



# FAIRBANK COMMUNITY CENTER FEASIBILITY STUDY

MARCH 2015

**bh + a**

Bargmann Hendrie + Archetype, Inc.

## PROJECT TEAM

### ARCHITECT

**Bargmann Hendrie + Archetype, Inc.**

300 A Street  
Boston, MA 02210  
617 350 0450

### MARKETING & OPERATIONS RECREATION PLANNER

**Ballard\*King & Associates**

2743 E. Ravenhill Circle  
Highlands Ranch, CO 80126  
303 470 8661

### CIVIL ENGINEER

**Samiotes Consultants, Inc.**

20 A Street  
Framingham, MA 01701  
508 877 6688

### MEP/FP ENGINEER

**Allied Consulting Engineering Services, Inc.**

215 Boston Post Road  
Sudbury, MA 01776  
978 443 7888

### STRUCTURAL ENGINEER

**Bolton & DiMartino, Inc.**

100 Grove Street  
Worcester, MA 01605  
508 756 8972

### COST ESTIMATING

**DG Jones International, Inc.**

3 Baldwin Green Common, Suite 202  
Woburn, MA 01801  
781 932 3131

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**SECTION 1**  
**INTRODUCTION +**  
**EXECUTIVE SUMMARY**



### GENERAL INFORMATION

The purpose of this project is to develop a master plan for the Fairbank Community Center which includes the Atkinson Pool, the Senior Center, Park and Recreation, and currently houses the Sudbury Public Schools administrative offices. The master plan investigates the feasibility of using the existing structures or creating a new multigenerational community center with expanded programs for the Town of Sudbury.

The master plan also includes an operational and revenue plan containing a community analysis of recreational, educational, and cultural need, an analysis of potential users, desired recreational and aquatic programs; and administrative and operational analysis of the proposed master plan. It is important to note that a Senior Center is not a revenue or fee based program in any community and would have an impact on the revenue for the proposed community center.

The Community Center was established in 1983 in this former school building. The Atkinson Pool was constructed in 1987.

Currently 72,000 people use the pool in any given year. The Recreation Department provides 691 programs serving 9,700 participants, ages 18 months to senior citizen. Summer Day Camp is limited in size by the building area limitations. Day camp programs sell out on the first day of registration and there are 40 to 50 children on a wait list for each week of camp. The Recreation Department operates the Teen Center.

The Senior Center shares the Fairbank building with Parks and Recreation. The mission of the Council on Aging is to “create and maintain an age and family friendly community” for Sudbury. Part of this initiative is that Sudbury seniors, in large part, prefer to “age in place” as opposed to moving. To accommodate this market trend, Sudbury developers have constructed several age-restricted housing developments catering to the senior age group. This is considered a benefit to the Town as it reduces the school age population and potentially lowers the Town’s operating budget. Obviously, there is a fine line that needs to be reached in order to have a sustainable town population base. The senior aged population is expected to grow to 32% of the total

town population (6,863 people) in year 2040. In 1990 this age group constituted 14% or 1,625 town members. This is a 5,238 more people to potentially use the Senior Center.

Currently 1,600 different individuals participate in the Senior Center each year. Approximately 200 people under age 60 draw on the Senior Center for assistance with an elderly or disabled parent.

### SPECIFIC GOALS ADDRESSED INCLUDE

- Determination of the current condition of the facilities
- Identification of current and desired program offerings at the facility
- Preparation of a master plan and conceptual design for a renovated and/or expanded facility
- Establishment of construction budgets and total project costs for the work including single project and multi-phase approaches
- Determination of operational costs, including income and expenses for a renovated or modified facility
- Presentation of an Implementation Plan

## INTRODUCTION

### EXECUTIVE SUMMARY

The Permanent Building Committee and representatives of the Fairbank Community Center Study Task Force reviewed the Master Plan scope, identified project participants and established project parameters and schedule. A series of meetings with identified user groups discussed current building usage and potential expansion of programs, including use of the building as an emergency shelter. Facility stakeholders identified programming and spatial considerations existing or desired at the facility.

#### Stakeholders Included:

- Seniors who use the Senior Center
- Users of Park and Recreation facilities
- “Vendors” who use or may use the facility
- Athletic program leaders (including school swim teams)
- Public safety agencies regarding emergency sheltering
- Town Manager
- Members of the general public

A document was created containing the existing facilities program including area, use, and amenities. After careful review and discussion, a spatial needs report was developed that documented the existing and proposed recommended changes to the current facility.

An existing conditions assessment was performed to establish the building’s current condition including required repairs and upgrades to the envelope, structure, interiors, mechanical, plumbing including septic system, electrical, and life safety systems. Assessment included the site, parking, outdoor play venues, and site amenities. The evaluation also included estimated costs for required repairs and upgrades. The facility was reviewed for compliance with the requirements of the Massachusetts Architectural Access Board, American with Disabilities Act (ADA), current Massachusetts State Building Codes (8th edition), State Plumbing, Fire, and Electrical Codes. Through collecting existing building documentation available from the Town, existing condition drawings required to prepare the Master Plan could be developed. The Permanent

Building Committee, and representatives of the Fairbank Community Center Study Task Force scheduled a preliminary review of these findings.

The work products prepared for the Master Plan includes

- General Description and Building History
- Existing Condition Drawings
- Existing Program/Space Assessment
- Programming Interviews
- Recommended Program
- Building Assessment
  - Existing Conditions Report
  - Code Analysis
  - Market Analysis
  - Estimates of Probable Construction Costs
- Site Assessment
- Conceptual Design Drawings
- Conceptual Design Narratives
- Cost Estimates & Total Cost Estimate
- Implementation Plan

The findings were shaped by the general opinion that there are benefits to all to live in an age-



friendly community and to have an intergenerational community center where age groups are not segregated to different wings. Both Recreation and Senior Center departments struggle to meet the needs due to space limitations.

- Building is old, leaking from old roof made some rooms unusable this winter, leaking and other issues ongoing
- Fitness programs are sometimes cancelled or need to be moved to different rooms, some rooms are not appropriate, sometimes off site
- Elections close the gym off for a few days and conflict with Senior Center programs
- Not enough space for consultations and counseling - need to move staff out of their offices
- Park and Recreation programs during school vacations and the summer use the gym and other rooms

Senior Center programs that are required include the following:

**Staying Active/Staying Fit**

- More fitness programming - need clean, safe, appropriate space available
- Wellness/Health counseling services - need clean, private space for nurse and other counseling
- Education/Lifelong Learning
- Transportation

**Staying Connected**

- Socialization/Recreation opportunities
- Healthy aging programs
- Intergenerational programs
- Information/Referral for supportive home care and other needs
- Volunteer opportunities

From a Recreation Department perspective the current space is deficient due to:

- Council on Aging and Recreation often need the same spaces at the same time and thus, one is compromised
- Summer program expansion
- Summer camp locker rooms
- Dedicated arts & crafts space
- Dedicated technology space
- Dedicated adaptive space
- Space to house elections so they don't take over prime space in the Center
- Space for larger Teen Center
- Locker rooms are not accessible nor pleasant to use
- Family, companion or accessible changing rooms are not provided
- Staff rooms and restrooms

Finally, the building is old, uninsulated for the most part, is not well air conditioned and leaks. Serious roof leaks render rooms unusable.

**FINDINGS**

Analysis concluded that a long term solution would retain Atkinson Pool but that the older portions of the building were deficient and were not cost effectively renovated. Three building sizes were developed to evaluate programming and revenues including a 40,000 sf, 50,000 sf and 60,000 sf total building area. The 40,000 sf is close to the existing building size and does not satisfy program needs for Recreation or Senior Centers. The 60,000 sf facility was determined to meet current and projected needs by even that size did not include all programs required as raised in public forums. As a point of comparison, a "status quo" option was developed: what is the Town's cost over the next ten years to maintain the Fairbank Center as is. A new building will be compliant with codes, improve internal conditions and provide new programs.

The construction costs for the schemes ranged from \$11.3M to \$16.2M. Construction cost for the status quo plan is \$9M. Total project costs for new schemes range from \$14.2M to \$20.2M while the total project cost for the status quo plan is \$12M.

In all scenarios, including the status quo solution, it is necessary to relocate the School Administration Department to a permanent location. Also, in all solutions temporary space will be required for the Senior Center and Recreation Department during renovation of the Fairbank Community Center.

## EXECUTIVE SUMMARY

### POST SCRIPT

During the Public Forum the Chairman of the Capital Improvement Committee asked why constructing the Community Center across Fairbank Road on the Haskell Field site, was not considered. Since the Forum, inquiries have been initiated relative to the restrictions on the Haskell Field parcel during its purchase, and the legal restrictions currently on the parcel.

The Haskell Field purchase of 28 acres was authorized by the Sudbury Town Meeting in 1973 for the sum of \$180,000. Documents reflect that the US Bureau of Outdoor Recreation through the Massachusetts Department of Natural Resources provided \$90,207.60 in Federal Funds toward the purchase of the Haskell site and added restrictions as to the use of the parcel.

The Town is still researching the legal documents but believe that building on the property would require both Federal and State approvals. With both Federal and State approval required to use the Haskell site, it will require at least 2 years to obtain necessary permits including a legislature act of approval.

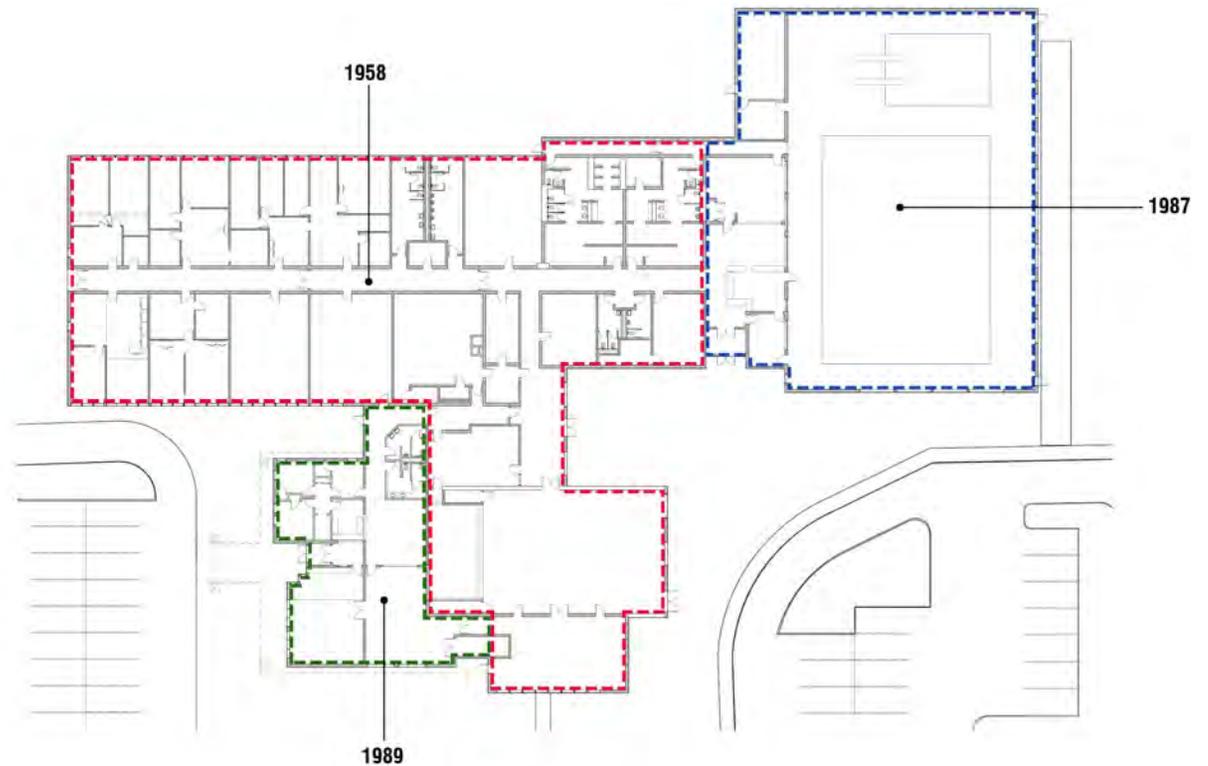
Using the Haskell site has advantages. First, it would allow construction of a new facility without having to temporarily relocate Parks and Recreation and the Senior Center for between 18 to 24 months. Secondly, the School Administration could stay in place until an alternate location is selected. Finally, instead of a partial renovation of the pool with some compromises remaining, relocation to Haskell Field enables a start from scratch solution with a full new building life cycle.

**SECTION 2**  
**BUILDING HISTORY**



## GENERAL DESCRIPTION AND BUILDING HISTORY

The Fairbank Elementary School was constructed on the current site in 1958. The original school included the double loaded corridor wing that currently houses program spaces, the Sudbury School Department Offices, as well as the kitchen and gymnasium (formerly referred to as a cafetorium). In 1987, the Atkinson Pool was added to the complex. Prior to the pool construction, the building was no longer used as a school and housed miscellaneous Town offices. The pool addition included an 8-lane, 25 yard swimming pool, diving tank, lobby, locker rooms within the original school footprint, and modifications to the connector between the school wing and the gymnasium. In 1989, the Senior Center was added to the north side of the gymnasium space. The addition included administrative offices, two multi-purpose rooms, a drop-in area and physical connections to the main Fairbank Complex and kitchen space adjacent to the gymnasium.



# GENERAL DESCRIPTION AND BUILDING HISTORY

It should be noted that in 1973, the approximately 28 acres of land across Fairbank Road was deeded to the Town for the creation of Haskell Field. Funding for the purchase was partially funded by the Federal Land and Water Conservation Fund. With this funding, the land was developed and must be maintained as an outdoor recreation facility. Haskell Field, with its multiple playing fields, accessible playground, and parking enhances the Fairbank Community Center as anchor to this large, very active sports and recreation area.



Original Fairbank Elementary School Wing



Senior Center



Gymnasium (Former Cafatorium)



Atkinson Pool Addition



Aerial View



**SECTION 3**  
**EXISTING CONDITIONS REPORT**  
ARCHITECTURE  
ENGINEERING  
PLANS  
PROGRAM



The purpose of the building assessment is to determine the current condition of the complex, to identify existing and desired facility demands, to establish construction budgets and total project costs for projected work, and to determine the need for a renovation to the existing facility or a proposal for a new one.

In conjunction with Bolton & DiMartino, Allied Consulting Engineering Services, Samiotes Consultants, Simpson Gumpertz & Heger, Bargmann Hendrie + Archetype toured the facility, observing existing conditions and noting deficiencies. Building materials, spaces, equipment, the pools, and mechanical, electrical, and plumbing systems were observed. Department heads, town staff, and relevant personnel were interviewed to gain additional insight. The meeting included a discussion with the Police, Fire, Health, Building, and the DPW. Each department provided their view of the current facility and provided suggested improvements based on public safety, maintenance, and operations.

The following is a collection of reports contributed to the feasibility study and master plan for the Fairbank Community Center.

## EXISTING CONDITIONS

Architectural - Bargmann Hendrie + Archetype, Inc.

### DESCRIPTION AND CONDITION OF EXTERIOR ELEMENTS

#### ROOF

As documented in prior reports the existing roof is in varying degrees of disrepair and can be generally categorized by year of construction and underlying program space. In 2012, the Town implemented necessary upgrades to the Atkinson Pool HVAC system which also necessitated replacement of a portion of existing ballasted EPDM with a new 60 mil white PVC roof membrane.

#### 1. Low Slope EPDM Membrane system; Original 1950's school building

As indicated in the 2012 Russo Barr (RB) existing conditions report, and further confirmed by our field observations, the drainage of the low slope EPDM membrane roof system continues to be a maintenance issue with many of the RB observed deficiencies readily apparent. The original intent of the roof drainage system was to slope the roof toward the perimeter roof edge where the rainwater would discharge through the canted gravel stop via one or more scuppers. Very little slope is apparent in the existing installation, nor has any built-up crickets been installed to divert water around the multitude of penetrations within the field of the roof. In addition to these and prior observations, the following items are also contributing factors to the poor performance of the existing roof.

- Masonry telegraphing through roof structure: A ridge has formed at the location of the split face block infill that was performed during the 1987 Atkinson Pool project. The ridge prevents water on the field of the roof from draining to the downspouts along the exterior roof edge. (Figure 1)
- Debris build-up at existing equipment: The poor performance of the roof slope is further exacerbated by build-up of debris and organics at existing equipment with the indirect result of causing further rust and membrane damage. (Figure 2)
- Compromise of existing masonry flue enclosure: The existing concrete cap and supporting masonry walls of the existing flue enclosure are cracked. In addition, the sealant at the blank off panels installed in the top horizontal surface has failed. Both of these conditions allow moisture to penetrate to the interior and can cause further progression of material failures. (Figure 3 & 4)



Figure 1



Figure 2



Figure 3

- Deterioration of wood trim/flashing support blocking and membrane seam failure: Existing wood trim and flashing backer support shows signs of significant deterioration at the transitions between the EPDM roof system and the wall systems of the 1989 Senior Center building. The deterioration is to the point at which the integrity of the sheet metal flashing is in question. Lap seam failure is apparent with pinholes observed in seam sealants and generally poor condition of exposed sidewall transitions. (Figure 5)



Figure 4



Figure 5

## 2. Sloped Shingle Roof; Senior Center

The shingle installation appears to be in generally good condition as it was recently replaced. Roof edge flashings, except where adjacent to EPDM roof transitions, appear to retain its performance and requires little maintenance.

The tectum panel soft shows signs of water damage and staining which suggests that water is infiltrating the roof edge at some unknown location, perhaps through a compromise in the roof edge gutter/flashing assembly. (Figure 6)

Skylight: The gasketing of the existing skylight perimeter has failed and requires reinstallation. (Figure 7)



Figure 6



Figure 7

## EXISTING CONDITIONS

Architectural - Bargmann Hendrie + Archetype, Inc.

### 3. Low Slope EPDM Membrane system; Atkinson Pool

This area of flat roofing has been replaced as part of the Atkinson Pool HVAC replacement project that was completed in 2012. Drainage is accommodated by a low slope pitch that drains water from the pool structure onto the EPDM roof below. Roof parapet flashings, as well as transition flashings to the higher roof structure over the natatorium appear to be in good condition. Pipe penetration flashings appear adequate and in good condition. There is slight ponding at the roof edge where the primary drainage is to occur, however, it does not appear to be greater than what might normally be observed at a build-up roof edge. While drainage from the Atkinson Pool roof appears to function as designed, the issue remains of poor drainage from the EPDM roof of the existing school wing.

### 4. Sloped, ballasted roof system; Atkinson Pool

The condition of this area appears to be generally consistent with the previous RB report outlining condition of the roof.

## WINDOWS

In similar fashion as the roof, conditions of existing windows can generally be categorized by building wing and function.

### Original 1950's school building

In general, all windows within this portion of the complex are in very poor condition and must be replaced if any considerable renovation to the existing building occurs. The glass is single pane, the frames are not thermally broken and all sealants have failed. Over time, several repairs have been made, both to the frames and to the sealants, all of which show immediate signs of failure and various stages of incompleteness. In addition, there are areas of original wood frames that over time have lost their applied painted finish which has led to deterioration of the frame and sash.

- Installation of unknown sealant – perhaps a non-curing butyl type – that has become fluid, perhaps due to environmental temperatures, and unfastened storefront faceplate. (Figure 8)
- Original wood windows: Lack of finish maintenance has resulted in deteriorating bare frames. (Figure 9)
- Single pane windows and failed sealant. Condition of sealant is indicative of sealants throughout this portion of the building. (Figure 10)



Figure 8



Figure 9

- Missing frame cover plates and fasteners. Sealant installation shows liquefaction. (Figure 11)
- These windows are not salvageable and are poor performers from an energy conservation perspective.

**Senior Center**

In general, the window systems within the Senior Center addition appear to be in satisfactory condition with repair being related to refinishing of the frames and perimeter sealants. The factory applied original finish has weathered enough to flake off of the metal frames. Although the insulated glass panels have likely exceeded their intended life expectancy, there were no signs of condensation between panes or of cracked or broken glass or sash. Perimeter sealants have been periodically repaired and the installations are experiencing noticeable failure. A schedule of removal and replacement of sealants is recommended.

- Finish deterioration, typical of Senior Center window frames. (Figure 12)
- Sealant failure. (Figure 13)

**Atkinson Pool**

As in the Senior Center, the window systems within the pool addition appear to be in satisfactory condition with repair being related to perimeter sealants. Although the insulated glass panels have likely exceeded their intended life expectancy, there were no signs of condensation between panes or of cracked or broken glass or sash. Perimeter sealants have been periodically repaired and the installations are experiencing noticeable failure. A schedule of removal and replacement of sealants is recommended.



Figure 10



Figure 11



Figure 12



Figure 13

**EXTERIOR WALL CONSTRUCTION**

Many of the issues surrounding the exterior wall construction of the Atkinson Pool have been documented previously in the June 6, 2013 field report by Simpson Gumpertz & Heger. These include cracking and staining of

the exterior masonry veneer, failure of installed sealant joints, corrosion of the masonry relieving angle, and multiple cracks within the EIFS system. Cracking of masonry joints and in some cases of the masonry units themselves was observed throughout the facility.

# EXISTING CONDITIONS

Architectural - Bargmann Hendrie + Archetype, Inc.

## DESCRIPTION AND CONDITION OF INTERIOR ELEMENTS

Other than isolated water-related damage to door and window elements and some plaster surfaces, the Mansion interior remains in excellent condition overall.

### Flooring

Senior Center: Carpeting is used through the majority of Senior Center spaces. Ceramic tile and base are provided in the toilet rooms and VCT is used in the Van Houten Room and Nurses Office. The types of flooring used are appropriate for the programming held in the spaces. The flooring is in serviceable condition. The toilet room tile grout has discolored and should be cleaned and possibly regouted.

Fairbank Wing: VCT is the primary floor covering used in the corridors, lobby, and program spaces of this wing. Some carpet is used in some offices. The gymnasium is a conventional maple wood floor assembly. The kitchen and toilet rooms are tiled. The VCT is in serviceable condition, some of the tile has been installed recently. The VCT is well maintained in the public areas. Some tiles have separated and lifted in areas subject to moisture and should be repaired. The gymnasium floor is sound structurally; the finish is in fair condition. The gymnasium floor should be sanded to bare wood and refinished. The tile in the kitchen and toilets are serviceable; cleaning and regrouting would be included as part of a renovation project. The pre-school room has vinyl plank flooring that simulates wood.

Atkinson Pool: The main lobby has carpeting which is worn and discolored. A repair or renovation should consider alternative materials such as sheet flooring that will provide a durable easier to maintain surface in this high traffic area. The locker rooms and pool deck are ceramic tile. The tile is in generally serviceable condition but requires cleaning and regrouting. There are areas within the natatorium corridor and lockers that are in poor condition and cracked. Movement of the substrate has telegraphed through the tile and damaged the units. The pool office is carpeted. This office which is accessed directly from the pool deck should be tile or a sheet product better suited for a wet environment.



**Walls**

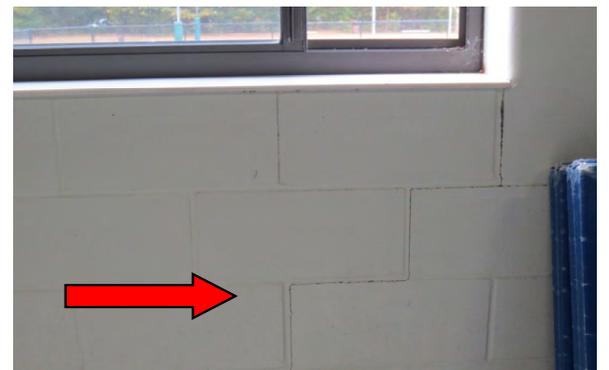
Senior Center: The walls are generally painted GWB that is in serviceable condition and well maintained. The toilet rooms have a tile wainscot. As part of a renovation, the addition of a combination handrail/chair rail is recommended. This will provide a handhold to Senior Center users that might require assistance walking as well as provide the wall surface. It will help protect the walls from frequently moved tables and chairs, carts, and other equipment



Fairbank Wing: The original glazed masonry units are visible in the corridor and some of the individual spaces. The wall surface above the glazed masonry is painted CMU. Walls separating program space are painted CMU. A small section of wood wainscoting was installed in the Teen Center lobby area.



Atkinson Wing: The walls are painted CMU and in serviceable condition. Exterior walls have experienced movement or settling and stepped cracking is visible at various locations around the perimeter of the building



## EXISTING CONDITIONS

Architectural - Bargmann Hendrie + Archetype, Inc.

### Ceilings

Senior Center: The ceilings are a combination of GWB and acoustic tile (ACT) that are in serviceable condition. Leaks from the roof have discolored some tiles and stained GWB.

Fairbank Wing: The underside of the roof the cementitious roof panels and structure are exposed many of the program spaces and corridor. ACT was added to a number of spaces to conceal equipment and provide better acoustics.

Atkinson Pool: The natatorium ceiling is the exposed underside of the wood roof deck. The remainder of the spaces has ACT. The ACT is in fair condition and water stained in areas. The existing roof deck will remain in serviceable condition. Lightening the color to allow for up-lighting over the pool could help resolve the glare on the water that resulted from the energy upgrade of the lighting.



## **INTRODUCTION**

The Fairbanks Community Center is a 40,900 ft<sup>2</sup>, single-story, building located in Sudbury, MA that is being investigated for possible renovation. The Community Center consists of the former Fairbanks Road Elementary School (23,100 ft<sup>2</sup>), the Atkinson Town Pool addition (13,800 ft<sup>2</sup>), and the Senior Center addition (4,000 ft<sup>2</sup>). The masonry and clapboard veneered building is being investigated for a possible renovation to support current Town needs, as well as address the aging condition of the building. The original School was constructed in 1958 and renovations have been limited to re-roofing, infilling skylights, interior remodeling for current usage needs, and exterior wall infill at the entrance areas during the Atkinson Pool addition. The Atkinson Town Pool was constructed in 1987 and the structure has remained relatively unchanged. The Senior Center was added in 1989 and the structure has also remained unchanged.

This report will describe the general conditions of the existing structure to aid in planning for a building renovation and possible addition. Refer to "Building Code Review" for additional renovation requirements associated with the Massachusetts State Building Code.

## **GENERAL**

This report presents the results of our Structural review of the Fairbanks Community Center in Sudbury, Massachusetts. Our review has been completed in conformance with Chapter 34 of the

Eighth Edition of the Massachusetts State Building Code, which became effective August 6, 2010 and the International Existing Building Code, 2009 Edition.

## **BASIS OF THE REPORT:**

- This report is based on the visible observations during our site visit on October 10, 2013.
- Original Construction Drawings 2 through 6 (Architectural) and S-1, "S.W. Haynes & Associates, Inc. Architects" dated April 18, 1958.
- Atkinson Pool Drawings S-1 through S-3, "Benedict Associates, Inc." dated March 10, 1987.
- Senior Center Drawings S-1 through S-3, "Foley & Buhl Engineering, Inc." dated September 25, 1989.

Our observations of the existing building were limited to what was readily visible. We did not evaluate strengths of materials, remove finishes, or take measurements; therefore, we are unable to comment on any structural capacities or deficiencies of the existing structural systems beyond what was readily visible or shown on the existing drawings.

## **BUILDING DESCRIPTION**

The original Fairbanks School is a one-story building consisting of a flat roof classroom wing and a gable roofed gymnasium; refer to Figure 1 for general Community Center layout. The school was constructed with one expansion joint located in

the concrete slab and foundation near the center of the classroom wing, but the joint does not appear to continue through the roof structure. The classroom wing is framed with CMU bearing walls, steel joists, bulb tees, and 2" fiber tile decking. The Gymnasium is framed with CMU bearing walls, laminated wood beams, and wood plank decking. The interior of the school structure is in average condition for its age, but the exterior of the building is in generally below average condition with noticeable wear and deterioration, especially at the rear of the building that was not updated during the 1987 or 1989 additions.

The 1987 Atkinson Pool addition is a one-story building with a clear-span gable roof over the pool area and a lobby/locker room area. The building is framed with CMU bearing walls, steel joists & deck, wood glulam beams, and wood plank decking. The wood structure appears to be in generally good condition, but the exterior masonry walls are in below average condition with noticeable thermal movement and cracking. It is our understanding that a study was completed earlier this year on the exterior masonry condition, and will be used as a guide for repairs by the Owner. As part of the 1987 addition, several walls at the entrance area of the original school were renovated by removing the aluminum storefront system and replacing with a split-face veneer and CMU block back-up walls. Due to the limited width, 4" masonry was used for both the veneer and back-up wall. The veneer at most of these locations is cracked due to thermal

**EXISTING CONDITIONS**  
Structural - Bolton & DiMartino, Inc.

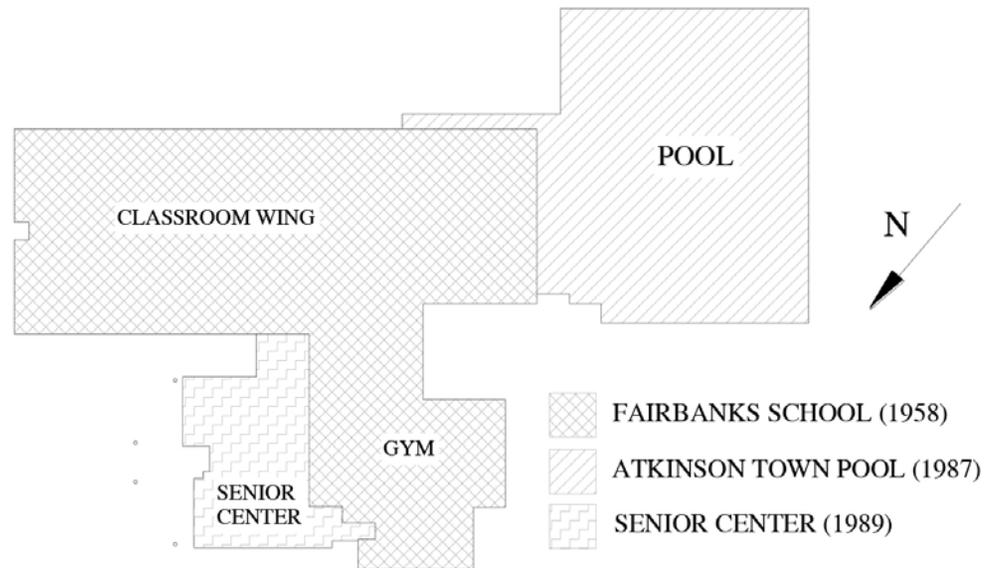


Figure 1 - Plan

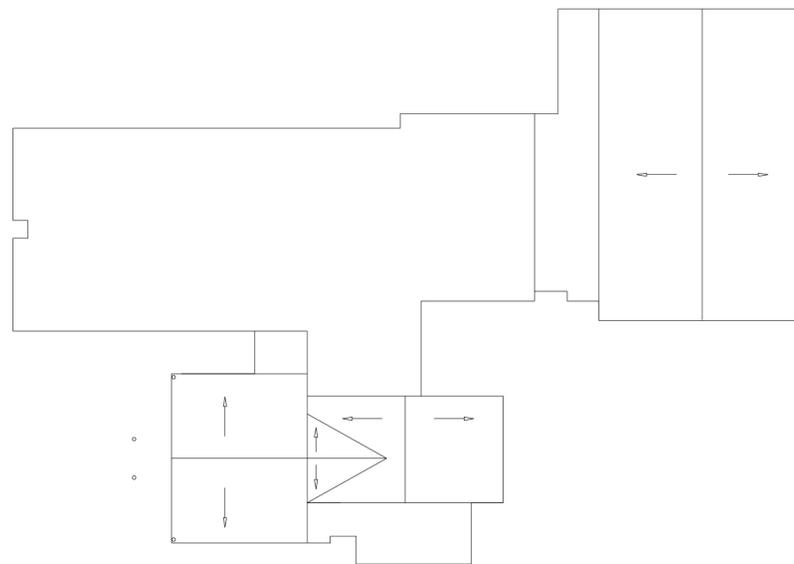


Figure 2 - Roof Plan

movement and will need to be repaired. The exterior masonry infill at the gymnasium also has horizontal cracks near the top of the wall that appear to be caused by an interior mounted basketball hoop, which should be removed due to safety concerns of attaching to an unreinforced 4" CMU block that is not designed to support such loads.

The 1989 Senior Center addition is a steel framed structure that appears to be structurally isolated from the existing building. The gable roof is framed with steel beams and metal roof deck. There are a couple of small flat roofs framed also framed with steel beams and metal roof deck. As part of the renovation, a wood cricket was added over the gymnasium roof to shed water away from the new Senior Center. The interior and exterior of the Senior Center appears to be in above average condition.

## **EXISTING CONDITIONS**

### **General Exterior**

In general, the exterior walls of the Community Center are exposed 8" concrete masonry units (CMU), masonry veneer, or cedar clapboards. The exterior walls bear on standard concrete foundation walls with continuous spread footings. The exterior masonry walls show signs of deterioration (thermal cracking of the exterior masonry and failed caulked joints), and are generally in average condition. The concrete foundation walls that are exposed to view appear to be in better condition than the veneer, with minimal cracking.

The exterior CMU wall at the school gymnasium was patched at several previous stepped cracks, and currently appears to be in average condition. Most of the cracking in the veneer has happened at the 1987 addition and renovation infills to the original school building. The condition of most of these walls is below average. Caulked expansion joints in the masonry at the 1987 building veneer have aged and are no longer effective. Also, most of the caulking has failed to the point of exposing the foam backup and will need to be repaired as part of regular maintenance.

### **General Interior**

In general, the interior finishes of the building appears to be in average condition, but the structure is showing signs of ageing, especially at pool area and the interior classroom portion of the original school.

Due to the flat roof membrane failing at several locations of the school classrooms, the fiber roof panels have been subject to water infiltration. The water infiltration has caused the fiber panels to sag at several locations due to their weakened state while being wet. Any renovation work within the classroom wing will need to include replacing the damaged panels with either new panels or metal decking.

## **SCHOOL BUILDING (CLASSROOMS AND GYMNASIUM AREAS)**

This one-story section of the building consists of:

- Foundation:
  - Concrete foundation walls and continuous spread footings below the exterior walls. Foundations appear to extend to native till at the exterior walls and appear to be between 4'-0" and 8'-0" tall.
  - Concrete foundation walls and continuous spread footings below interior CMU bearing walls.
  - Concrete foundation walls at lowered boiler room.
  - 4" concrete slab on grade throughout the building.
- Classroom/Low Flat Roof Structure:
  - Unreinforced masonry bearing walls (interior and exterior).
  - Steel Joists (round rod web & chords).
  - Bulb tees and fiber board roof structure (flat roof with no slope).
  - Membrane roof.
- Gymnasium Gable Roof Structure:
  - Unreinforced masonry bearing walls.
  - Wood laminated girders (7"x24 3/8")
  - 3" plank deck roof.
  - Asphalt shingle roof (original roof was noted to be "Built-up Roof").

## EXISTING CONDITIONS

### Structural - Bolton & DiMartino, Inc.

For the purposes of this report, the original building is broken up by the classroom wing and the gymnasium wing. The classroom wing is typical 1950's school construction, with cost effective design and construction. The building is constructed with CMU bearing walls at the classroom partitions, corridor walls, and some exterior walls. The flat roof is lightly framed with steel joists, steel bulb tees, and fiber board planks. There is no slope to the roof and the water is meant to drain off the roof with scuppers. There is no roof top equipment, and the roof would not be able to support any without installing new framing. Skylights were originally located at each of the classrooms and the central corridor, but most of the original skylights have been roofed over at the classrooms, with approximately seven remaining at the corridor. Roof leaks were evident from stained fiber deck panels, as well as, bowed deck panels that have been weakened from water infiltration.

The gymnasium wing was constructed with load bearing CMU walls and heavy timber roof framing. The gable roof is framed with laminated wood beams and wood plank decking. During the 1987 Atkinson Pool addition, several storefront window systems at the school entrance and gymnasium were removed and replaced with split face masonry veneer with 4" CMU backup walls. The veneer that was added to the end wall of the gymnasium is noticeably cracked due to thermal movement. Also, there is also a horizontal crack at the top of the wall, near the center, which appears to be caused by a basketball hoop that was mounted to the CMU



Figure 3 - Classroom Wing



Figure 4 - Typical Classroom Framing



Figure 5 - Classroom Building Roof

wall within the gymnasium. The 4" CMU wall is not capable of safely supporting the basketball hoop, and there are signs that the top connection is failing. We recommend removing the basketball hoop from the wall before someone hangs on the hoop causing the wall to fail.

Roof snow loads for the original school design are noted on the original construction drawings as 30 psf, which is much less than the current Building Code flat roof snow load of approximately 38 psf for an office use building, or 42 psf for a similar school building in Sudbury. If the building is renovated, and the roof structure is altered, the existing members in the areas of the alteration will need to be reviewed with modified current snow loads, including drifting snow, to verify their adequacy. Based on a preliminary review of the existing joists, the existing flat roof appears to be designed for 15-20 psf of dead load and 30 psf of snow load. These loads were minimal at the time of original construction, and would be below current design loads due to the increased snow loads, mechanical loads for sprinkler piping, and additional insulation to conform to current energy codes. Renovations would not be able to add any loads to the existing structure without installing new structural framing.

The roof diaphragm of the classroom building consists of fiber panels and steel bulb tees, which does not provide adequate resistance to seismic loads, but may remain if the system is unchanged and the use remains the same. Also, sagging

and water stained fiber panels were noticed at several locations, indicating that the roof system is deteriorating and should continue to receive regular maintenance of replacing failed fiber panels. It should be understood that as the fiber panels get wet, the panels lose their ability to support gravity loads. During any significant renovation, we would recommend stripping the fiber panels from the roof from the entire roof and replacing the diaphragm with steel roof deck. The roof diaphragm at the gymnasium consists of the wood plank decking, which if nailed correctly, will provide an adequate diaphragm.

Lateral loads (wind & seismic) at both the classroom wing and gymnasium area are resisted by unreinforced masonry bearing walls. The walls would not be adequate for new construction, but may remain unchanged as long as the building does not undergo substantial structural renovation that removes or modifies the walls. Under a substantial structural renovation, new walls or bracing systems would need to be installed to adequately brace Code mandated loads.

#### **ATKINSON POOL ADDITION (POOL ENCLOSURE, LOCKER ROOMS, AND LOBBY)**

This one-story section of the building consists of:

- Foundation:
  - Concrete foundation walls and continuous spread footings below the exterior walls. Foundation walls appear to be between 4'-0" and 12'-0" tall (near diving pool).



Figure 6 - Gymnasium



Figure 7 - Basketball Hoop Mounted to 4" CMU

## EXISTING CONDITIONS

### Structural - Bolton & DiMartino, Inc.

- Concrete foundation walls and continuous spread footings below interior CMU bearing walls.
- 4" concrete slab on grade.
- 6" concrete slab on grade at pool structure.
- Lobby Flat Roof Structure:
  - Reinforced masonry bearing walls at new structure.
  - Steel K-Joists.
  - 1 ½" (Type B) Metal roof deck
  - Membrane roof (replaced original single ply membrane & ballast roof).
- Pool Gable Roof Structure:
  - Reinforced masonry bearing walls.
  - Wood laminated beams (8 ½"x 30 ¼"/63 ¼") @ 11'-6" & 12'-6" o.c.
  - 3" plank deck roof.
  - 2/12 Pitched roof with stone ballast over single ply membrane roof.

The Atkinson Pool addition in 1987 included a new pool building, lobby, locker rooms, and renovating the façade of the existing school building near the new entrance. The pool addition is typically clad with split faced masonry and Exterior Insulation and Finish System (EIFS). Due to the warm humid interior air and the exterior wall details that do not isolate the interior and exterior spaces, there are several exterior envelope issues that have developed. Issues include excessive cracking in the interior masonry walls, exterior masonry veneer, and the EIFS. There has been some settlement of the interior slab of the pool building, as noticed at the tile flooring at the exterior wall near the diving pool (Figure 9).

The exterior façade of the pool enclosure was reviewed by Simpson Gumpertz & Heger earlier this year, and a report was issued on June 6, 2013 covering their findings. We reviewed the general condition of the entire building, and more in depth commentary on the exterior envelope can be found in their report. There are several recommendations in their report for remedial work that should be incorporated in future renovations.

Contributing to, and a result of the envelope problem, are numerous vertical and stepped cracks in the exterior veneer. Many of these cracks appear to be due to



Figure 8 - Atkinson Pool Building



Figure 9 - Slab Settlement Near Diving Pool



Figure 10 - Typical Roof Framing at Atkinson Pool

thermal movement of the walls and that the veneer is restrained by other portions of the wall system. The wall system consists of an 8" CMU backup wall with a 4" veneer for the bottom half the of the wall, and the top half of the wall is 12" CMU bearing directly on both the 8" & 4" masonry veneer. Since the walls are all attached, the veneer is not allowed to move with the daily thermal changes of the weather since it is directly attached to the 12" CMU above and the veneer cannot be isolated since it provides bearing for the 12" CMU above. We recommend re-designing this exterior wall assembly to address this problem since the cracks in the masonry veneer are likely active and will continue to move. Alternatively, additional control joints could be sawn through the veneer to try and control the cracking, but the control joints would not change the underlying problem of the restrained veneer and may not completely solve the thermal movement problems.

The roof for the Atkinson Pool addition consists of a low slope gable roof over the pool area and a lower flat roof over the lobby. The roof was designed with stone ballast over a single-ply membrane. The membrane and ballast have been replaced with an adhered membrane roof over the lobby, but the single-ply membrane and ballast remain over the pool area. The roof membrane and ballast over the pool area appear to be near the end of their useful life.

The design roof snow load for the building is noted to be 35 psf on the original drawings. Since the

pool building roof appears to be near the end of it's useful life, we recommend removing the ballast and installing a new roof system as part of any renovation. With the removal of the ballast, which usually weighs 10-15 psf, the roof would meet the current snow load design of 38 psf or 42 psf, depending on the Use Group.

The roof diaphragm appears to be metal roof deck at the low roof, and wood plank decking at the pool area. If installed correctly, both systems would provide an adequate diaphragm to resist the Building Code mandated loads for the building. The wood decking does not appear to be directly attached to the CMU walls along the sidewalls supporting the laminated beams, but there are bearing plate details at the taller gable ends. During a future re-roofing project, we recommend installing anchorage from the wood decking to the CMU sidewalls between the laminated beams to transfer diaphragm loads to the CMU walls. The anchorage may be with bent plates or installed anchors.

Wind and seismic loads are resisted by partially reinforced CMU walls at the perimeter of the pool enclosure and the other exterior walls. The CMU walls have several step cracks and near the base, likely from thermal movement of the exterior wall, and possibly from some slight settlement. The cracks on the interior do not appear to be active and should be repointed during future renovations.

#### **SENIOR CENTER:**

This one-story section of the building consists of:

- Foundation:
  - Concrete foundation walls and continuous spread footings below the exterior walls. Foundation walls appear to be 5'-0" tall with about 4'-0" below grade.
  - Concrete foundation walls at interior columns adjacent to the existing school building to match the depth of existing foundations.
  - 4" concrete slab on grade.
- Attic Structure (small local area):
  - 2x10 wood joists bearing on wide flange steel beams.
  - ¾" T&G ply-wood floor.
- Roof Structure:
  - Wide flange steel beam (sloped and level)
  - 1 ½" (Wide Rib) 20 Gauge- Metal roof deck
  - Asphalt shingles at sloped roof.
  - Membrane roof at flat roofs.
  - Diagonal steel braces to foundation level.

The Senior Center addition was built in 1989 and appears to be in generally good condition. The addition was separated from the existing school with expansion joints at both the classroom building and the gymnasium. Unlike the previous buildings, this building was constructed with structural steel columns and wide flange beams. The exterior walls are conventional metal studs with either masonry veneer or clapboard siding.

## EXISTING CONDITIONS

Structural - Bolton & DiMartino, Inc.



Figure 11 - Senior Center Addition

The foundations are conventional concrete frost walls and spread footings. The exterior walls appear to be in good condition with no noticeable cracking or settlement. The interior partitions also appear to be in good condition with no noticeable structural problems.

The roof is constructed with steel beams and girders. The sloped roof rafters cantilever over intermediate girders to extend to the ridge. The members appear to be in good condition with no noticeable structural concerns. The original construction drawings note that the roof was to be designed for 35 psf, which is slightly less than the current 38 psf that would be required for a senior center in Sudbury. The snow load was adequate at the time of original construction and should continue to be adequate provided

the loading on the roof does not change due to mechanical equipment or roof reconfiguration.

The roof diaphragm consists of metal roof deck welded to structural steel beams. The diaphragm is adequate to resist Code mandated loads. Lateral bracing was installed to resist wind and seismic loads. The bracing consists of structural steel tubing welded to connection plates at the column bases and roof framing. The bracing is appropriate for the senior center framing and will not need to be modified during a renovation, providing the existing framing and building layout does not change.

### CONCLUSIONS AND RECOMMENDATIONS:

The purpose of this report is to identify any structural deficiencies and liabilities that will need to be addressed during any substantial renovation, which we understand, is being considered. The report is

based on the premise that the existing building will remain in use as a Community Center, Senior Center, and some office use. We have reviewed the general conditions of the building, but did not remove finishes or perform computations to determine structural capacities. This report, along with the Building Code Review, shall be used as the basis for the renovation. The following items are meant to highlight structural conditions or deficiencies noted in the report. Refer to "Building Code Review" for additional structural requirements associated with the proposed renovation and addition.

### GENERAL INFORMATION:

- Existing building area is 40,900 ft<sup>2</sup>.
  - 1958 School Building: 23,100 ft<sup>2</sup>
  - 1987 Atkinson Pool Addition: 13,800 ft<sup>2</sup>
  - 1989 Senior Center Addition: 4,000 ft<sup>2</sup>
- 1958 School Building: Interior of building in average condition. Exterior envelope and structure in below average condition due to lack of regular maintenance.
  - Roof framing is under-designed for current snow loads. Existing framing was designed to support minimum loads required by the Building Code at the time of construction. New framing and roof decking would be required to support increased loads due to added insulation, mechanical equipment, fire protection equipment, etc.
  - Roof diaphragm of fiber panels on bulb tees would need to be replaced to resist Building Code mandated diaphragm loads as part

- of any renovation that alters the structure or structural loads on the classroom building.
- Exterior envelope has not been maintained at rear of building and need complete repair or replacement.
- Interior and exterior CMU walls are bearing walls and cannot be removed without engineering a new roof support to replace the walls. Also, walls are not reinforced, but do provide lateral resistance to wind and seismic loads. Changes to the building structure will likely require new reinforced CMU shear walls.
- Roof deck fiber panels are susceptible to water infiltration and there are signs of water infiltration. Damaged panels need to be replaced during re-roofing or renovation.
- Masonry veneer added to front of gymnasium and entry areas during 1987 addition show signs of thermal cracking that require new joints and re-pointing.
- Basketball hoop installed on infilled 4" CMU need to be removed or resupported due to safety concerns.
- 1987 Atkinson Pool Addition: Interior of building in average condition. Exterior envelope in below average condition.
  - Roof structure appears in good condition, but roofing membrane at pool enclosure is nearing the end of its lifespan and should be replaced. During the roof membrane replacement, the ballast should be removed from the roof structure.
  - Exterior masonry veneer is in below average condition due to thermal cracking and failed expansion joints. Cracks are likely active and will need an engineered solution to correct problems.
  - CMU backup walls at pool enclosure are in average condition, but there are several thermal cracks that require repointing. Most of the cracks are likely stable due to the controlled temperature and air within the building, but the direct attachment to the veneer may cause some active movement.
  - Masonry veneer overhangs foundation wall by 1"-1 ½", requiring a supporting angle at the rear of the pool building that was not shown in the original design. The angle is rusting and losing structural integrity. This angle should be replaced or re-designed during any renovation.
  - Wood roof diaphragm does not appear to be attached to CMU sidewalls. Any re-roofing project or exterior wall renovation should include installing anchors along the sidewalls from the roof deck to the CMU wall. The gable end walls appear to be attached to anchored wood sills and the wood decking.
- 1989 Senior Center Addition: Interior and exterior of building in above average condition.
  - Structure is isolated from existing school structure with expansion joints.
  - Steel framed roof structure appears to be in good condition. No noticeable structural problems.
  - Exterior walls include masonry veneer and clapboard siding. Both materials are in good condition.

Based on our site visit and review, it is our opinion that each of the three building could be renovated, but there are significant limitations with the original school classroom building due to the minimalist design and rigid CMU wall layout. Costs to update the classroom structure may be prohibitive, especially with the inability to reconfigure the masonry partition layout and significant cost to upgrade the roof framing to support current snow loads, mechanical systems, and fire protection. The Atkinson Pool building is in generally good condition, but does require significant exterior envelope remediation. The Senior Center is in the best structural condition of the three buildings and could be renovated without much difficulty.

## EXISTING CONDITIONS

MEP/FP - Allied Consulting Engineering Services, Inc.

### INTRODUCTION

The intent of this report is to describe the existing systems and discuss deficiencies and recommendations if the building is to undergo extensive renovations. We visited the site to review the existing HVAC, plumbing and electrical systems. Our exploratory work encompassed the entire building (where accessible) including the roof and attic area.

The building has three main parts, built at different times. The main building was built as a school around 1959 and houses the School Department, Teen Center, Gym and Senior Center Kitchen. The Senior Center part was built around 1989. The natatorium and locker rooms was built around 1987.

The MEP systems have undergone renovations throughout the life of the building, and are now a mix of original and replaced equipment.

### HVAC SYSTEM DESCRIPTION

#### Heating System

The heating system for the building, with the exception of the natatorium, is a central boiler system located in the boiler room. There are two (2) 1700 MBH output Patterson Kelly boilers. The boilers were installed in 2006 as part of a boiler system upgrade. There are three sets of hot water circulator pumps which circulate hot water to different areas of the building that were installed at the same time.

#### Senior Center

Heating in the Senior Center area is provided by hot water finned tube radiation. Cooling is provided by two

air handling units with DX cooling coils located in the attic with air cooled condensing units located on the roof. One unit is 7-1/2 tons and serves the Arts & Crafts room. The other unit is 10 tons and serves the remaining spaces. The air handlers and condensing units were installed around 1990. The heat is zoned by room and the cooling is one zone per air handler. (Figure 1)

Condition: The air handlers and finned tube are in good condition and have additional useful life. The condensing units are 20+ years old and are near the end of their useful life. The units are refrigerant R22, which will be more difficult and expensive to obtain when needed.

#### Gym

The gym is heated by hot water finned tube radiation. Cooling is provided by a 12-1/2 ton (approx.) rooftop unit with hot water heating that was installed around 1991. The rooftop unit feeds ductwork above the stage that blows out into the space. Return is ducted low at the back corner of the stage. The gym has two sidewall propeller fans high on the wall. These appear to be installed as a means to provide air movement or passive cooling.

Condition: The finned tube in the gym is damaged due to the wear and tear of being in a gym. The rooftop unit is 20+ years old and is past its useful life. It is our understanding that the unit failed during the summer. (Figures 2 & 3)

#### Kitchen (part of Senior Center)

The kitchen is heated by a hot water unit heater and hot water unit ventilator. The space does not appear to have cooling. There is an existing grease exhaust hood in the



Figure 1 - Senior Center AHU



Figure 2 - Gym RTU



Figure 3 - Gym Finned Tube

middle of the space that doesn't appear to be functional. There is also a dishwasher exhaust duct. On the roof there are two fans, which appear to be for the grease hood and dishwasher duct. (Figures 4 & 5)

Condition: The existing fans on the roof appear to be original to the school and are likely not functional. The grease fan does not meet current code. The unit heater and ventilator have additional life remaining, but since there is no cooling in the space they may not be useful in the future.

**School Dept. Area**

Heating in the school department wing is provided by hot water finned tube radiation. Each room has a non-electric thermostatic control valve to control the temperature. The finned tube appears to have been installed as part of the 1990 renovation, with various control valves having been replaced since that time. (Figure 6)

Cooling is provided by through the wall air conditioners. The air conditioners have been replaced as they fail.

Ventilation and cooling for the corridor and interior spaces is provided by a DX fan coil unit with hot water heat, located at the end of the corridor. The unit has an outdoor air intake to provide outdoor air for ventilation.

Condition: The hot water finned tube radiation appears to be in good condition and has useful life remaining. The non-electric control valves will require ongoing maintenance and replacement. The through the wall air conditioners are in various states of repair and age, and would likely be replaced if an extensive renovation is done.

The fan coil unit likely has additional life left, however the condensing unit is near the end of its useful life and is R22.

**Locker Room / Reception Area**

The locker rooms and reception area are served by a packaged gas/electric rooftop unit for heating, cooling and ventilation. This unit was manufactured in 2010, and appears to have replaced a unit that was heating only. The rooftop unit is controlled by a single thermostat. (Figure 7)

The back hall is heated by hot water finned tube radiation. The rear of the reception area has hot water finned tube radiation. The vestibule has an electric heater. The office adjacent to the toilet rooms has electric baseboard. The office adjacent to the natatorium has two supply grilles. One is shown on the original hvac plans to be from the natatorium unit. The other is assumed to be from the rooftop unit. Exhaust from the locker rooms is provided by rooftop exhaust fans.

Condition: The packaged rooftop unit serving this area is only three years old and has 10+ years of additional life remaining. The hot water finned tube radiation and electric baseboard seem to be in good condition. The exhaust fans appear to be original but functional.

**Natatorium**

The natatorium is heated, cooled and ventilated by an energy recovery ventilator with a hot water heating coil. The heat is provided by a separate boiler system that serves the ERV and pool heating. The ERV and boilers were installed in the spring of this year.



Figure 4 - Kitchen Hood



Figure 5 - Kitchen Fans



Figure 6 - Replaced Heating Valve



Figure 7 - Locker / Reception RTU

## EXISTING CONDITIONS

MEP/FP - Allied Consulting Engineering Services, Inc.

### TV Room

The TV Room is an interior space and does not have heating. Cooling is provided by a ductless split system air conditioner. The indoor unit is installed above the ceiling with several eggcrate grilles open to the plenum. The outdoor unit is located on the roof. The unit was installed around 1990. The room does not appear to have any ventilation.

Condition: The ductless split system is 20+ years old and is near the end of its useful life.

### Game Room

The Game Room is heated by hot water finned tube radiation and cooled by a ductless split system air conditioner. The indoor unit is mounted on the ceiling and the outdoor unit is located on the roof. The unit was installed around 1990. (Figure 8)

Condition: The ductless split system is 20+ years old and is near the end of its useful life.

## HVAC SYSTEM DEFICIENCIES AND POTENTIAL UPGRADES

The existing boiler system, including the boilers and pumps, is relatively new and has many years of useful life remaining. The system provides much of the heating throughout the building. This system could be reused as the heating system for the building, if it is appropriate for the system designed.

The heat in the majority of the spaces is hot water finned tube radiation and the piping system in the building is mostly copper. The piping system and finned tube should be

in good condition and should be appropriate for selective re-use if it is appropriate for the new systems.

The building has several different cooling systems, with most of them beyond their useful life.

In the Senior Center the cooling is provided by two air handlers with two condensing units. The air handlers appear to be in good condition, however the condensing units are near the end of their useful life. And since the condensing units are R22, when they are replaced they will need to be changed to R410A, which will require replacing the air handler or at least the coil in the air handlers. (Figure 9)

The Gym is cooled by a rooftop unit that is at the end of its useful life. It is our understanding that the unit failed during the summer and is in need of replacement. Additionally, the finned tube in this area is damaged and would be replaced if the space is renovated.

The kitchen area is only heated. The exhaust fans are old and not to code. If the space is to be renovated and used as a commercial kitchen, a new grease hood and fan will be needed, as well as a make up air unit. Cooling for the space can be provided in the make up air unit or by a separate system as applicable.

The School Department area is served by through the wall air conditioners. The units are in various states of repair and age and are inefficient. If a renovation is done these units should be removed and replaced with a different system, such as several packaged rooftop units or split systems.



Figure 8 - Game Room Ductless Split



Figure 9 - Senior Center Condensing Units

The locker room and reception area is served by a rooftop unit that is only three years old. This unit can be reused to serve the existing area if it is appropriate with the new system selected. If the spaces are reconfigured, the ductwork can be changed to provide appropriate conditions. The spaces that are served by electric baseboard can be evaluated for hot water heat or some other system.

The natatorium systems were upgraded in spring of this year and do not require any upgrades.

The TV Room ductless split system is near the end of its useful life and should be replaced. The space does not appear to have any ventilation, and this can be incorporated into the new air conditioning system.

The Game Room ductless split system is near the end of its useful life and should be replaced. The hot water finned tube appears to be in good condition, and could be reused if appropriate with the new system.

The HVAC system controls are a mix of stand-alone controls and others that are connected to the town control system. Any renovations can include upgrading of controls and connection to the town system. (Figure 10)

**PLUMBING SYSTEM DESCRIPTION, DEFICIENCIES AND POTENTIAL UPGRADES**

**Sanitary**

The majority of the sanitary system for the building was installed when the building was built as a school around 1959. The Senior Center sanitary was installed around 1991

and was connected to the existing building underground. The condition of the piping is unknown. A camera can be used to evaluate the interior of the pipe and determine its suitability for reuse. We are not aware of any ongoing clogging or leaking issues. If major renovations are to be done (moving or adding toilet rooms), consideration should be given to replacing the sanitary piping. If renovations in place are made (fixture upgrades, finishes), the piping could probably remain.

The commercial kitchen has two above the floor grease traps. The age of the grease traps is not known, but they do not appear original to the building. If the kitchen is renovated, the condition and size can be evaluated further.

**Domestic Water**

The building is served by a 3" domestic water line that enters the building at the Senior Center on the Fairbanks Road side. The water then runs to the boiler room where the water heaters are located. There is a minor leak at the water service meter area in the water service closet. (Figure 11)

There are two gas fired water heaters for domestic water heating for the building. The water heaters were installed around 2006 as part of the boiler renovation. These water heaters have a 10 year warranty and have many years of useful life remaining. (Figure 12)

The domestic water system stores the water at 140 degrees. There is a Leonard mixing valve which reduces the temperature to approx 110 to supply to the building. The mixing valve was installed at the same time as the



Figure 10 - Gym Controls



Figure 11 - Water Service Leak



Figure 12 - Domestic Water Heaters

## EXISTING CONDITIONS

MEP/FP - Allied Consulting Engineering Services, Inc.

water heater and appears to be in good condition. There should be many years of useful life remaining for the mixing valve, however it should be noted that these valves require maintenance to prevent scaling/clogging and to keep functioning properly.

There is a solar thermal domestic water heating system connected to the domestic water system. This system consists of a series of panels on the gym roof and a storage tank and pump in the boiler room. This system was installed in 2010. It is our understanding that the system functions properly.

There is an additional 80 gallon electric water heater in the commercial kitchen. The water heater was manufactured in 2006, and is now out of warranty. It appears to be in good condition, but should be replaced if the kitchen is renovated. (Figure 13)

The majority of the domestic water piping in the building appears to be original to the building of the school in 1959. The piping in the Senior Center was new but connects to this piping. This is also the case for the piping in the Natatorium and locker rooms. Copper piping under normal water conditions should still be serviceable and have additional useful life remaining. One consideration is that the piping probably has lead solder joints. If major renovations are done (moving or adding toilet rooms), consideration should be given to replacing the water piping. If renovations in place are made (fixture upgrades, finishes), the piping could remain.

### Plumbing Fixtures

The plumbing fixtures throughout the building are of various ages and differing states of repair. Some toilet rooms, such as the school department area, have fixtures that appear to be original to the school. Other areas such as the Senior Center have newer fixtures from when renovations were performed. The original fixtures are near the end of their useful life and will require increased maintenance. If toilet rooms are to be renovated, fixture replacement is recommended. (Figure 14)

### FIRE PROTECTION SYSTEM DESCRIPTION, DEFICIENCIES AND POTENTIAL UPGRADES

The building sprinkler system was installed as part of the Atkinson Pool project. The sprinkler system only serves this area of the building. If extensive renovations are performed in the remaining part of the building, then the system will need to be extended to serve the rest of the building. The existing fire service enters in the reception side of the building into a closet. The service size is 4" This size will likely be adequate to serve the other portions of the building.

### ELECTRICAL SYSTEM DESCRIPTION

The existing electrical service is an 800 amp, 208V, 3-phase service fed from a pad mount transformer on the North-West face of the building. The main service entrance breaker is located in the electrical room (located within the boiler room). Primary and secondary feeders are run underground. The service is split into two on the load side of the 800 amp main breaker – an 800 amp branch feeds the switchgear in the natatorium area and a 400 amp branch



Figure 13 - Kitchen Water Heaters



Figure 14 - Original Plumbing Fixtures



Figure 15 - Service Transformer, Know-Box and Master Radio Box

feeds the transfer switch associated with the generator and the old switchgear located in the boiler room below. A roof-top HVAC unit is also lugged off the 400 amp branch disconnect. A one-line diagram has been attached to this document to illustrate the basic configuration.

There is a separate NSTAR meter for each of the two branches: (Figure 15)

1. 800 amp branch: meter #5054600
2. 400 amp branch: meter #2442700

The equipment in the main electrical room appears to be in good working condition and has been maintained. The newer equipment was installed in ~1990. No visible signs of rust were noted. The older equipment (with fuses) appears to be from mid-1980s. Some of the equipment was opened to inspect the interior condition. The 400 amp disconnect has one fuse with burn marks (Phase B). (Figures 16 - 19)

The old switchgear located in the boiler room is the original main service entrance for the building and was installed in ~1960. This piece of equipment is severely rusted and in disrepair. Several fuse mechanisms are not operational or have been deactivated. Some HVAC and kitchen equipment is still possibly fed from this switchgear. (Figures 20 & 21)

The generator (Olympian #D75P3) and transfer switch (ASCO brand) are in good condition (installed ~1990). The generator is located on the North-East face of the building and is rated for 75kW of load. The generator has roughly 3100 hours of run-time on it. Although the both pieces of equipment were not tested, they should have some useful life left if properly maintained. Emergency equipment is not separated from normal power equipment – separation is a requirement under current codes. (Figures 22 - 23)



Figure 16 - 800 Amp Main Breaker Switchgear



Figure 17 - Main Breaker Switchgear



Figure 18 - Main Switchgear (two disconnects and one main breaker)



Figure 19 - Disconnect 400 Amp showing burn marks on fuse



Figure 20 - Original Service Entrance in Boiler Room Area



Figure 21 - Original Service Main Fused Section



Figure 22 - Automatic Transfer Switch and Emergency Panel



Figure 23 - Generator

## EXISTING CONDITIONS

MEP/FP - Allied Consulting Engineering Services, Inc.

There is a small PV system (solar power) that was recently installed. The system appears to be installed per the latest code. Utility disconnects were found on the exterior and the inverter has the functionality required to shut-off the power supply upon power failure. (Figures 24 & 25)

The existing electrical equipment dispersed throughout the building is a mix of "old" and "newer" equipment and all appear to be installed within the last 20 to 50 years. There are numerous electrical sub-panels throughout the building, which have been added over the years as they were needed. The main panel in the pool area and the flush mounted panel in the pool lobby area have some rust on the cover. Other branch panels are in fair shape overall although the condition and age vary. Several panels do not have new replacement parts available as the manufacturers are no longer operational. Breakers in the stage/gymnasium panel are not functioning and need to be replaced. (Figures 26-30)



Figure 24 - PV System Inverter



Figure 25 - PV System Utility Disconnect and Fire Alarm Remote Annunciator



Figure 26 - Branch Panel in Main Electrical Room



Figure 27 - Natatorium Main Panel, Upper Section



Figure 28 - Stage Panel Breakers



Figure 29 - Natatorium Main Panel, Lower Section



Figure 30 - Natatorium Lobby Area Branch Panel

## EXISTING CONDITIONS

MEP/FP - Allied Consulting Engineering Services, Inc.

Several disconnects on the roof are severely rusted and have been infiltrated by moisture. Other disconnects are in good condition and have been installed recently. One disconnect (in the TV room) is installed at ceiling level and should be relocated above or below. (Figures 31 & 32)

The kitchen area is mostly gas-fueled – any addition of electrical equipment may need more power being added to this area. Panel space in the existing kitchen panel is also limited.

Wiring in the building is mostly MC cables and appears to be properly installed. There is limited identification of circuits and a lack of proper labeling (both of wiring and of breakers). (Figure 33)

The lighting is mostly fluorescent strip lights with T8 lamps and incandescent older lighting. These are functional but outdated. Existing lighting is in fair condition – still operational, however, several fixtures are missing lenses. Some ballasts and/or lamps are not functional. LED lamps have been used as replacements in some cases. The natatorium and the gymnasium have had updated T5 “efficient” fixtures installed recently. Lighting in the gaming room is fairly low and has been mounted to plastic piping – a potential hazard. (Figures 34-36)



Figure 31 - Rooftop HVAC Disconnects



Figure 32 - TV Room Disconnect at Ceiling



Figure 33 - Above Ceiling Wiring



Figure 34 - Troffer with Missing Lens

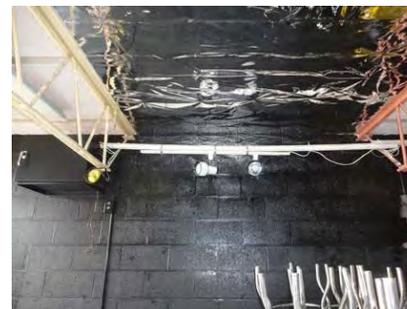


Figure 35 - Game Room Lighting Hanging from Piping

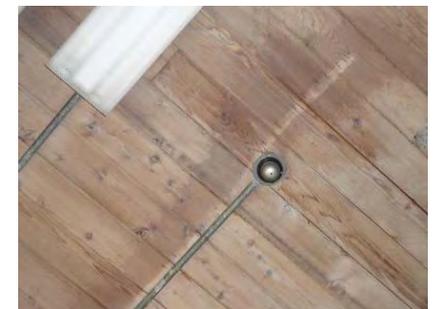


Figure 36 - Stage Area Lighting and Old Heat Detector

**EXISTING CONDITIONS**

MEP/FP - Allied Consulting Engineering Services, Inc.

The exit signs throughout are mostly functional. The look of the space is not consistent as varying types of exit lights have been installed over the years. Emergency lighting in the building is outdated – battery banks are used and emergency heads are dispersed throughout areas. Exterior exit egress lighting is not present – this would be required per current code. (Figures 37-39)

The existing fire alarm system is a zoned Simplex #4002 system. Horn/strobes, strobes, smoke detectors, and pull stations are located throughout the building although coverage is neither consistent nor complete. The system is monitored by the local fire department via a master box mounted near the electrical service transformer. A remote annunciator is located at the building entrance. The system was added in the early 90s. Several additional devices have been added over the years. (Figures 40-42)

Existing data and telephone systems needed for operation of the building are active. A server is located in the technology room and is fairly new. Overall, the I.T. system appears to be in good condition although there is a lack of identification and labeling, and a lack of wire management hardware. (Figure 43)



Figure 37 - Emergency Lighting Battery / Inverter



Figure 38 - Emergency Lighting Heads



Figure 39 - Emergency Lighting Unit in Corridor



Figure 40 - Fire Alarm Control Panel - Closed



Figure 41 - Fire Alarm Control Panel - Opened



Figure 42 - Fire Alarm Horn Strobe



Figure 43 - Server Rack

**SYSTEM DEFICIENCIES AND POTENTIAL UPGRADES**

**Electrical**

Portions of the existing electrical service equipment are near the end of their useful life and should be replaced if extensive renovations are to be done. It is recommended that several of the service disconnects/breakers be consolidated into one updated switchboard. Outdated equipment such as the original main switchgear should be removed and replaced by an updated electrical panel. Any abandoned/unused feeds can be removed concurrently.

The generator, transfer switch and PV system can remain and be tied in to the electrical system without any further modifications to these systems. If 2-hour separation of equipment is desired then existing equipment can be relocated to a new 2-hour closet.

Existing branch electrical panels that are outdated or rusted should be replaced “one for one” with new equipment. Most of the branch panels can remain in place and just be serviced. It is recommended that exterior (primarily roof) equipment also be considered for replacement on a device by device basis.

Existing lighting throughout the building varies significantly and would be evaluated on a case by case basis. It is recommended that incandescent lighting be completely removed and replaced. Older fluorescent lighting (with older ballasts and broken/yellowing lenses) should be replaced by updated, more efficient lighting. The stage lighting has scope for an update – presently there are strip lights (“wrap” fixtures) utilized in above the stage. Exit signage does not provide complete coverage and some exit light need to be added – it is recommended that exit lights be replaced throughout to provide consistent aesthetics.

The remote emergency battery packs providing emergency lighting in the building and should be replaced. New emergency lighting is required to be installed as per the building code. New emergency lighting can be achieved by remote battery heads or emergency ballasts integral to the light fixtures (if new lighting is to be installed in a given area). We recommend integral ballasts where possible.

The building partially utilizes automatic lighting controls (mainly occupancy sensors) and most of the controls seem to be in working condition. Complete lighting controls (in all areas) would further decrease utility costs by automatically turning lights off when rooms become unoccupied. If extensive lighting renovations are to occur, automatic controls would be required throughout in order to conform to the latest code.

It is recommended that the fire alarm system be completely removed and replaced with a new addressable system. A voice-evacuation system would possibly be required if the occupancy is greater than 300 – this would also depend on the building use group classification.

The telephone and data system requires no further updating unless specific issues need to be address. It is recommended, for future maintenance, that a proper labeling and identification system be maintained and wire management hardware be added at the server. (Figure 44)

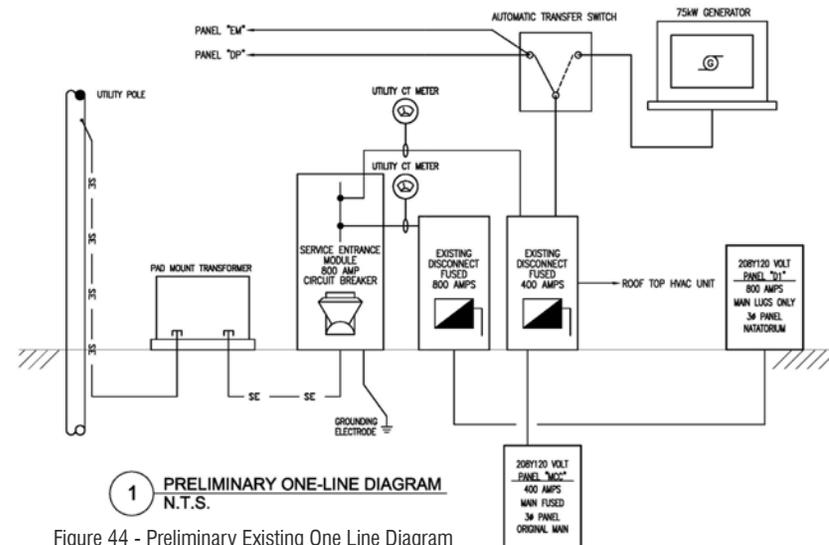


Figure 44 - Preliminary Existing One Line Diagram

## EXISTING CONDITIONS

Civil - Samiotes Consultants, Inc.

### GENERAL

The Sudbury Community Center was originally built in 1958 as the Fairbank School designed to service up to 600 students and faculty. The property use was converted to and currently services a mixture of public services including the Sudbury public school department, the senior center kitchen, the teen center, a gymnasium and the Atkinson Pool.

The Fairbank Community Center currently has 174 parking spaces, 9 of which are handicap accessible. These parking spaces are distributed in a 60/40 split in the West and East lots respectively. Between 1987 and 1989, the Senior Center, natatorium and gym additions were constructed forming the current configuration of the Sudbury Community Center. The goal of the Fairbank Community Center expansion is to better serve the population of Sudbury as a whole. The center hosts events such as swim meets and Veterans Day Lunches and various programs to supporting the teen center. As the population of Sudbury has more than doubled since the facility was originally constructed, the community center has seen an increasing demand from the residents of Sudbury. The future community center is proposed to serve as a resource for teens, parents, adults and the older adult population segments. In order to fulfill these needs, it is expected that between 10,000 and 20,000 square feet (sf) of area will be needed to accommodate fitness areas, a cafeteria, a pre-school and office space, with multiple entrance and egresses.

The study focuses on three expansion programs that will be referred to as the base, midrange, and enhanced program to incorporate the expected needs of the facility to varying degrees. The base program addresses the immediate needs of the facility; retaining the entire existing building layout and focusing on renovation and addition of essential amenities. The midrange and enhanced programs retain 11,100 square feet of the existing facility and expand upon the additions made in the base program. As part of the planning process, it is imperative to examine the existing conditions. All aspects of the existing infrastructure including parking spaces, utility services (in particular the septic system) will be evaluated to determine current conditions / capacity, as well as future impact based on the proposed changes.

### SITE AND UTILITIES

The Fairbank Community Center is serviced by public electric, cable, telephone natural gas, storm drainage and domestic water. Sewage is maintained by an on-site septic system. The septic system is a key component as the design cannot exceed the existing design capacity without requiring constructing a new septic system. The existing septic system was constructed in 1958 and serves all uses of the Fairbank Community Center. According to town records, the system consists of a 10,800-gallon septic tank that then transmits the sewage via a 2,200 gallon foot dosing tank with a 6-inch siphon line to the 7,200



Figure 1



Figure 2



Figure 3

square foot leaching bed that is located behind the building to the west. Based on information gathered from the Health Department, the system has a capacity (based upon the Title 5 regulations at the time of design) of approximately 7,200 gallons per day (GPD). An assessment of the septic system was performed on December 13, 2013 (figures 1, 2 and 3).

At the time of inspection the distribution box was observed to be at proper operating level (see Fig. 2). The distribution box showed no signs of surcharging and appeared to be structurally sound. The only recommendations would be to perform regular maintenance in an effort to remove accumulated growth.

The three programs have been examined to determine their demand to the existing septic system's capacity. In order to estimate the peak daily flow, each of the programs were broken up into the following categories: office space, auditorium / gathering, gymnasium space and pool area. Title V assigns contributing flow rates based on the proposed use of space in square feet or capacity. Unit values for office space, auditorium / meeting space, pool area and gymnasium have been based on the seating layout provided in the conceptual plans by Bargmann Hendrie + Archetype, Inc. Based on that plan, it has been assumed that the Base program is comprised of 5,400 sf of office space, the mid-range program includes 6,600 sf of office space and the enhanced program incorporates 7,000 sf of office space. Auditorium / meeting, gymnasium and pool areas are

calculated using a flow rate per person, which have been estimated based upon the conceptual seating layouts and the assumed number of participants for these areas.

Those areas and participant / seating assumptions result in flows of 3,000 GPD for Option 1, 4200 GPD for the Option 2 and 5,400 GPD for Option 3. As stated, the existing system has a capacity of 7,200 GPD. As currently constituted all three of the proposed programs will be under the peak capacity of the existing system.

The existing storm drainage systems appear to be performing adequately as no pooling or overflow issues have been reported. All existing drainage should be evaluated for capacity and condition as it relates to the selected expansion program during the design phases. The stormwater management from a water quality perspective may require additional Best Management Practices (BMPs) as there is a wetland that the parking lot is tributary to.

Gas, domestic water, fire protection, and electric services are fed to the community center from Fairbank Road. Verizon and Comcast report no underground facilities servicing the building. An existing conditions plan from September 25, 1989 shows overhead telephone lines feeding an onsite utility pole. A service drop is shown from the onsite utility pole servicing the building.

The existing community center building is provided cable and telephone service in its current use, we do

not anticipate any issue with these services and this should be confirmed by the MEP engineer.

Domestic and fire protection water services are fed from a 12" line located in Fairbank Road. This water main feeds a hydrant located on the Northeast side of the property. Only the Atkinson pool utilizes a fire protection system, this sprinkler system is being fed by a 4" fire protection line. According to the mechanical engineer, it is likely that the 4" fire protection line will provide adequate flow to expand the system to all portions of the facility. In the event that the 4" line does not provide enough flow or pressure, the 12" main should be able to support increasing the size of the fire protection service to meet the demand. Fire flow tests should be conducted in the next plan development phase in order to determine the viability of the existing main from a flow and volume perspective to accommodate the fire protection system.

Electric service is provided by NSTAR the underground feed is 800a, 208V 3 phase line supplied from a utility pole on Fairbank road to a transformer mounted on a maintenance pad located in the Northwest face of the building. This service should be adequate to support the proposed renovations. A backup generator and transfer switch were installed around 1990 as part of the most recent addition. According to the electrical engineer these systems are not currently independent of primary power equipment and would need to be in order to comply with current code.

## EXISTING CONDITIONS

Civil - Samiotes Consultants, Inc.

### ENTRANCE

The base program retains the existing entrance located in the front (North side) of the building, three egresses located on the South, East and West sides of the building will be included in this plan. Additionally the Northeast side of the building will include a pre-school drop off entrance/exit.

The mid-range and enhanced programs relocate the existing entrance to a more centralized location based on the new layouts. Both of the programs include a dedicated pre-school drop entrance and exit located on the Northeast side of the building, two additional egresses have been included in the mid-range program while three egresses are included in the enhanced program. All new construction or renovations to the entrance must be completed in accordance with State ADA regulations.

### PARKING

Options 1 and 2 will not impact the existing parking capacity or layout. Option 3 will require removing the sidewalk and curb structure at the front of the building. The parking layout will change but there will be no impact to the total number of parking spaces. Each of the layouts have approximately 40% of the total parking located on the Northeast side of the building where the pre-school drop off is located. This area will be serviced by a dedicated entrance from Fairbank Road improving morning and evening queuing at the main entrance. Considering the parking layout will not change as part of the base or midrange program, it is recommend that the majority of handicapped accessible parking be placed in the 20 space area located closest to the proposed entrances.

Option 3's program includes 46 parking spaces located in front of the building, 17 of which are located along the front face of the building. Direct access to the walkway could easily be accommodated from these parking spaces. The kitchen and associated receiving area is located between this walkway and the main entrance. Delivery vehicles will present an access issue, especially for physically challenged as the walkway will be blocked by the delivery vehicle. The 29 parking spaces located across from the front face of the building could be

utilized as handicapped accessible, proper curb cuts and pedestrian crossings would be required to comply with ADA standards and provide a safe environment for pedestrian travel.

The parking lot located on the East side of the building contains 70 parking spaces. This will adequately provide for morning and evening peak times associated with the pre-school. There is potential to utilize these spaces as a high turnover area used for all pick-ups, drop-offs or visitors staying for less than 30 minutes.

	Base Program	Mid-Range Program	Enhanced Program
Category			
Meeting Space	250	250	300
Gymnasium	50	100	125
Pool	50	50	75

Simpson Gumpertz & Heger performed a visual survey and made probe openings in the Exterior Insulation and Finish System (EIFS) cladding and ballasted EPDM roofing at the Atkinson Pool natatorium building. This report contains a summary of our findings, as well as a sketch and outline specification sections related to recommended repairs.

#### 1. BACKGROUND

The Atkinson Pool was constructed in 1987 as an addition to the Fairbanks school, which was constructed in 1959. The Fairbanks school and the Atkinson Pool are now a part of the Fairbank Community Center (Photo 1). The Atkinson Pool building natatorium is approximately 10,000 sq ft, with a swimming and diving pool. The natatorium is constructed with a wood-framed roof structure and load-bearing masonry walls on concrete footings.



Photo 1 - Exterior of Fairbank Community Center & Atkins Pool

We reviewed the existing as-built drawings dated 6 March 1987. The exterior walls are constructed of a combination of concrete masonry units (CMU) and an exterior insulation finish system (EIFS). The lower portion of the masonry wall consists of a 4 in. split-faced CMU veneer, 3/4 in. air space, 1 in. rigid insulation, and 8 in. CMU. The upper portion of the masonry walls consists of an EIFS system installed over 12 in. CMU. The architectural design lacks a flashing at the joint between the EIFS system and the lower split-faced CMU veneer wall.

The roof assembly over the natatorium is a gabled roof sloped at 2 in. per foot toward gutters at the roof eaves. The architectural drawings indicate that the roof assembly over the natatorium is a ballasted single-ply roof membrane on 3 in. rigid insulation over 3 in. x 6 in. tongue and groove laminated wood deck. Several of the architectural details indicate that a vapor barrier is to be installed between the wood deck and the rigid insulation.



Photo 2 - Interior of Atkins Pool Natatorium

#### 2. INTERIOR OBSERVATIONS

The interior of the Atkinson Pool natatorium has exposed acoustical CMU walls, laminated wood roof beams, and tongue and groove laminated wood roof deck (Photo 2). We observed staining on the laminated wood beams that appears to originate from the joint between the wood beams and the wood deck (Photo 3). During our visit, the interior temperature inside of the space was 80.5°F, and the relative humidity was 53%. We observed that the building is negatively pressurized with respect to the exterior.

#### 3. EIFS OBSERVATIONS

We performed a visual assessment of the EIFS finish, and made exploratory openings at three locations in the EIFS to evaluate the condition of the EIFS and details, and to evaluate the source of isolated cracks in EIFS finish.



Photo 3 - Staining on the interior laminated wood beams

## EXISTING CONDITIONS

### Facade Condition Assessment - Simpson Gumpertz & Heger

#### 3.1 Visual Assessment

We performed a visual assessment of the existing EIFS and observed the following conditions:

- Cracking of the existing EIFS finish in multiple locations on the southwest and northwest elevations (Photo 4).
- Damage and dents in the existing EIFS finish in multiple locations on the southwest and southeast elevations from rocks or balls (Photo 5).
- Burrowed holes in the existing EIFS finish and insulation on the southwest and northwest elevations from birds (Photo 6).
- Failed sealant at EIFS expansion joints (Photo 7).
- Failed sealant between the EIFS and the split-face CMU veneer brick below (Photo 8).
- Scouring of the EIFS finish with the reinforcing mesh visible below joints in the roof gutter at the southwest elevation (Photo 9).
- EIFS expansion joints generally align with the CMU expansion joints below.
- An aesthetic EIFS reveal is installed at regular intervals. This reveal is not intended to be an expansion joint for the EIFS. Several reveals are cracked (Photo 10).



Photo 4 - Crack at the northwest elevation



Photo 5 - Multiple dents observed in EIFS



Photo 6 - Bird within the EIFS



Photo 7 - Failed sealant joint at EIFS expansion joint



Photo 8 - Failed sealant joint at EIFS panel to veneer CMU below



Photo 9 - Scoured EIFS and CMU below leaking gutter joint

**3.2 Exploratory Openings**

We made three exploratory openings in the EIFS at different locations. At all locations we observed that the EIFS is a reinforced acrylic finish installed directly over 2 in. of expanded polystyrene insulation. The insulation is adhered to the CMU backup with a discontinuous cementitious based adhesive. At areas without adhesive, the insulation is spaced approximately 1/4 in. to 1/2 in. off of the CMU backup wall and is not adhered to the CMU backup (Photo 11). We used a GE Protimeter Moisture Measurement System (Protimeter) to record moisture readings in existing wood construction. Measured wood moisture contents in excess of 16% are considered “wet” and may cause accelerated decay and promote mold growth within or on the wood. When moisture contents of wood substrates are below 8%, the Protimeter does not provide a moisture reading. We observed the following conditions at the individual openings:

- **Opening 1:** We made an exploratory opening at the transition between the EIFS and the lower portion of the masonry wall with the 4 in. CMU veneer. The EIFS terminates approximately 1/2 in. from the top of the 4 in. CMU. The EIFS finish reinforcement fabric wraps the bottom of the insulation panel, however the base and finish coat do not wrap around the bottom of the insulation (Photo 12). A sealant joint is installed between the bottom of the EIFS panel and the CMU veneer. The sealant joint failed adhesively and cohesively. Below the failed sealant joint, we observed staining on the CMU veneer (Photo 13). We noted a gap of approximately 1/8 in. between insulation boards (Photo 14).
- **Opening 2:** We made an opening at the end of the laminated wood beams and observed that the end of the laminated wood beam is exposed behind the EIFS. The end of the wood beam did not show signs of deterioration due to moisture. We attempted to record the percent moisture

content with the Protimeter, however the Protimeter did not register a reading; this means that the percent moisture content at the end of the wood beam was below 8% (Photo 15).

- **Opening 3:** We made an opening at the cracked EIFS at the northwest elevation. The crack in the EIFS is diagonal beginning at the window head-to-jamb corner. We observed that the CMU backup wall mortar joints are cracked at this location along a similar to the crack in the EIFS (Photo 16).

**4. CMU OBSERVATIONS**

We performed a visual assessment of the exposed CMU veneer masonry walls. We observed staining on the CMU veneer across all elevations. The staining emanates from the joint between the EIFS and the top of the exposed CMU (Photos 17 and 18).

The CMU mortar joints are cracked on all elevations. We observed that the cracking is more prevalent at



Photo 10 - Reveal in EIFS system cracked at the northwest elevation



Photo 11 - EIFS insulation board spaced approx. 1/2 in off CMU backup



Photo 12 - EIFS base coat does not wrap around the board edges at the base of the system

## EXISTING CONDITIONS

### Facade Condition Assessment - Simpson Gumpertz & Heger



Photo 13 - Failed sealant at the EIFS to CMU veneer joint



Photo 14 - Insulation Boards are spaced approximately 1/8 in.



Photo 15 - Wood beam exposed behind EIFS



Photo 16 - Cracked CMU joints generally align with crack in EIFS



Photo 17 - Staining on CMU below EIFS



Photo 18 - Staining on CMU below EIFS

## EXISTING CONDITIONS

### Facade Condition Assessment - Simpson Gumpertz & Heger

the building corners and below the windows along the southwest elevation (Photos 19 and 20). We also observed a dislodged CMU veneer at the south corner of the building (Photo 21).

At the northeast elevation of the building, a 1 in. x 1 in. steel relieving angle is installed to support the outer edge of the veneer (Photo 22). At the north side of the northeast elevation the steel relieving angle is corroded (Photo 23). This area is directly below exhausts from the pool filter room. Below a leaking joint in a roof gutter on the southwest elevation, the smooth-faced CMU veneer blocks are scoured and the mortar within joints has cracked and has fallen out (Photo 24).



Photo 19 - Cracking at the south corner of the building

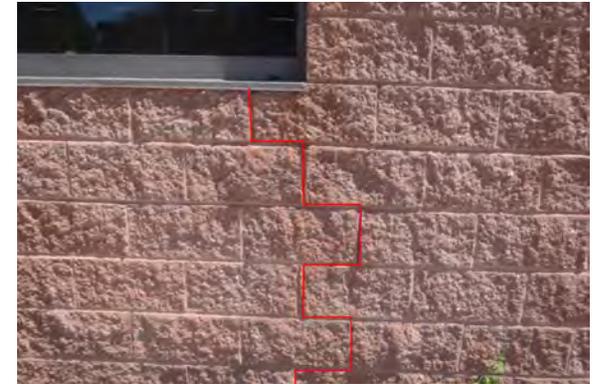


Photo 20 - Cracking below window frame corner at southwest elevation



Photo 21 - Dislodged CMU at south corner



Photo 22 - Corrosion on steel relieving angle at southeast elevation



Photo 23 - Corrosion on relieving angle at southeast elevation



Photo 24 - Scoured CMU below gutter seam

## EXISTING CONDITIONS

### Facade Condition Assessment - Simpson Gumpertz & Heger

#### 5. ROOF OBSERVATIONS

We made three exploratory openings in the roof assembly to determine the existing construction and the condition of concealed materials. The roof membrane is a loose laid and ballasted ethylene propylene diene (EPDM) single-ply membrane with approximately 2 in. of river rock ballast. The membrane is installed over 3 in. loose laid polyisocyanurate insulation and two layers of asphalt-impregnated felt over 3 in. x 6 in. tongue and groove wood plank deck (Photo 25).

At all of the openings, we observed moisture on the underside of the EPDM roof membrane (Photo 26). The top 1 to 2 in. of insulation is wet to the touch. We measured the moisture content of the wood planks with the Protimeter moisture meter and found that the wood planks have acceptable moisture content (9.5-11.4%). We observed surface corrosion on several fasteners securing the asphalt-impregnated felt to the wood plank deck (Photo 27).

We observed that the river rock ballast is degrading. Many of the stones are cracked and splitting, which results in sharp edges that can penetrate the roof membrane particularly under foot traffic (Photo 28). We understand that this roof does not experience much traffic; however, you indicated that the roof is occasionally shoveled in the wintertime to reduce the roof snow load.



Photo 25 - Wood plank deck exposed at opening



Photo 26 - Water test paper indicating condensation (pink color) on the underside of the EPDM membrane



Photo 27 - Surface corrosion on fastener securing asphalt-impregnated felt to wood deck



Photo 28 - Degraded roof ballast with sharp edges

## 6. CONCLUSIONS

### 6.1 EIFS

The installed EIFS is a barrier system that relies on the exposed finish and sealant joints to form a continuous barrier and resist water penetration. Therefore, breaches in the barrier such as sealant discontinuities or cracks and holes in the finish result in water penetration behind the EIFS.

The insulation boards are not continuously adhered to the CMU backup wall, and rely on discontinuous cementitious adhesive for support. EIFS manufacturers require that the board insulation be adhered to the substrate to resist cracking and wind loads. The insulation board spanning between areas of adhesive is prone to cracking and delamination in a high wind event. Due to the space between the existing EIFS insulation board and the backup CMU, providing supplemental fasteners through the EIFS insulation board would deflect the insulation and result in more cracks and a non-plumb (wavy) appearance.

### 6.2 CMU

The portions of the CMU wall exposed to the exterior are 4 in. thick smooth-faced and split-faced veneer CMU blocks installed over a 1/2 in. air cavity, 1 in. insulation, and 8 in. CMU backup wall. We observed cracking in the split-faced veneer CMU at building corners and below and above window corners. However, we do not know if the cracks are static or moving. The cracking appears to be the result of building settlement over the history of the building. If the cracks are static (non-moving), then cutting

and re-pointing the affected joints will eliminate the aesthetic impacts of the cracked joints and will help to prevent water infiltration through them. The corroded shelf angle on the southeast elevation is located directly below the pool filter room exhaust louvers. Replacing the corroded shelf angle with a stainless steel angle that is more resistant to corrosion will reduce the possibility of corrosion in the future.

### 6.3 Roof

Ballasted roofing systems typically have a shorter lifespan than similar adhered or mechanically fastened (non-ballasted) systems for the following reasons:

- The ballast tends to inhibit drainage of water from the surface of the membrane, resulting in prolonged exposure of the membrane seams to moisture; over time, this can result in premature deterioration of the seams and eventual leakage
- Over the life of the roof the initially relatively smooth stone ballast tends to crack into smaller pieces with sharper edges. Under foot traffic or moving of ballast, these sharper edges lead to holes in the membrane and leakage into the building.

The existing roof assembly is approximately 25 yrs old and is near or at the end of its useful service life. We understand that the roof currently does not have reported leaks to the interior. The deteriorating ballast presents an increasing risk of damage to the single-ply EPDM membrane. The sharp cracked stone can puncture the EPDM roof membrane from foot traffic

on the roof during snow shoveling and other activities. Leaks that develop in ballasted, loose laid single-ply roof assemblies can be difficult and costly to trace since the membrane is not visible, and inspection of the membrane often requires temporary removal of a significant amount of stone ballast. In addition, the foot traffic and moving of sharp ballast associated with the inspection process can lead to additional punctures in the membrane.

The current roof assembly lacks a vapor retarder and air barrier; the two layers of asphalt-impregnated building paper provide little resistance to air or vapor flow. Today it is common practice to install a vapor retarder and air barrier to separate relatively humid natatorium spaces from the exterior environment, especially in cold climates. The vapor retarder and air barrier prevent the warm moist interior air and interior water vapor from reaching the cold portions of the roof assembly. As the interior air or vapor travel through the roofing assembly, the water vapor condenses on cold surfaces (such as on the underside of the roof membrane, as our exploratory openings revealed). During prolonged periods of cold weather (wintertime), condensation may build up inside of the roof assembly and result in the water staining that we observed at the top of the laminated beams. In addition, the wet roof insulation is no longer providing the expected thermal protection.

## EXISTING CONDITIONS

### Facade Condition Assessment - Simpson Gumpertz & Heger

#### 7. RECOMMENDATIONS

We have included an outline specification section in Appendix A to address the following recommended repairs.

##### 7.1 EIFS

We recommend removing and replacing the EIFS with new fully adhered, drainable EIFS. Such a system will maintain the original appearance of the building and drain water that bypasses the EIFS finish or sealant joints back to the exterior.

Prior to installing the new EIFS, we recommend installing a through-wall flashing (with an exterior drip edge) at the base of the drainable EIFS and above the CMU veneer to direct any incidental moisture away from the exterior surface of the CMU (thereby reducing staining on the CMU). The through-wall flashing should have an upturned leg that is integrated with the water resistive barrier behind the EIFS.

Additionally, we recommend repairing the gutter joints to eliminate water from escaping the gutter and flowing down the face of the new EIFS (which currently results in scouring of the EIFS finish). We recommend removing the gutter sealant that is currently installed and stripping the gutter seams with EPDM membrane backed with a butyl adhesive. The EPDM membrane will allow movement between the gutter sections.

We have included specification sections and sketches in Appendix A for these recommended repairs.

##### 7.2 CMU

While we do not know whether the cracks in the CMU are active, we recommend repointing the cracks at this time to help reduce water penetration at these locations. If the cracks re-open with time, we will then know that they are active and we then can provide guidance on the possibility of a further study or investigation.

We expect that the installation of a flashing above the top course of the flush and split-face concrete CMU will prevent water staining of the CMU. The current stains can be removed with a masonry cleaner.

We recommend replacing the relieving angle at the southeast elevation with a stainless steel angle to reduce the possibility of corrosion in the future. Temporary support of the CMU above the angle will be required to replace the angle.

##### 7.3 Roof

We understand that the roof system is not scheduled for replacement at this time. Due to the wet insulation, condition of the ballast and lack of a vapor retarder and dedicated air barrier in the current assembly, we recommend replacing the ballasted EPDM roof assembly when budgets allow. The new assembly should include a dedicated vapor retarder and air barrier that are continuous across the roof and integral with the building walls to reduce the possibility of condensation within the roof assembly. We recommend avoiding a ballasted assembly and installing either mechanically fastening or fully

adhered roofing membrane over insulation and cover board that are fastened directly to the wood deck. If you would like to pursue roof replacement, we can provide you with a proposal for a roof design at a future date.

**APPENDIX A - OUTLINE SPECIFICATION**

**1.0 SCOPE OF WORK**

**1.1 Mockups**

- A. For all repairs listed below, unless otherwise specified, prepare one full-sized mockup for inspection and water testing by the Owner’s representative. Mockup shall demonstrate transition of all materials. If approved, the mockups may remain on the building as part of the permanent construction. Reconstruct or modify mockup as many times as required to provide a watertight system and obtain approval from the Owner’s representation.

**1.2 Exterior Insulating Finish System (EIFS)**

- A. Remove and dispose of existing EIFS system around the exterior of the Atkinson Pool down to the CMU backup wall.
- B. Repoint any exposed cracked or otherwise deteriorated mortar joints in the CMU backup wall
- C. Install metal flashing as shown in included sketches
- D. Install water resistive barrier and associated flashings for a fully drained EIFS system.
- E. Install drainage material and 2 in. rigid insulation for a fully drained EIFS system.
- F. Install fabric reinforcement and base coat.
- G. Install expansion sealant joints.
- H. Install EIFS finish coat

**1.3 Concrete Masonry Unit (CMU) Repointing**

- A. Repoint all cracked and otherwise deteriorated exterior mortar joints.

**1.4 Sealant Joints**

- A. Remove existing polyurethane sealant joint and open-cell backer rod at all CMU expansion joints.
- B. Clean and prepare CMU substrate for sealant joint installation, including any primer recommended by sealant manufacturer.
- C. Install closed-cell backer rod and silicone sealant into expansion joint as shown in attached sketches.

**2.0 PRODUCTS**

**2.1 Exterior Insulating Finish System (EIFS)**

- A. Drainable EIFS cladding system: Provide a complete, drainable, exterior insulation and finish system (drainable EIFS). Obtain materials from the same manufacturer and as required by the EIFS manufacturer to provide a complete warrantable system.
  - 1. Basis of Design: StoTherm Classic NExT by Sto. Corp.
    - a. Alternate approved System Manufacturers:
      - (1) Dryvit
      - (2) Synergy by BASF
  - 2. Air/Moisture Barrier: Sto Gold Coat ready mixed waterproof coating for wall

- substrates and sheathing or as approved by manufacturer.
- 3. EIFS Adhesive: Sto BTS Plus one component polymer-modified, cement based high build adhesive or as approved by manufacturer
- 4. EPS Insulation Board: Polystyrene, ASTM C578, extruded or expanded type; minimum average density 1.5 pcf; thickness to match existing EIFS insulation, hot wire cut to special shapes indicated, maintaining tolerances necessary to achieve tolerances specified for finished installation.
- 5. EIFS Base Coat: Sto RFP one component non-cementitious, fiber reinforced acrylic base coat.
- 6. EIFS Reinforcing Mesh:
  - a. All Areas
    - (1) Sto Mesh, 4.5 oz per square yard, symmetrical, interlaced open-weave glass fiber fabric made with alkaline resistant coating for compatibility with Sto materials.
  - b. Southwest Elevation (adjacent to playground)
    - (1) Sto Armor Mat 15 oz per square yard, ultra high impact, double strand, interwoven, open-weave glass fiber fabric

## EXISTING CONDITIONS

### Facade Condition Assessment - Simpson Gumpertz & Heger

with alkaline resistant coating for compatibility with Sto materials. Install Sto Armor Mat below Sto Mesh.

7. EIFS Primer: Sto Primer
  8. EIFS Finish Coat: Stolit – Acrylic-based textured wall coating. Color to match existing or as approved by Owner.
- B. Sheet Metal Flashing: 24 ga stainless AISI Type 304 steel sheet metal with 2D finish.
1. Solder: ASTM B32, Class 50A or 50B, Bar Form, 50% block tin and 50% pig lead or 60% block tin and 40% pig lead.
  2. Flux: Conforming to ASTM B 813. Clean metal immediately after soldering to ensure that no acid remains on the metal.
  3. Rivets for sheet metal connections: Solid stainless steel 3/16 in. dia. Flat head rivets of proper length for the material being fastened.

#### 2.2 Concrete Masonry Unit (CMU) Repointing

- A. Water: Potable.
- B. Sand: ASTM C144, fineness modulus 2.0 to 2.5.
- C. Hydrated Lime: ASTM C 207, Type “S” (Type SA/air entrained is not permitted)
- D. Portland Cement: ASTM C 150, Type I (white, non-staining), low alkali (equivalent

alkalis less than 0.6%). The use of “masonry cement” is prohibited.

1. Mortar Pigment: Use integral coloring material consisting of inert, nonfading, finely ground, alkali-fast mineral oxides, meeting ASTM C979. Limit coloring additive to 10% by weight of cementitious material.
  2. Mortar color to match existing or as selected and approved by the Owner.
- E. Mortar: ASTM C 270, Type N. Proportions by volume 1:1:6 (portland cement: hydrated lime: mason’s sand). Do not use ground limestone or prepared masonry mortar mixes. Use the same brands of cement and lime, and the same source of sand throughout the project, for each mix. Do not use chlorides or any admixture without written approval by the Engineer.

#### 2.3 Sealant Joints

- A. Sealant and Primer for Joints:
  1. 790 Silicone Building Sealant by Dow Corning, color selected by the Owner. Dow Corning 1200 Primer or primer as recommended by Dow Corning.
- B. Sealant Backer Rod: Closed-cell nongassing polyethylene foam rod, “HBR” by Nomaco. The diameter of the rod is to be 25% in excess of joint width. Surface skin of the rod shall be continuous and unbroken to

preclude outgassing and formation of voids in the overlying sealant.

- C. Joint Cleaner: Isopropyl alcohol, Xylene, or as recommended by sealant manufacturer and as approved in jobsite adhesion tests.

## 3.0 EXECUTION

### 3.1 EIFS Demolition and Installation

- A. EIFS workmanship is to comply with all applicable recommendations provided by EIMA, details and recommendations provided by the manufacturer, and as prescribed in these Specifications. Do not proceed with EIFS installation until all associated backup waterproofing and flashings are installed. Coordinate work to incorporate all upturned legs and ends of flashing into EIFS work.
- B. Mix all EIFS components according to manufacturer’s recommended quantities, proportions, consistencies, and mixing times.
- C. “Back wrap” all insulation board edges with detail mesh at bases of walls and at all EIFS terminations. Mesh must be wide enough to adhere a 4 in. strip of mesh to the back of insulation board, fully wrap board edge, and extend a min. 4 in. onto the exterior face of the insulation board. Installation of Metal Lath at Areas of Drainable EIFS:
- D. Adhesive Application and Insulation Board Installation
  1. Bridge joints substrate by a min. of 8 in. Interlock insulation board at all inside

and outside corners. Cut insulation board in an L-shaped pattern to fit snugly around openings – do not align board joints with corners of openings.

2. Butt all board joints tightly; holidays are not allowed. Prevent adhesive from entering board joints. Fill any open joints solid with slivers of insulation board.
3. After insulation boards are firmly adhered to substrate, rasp surface to remove any residue or damage due to ultraviolet ray exposure.

**E. Installation of Base Coat and Reinforcing Mesh**

1. At corners of all penetrations in EIFS, install min. 9 in. x 12 in. diagonal strips of detail mesh. Embed strips in wet base coat adhesive and trowel from center to edges to avoid wrinkles in the mesh.
2. Apply base coat over insulation board to a thickness of approximately 1/8 in., or thick enough to fully embed mesh. Work horizontally or vertically in strips of 40 in. and immediately embed mesh in wet base coat by troweling from center to edge of mesh. Allow base coat to dry. Mesh must be fully embedded in base coat so that mesh color is not visible. Re-skim with additional base coat if mesh color is visible.

3. Complete back wrapping procedure by applying base coat to exposed board edges and 4 in. onto face of insulation board. Pull mesh tight around board edge and embed in base coat with stainless steel trowel. Use a corner trowel for clean, straight lines. Smooth any gaps or wrinkles in mesh.
4. Allow base coat to dry thoroughly before applying primer or finish.

**F. Primer and Finish Coat Application**

1. Apply primer evenly with brush, roller, or proper spray equipment over clean, dry, base coat. Allow primer to dry thoroughly before applying finish coat.
2. Apply finish directly over primed base coat or concrete by spraying or troweling with stainless steel trowel. Abide by the following general rules for finish coat application:
  - a. Avoid application in direct sunlight.
  - b. Apply in continuous application, and work to a wet edge or natural break in wall. Avoid cold joints in finish coat application, and do not install separate batches of finishes side-by-side.
  - c. Adjust schedule of work according to climatic conditions. Hot or dry conditions limit working time and accelerate drying; cool or damp

conditions extend working time and retard drying. Protect finish coat from extreme temperatures, wind, dust, dirt, rain, freezing, or moisture of any kind.

- d. Do not apply finish into or over sealant joints; apply to outside face of wall only. All sealant joints in EIFS are to be installed to base coat only.
- e. Do not apply finish over irregular, unprepared, dirty, or unprimed surface.

**3.2 CMU Repointing**

- A. Masonry workmanship shall comply with all applicable recommendations of the Brick Industry Association (BIA). Report any damage to new or existing flashing within the work area to the Engineer and provide for repairs by appropriately skilled mechanics at no cost to the Owner.
- B. Conduct all masonry work in a neat and workmanlike manner to prevent staining any surface with mortar or other spills. Avoid dropping mortar on completed masonry work or other elements of the building. If mortar drops or spills, spot-clean immediately using a sponge and clean water.
- C. Hot Weather (above 90°F): Do not use mortar when masonry surface temperature is above 90°F. At air temperatures over 80°F, protect the mortar from direct sunlight and exposure

## EXISTING CONDITIONS

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to wind to prevent rapid evaporation of water in the mortar before, during and after installation.

- D. Mix mortar using sufficient quantity of water to ensure good workability in accordance with BIA recommendations. For each batch, measure cement and lime by volume or equivalent weight. Measure sand by weight or in calibrated containers, with allowance made for moisture content, bulking, and consolidation. Do not use shovel measurements. Mix by machine only for at least 3 min. but not more than 5 min. Use mortar within 2 hrs of mixing at temperatures over 74°F, and 2-1/2 hours at temperatures between 50°F and 74°F. Do not re-temper mortar; discard hardening mortar.
- E. Where required, cut masonry with a motor driven saw to obtain true, even, and undamaged edges.
- F. Strike exterior of mortar joints flush during laying. When mortar is thumbprint hard on exposed surfaces, tool joints concave with a cylindrical pointing tool slightly larger than the masonry joint to compact the mortar thoroughly.
- G. Unless shown otherwise on drawings, place weep baffles horizontally in bed joints immediately above flashing at no more than 24 in. on center and at low spots on the metal flashings.

- H. Clean all masonry work promptly after curing by wetting surfaces and washing with a stiff bristle brush to produce a clean and unmarred appearance. Begin cleaning with clean water only, without chemical cleaners. If water alone with a scrub brush is not successful, as determined by the Engineer, use an approved cleaning compound. Dilute the compound with the maximum amount of water that will allow proper cleaning, as approved by the Engineer.

### 3.3 Sealant Joint Installation

- A. General Sealant Joint Construction:
  - 1. All sealant joints shall contain backer rod as shown on the Drawings. Avoid three-sided adhesion in all joints.
  - 2. Centerline depth of butt joints shall be one-half of joint width, with minimum depth of 1/4 in. and maximum depth of 1/2 in.
  - 3. Use an appropriate removable tape to protect all adjacent surfaces from staining or errant sealant application.
- B. Sealant Substrate Preparation:
  - 1. Grind all masonry surfaces to remove all remnants of existing polyurethane sealants.
  - 2. Remove all dirt or other foreign substances, including existing sealant, from substrates to receive sealant. All substrates shall be dry before

preparation begins. Solvent clean substrates immediately before insertion of the final backer rod or bond breaker.

- 3. Solvent Cleaning: Use two clean, white, lint-free cloths to solvent clean. Pump solvent onto the first cloth and wipe substrate vigorously. Do not dip cloth into solvent to avoid contamination of the solvent. Use second cloth to clean substrate before solvent evaporates. Repeat this two-cloth procedure until substrate does not discolor cloth and repeat at least once. Allow solvent to evaporate from substrates before continuing.
- C. Backup Material Installation:
  - 1. Install clean and dry backer rod, release tape, or compressible filler into joint openings against dry solvent-cleaned substrates. Remove all wet materials from the jobsite. Replace any backer rod not sealed over by the end of the day and solvent clean the surface again.
  - 2. Inspect the surface of the backer rod for any punctures before sealant installation. Remove any rod containing punctures. Do not rupture the skin of the closed-cell backer rod during installation. Remove any rod punctured during installation.
  - 3. Place the rod and release tape so that the sealant shape will meet the shape

requirements of this Section and as shown on the Drawings.

4. Use as long a piece of backer rod as possible. Change rod sizes as frequently as required by the variation in the joint width. Do not twist rods together. The diameter of the rod is to be 25% in excess of joint width. Butt ends of rods tightly. Provide a full range of backer rod and release tape sizes at the site of all sealant work.
5. Account for slight concave tooling of joints when setting backer rod depths. Do not touch with fingers or otherwise contaminate the substrates while inserting the backer rod.

**D. Sealant-Joint-Primer Installation:**

1. Do not install sealant until all surfaces to receive sealant have been cleaned and primed.
2. Prime all surfaces to receive sealant after backer rod, release tape, or compressible filler installation. Apply a thin coating with a clean cloth and allow to dry for at least 1 hr or as required by the manufacturer's approved instructions. Apply primer to clean, dry substrates at ambient temperatures above 40°F.
3. Mask all surfaces before priming. Apply primer with a clean brush. Do not allow

primer on exposed surfaces beyond sealant.

4. Allow primer to dry. If the primed area turns milky white in color, remove primer with specified cleaner and reprime.
  5. Do not allow primer to become wet or dirty before sealant application.
- E. Sealant Joint Installation:**
1. Inspect each cartridge or container of sealant before use and verify that the production date is within six months of the date of application. Remove from the site all sealant more than six months old. Each applicator shall understand the method of coding the production date on the cartridge.
  2. Mask all exposed surfaces along joint before applying sealant.
  3. Recheck backer rod and bond breaker tape positioning before applying sealant.
  4. Apply sealant only to clean, dry, primed surfaces at ambient temperatures above 40°F. Seal joints within 10 hrs of primer application.
  5. Fill all joints solidly and continuously with sealant, neatly applied with a standard caulking gun in a continuous motion, using a slight pressure. Push the sealant bead ahead of the nozzle; do not drag the nozzle.

6. Within 5 min. of sealant application and before skin develops on sealant, dry tool the joint surface with a concave tool to ensure intimate contact with substrate and to eliminate air bubbles. Do not use any liquid for tooling. Provide a smooth, uniform finished surface.
7. Remove masking within 10 min. of tooling. Avoid contaminating adjacent surfaces with excess sealant. Remove all traces of smears and droppings on metal or glass surfaces promptly, using a solvent that is recommended by the sealant manufacturer and that will not damage or discolor the building surfaces. Remove smears and droppings on porous surfaces by mechanical means after the initial cure of the sealant.
8. Coordinate work with other trades to prevent contamination of fresh sealant by dust or other debris.

**3.4 Sheet Metal Flashing Workmanship**

- A. Completed metal shall be straight, flat, and without buckles, dents, scratches, or other blemishes.
- B. Form sheet metal on a bending break. Perform shaping, trimming, and hand seaming in the shop as far as practicable, with the proper sheet-metal-working tools. Make the angle of the bends and the folds for interlocking the metal with full regard for expansion and contraction to avoid

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### Facade Condition Assessment - Simpson Gumpertz & Heger

buckling or other deformation in service. All lines shall be straight and crisp except where thickness of metal dictates radius bend, and all exposed edges shall be hemmed 1/2 in. minimum.

- C. Immediately before soldering, mechanically clean all metal to be soldered with steel wool or by other acceptable means, apply flux, and pre-tin. Clean metal again if it is not soldered on the same work day. Perform all soldering slowly with well-heated heavy (10 lb) irons with properly tinned clean blunt tips. Do not use torches. Apply enough heat to sweat the solder completely through the full width of the seam. Close clinch lock seams gently with a block of wood and mallet; then flux and show at least one full inch of continuous and evenly flowed solder. Whenever possible, do all soldering in flat position. All sloped and vertical seams shall be laced and soldered a second time. Wipe and wash clean soldered joints to remove all traces of acid from the flux immediately after the joints are made.
- D. Reinforce all metal flashing corners as required; rivet and solder all flashing corners for permanently waterproof connections. Space rivets at 1 in. o.c. in staggered pattern unless otherwise indicated. After soldering, immediately remove all traces of acid or flux with an appropriate neutralizer, followed by repeated washing and scrubbing.
- E. Lay out metal flashing to minimize transverse joints. Detail transverse joints in all flashing pieces to provide a watertight connection, and allow for expansion/contraction of the metal. Provide prefabricated corner pieces with joints locked, riveted, and soldered watertight. Space rivets at 1 in. o.c. in staggered pattern unless otherwise indicated.
- F. Unless specified otherwise, provide expansion joints at 20 ft o.c. maximum and 2 ft away from all changes in flashing direction (each side) and from all terminations of flashing. Space expansion joints in flashing appropriately to ensure that there are no expansion joints directly in front of windows.
- G. Form typical flashing joints by overlapping 4 in. and soldering.
- H. Integrate all metal flashings with waterproofing systems.
- I. Flashing Splice Installation:
  - 1. Lap all metal through-wall flashing at least 6 in. at transverse expansion joints, and apply strip flashing and metal cover plate as shown on the details. Apply release tape, centered over exposed edge of joint, and adhere strip flashing over joint as follows:
    - a. Cut and position strip flashing sheets in place. Inspect sheet for any discontinuities or deficiencies; do not use defective sheets.
    - b. Apply release tape over all joints and edges of the flashing covered by adhered neoprene sheet.
    - c. Clean all metal surfaces to receive strip flashing with clean, lint-free rags. Wet one rag with solvent and wipe surface. Use second rag to clean surface before solvent evaporates. Pump solvent from cans onto first rag. Do not dip rag into solvent to avoid contamination of solvent. Allow to dry.
    - d. Prime all substrates to which strip flashing is to be adhered with appropriate primer, and allow primer to dry. Recoat primed areas not covered by strip flashing within 12 hrs.
    - e. Brush apply a full continuous coat of adhesive without holidays to the substrate and the sheet, using circular motion; roller application is not allowed. Allow adhesives to dry until tacky. Do not exceed maximum "open time" recommended by the manufacturer, or 12 hrs. Do not use, and remove from the site, all strip flashing that has been coated with adhesive and allowed to exceed the maximum "open time" or exposed for more than 12 hrs, or that has been exposed to any

moisture before being applied to the substrate, or that has partially or fully cured. Do not expose adhesive coated substrate to any moisture, or to air for more than 12 hrs. Protect adhesive from airborne dust and debris while drying.

- f. Once the adhesive is dry, lay sheets into it promptly. Do not move or reposition sheets once they have contacted the adhesive. Immediately roll entire sheet into firm contact with the substrate using a smooth metal roller. Form sheets tightly into bends in flashing without stretching or cutting sheet.
- g. After 1 hr, continuously caulk all edges of strip flashing with lap sealant and tool out over edges. Apply release tape overlap sealant and install metal cover plate.

**SIMPSON GUMPERTZ & HEGER**  
Engineering of Structures and Building Enclosures

CLIENT: Mr. James Kelly; Town of Sudbury

SUBJECT: Atkinson Pool; Fairbank Community Center

SHEET NO. 1 of 3

PROJECT NO. 130447

DATE 6 June 2013

BY DWF

CHECKED BY FJS

**Notes:**

Detail shows the components of StoTherm NEXt® installed over a CMU substrate:

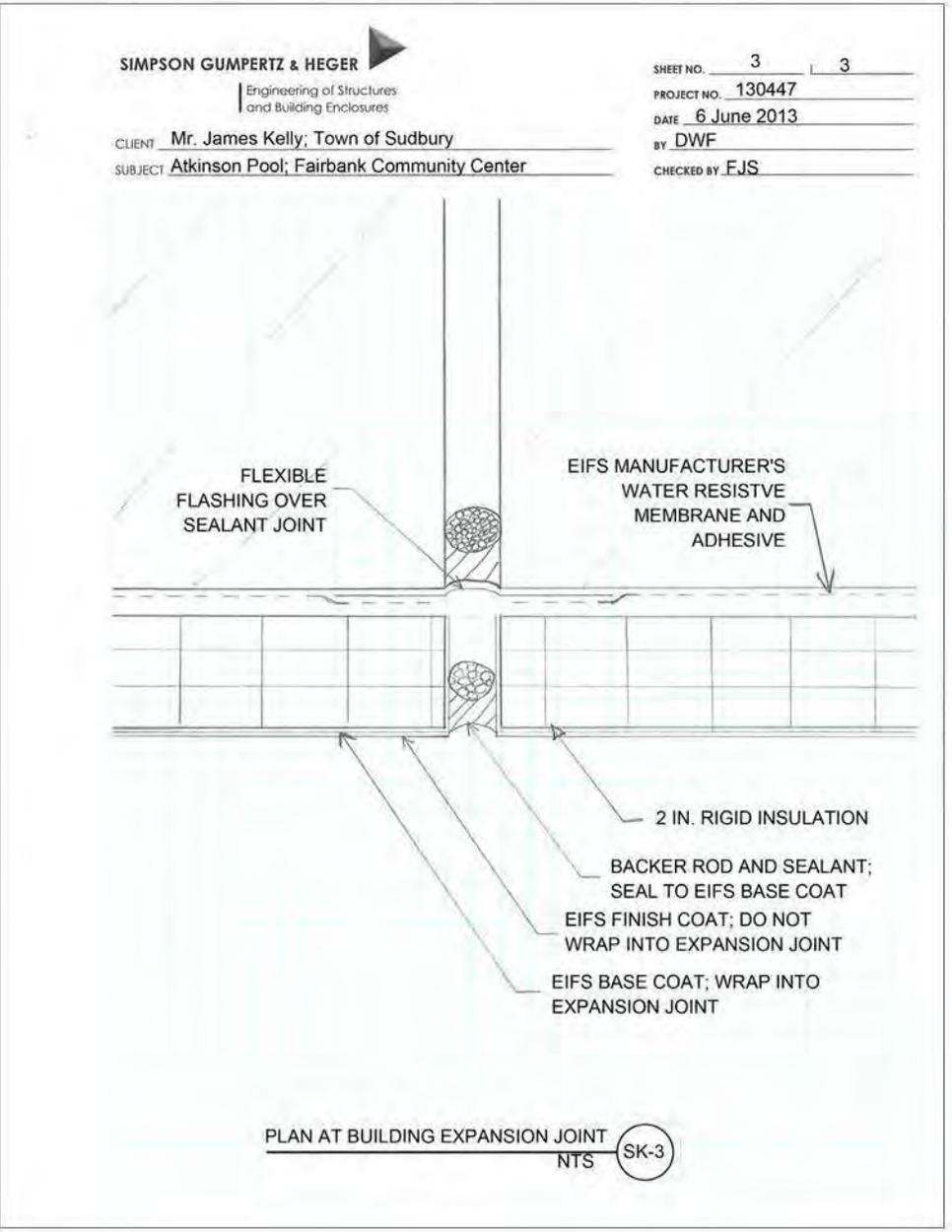
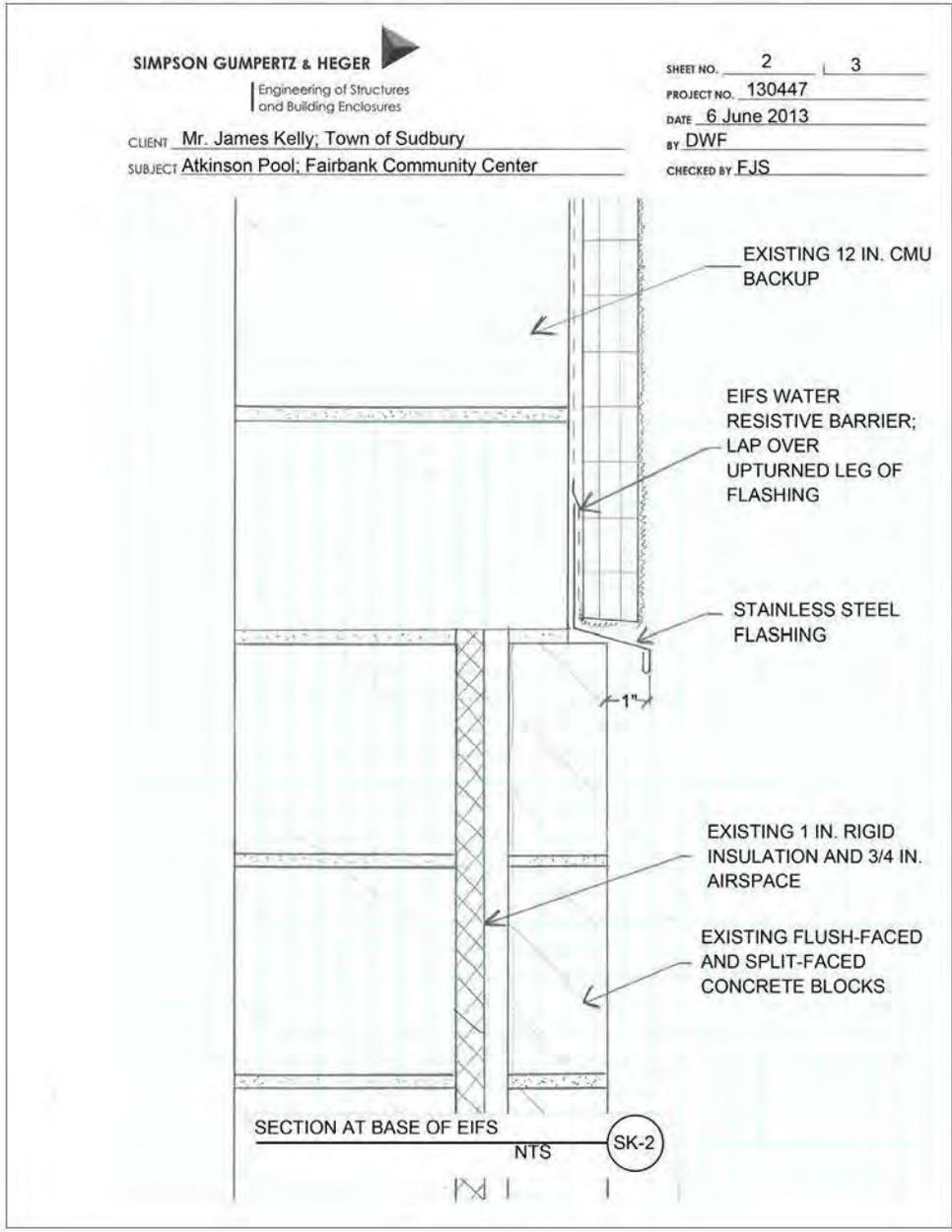
- 1] StoGuard™ Moisture and Air Barrier installed as per Sto Detail 20.01G or 20.02G and Sto Specification.
- 2] Sto adhesive
- 3] Sto insulation
- 4] Sto base coat
- 5] Sto mesh
- 6] Sto finish

**Attention**

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the non-performance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components. STO CORP. DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the latest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, www.stocorp.com.

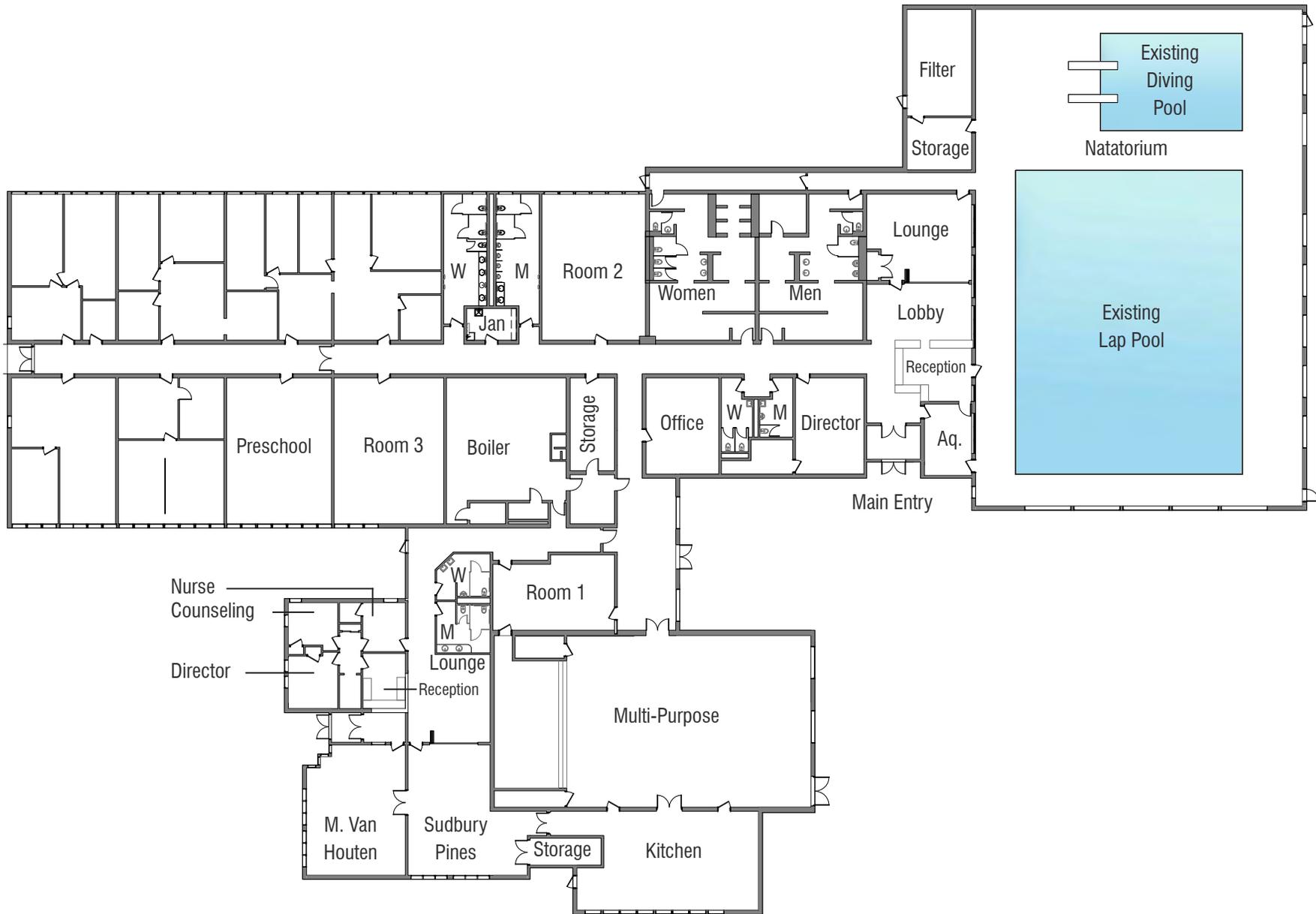
# EXISTING CONDITIONS

## Facade Condition Assessment - Simpson Gumpertz & Heger



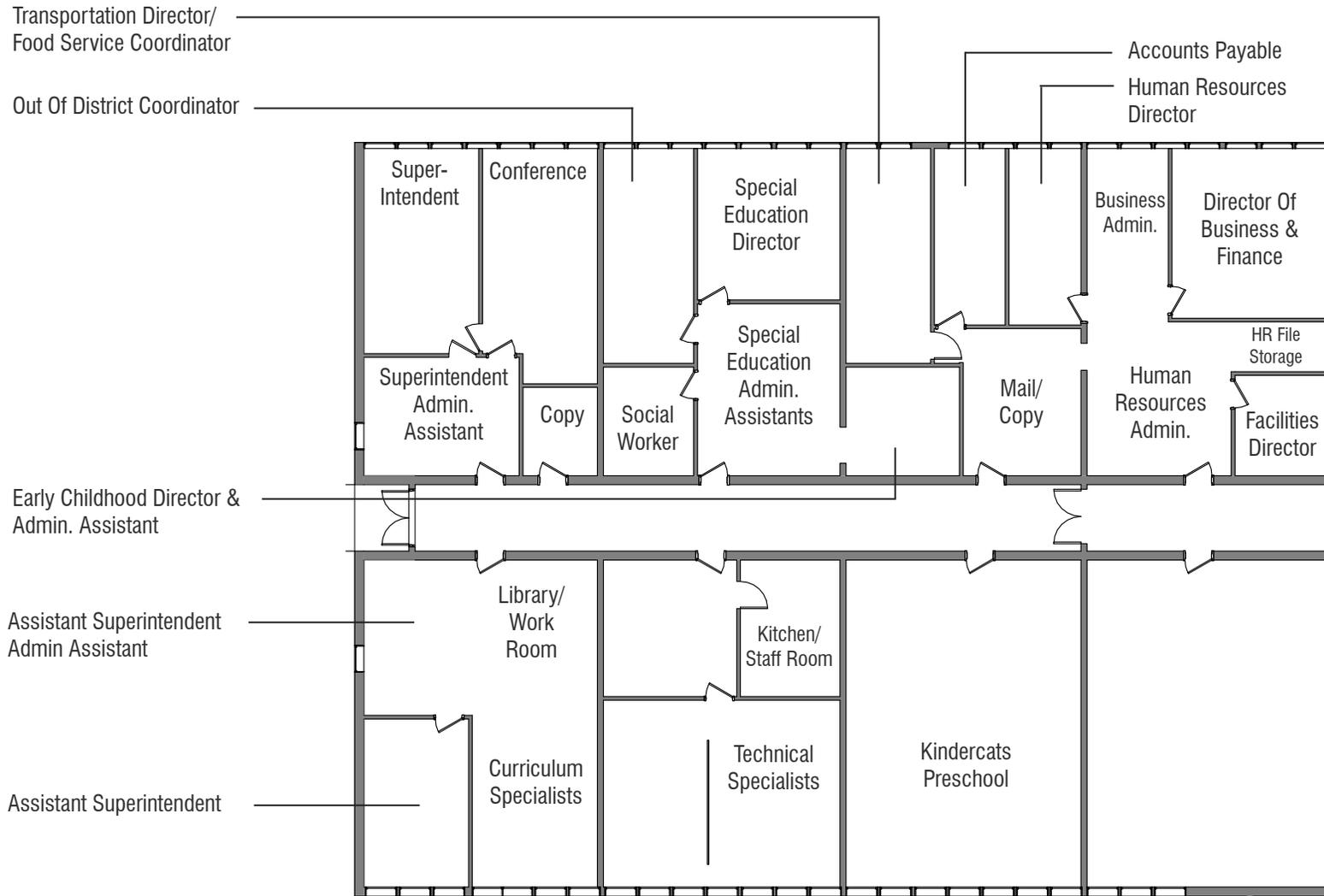
# EXISTING CONDITIONS

## Fairbank Community Center Floor Plan



# EXISTING CONDITIONS

## Sudbury Administration Building Floor Plan



**EXISTING CONDITIONS**  
Current Program Area and Occupant Load

	Area	
	Required	Actual Current
<b>SENIOR CENTER</b>		
<b>Lobby/Reception</b>		
Vestibule	56	56
Reception	150	77
Storage for Coats	25	0
Subtotal	<b>231</b>	<b>133</b>
<b>Administrative Offices</b>		
Reception	250	165
Executive Director	175	156
Admin Assistant	150	132
Nurse	150	120
General Staff		
Workspace for 4	500	0
Volunteer workspace	75	0
Small Meeting Room / Counseling	150	0
Health / Other Services	120	120
Copy / Supplies	100	35
File Storage	150	0
Coat Closet	10	0
Subtotal	<b>1,830</b>	<b>728</b>
<b>Program Spaces</b>		
Drop-In Center	500	400
Arts & Crafts Studio/Gift Shop	650	0
Fitness Studio (Controlled by COA.)	800	870
Library / Reading Area	400	0
Games / Cards	500	0
Sudbury Pines Room	800	800
Van Houten Room	732	732
Seminar Room	800	0
Computer Room/Tech Training	300	0
Conference Room for 12	150	0
Subtotal	<b>5,632</b>	<b>2,802</b>
<b>Food Service</b>		
Dining Room for 75 occupants	1,000	0
Kitchen	1,056	1,056
Servery for Drop-In	200	Included in Van Houten Room
Back Door Pantry	0	0
Pantry Storage	0	0
Loading / Receiving	0	0
Subtotal	<b>2,256</b>	<b>1,056</b>

	Area	
	Required	Actual Current
<b>Restrooms</b>		
Women's	220	132
Men's	220	132
Companion Women's Toilet	60	0
Companion Men's Toilet	60	0
Subtotal	<b>560</b>	<b>264</b>
<b>Support Spaces</b>		
Storage for Program Rooms		
Arts & Crafts Storage	75	0
Fitness Storage	75	0
Media Storage	10	0
Game Room Storage	10	0
Sudbury Pines Storage	180	180
Van Houten Storage	100	0
Computer Room Storage	10	0
General Storage	200	0
Health Equipment Storage	200	0
Custodian	50	0
Subtotal	<b>910</b>	<b>180</b>
<b>Total Net Square Feet</b>	<b>11,419</b>	<b>5,163</b>
Grossing Factor	1.20	1.20
<b>Senior Center Program Gross Area</b>	<b>13,703</b>	<b>6,196</b>

## EXISTING CONDITIONS

### Current Program Area and Occupant Load

	Area	
	Required	Actual Current
<b>RECREATION</b>		
<b>Lobby/Reception Atkinson</b>		
Vestibule	100	104
Reception	150	185
Subtotal	250	289
<b>Lobby/Reception (Teen Center)</b>		
Vestibule	56	0
Lobby	0	560
Storage for Coats	25	0
Subtotal	81	560
<b>Recreation Offices</b>		
Reception	250	320
Director	175	400
Admin Assistant	150	0
Aquatics Office	250	216
First Aid Treatment	100	0
General Staff		
Common Office	0	400
Program Office 1	125	0
Program Office 2	125	0
Program Office 3	125	0
Program Office 4	125	0
Common Workspace (Swing Space)	150	0
Small Meeting Room / Counseling	150	0
Health / Other Services	120	120
Copy / Supplies	100	80
File Storage	150	0
Coat Closet	10	0
Subtotal	2,105	1,536
<b>Program Spaces</b>		
Lobby Waiting	500	400
Lobby/Party Room	650	420
Room 1	570	570
Room 2 ( Teen Center)	970	970
Room 3 (Gross Motor/Fitness)	910	910
Pre School	970	970
Pre School- Dedicated Gross Motor/	1,000	
In Room Toilets		0
Fitness Room	1,000	0
Cardio/Fitness Equipment	1,800	0
Art Room	900	
Gymnasium	7,200	2,460

	Area	
	Required	Actual Current
Stage/platform	576	576
Conference Room for 12	150	0
Subtotal	17,196	7,276
<b>Food Service</b>		
Snack/Vending	500	0
Subtotal	500	0
<b>Restrooms</b>		
Women's	250	100
Men's	250	75
Companion Women's Toilet	60	0
Companion Men's Toilet	60	0
Subtotal	620	175
<b>Aquatic Changing Facilities</b>		
Women's Lockers	1,000	936
Men's Lockers	1,000	936
Team/Girl's Lockers	1,000	0
Team Boy's Lockers	1,000	0
Companion/Family Changing	100	0
Companion/Family Changing	100	0
Subtotal	4,200	1,872
<b>Pool</b>		
Pool Space	10,250	10,250
Pool Storage	400	192
Filtration	800	480
Subtotal	11,450	10,922
<b>Support Spaces</b>		
Storage for Program Rooms		
General Storage	500	250
Fitness Storage	150	0
Teen Center	75	0
Rotating Storage	75	0
Camp Storage	150	0
Off Season Storage	100	0
Custodian	50	40
Subtotal	1,100	290
<b>Total Net Square Feet</b>	37,502	22,920
Grossing Factor	1.20	1.20
<b>Recreation Program Gross Area</b>	45,002	27,504

	Area	
	Required	Actual Current
<b>Existing School Department Rooms</b>		
Space 1	0	972
Space 2	0	936
Space 3	0	936
Space 4	0	936
Space 5	0	936
Space 6	0	936
School Storage	0	96
Subtotal	0	5,748
<b>Total Net Square Feet</b>	0	5,748
Grossing Factor	1.20	1.20
<b>Reprogrammed Gross Area</b>	0	6,898

	Area	
	Required	Actual Current
<b>Support Spaces-Building Wide</b>		
Boiler	600	1,080
Dedicated Electrical/Tel Data	200	0
MDF Room	125	0
Water Service/Sprinkler Room	75	0
General Storage	125	0
Exterior Maintenance Storage	100	0
Storage for Outdoor Furniture	150	0
Storage for Outdoor Equipment	200	0
Women's	250	250
Men's	250	250
Custodian	50	0
Subtotal	2,125	1,580
<b>Total Net Square Feet</b>	2,125	1,580
Grossing Factor	1.20	1.20
<b>General Building Wide Gross Area</b>	2,550	1,896
<b>Total Program Gross Area</b>	61,255	42,493

**SECTION 4**  
**PROGRAM**



Programming for the Fairbank Community Center Complex has been a universal process that involved establishing a holistic goal which enables the client and/or the public to judge where the compromises are to be made. The program summary chart compares the existing Community Center program to four potential building sizes which correspond to funding targets.

Existing	33,732 sf
Option 3	60,000 sf
Option 2	50,000 sf
Option 1	40,000 sf
Maintain Status Quo	33,732 sf

*Gross Area*

The median size “Option 2” building contains 50,000 square feet of gross area. “Gross area” refers to a total building area that is inclusive of corridors, elevators, stairs, mechanical spaces, restrooms, janitorial spaces and wall thicknesses. It is the total area that a contractor builds. In the attached program, we have developed realistic areas for most of the typical grossing elements such as stairs, elevators, restroom and closets in order reduce the “grossing factor.” This creates the highest level of programming certainty in this study by detailing through the use, the grossing factor has to account only for area used by horizontal circulation and wall thickness.

*Net Area*

The “net area” is the actual usable space needed for particular programs such as a gym, fitness center and locker rooms. Certain elements like the gym will have strict dimensional requirements based on the dimensional regulations and court clearances. Other spaces such as the fitness rooms are sized based on the equipment and population. Locker rooms are supported by toilets, sinks and showers, the number of which is determined by codes.

The “gross area” noted above, 50,000 sf results in a “net program area” of 40,660 sf.

In this study, we have itemized all of the program areas that are needed for the building. We have then built the program up starting with the most essential element.

## PROGRAM SUMMARY

### **Programming Process / Group Members:**

- Council On Aging
- Friends Of The Sudbury Senior Center
- Recreation Commission
- Sudbury Family Network
- Town Staff
- Police Chief
- Fire Chief
- Head of the DPW
- Head of the Health Department
- Building Inspector

### **Fairbank Community Center Visits:**

- Dual County Kick-Off Meet ( All DCM teams)
- Veterans Lunch (viewed how a major dining event was handled)
- Senior Center's Harvest Festival  
(viewed how the COA set up in the Senior Center, Gymnasium, and other spaces to accommodate a major event)

## **A Community Center**

A message heard loud, clear and often was that Sudbury residents wanted an intergenerational community center where in the program space for different age groups were not segregated by age. Rather, participants emphasized the desire to juxtapose spaces to increase interaction, spontaneity and sharing of space as well as experience.

### **Programming and Diversity of Use**

The existing Fairbank Community Center is not meeting the needs of the community. Improvements based on public safety, maintenance, operations, and the emerging demand for sufficient space need to be addressed to meet the growing populations demands. Public buildings should also be accessible to all citizens of the community. The current building is not accommodating today's program clearly and does not provide the flexibility required for future demands. Successful municipal community centers are embracing multi-generational and multi-use spaces specific to certain programs but also providing flexibility for other potential users. Schedule diversity allows sharing of rooms. The Senior Center can use program rooms in the morning when Recreation programming is slower and the reverse would occur in the evening when the Senior Center programs slow down and the Recreation Department begins to get a bit more active. The bulk of the Senior Center programming occurs between 9am and 2pm.

The Community Center's goal is to provide programs and services that support health, promote various forms of socialization, and provide public accessibility to information and resources. Recreation and senior programs require natural daylight and sufficient fresh air to create a healthy a welcome environment.

## **General Discussion of Program Needs**

The Recreation Department required space for year round programming serving citizens from 18 months to senior citizen age. Both passive (example: art and lego engineering) and active (example: line dancing) classes are provided. Facilities are provided for self directed programs such as recreational pickleball. In addition, the Recreation Department needs office space to support programming, administration and oversight of ballfields, playgrounds, outdoor basketball and volleyball courts, outdoor ice rinks, tennis courts, walking paths, outdoor fitness equipment, Heritage Park and Willis Pond.

Atkinson Pool Services:

- Learn to swim programs
- Diving programs
- Swim teams
- Scuba programs
- Triathlon programs
- Summer camps
- Birthday parties
- Lap swim
- Family swim
- Lifeguard training

Due to the programs offered being sports-oriented the water is maintained at an appropriately cool temperature. Senior citizen, adults, young children and those rehabbing from injury could benefit from a warm water therapy pool. During programming meetings, this type of pool was deemed to be in high demand to supplement the offerings of Atkinson Pool.

## PROGRAM SUMMARY

Atkinson Pool needs new locker rooms as the current ones are outdated. New lockers would be accessible and provide separate space for swim teams and the public. Family/companion and disabled accessible restrooms are necessary. These locker rooms will also coincidentally serve the summer camp programs.

The Recreation Department is also organizer of special events including Drop-in Gyms and Teen Centers. Providing age appropriate safe and secure space for the Teen Center is a program requirement. The department is limited in their program offerings by the building. The proposed Option 1 program accommodates the department to expand current program offerings and to improve the quality of currently offered programs.

The Senior Center is very undersized when compared to similarly sized communities. The population served has also dramatically increased since the existing space was constructed. Being located with the Recreation Department is a benefit as the Senior Center the has access to wellness and fitness programs and spaces as well “program” rooms. The Senior Center needs space for dedicated arts and crafts space, flexible space for technology training (computers) and easily accessible space. Classes and services offered cover a wide range:

- Lifelong learning classes: history, art, science
- Fitness classes: Fit for the Future, Yoga, Tai Chi, Tap Dance, Better Bones
- Arts and crafts classes
- Information and Assistance
- Rides to employment, doctors and shopping

### **Why is it important for the Council on Aging to offer a variety of programs for Seniors?** (This from the Boston Globe, April 18, 2015)

*In a recent study on aging, researchers at the Mayo Clinic in Minnesota compiled 11 years of survey and health data from 256 individuals, aged 85 and older. Previous studies support the idea that certain lifestyle factors can reduce the risk of dementia, but this is one of the first to focus on the oldest seniors and to assess the impact of midlife activities on their later mental health.*

*Participants were questioned about their habits in middle and late life – before and after the age of 65 – and were subject to complete neuropsychological evaluations every 15 to 18 months. The team found that those engaged in artistic activities, such as painting, drawing and sculpting in both middle and late life were a whopping 73 percent less likely to develop mild cognitive impairment – the onset of declining mental function that may progress to dementia – in their late 80s than those who did not.*

*Arts were not the only activity that appeared to protect the brain: Crafting in middle and late life reduced risk of brain dysfunction by 45 percent, socialization dropped it by 55 percent, and computer use lowered risk by 53 percent.*

Through the offering of programs and services the COA will enable seniors to:

- Stay Active
  - Keeping fit
  - Continuing to learn
  - Access to safe transportation
  - Sidewalks/safe places to walk
- Stay Connected
  - Promoting community engagement for all ages
  - Support for family caregivers and referral services for frail elders

The attached program for Options 1, 2 & 3 shows what is compromised as the plan area is reduced from the 60,000 sf deemed necessary. The benefits of the new building Option 1 plan for the COA and Recreation Department are that it offers:

1. Reduction in overall space needs through sharing of infrastructure, support and circulation;
2. Supports need for additional programming;
3. Supports need for increased diversity of programs, including more healthy aging and intergenerational programs; and
4. Supports Sudbury’s goal to be age and family friendly into the future.

## Building Programs

**Option 3** is a building that satisfies the basic program needs that would complement the community center's evolving demands. This a 60,000 sf facility that has most of what is needed including a gym with adequate dimensions, spectator seating, a dedicated stage area for entertainment, and generous locker rooms for both adolescents and adults. A therapy pool and spectator seating has been incorporated into the existing Atkinson Pool building which is to remain. Aside from the existing pool, the new facility would expand in a direction that would enhance the fabric of what makes a community center special. Offices, consultation rooms, large group fitness and equipment rooms, a proper wellness exam room, and better seminar/ classrooms are provided. A multi-purpose room, teaching kitchen, café, library, and a new and improved teen center are just a small number of programs that occupy this building. Every space meets the centers unique functional requirements as well as the need for privacy, expansion, and internal flexibility. The design intent of this scheme embraces the communal neighborhood by encouraging interaction through circulation and welcoming breaks that inspire people to linger and socialize. Lines become blurred between the Senior Center and Recreation Department at specific moments to encourage interaction between generations. Natural daylight, fresh air, multiple views outside, and flexible spaces that can expand or contract to meet various needs, make this building susceptible to today's developing and expanding needs.

**Option 2** is a new 50,000 sf building which was an attempt to downsize from Option 1, a new 60,000 sf. building. The new facility would sit on the footprint of the existing complex. It is important to note that this option keeps the existing Atkinson Pool as it is today with minimal renovations to accommodate additional bleacher seating. This scheme provides a circulation that is not efficient and a minimal amount of privacy for administration offices. The purpose of this option was to address the necessary changes which include more program space and accessibility to fresh air and natural daylight. This option does not offer multiple fitness classes to occur at the same time. Only one fitness studio is provided. The design does not incorporate a gymnasium that is based on one full size high school dimensioned practice court but no stage is included. Team locker rooms and companion/family changing rooms have also been eliminated. This option has no Senior Center game room, therapy pool, or additional 500 sf. space for a temporary stage located in the multi-purpose room.

**Option 1** was a further attempt to downsize from a new 50,000 sf. building to a new 40,000 sf. building that sits on the footprint of the existing complex. It is important to note that this option keeps the existing Atkinson Pool as it is today with minimal renovations to accommodate additional bleacher seating. This scheme provides a circulation that is not efficient and a minimal amount of privacy for administration offices. The purpose of this option was to address the necessary changes which include more program space and accessibility to fresh air and natural daylight. This option does not offer fitness studio rooms to provide aerobics, dance, steps, "body pump," Pilates and other programs that develop yearly. The plan does not provide a gymnasium, team locker rooms, or companion/family changing rooms. The design has no Senior

Center game room, therapy pool, or additional 500 sf. space for a temporary stage located in the multi-purpose room. In the Community Meeting it was determined that Option 1 was not a viable option.

The **Maintain Status Quo Plan** houses 33,732 sf of space. This scheme uses the existing program and incorporates a limited number of the spatial requirements obtained from various user groups. The existing 6,510 sq. ft. administration area would be demolished and rebuilt to follow the same building footprint. The remaining building would be renovated. It is important to note that no additions are being accounted for in this scheme. The 6,510 sq. ft. area would house additional program rooms that can accommodate various activities. While community assets would be re-used, the programmatic need would still have significant deficiencies. The demand for an increased number of offices and consultation rooms for private conference space such as counseling, interviews, and tax return help as well as part time and full time staff is not being addressed. Adults, adolescents, and swim team members would continue to use the deficient locker rooms, sharing changing/shower rooms and restrooms that are minimally provided. The group recreation/arts rooms and education/seminar classrooms that are especially popular with both seniors and teenagers, this design scheme does not feasibly provide them. Finally, to hit the target area, the gymnasium and multi-purpose room would continue to be a shared space. Opportunities to hold luncheons, special entertainment, a lunch program, and athletic games would continue to be an ongoing scheduling conflict between the Recreation Department and Senior Center.

**Summary Of Charts**

This detailed chart breaks down each options programs side by side to demonstrate how spaces vary in size and quantity between schemes. A purple column identifies the existing buildings square footages along with a light green color that highlights common areas within the facility shared by both members and staff.

To make this chart more useful; common, senior center, and recreation areas were separated. This provided a way to determine how much space each department was occupying with-in the varying schemes. Each discipline (Common, Recreation, and Senior Center) incorporated a grossing factor to determine the buildings total gross area. This helped BH+A to organize three plans that included the listed spatial needs while maintaining the overall building area.

**Programs Discussed But Not Included:**

- 50 meter pool 25,000 sq. ft.
- Family Aquatic Center/ Leisure Pool 10,000 sq. ft.
- Ice / Hockey Arena 25,000 sq. ft.
- Indoor Turf Center 30,000 sq. ft.
- Black Box/ Regular Theatre 8,000 sq. ft.
- Climbing Wall 5,000 sq. ft.
- Indoor Playground 15,000 sq. ft.
- Trampoline Center
- Indoor Track Above Gym 2,500 sq. ft.

	Actual Existing	"40" PLAN	"50" PLAN	"60" PLAN
<b>COMMON AREAS</b>				
Building Lobby	560	500	500	500
Entry Vestibule	110	100	100	100
"Café" space as adjunct to lobby space		200	200	200
Café Kitchenette				
Men's Restroom	320	320	320	250
Women's Restroom	320	320	320	250
Mechanical Room	900	400	400	400
Electrical Room		150	150	150
Tel/Data		100	100	100
Janitorial		100	100	100
Storage		200	200	230
Subtotal	2,210	2,390	2,390	2,280
Total Net Square Feet	2,210	2,390	2,390	2,280
Grossing Factor	1.20	1.20	1.20	1.20
Building Common Program Gross Area	2,652	2,868	2,868	2,736

**Estimate of Revenue & Expense Potential**

<u>Component</u>	<u>Expense</u>	<u>Revenue</u>
• Art Display Case	Low	Low
• Climbing Wall	Low	Medium
• Indoor Track	Low	Medium
• Game Area (electronic/active)	Low	Medium
• Racquetball	Low	Medium
• Gymnasium	Low	High
• Meeting/Multi-Purpose	Medium	Low
• Senior Activity Space	Medium	Low
• Pre-School Meeting Space	Medium	Low
• Gymnastics	Medium	Medium
• Indoor Playground	Medium	Medium
• Aerobics/Dance Room(s)	Medium	High
• Weight/Cardiovascular Space	Medium	High
• Theater/PAC	High	Low
• Competitive Pool (50M)	High	Low
• Drop-In Child Care	High	Low
• Kitchen	High	Low
• Conventional Pool (25Y)	High	Medium
• Leisure Pool	High	High
• Ice Arena	High	High

## BUILDING PROGRAM SUMMARY CHART

	Actual Existing	"40" PLAN	"50" PLAN	"60" PLAN
<b>SENIOR CENTER</b>				
<b>Senior Area Lobby/Reception</b>				
Reception Desk & Information Center	150	250	250	110
Drop-in Social Space	80	300	300	300
Storage for Coats	0	70	70	70
Subtotal	230	620	620	480
<b>Administrative Offices</b>				
Executive Director	160	160	160	160
Assistant Director (future position) / Program Coordinator		130	130	160
Administrative Assistant	0	100	100	100
Information Specialist		100	100	100
Wellness (nurse & exam room with sink and restroom)	130	150	150	250
Workspace for 4 (grant employees & volunteers)	0	220	220	480
Small Meeting Room / Counseling	130	150	150	150
Copy / Supplies	40	30	30	80
Coat Closet	0			
Subtotal	920	2,280	2,280	2,440
<b>Program Spaces</b>				
Multi Purpose Room (movies, programs, dining, etc.)	2,750	2,000	2,000	2,000
MPR Stage	600			500
MPR Storage	140	100	100	100
Arts & Crafts	0	650	650	900
Arts & Crafts Storage	0	50	50	50
Friends Gift Shop (locate in building lobby)	0			
Library Reading Room / Media Center		250	250	300
Game Room	990			1,500
Game Room Storage				20
Large Program Room	830	900	900	900
Large Program Storage		20	20	20
Medium Program Room	760		650	650
Medium Program Storage			20	20
Conference Room or Seminar Room		300	300	300
Computer Room/Tech Training		400	400	400
General Storage		220	220	100
Subtotal	6,070	4,890	5,560	7,760
<b>Kitchen @ Multi-purpose Room</b>				
Kitchen	1,090	650	650	650
Senior Center Pantry	0	70	70	70
Recreation Pantry	0	70	70	70
Loading, Receiving, Trash	0	100	100	100
Subtotal	1,090	890	890	890
<b>Restrooms</b>				
Staff Restroom	160	70	70	70
Companion Restroom @ senior center	0	80	80	80
Subtotal	160	150	150	150
<b>Total Net Square Feet</b>	<b>8,470</b>	<b>8,830</b>	<b>9,500</b>	<b>11,720</b>
<b>Grossing Factor</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>
<b>Senior Center Program Gross Area</b>	<b>10,164</b>	<b>10,596</b>	<b>11,400</b>	<b>14,064</b>

## BUILDING PROGRAM SUMMARY CHART

	Actual Existing	"40" PLAN	"50" PLAN	"60" PLAN
<b>RECREATION</b>				
<b>Recreation Offices</b>				
Reception (covers building lobby & rec dept)		250	250	250
Director's Office	410	160	160	160
Assistant Director & Office Coordinator Office	430	160	160	160
Admin Assistant		100	100	100
Common Office	430	200	200	200
Program Office 1 (program and youth coordinator)		200	200	100
Program Office 2 (rec & fitness programming)				100
Copy / Supplies		100	100	100
Subtotal	<b>1,270</b>	<b>1,170</b>	<b>1,170</b>	<b>1,170</b>
<b>Program Spaces</b>				
Large Program Room	930	900	900	900
Program Room Storage	250	20	20	20
Medium Program Room 1	760	630	800	650
Medium Program Storage		20	20	20
Medium Program Room 2	760			650
Medium Program Storage				20
Teen Center		1,000	1,000	1,300
Teen Center Storage (video games)	130	100	100	110
Pre School w/ In Room Restrooms		870	900	1,000
Pre School Gross Motor				
Fitness Room / Group Exercise			950	2,000
Cardio/Fitness Equipment		2,000	2,000	2,000
Fitness Storage		50	50	50
Arts & Crafts Room		800	800	800
Arts & Crafts Storage		50	50	50
Camp / Off Season Storage			250	280
Gymnasium			6,600	7,200
Gymnasium Stage				400
Subtotal	<b>2,830</b>	<b>6,440</b>	<b>14,440</b>	<b>17,450</b>
<b>Aquatics, Offices and Changing Facilities</b>				
Pool Lobby & Reception	830	500	500	500
Existing Pool Space	9,960	9,960	9,960	9,960
Add for Bleacher Seating in Pool Room		300	300	200
Therapy Pool				2,000
Pool Storage	210	210	210	210
Filtration	420	420	420	600
Aquatics Office	210	210	210	240
First Aid Treatment		100	100	100
Women's Lockers	840	850	850	750
Men's Lockers	860	850	850	750
Team/Girl's Lockers				750
Team Boy's Lockers				810
Companion/Family Changing Room (2)				200
Subtotal	<b>13,330</b>	<b>13,400</b>	<b>13,330</b>	<b>17,070</b>
Total Net Square Feet	17,430	21,010	28,940	35,690
Grossing Factor	1.20			
Recreation Program Gross Area	<b>20,916</b>	<b>26,536</b>	<b>35,732</b>	<b>43,068</b>
Total Program Gross Area	<b>33,732</b>	<b>40,000</b>	<b>50,000</b>	<b>60,000</b>

## BUILDING PROGRAM COMPARISON CHART

40,000 sq. ft. Comparison to 60,00 sq. ft.

### Summary Of Charts

This chart determines the adequacy of the proposed option by identifying how much the scale of each room varies between the two schemes. The chart also expresses which program rooms are not accounted for. These differences help to explain the significant change in gross building area.

Similar to the other chart; common, senior center, and recreation areas were separated providing a way to determine how much space each department was losing or gaining in each scheme.

	NOT INCLUDED	
<b>BUILDING COMMON AREA</b>		
Circulation	2,120	
Storage	30	smaller than specified
<b>Subtotal</b>	<b>2,150</b>	
<b>Total</b>	<b>2,150</b>	
<b>SENIOR CENTER</b>		
<b>Senior Area Lobby/Reception</b>		
Reception	-140	larger than specified
<b>Subtotal</b>	<b>-140</b>	
<b>Administrative Offices</b>		
Assistant Director (future position) / Program Coordinator	30	smaller than specified
Wellness (nurse & exam room with sink and restroom)	100	smaller than specified
Workspace for 4 (grant employees & volunteers)	260	smaller than specified
Copy Room	50	smaller than specified
<b>Subtotal</b>	<b>440</b>	
<b>Program Spaces</b>		
Multi Purpose Room Stage	500	
Arts & Crafts	250	smaller than specified
Game Room	1,520	
Medium Program Room	670	smaller than specified
Library	50	smaller than specified
General Storage	-120	larger than specified
<b>Subtotal</b>	<b>2,870</b>	
<b>Total</b>	<b>3,170</b>	
<b>RECREATION</b>		
<b>Program Spaces</b>		
Medium Program Room 1	20	smaller than specified
Medium Program Room 2	670	
Teen Center	310	smaller than specified
Pre School w/ In Room Restrooms	130	smaller than specified
Fitness Room / Group Exercise	2,000	
Camp / Off Season Storage	280	smaller than specified
Gymnasium	7,200	
Gymnasium Stage	400	
<b>Subtotal</b>	<b>11,010</b>	
<b>Aquatics, Offices and Changing Facilities</b>		
Add for Bleacher Seating in Pool Room	-100	larger than specified
Therapy Pool	2,000	
Aquatic Office	30	smaller than specified
Filtration Room	180	smaller than specified
Team Lockers	1,360	
Companion/Family Changing Room (2)	200	
<b>Subtotal</b>	<b>3,670</b>	
<b>Total</b>	<b>14,680</b>	
<b>Grand Total</b>	<b>20,000</b>	

## BUILDING PROGRAM COMPARISON CHART

50,000 sq. ft. Comparison to 60,00 sq. ft.

		NOT INCLUDED	
<b>BUILDING COMMON AREA</b>			
Circulation		890	
Storage		30	smaller than specified
Subtotal		920	
Total		920	
<b>SENIOR CENTER</b>			
<b>Administrative Offices</b>			
Assistant Director (future position) / Program Coordinator		30	smaller than specified
Wellness (nurse & exam room with sink and restroom)		100	smaller than specified
Workspace for 4 (grant employees & volunteers)		260	smaller than specified
Reception		-140	larger than specified
Copy Room		50	smaller than specified
Subtotal		300	
<b>Program Spaces</b>			
Multi Purpose Room Stage		500	
Arts & Crafts		250	smaller than specified
Library		50	smaller than specified
Game Room		1,520	
Storage		-120	larger than specified
Subtotal		2,200	
Total		2,500	
<b>RECREATION</b>			
<b>Program Spaces</b>			
Medium Program Room 1		-250	larger than specified
Medium Program Room 2		670	
Teen Center		310	smaller than specified
Pre School w/ In Room Restrooms		100	smaller than specified
Camp/ Off Season Storage		30	smaller than specified
Fitness Room / Group Exercise		1,050	smaller than specified
Gymnasium		600	smaller than specified
Gymnasium Stage		400	
Subtotal		2,910	
<b>Aquatics, Offices and Changing Facilities</b>			
Additional Bleacher Seating		-100	larger than specified
Aquatics Office		30	smaller than specified
Filtration Room		180	smaller than specified
Therapy Pool		2,000	
Team Lockers		1,360	
Companion/Family Changing Room (2)		200	
Subtotal		3,670	
Total		6,580	
Grand Total		10,000	

## BUILDING PROGRAMS

### Community Feedback Regarding Programs

At the March 2015 Town Forum program requests were articulated for additional family/accessible private changing rooms as one finds in contemporary YMCA or community center projects. The other general comment was that the Senior Center program may satisfy current and projected short term needs, with the large projected growth in Sudbury's senior population this  $\pm$  40% increase in program space is not luxurious. It was requested that the building be designed to add on to either horizontally (at grade) or vertically (with a second story) to accommodate growth that is difficult to anticipate today to meet the needs of a 30% growth of the senior age group.

The cafe program was also discussed as a method of boosting revenue. It was suggested that this could be more convenient to users of the field via an outside serving window or deck and that a leasing arrangement should also be considered.

The library space with book lending services per se was considered redundant while a reading room spaces was considered useful.

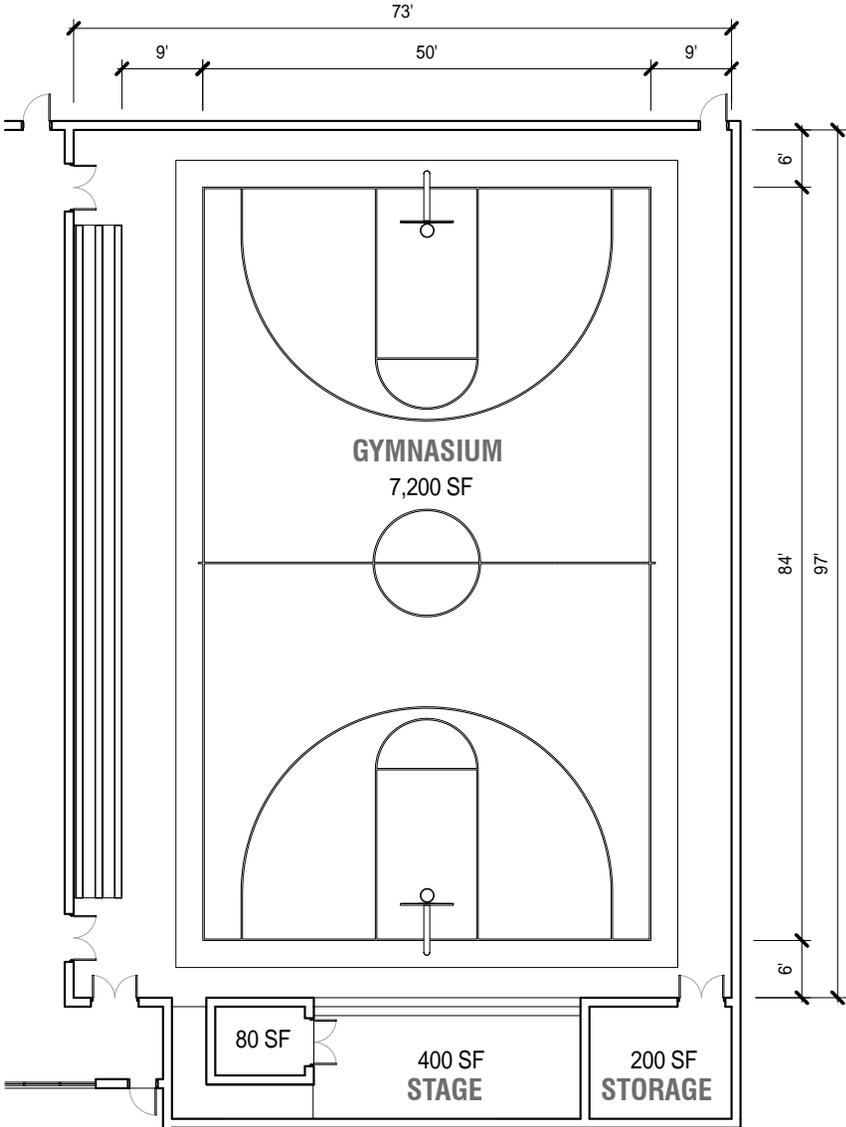
The pre-school program was valued. Care should be taken regarding drop-off parking and a convenient, secure entry for parents with children. Accessible restrooms within the rooms were sought.

In general comment, the desire for universal accessibility was stated since this would now be a new building.

One desire that is difficult to meet with the existing conditions is spectator seating for the pool. Even Option 3 falls short of a total solution which would entail complete rebuilding of the Atkinson Pool building. This topic may warrant further discussion and analysis when the project advances to the next phase of design.

Beyond the building, but a viable comment, was the desire to strongly connect Fairbank with Haskell Field. Suggestions include creation of an outdoor space at Fairbank that would allow people to get beverages or snacks from inside while sitting outside awaiting their children's activity to conclude.

Finally, an astute comment was offered regarding future flexibilities. It was encouraged that the building be designed to either add on horizontally or vertically (a second floor) to accommodate needs 25 to 50 years in the future that we cannot predict today.



**General**

The following data provides a more detailed analysis for the Fairbank Community Centers master plan. These data sheets refer to Option 3 and should be used as guides and references. Please note that room quantity, size, and characteristics vary between options.

**Gymnasium**

One full size indoor high school basketball court (50' x 84') with roll out bleachers for 50 people.

A permanent stage with additional storage has been integrated into Option 3.

<i>Dimensions</i>	<i>Minimum</i>	<i>Desired</i>
Practice Court (High School):	50' x 84'	50' x 84'
Practice Court Boundary End:	6'	10'
Practice Court Boundary Side:	9'	10'
Stage	400 sq. ft.	500 sq. ft.
Storage	280 sq. ft.	400 sq. ft.

## ROOM DATA SHEET: GYMNASIUM

### Gymnasium

#### *Existing:*

The recreation department gym is the driver that puts other area requirements into perspective. The community center gymnasium was the original cafetorium for the Fairbank School. The room has hardwood flooring with a basketball court. The far end has an elevated platform (not a stage) that can be used for performances and presentations. The platform is currently not accessible. Storage is limited to two closets that flank the stage. The existing gym is not large enough to hold competitive basketball games and perceived to be too large for some exercise classes. Summer camp typically reserves this space for their scheduled activities in the event of inclement weather.

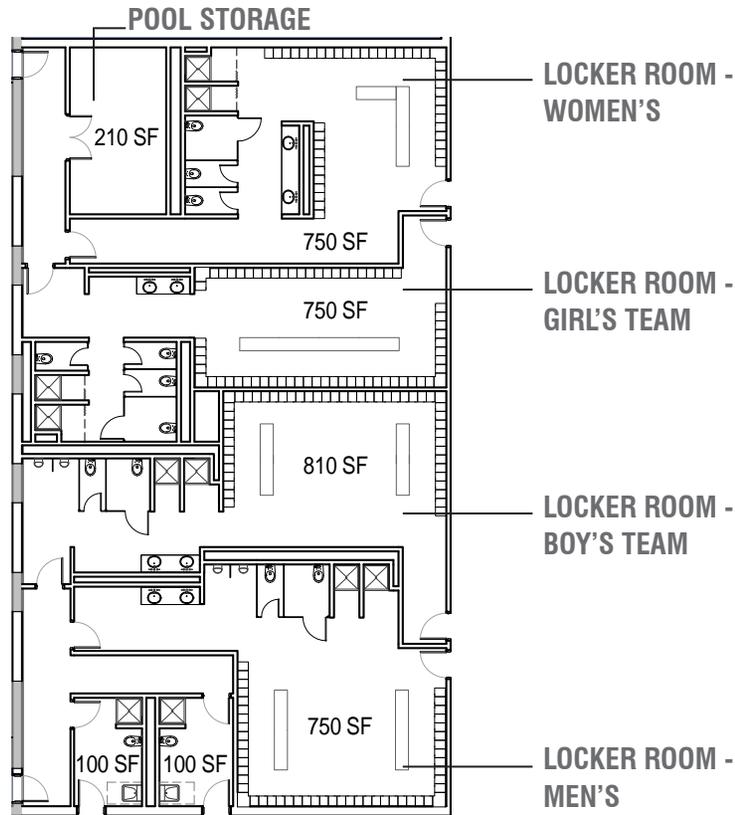
#### *Proposed:*

This program proposes a gym based on one full size high school dimensioned practice court. This will provide a more reasonable and acceptable place for all members to exercise and participate in scheduled competitive basketball games. During competition, a sidewall mounted bleacher extends onto the floor providing spectator seating on the left side of the court.

The gym will serve boys and girls freshman, JV and Varsity basketball and as a practice space for spring sports and summer camp when the weather does not allow outside practice. On weekends, the gym serves as a social gathering space for members and a location for indoor assembly such as dances and fund raisers to occur. The camp and off season storage can be easily accessed by department members and the permanent stage becomes a valuable asset in conducting plays and other forms of entertainment to the community.

The controlling factor in gym sizing is the basketball court. Where high school court dimensions are used, the court dimension is 84 x 50 feet. In addition to the court, "out of bound" areas are required. The out of bound area for the practice court is set at 6' feet at the ends and 9' feet at the court sides. If more is desired, the building is enlarged or the practice courts are reduced (and become non-regulation).





**Locker Rooms**

*Men's & Women's:*

Allow assignment of 1 locker per individual, and provide 750 sq. ft. of space. The proposal includes 42 women's lockers and 48 men's lockers. Area and locker capacity varies in presented schemes.

- 90 Lockers
- 3 Toilets for women
- 2 Toilets, 2 urinals for men
- 4 Showers
- 4 Sinks

*Team Locker Rooms:*

Allow assignment of 1 locker per individual. The girl's team locker room provides 750 sq. ft. and the boy's team locker room encompasses 810 sq. ft. total because of circulation requirements. The proposal includes 61 girl's lockers and 48 boy's lockers. Area and locker capacity varies in presented schemes.

- 109 Lockers
- 4 Toilets for girl's
- 2 Toilets, 2 urinals for boy's
- 2 Showers
- 4 Sinks

Women's showers should have drying / dressing area for each shower.

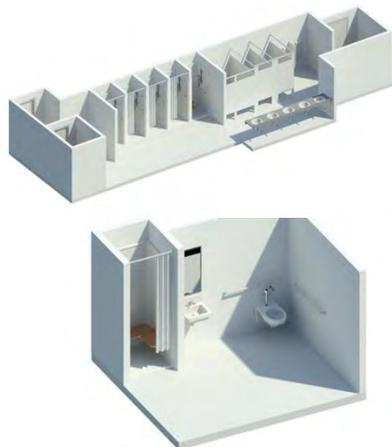
Women's locker room to have ample counter space.

*Companion/Family Changing Rooms:*

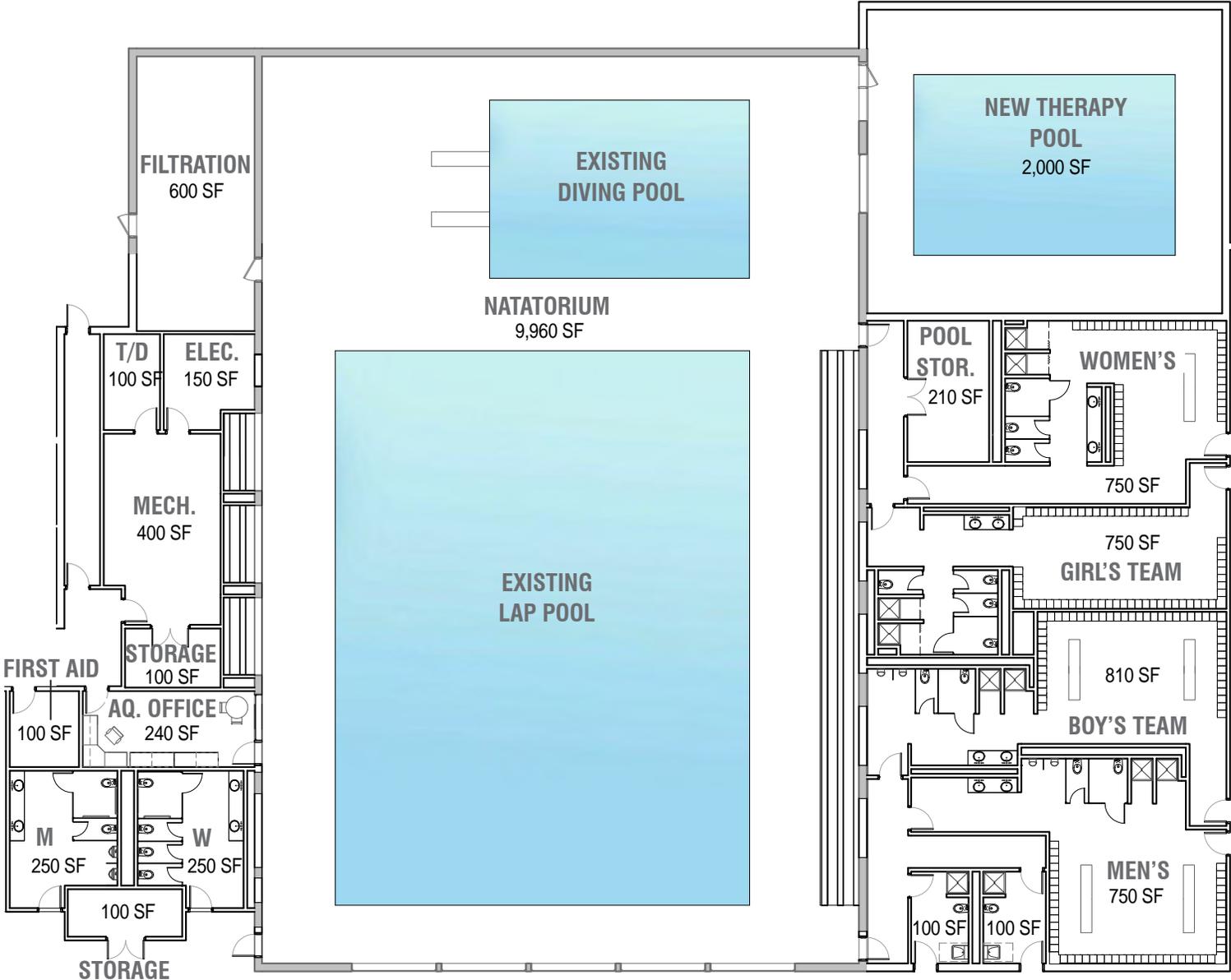
Meet proper requirements stated in the Americans with Disabilities Act (ADA). The rooms can be accessed from both the Atkinson Pool as well as the facilities main circulation providing 100 sq. ft. of space. Each companion room houses a shower, toilet, and sink.

*Pool Storage:*

This space is used by recreation department members to store equipment and other necessary items associated with the pool.



**ROOM DATA SHEET: ATKINSON POOL**



**Atkinson Pool**

*Existing:*

The current Atkinson Pool and it’s support spaces are under the control of the Recreation Department which is the primary user for many of it’s program offerings. The existing lobby provides the main viewing area for spectator’s during swim meets. Folding partitions divide the lobby to create separate spaces for special events and pool birthday parties. Training and first aid classes are also currently held in the main lobby. Because storage and workspace is lacking elsewhere, the lobby is often identified as a storage and staging area.

*Proposed:*

The Atkinson Pool building would remain in the new proposal, but specific locations around the pool would be renovated or expanded which vary between schemes. The design proposes the incorporation of a new warm water therapy pool. This enhancement would allow profitable programs to emerge in a small amount of space. The addition would accommodate rehabilitation services, personal training, arthritis aquatics classes, and swim lessons. Warm water can help guests improve their range of motion, balance, strength, and coordination.

A new dedicated First Aid Room and Aquatics Office has been incorporated into the plan. The new design provides a larger office space that would accommodate daily operations while also providing good visual control of the Atkinson Pool area. Existing windows which allowed spectators to view swim meets from the lobby would be removed and wall openings would then be renovated to incorporate team seating. Spectators would then use the current team bleachers. Spectator seating is also provided at the north end of the pool from the corridor but this is far from ideal.



Therapy/exercise pool

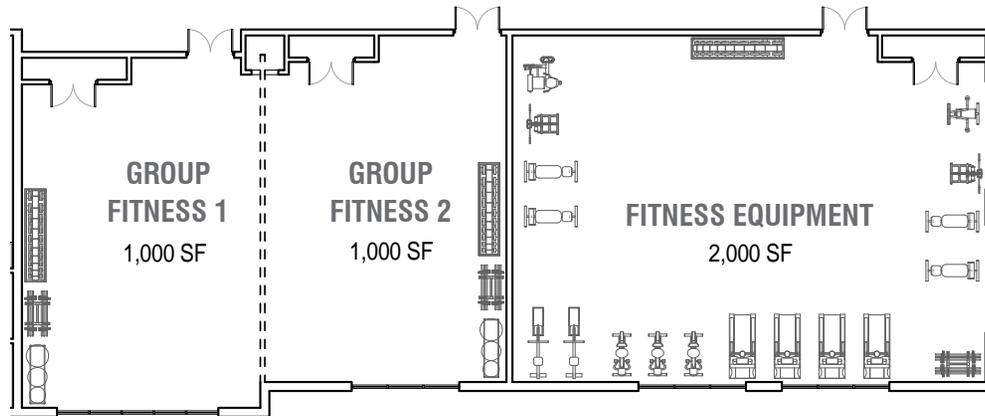


Combined children's and warm water pool



Alcove provides access for the disabled

## ROOM DATA SHEET: FITNESS



### Fitness

#### *Cardio Room and Weight Room*

Flexible environment for treadmills, elliptical machines, stair masters, and other cardiovascular training equipment. Additional area's would be dedicated for strength training used by teachers and students with a combination of resistance equipment and free weights. Sufficient area is required for multiple stations and team use. As with most fitness centers, area is required to enable the general "non-athlete" student population to use this equipment without being intimidated by more "power users." The "desired" area is based on long term flexibility and growth. Views, and natural daylight make this space very desirable to guests.



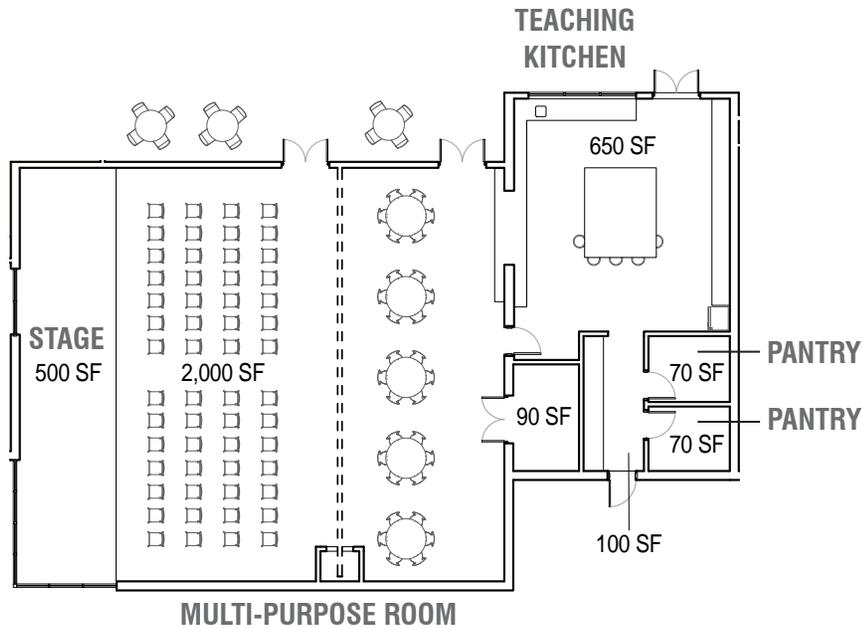
#### *Group Fitness Rooms*

This space is a large multi-purpose room with a shock absorbing wood floor for use by various group fitness programs such as aerobics, dance, steps, "body pump," Pilates and other programs that develop year to year. The desired space could be occupied as one large classroom or broken into two smaller ones with the integration of a movable partition. These programs develop and change over time so the room is flexible accommodating varying types of activities.

#### *Storage*

Dedicated storage is required to enable the group fitness rooms to be truly flexible. Additional storage has been added to the fitness equipment room.

## ROOM DATA SHEET: MULTI-PURPOSE ROOM AND TEACHING KITCHEN



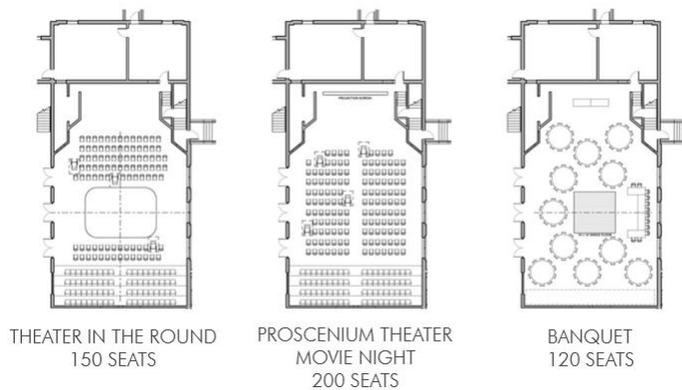
### Multi-Purpose Room and Teaching Kitchen

#### Multi Purpose Room

The addition of a multi-purpose room would provide a space for large special events to occur such as dances, movie nights, banquets, and performances as well as a space for the senior center lunch program to take place. A movable partition breaks the space up when two events need to occur at the same scheduled time providing more flexibility. A low ceiling with neutral walls creates a sense of ambience, providing the ability to decorate for special events, and bring the noise level to a minimum.

#### Teaching Kitchen

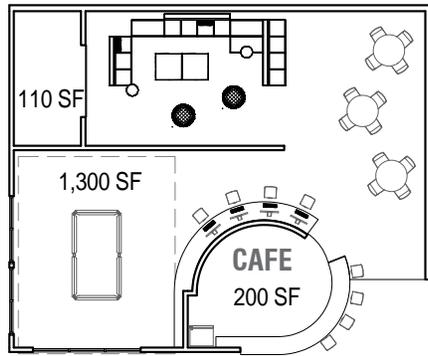
The existing kitchen is used for heating and keeping the meals warm before serving or delivery. Meals are brought into the complex from a central food preparation vendor and coordination for the meals program is undertaken by volunteers. Meals are also delivered to elders that have difficulty leaving their home. The current equipment is old and should be replaced to meet the growing demands of the community.



Cooking and nutrition classes are very popular programs offered at modern senior centers. Teaching kitchens offer arrangement for demonstrations as well as hands on cooking by participants. The proposed kitchen provides accessibility to individuals with disabilities. Additional pantries dedicated to both the senior center and recreation department has been incorporated for proper storage. The kitchen also houses a private receiving area for vendors to use.



## ROOM DATA SHEET: TEEN CENTER AND CAFE



**TEEN CENTER**

### Teen Center and Cafe

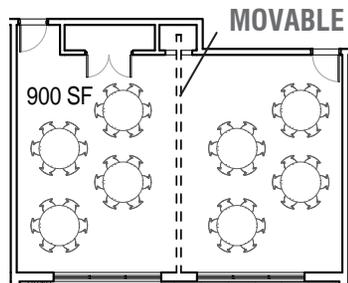
#### *Teen Center*

This environment offers a more open, social, and technology driven space that attracts teens. The room provides a pool table, internet bar, video game/tv lounge, and additional flexible seating for varying activities to occur. Walls and furniture create smaller environments for teenagers to interact with one another. Proper acoustic materials would contain sound from traveling. The space is centered with-in the building allowing children to be easily monitored through interior curtainwall systems. Guests walking by can peer in and watch the teenagers play a game of pool.

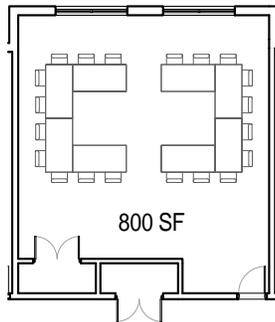
#### *Cafe*

A small snack bar/cafe offers guests the opportunity to have something to eat during varying times of the day. It becomes a great multi-generational spot, with opportunities for parents, children, and seniors to interact. This space is adjacent from the kitchen allowing baked goods and other items to be sold to guests. Flexible teen center seating and tables located outside of the kitchen provide a more comfortable spot for leisure if bar stools are not desired.

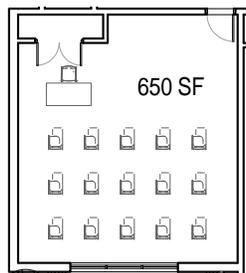




**LARGE PROGRAM**



**ARTS & CRAFTS PROGRAM**



**MEDIUM PROGRAM**



**Program Rooms**

*Large Program*

A large classroom can host various programs throughout the day. Rooms and furniture are flexible and storage is dedicated to each space to accommodate the communities needs. Movable partitions allow the space to be broken into two smaller rooms when more unique programming is needed. A large projection screen, room darkening shades, a DVD player, and computer access make this space very versatile.

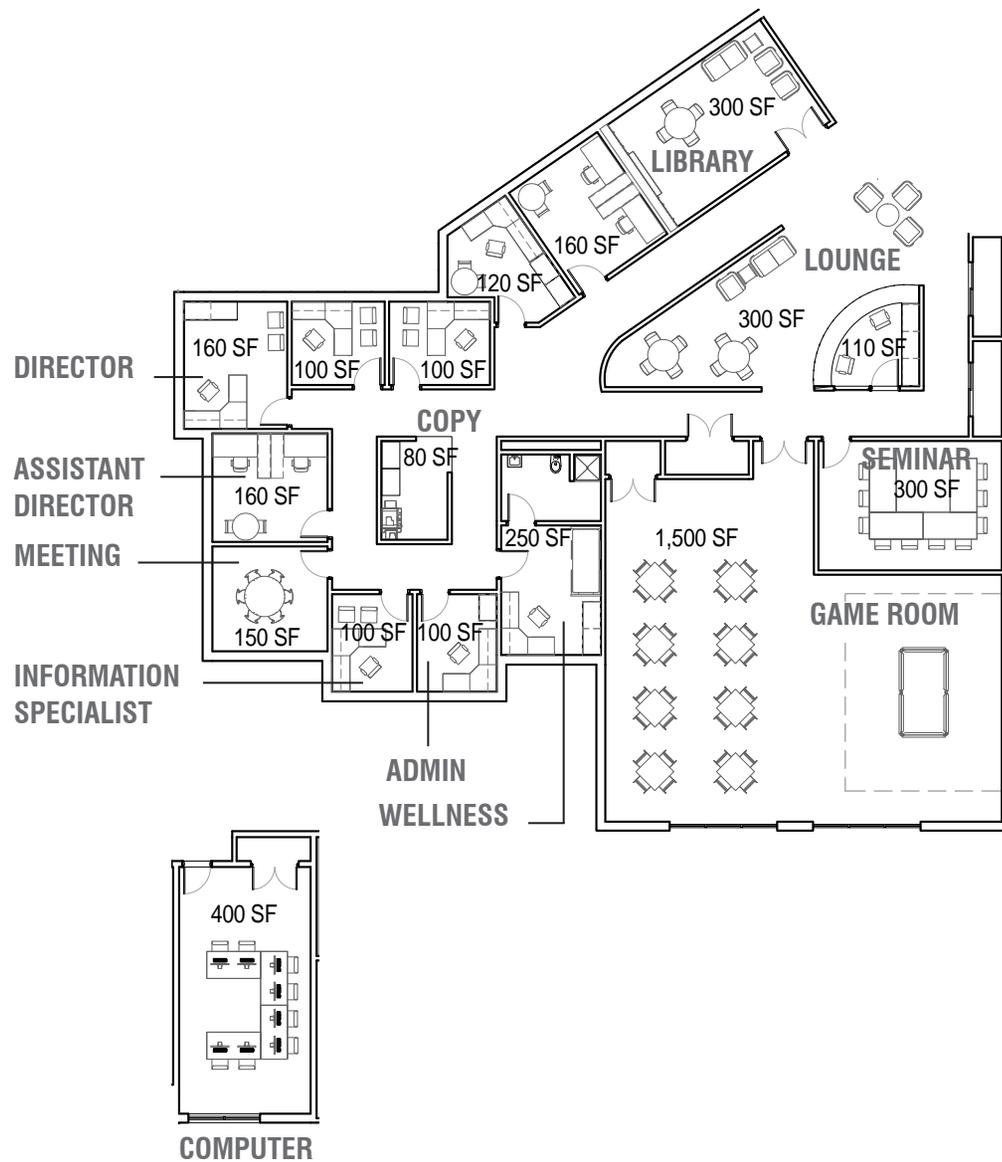
*Arts and Crafts Program*

Adequate storage to keep supplies and projects accommodates the changing needs of this space. Furniture is flexible to allow for the varying functions.

*Medium Program*

A mid-size classroom can also host various programs throughout the day. Rooms and furniture are flexible and storage is also dedicated to each space to accommodate the communities needs. Meetings for the Council on Aging and Friends, small card games, and scheduled programs could use these spaces when desired.

## ROOM DATA SHEET: SENIOR CENTER ADMINISTRATION AND PROGRAMS



### Senior Center Administration and Programs

#### Lounge

The drop-in space is occupied by seniors as a place to socialize, relax, or wait for a scheduled program to begin. Separate from the main entry lounge, this space does not interfere with the reception desk operations.

#### Library

The library can encourage communal integration as well. By becoming a social space to share books and hold book club conversations. Or a retreat if an individual would like to find a comfortable soft seat in a quiet environment.

#### Seminar/Computer Training

These rooms become vital in providing Seniors with information and resources for medicare, retirement, financial information, fitness, nutrition, and preventive health. Spaces need to provide easy access to computers, projector screens, DVD players, and room darkening shades. Technology plays an important role in seniors lives. Learning how to use social media, smart phones, tablets, and other devices provides seniors with the opportunity to Skype with grandchildren, and partake in conversations. Students can tutor seniors on the latest trends enhancing multi-generational interaction.

#### Game Room

Bingo, card games, bridge, pool, arts and crafts groups, and other sorts of activities can be held here. The space becomes more of a communal room for leisure and socialization to occur among seniors.

### Senior Center Administration and Programs

#### *Administration Offices*

Because of the need for confidentiality, privacy, and oversight inherent in the personal assistance offered to seniors by employees of the senior center, spaces related to counseling and assistance are typically separated from other activities or included with the administration offices. Consultation rooms are flexible in the sense that they can double as private offices. Programs offered to Seniors include tax return help, legal consults, information specialist consultations, health insurance information, along with volunteer interviews, and senior community work program interviews. A number of offices/consultation rooms are not labeled on the plan because they are not dedicated spaces. These rooms are flexible to accommodate the daily changing needs of the community.

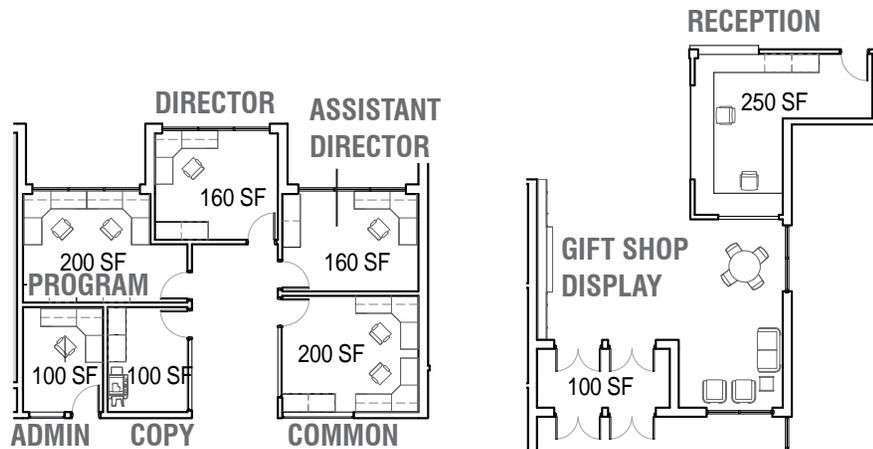
Five private offices housing the Director, Assistant Director, Administrative Assistant, Information Specialist, and Wellness Practitioner can be identified on the data sheet. A dedicated small meeting room and a copy room that includes a photocopy machine with additional storage space have also been incorporated into the design.

#### *Wellness Exam Room*

This space is dedicated to an in-house nurse to take blood pressure, blood glucose readings, administer flu shots, and consult health conditions. The current existing room is not designed for these functions. The space includes a practitioner's desk, file storage, a hospital bed that patients can lay down on, and an attached restroom with a toilet sink and shower. This allows the nurse to provide assistance in a private setting as needed.



## ROOM DATA SHEET: RECREATION ADMINISTRATION AND ENTRY LOBBY



### Recreation Administration and Entry Lobby

#### Administration Offices

Recreation staff offices are located in a small suite off of the buildings main circulation. The design includes three private offices housing the Director, Assistant Director, and Administrative Assistant. Additional office space is accommodated for program and common staff. A small copy room includes a photocopier machine with additional storage space.

The attached program describes the area for each component required in the building other than horizontal circulation and wall thickness in order to reduce the uncertainty about building size. The remaining incidental program areas are as follows:

#### General Lobby/ Reception

The lobby with an attached entry vestibule area varies per scheme. Every building has some sort of lobby and the community center is no different. The desired common entry enhances the multi-generation design intent.

The main reception desk monitors incoming and outgoing guests while providing information resources, directions, and other necessary tasks. Comfortable soft seating allows guests to wait for meetings with recreation department members or scheduled programs. A glass curtain wall allows guests to peer in and see the activities occurring in the fitness classroom. Inspiring new members to join. The lobby also includes an entry vestibule which is required by code to conserve energy.

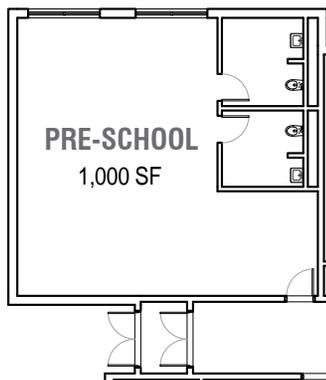
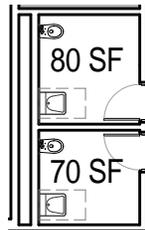
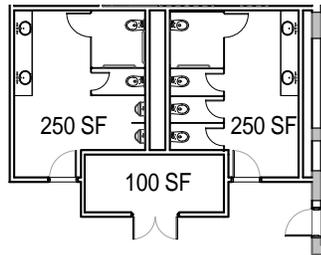
#### Gift Shop Kiosk

A gift shop display case provides community members with the opportunity to set up and sell handmade goods for donations. This dedicated space also could potentially provide community center event information.



## ROOM DATA SHEET: RESTROOMS, JANITORIAL, MECHANICAL, AND PRE-SCHOOL

### RESTROOMS



### Restrooms and Pre-School

#### *Public Restrooms*

Public restrooms are accessible to all guests. The location of these rooms vary between schemes.

#### *Janitorial Spaces*

A main 100 sf janitorial room will be located outside of the public restrooms with proper storage.

#### *Companion Restrooms*

Although a Men's and Women's Public Restroom is accessible to Senior Center guests, additional companion restrooms provide comfort and privacy for two people to maneuver in, helping those who may need assistance.

#### *Pre-School*

This room is set and furnished to run the Recreation Departments pre-school program. Toilet facilities are provided with-in the classroom so that the required staff can accompany children as needed. Parents can enter the building through the common entry or a more discreet side entrance. This provides a direct access for pick-up and easy circulation for teacher's to host outdoor activities.

#### *Mechanical, Electrical Tel Data, and Filtration*

Rooms are required for each of these items. The exact size of these is to be verified by the mechanical engineer.



## Senior Center Sudbury, MA

**Debra Galloway, Director  
Sudbury Senior Center  
October 2013**

### **Thoughts on the Current and Future Needs of the Seniors of Sudbury**

There are currently about 3,415 Sudbury residents who are 60 years of age and older, about 19% of the 18,323 total residents. This number is predicted to continue to increase dramatically over the coming years due to the aging of the baby boomer cohort as well as the increase to average lifespan. The Senior Center is already seeing increases in the use of Senior Center programs, especially health insurance counseling (SHINE), Information and Referral and transportation. In order to continue providing programming and services for the growing population, the Senior Center is in desperate need of more space and staffing.

The Senior Center mission is to provide programming and services to support and maintain health and wellness for seniors in many aspects of life. Older adults in Sudbury are looking for information, education, wellness, recreation and socialization. Therefore it is helpful to think of the Senior Center as having 5 areas of use:

- Education – Lifelong and community
- Wellness – fitness, nutrition, health monitoring, preventive health
- Information/Resources – Medicare information, retirement, financial information/resources
- Recreation/Arts- cards, bridge, other games, art and craft classes/groups
- Socialization – lunch, luncheons, special events, lounge area, coffee, all of the above

What are the space needs for these five areas?

The Senior Center has two program rooms: the Sudbury Pines room, a larger room with a projector, screen, room darkening shades, dvd player, and computer access, along with more comfortable chairs (55) and carpeting; and the Van Houten room, a smaller room with about 30 plastic chairs and a tiled floor. The Senior Center has one consultation room which is also an office for the Information Specialist. In addition, we have a small lounge area right in front of our Reception Desk.

#### **1. Education:**

Larger classroom and small seminar room – Many classes fill our current classroom, we could use a larger room with the same technology as the current room. And for smaller classes with more unique programming, a smaller room is also needed (this smaller room could be used for the many small meetings that take place with the Council on Aging and Friends, and possibly also for small groups of card players).

**2. Wellness:**

Wellness room – This is needed for nurse to take blood pressure and blood glucose readings, administer a flu shot, and consult about health conditions. The Board of Health nurse currently uses a staff person’s office for her blood pressure and other consults. The room is not designed for this use. The nurse and her visitor sit on desk chairs in front of the staff person’s desk. Meanwhile the staff person is not able to get her work done.

Fitness rooms – The gym is good, but too large (and sometimes cold) for some classes, such as: yoga, Better Bones (balance and strength), tap dance, Zumba, and tai chi. These classes could use a room about half the size of the gym to keep people warm and to make it easier to hear the teacher, among other things.

**3. Information/Resources:**

There is often competition for our one consultation room. The services provided in this room include: Information and referral, health insurance counseling (SHINE), elder law attorney consultations, Tax assistance and meetings with prospective volunteers and Senior Community work program applicants. Often the Tax assistance appointments, meetings with prospective volunteers and Senior Community Work program applicants have to be moved to one of our program rooms, or to a borrowed Park and Rec room (Room 1 or 3) due to the consultation room being used. This means that the Volunteer Coordinator and Senior Community Work program Coordinator do not always have a private space to interview volunteers/applicants.

To meet this need, the Senior Center needs at least another two small offices with perhaps one or both having a small table and few chairs in addition to a desk. This need has grown a lot in the last year, and is expected to continue to grow rapidly as aging baby boomers look for assistance with financial, legal and health insurance issues, as well as opportunities for volunteering and tax relief.

**4. Recreation/Arts:**

Our current arts classes use a room that doubles as our coffee and goodies area (Van Houten). This means that they are interrupted by staff making coffee and bringing out baked goods, along with senior participants who are visiting and coming to get coffee. There is not adequate storage for the arts classes to keep supplies or projects week to week.

Bingo is held in our main program room (Sudbury Pines), which means that we are not able to schedule a class or movie for that room during bingo. This room gets a lot of use as it is the only room with technology (projector, screen, dvd player, laptop access).

**5. Socialization:**

An important purpose of the Senior Center is to create a space for older adults to have an opportunity to socialize in various forms. As we get older, we may not have the same opportunities for socialization that we did as younger adults, such as work, other parents, physical activities, etc. The Senior Center offers opportunities for meeting new people, and visiting with those you already know. A lot of socializing goes on before and after classes, but people also enjoy coming to a special event or luncheon. The Fairbank gym is used for large luncheons. It is adequate: there is enough space for about 100 people, there’s a stage for entertainment, a kitchen to keep food hot, but it also has high ceilings, and is not easy to decorate and create ambience. The noise level is really high when people are eating and talking, making it difficult for those with hearing issues to hear. A large room with lower ceilings, no basketball hoops, and with neutral walls would be so much more amenable to having special luncheons.

When people are coming to the Senior Center for perhaps a lifelong learning class and a fitness class, they may have a need for a snack or light meal. We do have a lunch program on Tuesdays and Wednesdays at noon, but this does not fit the bill. The program is operated by BayPath Elder Services, who provides meals to many Senior Centers, and therefore contracts with a large caterer. The meals are not that popular, they must be reserved in advance and are only served at noon. A small snack bar or café would offer the opportunity to have something to eat at varying times during the day and allow people another avenue for socialization. In addition, this could be a space for all ages and would therefore be a multi-generational spot, with opportunities for parents with small children to also interact with the older adults in the community.

Mall/Common Area

The café might be a part of a large common area that includes a café space, library or artwork spot, and place for announcements and schedule for the day and would be welcoming to all ages. This space might also house a gift shop or “trolley” set up to sell handmade goods or donations to the Crafts group at the Senior Center.

Office Space

In order to provide all of the programming and services that we already do and plan to add to, we need additional office space. As is indicated above, the Senior Center has a number of part-time grant based positions. Although they are part-time, they compete for office and consultation space with the 2 full-time staff and the one part-time staff person.

## PROGRAMMING ASSESSMENT

### *Department Space Needs: Sudbury Senior Center*

The Sudbury Senior Center serves the social, recreational, health and educational needs of older adults in Sudbury. The interests and needs of residents as well visiting seniors, are addressed through programs and services offered from the Senior Center located within the Fairbank Community Center. The Senior Center interfaces with the public in a variety of ways, of which two are the most important. The first is through activity programming offered in the multi-purpose program spaces the Senior Center. These programs include but are not limited to fitness, nutrition, educational, media, socialization, and arts & crafts programs. The second is through outreach and assistance services offered from the administrative offices of the Senior Center and range from personal & financial assistance, medical screenings, counseling, and computer instruction.

The Senior Center employs three (3) full-time employees (FTE), including the Director, and four (4) part-time employees (PTE). The PTE's are the Information Specialist, Morning Receptionist, Volunteer Coordinator and part-time Van Driver. An additional PTE is planned starting in July 2014. The Senior Center also employs the help of volunteers, to assist with program setup and activities. There is no full time custodial staff. There are two (2) stipended positions , the Trips Coordinator and Senior Community Work Program Coordinator

The Senior Center currently operates Monday through Friday 9AM to 4PM. It is possible that hours may be extended in the near future to 9AM to 5PM or one day a week to 7PM.



Senior Center

*The Current Senior Center*

The current dedicated Senior Center space includes the lobby entry, drop-in lounge, the multi-use Van Houten Room which includes a kitchenette, the Sudbury Pines Room, Administrative Offices, and Men’s and Women’s toilets. All other spaces used by the Senior Center are shared with the Recreation Department.



Common Storage



Inadequate Closet Space

## PROGRAMMING ASSESSMENT

### *Staff Offices*

The staff offices are located in a small suite behind the main reception desk. There are three private offices housing the Director, Administrative Assistant and rotating staff, and the nurse. The staff offices are organized around a center corridor and a common storage space. A shared photocopier is located in the nurse's office. The nurses office is not large enough or equipped to provide medical screening and other activities required by this space. A small inaccessible toilet is located off of the nurse's office. The Administrative Assistant rotating staff space contains a few desks; no privacy is provided if room is occupied by two uses. The Director's office is small, requires additional storage and lacks adequate space for staff, vendor, or constituent meetings. There is not conference space to hold small meetings or training sessions.

### *The Current Senior Center*

The current dedicated Senior Center space includes the lobby entry, drop-in lounge, the multi-use Van Houten Room which includes a kitchenette, the Sudbury Pines Room, Administrative Offices, and Men's and Women's toilets. All other spaces used by the Senior Center are shared with the Recreation Department.

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As noted above, there is no conference room in the Senior Center. For this reason meetings must be conducted in one of the multi-purpose rooms. While staff and other meetings are essential, this does limit how the multi-purpose room can be used at these times.



Nurses Office



Doctor's Office



Waiting/Common Space at Reception Desk

Different Town organizations use the Van Houten and Sudbury Pines multi-purpose rooms for meetings after the Senior Center's hours of operation. The Sudbury School Committee meets in the Sudbury Pines Room which is equipped with presentation and Cable TV broadcast provisions. Both rooms are used by multiple Town sports organization. Typically an administrator for the organization will have a key to the Center and is responsible for opening and closing the building.

### *Program Spaces*

The Van Houten Room is defined by finishes and ceiling height into two distinct areas. The entry area has a VCT floor, base and wall cabinets as well as a sink, microwave and refrigerator. Coffee and pastries are set out each day for visitors to the center. The other half of the room is a large open area that contains moveable tables and chairs. Vertical wall units with locks are provided for use by various program instructors to store equipment and supplies. Use of this space of programming makes obtaining coffee awkward during the course of the day.

A small section of behind the kitchenette area is used to house medical equipment, walkers, wheelchairs, etc. that can be loaned to Town residents. This equipment is typically housed at the Flynn Building; a small amount is kept at the Senior Center for convenience. Portable screens were donated by the "Friends of the Senior Center" to conceal this storage area.

The Sudbury Pines Room is the larger of the two dedicated Senior Center Spaces is used for larger meetings and presentations. The room is carpeted with acoustic tile ceilings and provides a reasonable space for presentations, movies, and lectures. A moveable partition is located between the Sudbury Pines Room and the lobby to allow for possible overflow seating or simple expansion of the space. The west wall of the room is lined with windows that are controlled by window covers.

Access to the kitchen from the senior center is through the Sudbury Pines Room. Short of walking outside or through the gymnasium, access to the kitchen space is limited when the room is in use.



Van Houten Kitchenette/Storage Behind Screens on the left.



The Van Houten Room



The Sudbury Pines Room

## PROGRAMMING ASSESSMENT

### *Computer/Electronics Training*

A very popular LSRHS Community Service Program for both students and seniors called “Teen Tech” tutorials provided by the students to teach seniors how to use, or improve their usage of computers, smart phones, e-readers, and tablets. A portable computer station is available that it typically stored in the administrative office suite. Small school tables have been donated and set up in the corridor across from the toilet rooms to provide a space for this tutoring to take place. Needless to say, this is not an appropriate arrangement, however like other spaces in the building, staff and the Seniors make it work.

### *Drop-In Social Area*

A key space and element of any senior center is the drop-in social area. Usually during the morning arrival time, or anytime throughout the day, a space is provided for seniors to grab a cup of coffee or tea, a muffin or snack, and be able to site and socialize with the other seniors. An ideal space is located near the entrance but should not be the lobby or interfere with the reception desk operations.

The arrangement at the Sudbury Senior Center is not ideal. Although many comfortable chairs have been provided, and the space is fairly pleasant, it is part of the lobby reception area. The refreshment area is located in the adjacent Van Houten Room which may not be accessible if a meeting or program are being held in the room. All activity at the front desk is visible and part of the area. People waiting for an appointment or counselling must wait in this area. While some seniors may like to watch the comings and goings of the Center, the activity of the desk and the drop-in area are should be separated to allow audible an visual separation.

### *Meals Program*

Meals programs offered by senior centers serve two primary functions: 1) serving affordable, nutritious congregate meals to a community that does not easily have access to them otherwise, and 2) bringing members of the senior community to a group event for important socialization. Most senior centers also act as a hub for organizations that deliver meals to elders that have difficulty leaving the home. In both respects the Sudbury Senior Center is no exception.



Recycling was relocated to make room for the technology desks (show stacked in photo)



Veteran's Luncheon

Congregate meals and the home delivery meals program are both offered by BayPath Elder Services. Meals are brought into the center from a central food preparation vendor and kept warm in the Senior Center. Coordination of the meals program is undertaken by volunteers who work from the kitchen. Meal delivery to homes occurs on a daily basis with an average of twenty-five (25) meals per day. Congregate meals are offered twice per week Tuesdays and Wednesdays at lunchtime. Five (5) and ten (10) people typically part take in the meals.

Large special events are held 5 to 7 times per year and set up in the gymnasium. This is the only space available to accommodate 80 to 100 people and lacks the quality and ambience of a function hall or dining area. Food for these events are prepared off site and served by volunteers.

The former Fairbank School kitchen is used for heating or keeping the meals warm before serving or delivery. Although it can function as a full commercial kitchen the arrangement is set up for a school cafeteria. Equipment is old and operational.

Cooking and nutrition classes are very popular programs offered at modern senior centers. Teaching kitchens require an arrangement for demonstrations as well as hands on cooking by participants. All aspects of a teaching kitchen must provide accessibility to individuals with disabilities.

The Director has a strong interest in improving the COA meals program specially congregate meals if the proper facilities can be provided and would like to have the ability to offer cooking classes.

### *Share Spaces*

The Senior Center uses 3 shared spaces with the Recreation Department as well as the gymnasium space.



The gymnasium in its typical configuration



School Kitchen Serving line

## SUMMARY OF PROGRAMMING COMMENTS

The following is a summary of the comments collected during programming interviews with Town Staff, programming questionnaires, and multiple meetings with other stakeholders and Town officials.

### **Senior Center**

#### *Entry*

- Reception Desk also provides work space for van driver and other volunteers. Area is too busy and noisy at times.
- Proximity of drop-in area to reception desk and administrative offices can be a distraction for staff; offers no privacy for visitors to administration area.
- Covered drop off entry works very well for mobility impaired individuals and van drop-off.
- Secure control point for check in is important at the senior center space; however a shared entry with the rest of the center (the community) is desired. The senior center is isolated; the center has its back to the rest of the building. There is a desire to be more connected to a community center.

#### *Administration*

- Director's office doubles as storage and not large enough for small meetings.
- Nurse's office doubles as copy room and file storage. Space does not have adequate space or equipment for basic medical screening.
- Single office provided for staff and volunteers. Additional office space required for rotating volunteers, tax help, medical screening, and technology assistance.
- An individual should be able to visit the offices for counselling or a screening and feel that a basic level of privacy is provided.
- There is no room for staff meetings

#### *Program Spaces*

- Van Houten Room is truly multi-purpose. Used for many activities, programs are compromised by lack of space and storage. Kitchenette at the entry creates constant flow into the room while activities are taking place in the main area. Small portable screens were purchased to conceal stored medical equipment that is loaned to the public.
- Sudbury Pines Room works but is too large for many of the activities that take place. It is a corridor to the kitchen.
- Library consists of two small bookshelves. Senior Center has discussed shared programs with the Goodnow Library if space was available.
- Two small desks in the corridor provide additional meeting/work space for counseling and training.
- Center has larger demand for Senior specific wellness programs; however space is limited in the community center.
- Many meetings are held in Room 3, the Teen Center space, which is inappropriate for the Senior Center's needs.
- The two pool tables in Room 2 were originally acquired by the Senior Center. Members no longer have access to them.

### *General*

- There is inadequate storage for all program spaces.
- A companion toilet is desired; single use room that an individual with disabilities can use with a personal attendant or care giver.
- Meals were a large program element in the past and have fallen off due to space limitations.
- Large events such as the Men's Group, Veteran's lunch, Holiday Lunch, St. Patrick's Day Lunch, etc. are held in the gym. The gym has adequate space, but does not provide an appropriate level finish and amenities for large dining functions.
- The gym is too small for other activities such as the Fall Bazaar. The main activities are held in the gym, other major events of the day were in the Sudbury Pines and Van Houten room which are segregated from main events.
- Summer access to the gymnasium is limited due to summer camps. The gym is not available during inclement weather; Center has moved certain activities off site for the summer.

### **Recreation Department**

#### *Administration*

- Director does not have a private office that is necessary for job functions related to personnel and other discussions requiring privacy.
- No waiting area in office space for visitor's meeting with Recreation staff.
- Existing office space does not provide adequate sound separation for staff activities.
- Common work room required for staging events.
- Private meeting conference room needed for staff and vendor meetings.
- Flexible, rotating work stations needed for seasonal staff and vendor use.
- The pool office is adequate for pool administrative tasks but not for pool "wet" tasks. It is not an appropriate room for lifeguards. No accommodations for first aid/treatment.

#### *Program Spaces*

- Divider in lobby provides a party room for birthdays and also provides a training and staging area for events. When in use, the lobby space is constricted.
- Recreation would like to develop a gymnasium/birthday program.
- Summer camp population is limited by the number of campers housed in the gymnasium and other program spaces during inclement weather. There is usually a waiting list of 40 to 50 kids.
- Interest in fitness training requiring equipment expressed. Increased demand for triathlon training/cross training.
- Program offerings for fitness classes, whether operated by staff or outside vendor, are limited due to space.
- Dedicated art room needed for recreation programs and summer camps.

## SUMMARY OF PROGRAMMING COMMENTS

- Currently no after school programs offered; potential for future program.
- Pre-school is sized for current population; no room for expansion in the future. Pre-school uses Room 2 for gross motor activities for an hour when school is open. Staff escorts students to the public bathrooms down the corridor. In room facilities for that age group would allow staff to remain in the classroom.

### *Lockers/Toilets*

- Locker room spaces are poorly arranged. Patrons reluctant to participate in open swim when swim teams are practicing and utilize the locker rooms.
- No family changing/companion changing provided.
- Staff locker and changing space not provided for pool staff.

### *Swimming Pools*

- The 8 lane pool is advantageous and allows more lap swimming. Pool is limited to 6 competitive lanes due to width and lack of racing lines at the pool sides.
- Building configuration provides no spectator seating for swim events. Bleachers are moved into lobby to providing viewing.
- Large swimming events are staged throughout the building including the gym and program spaces.
- The diving tank is a great amenity to have and the Recreation Department exploits it.
- The pool complex provides for the needs of lap swimmers, swim teams, exercise, and swim lessons; it does not provide other aquatic amenities that would make the pool desirable for recreational swimmers seeking activities commonly found in seasonal outdoor pools. Water features, zero depth entries, etc.
- The pool is not desirable in the summer for recreational swimming.
- Can or should Atkinson offer a seasonal outdoor pool?
- Would families on the private waitlists join a public pool? (Opinions are mixed. Definitely yes for those seeking swimming opportunities; maybe for those looking for other amenities offered by the provide clubs that cannot be offered at a public pool.

### **Building Wide Comments**

- Provide central lobby and entrance for all users with individual control points to program spaces.
- Provide snack Bar/Concession space for building users as well as Haskell users.
- Look at all sports options as part of the final programming. In addition to a full size basketball court, is an ice rink practical?
- A larger combined facility will need full-time custodial help.
- Provide exterior seating and gathering areas for building users.

**SECTION 5**  
**BUILDING PROGRAM LAYOUT**



After consulting with various Fairbank Community Center members and staff, a determination of the anticipated program offerings was documented. The adequacy and quantity of spatial needs was assessed through reviewing the proposal of three schemes with different funding levels. With the concept of a new building, anticipation of a more environmentally and community friendly design was desired. A number of goals was discussed:

- Internal Flexibility
- Natural Daylight
- Fresh Air
- Outdoor Views
- Common Entrance
- Circulation: Communal Neighborhood
- Welcoming Breaks For Socializing
- Shared Program Rooms
- Multi-Purpose Gathering Space

The schemes are shown on the following pages. The purpose of the drawings and charts is to show what would be gained or lost at the different funding levels.

It is important to note, that all three proposals indicate that the existing Atkinson Pool building is to remain as is with minor renovations between options.

### OPTION 3

Is a 60,000 sf new building that accommodates all of the communities needs while providing an efficient use of shared spaces between COA and Park & Recreation. It provides privacy to departments when necessary. This design incorporates all of the desired goals that were derived.

### OPTION 2

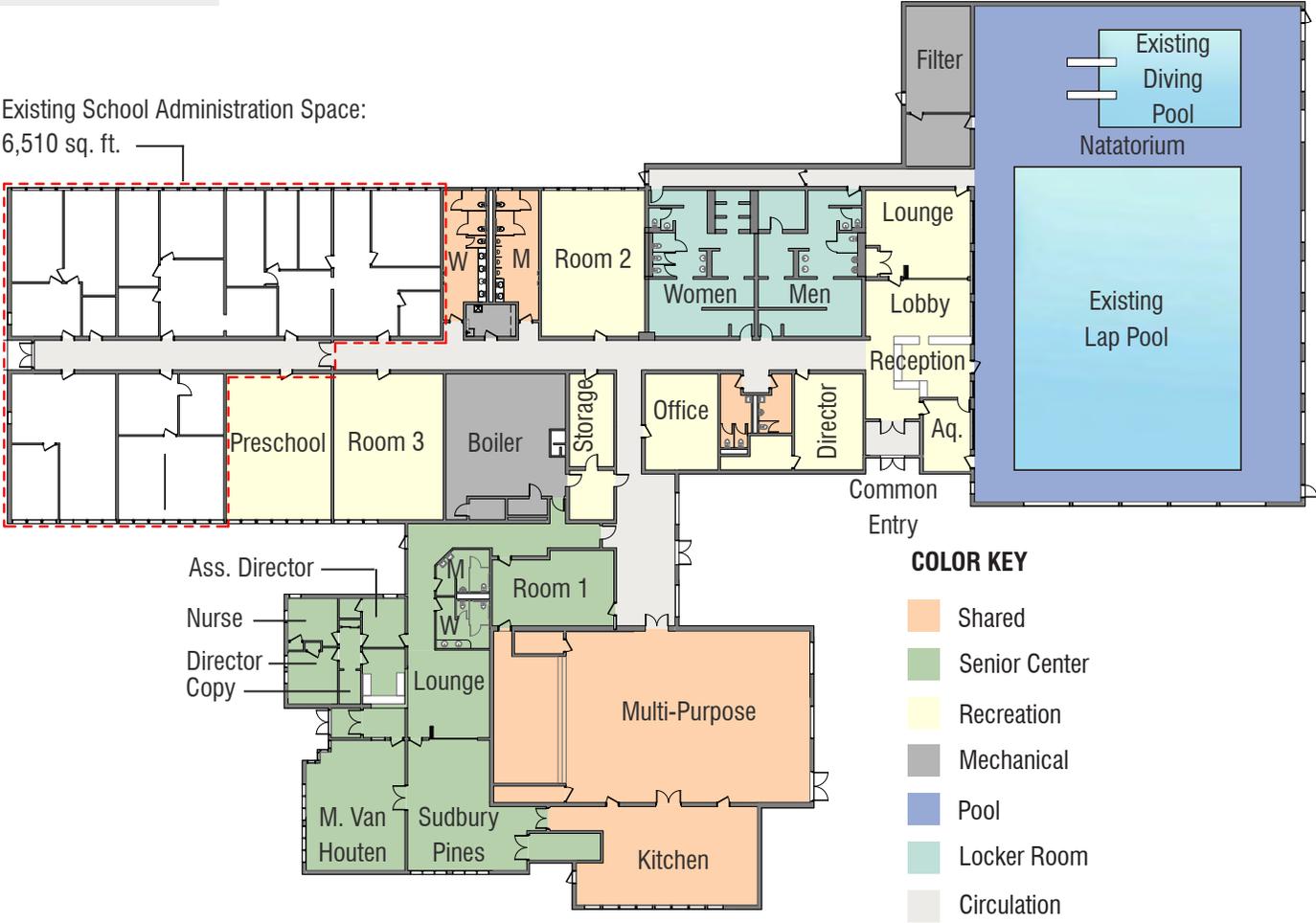
Is an attempt to downsize to a 50,000 sf new building that sits on the footprint of the existing complex. Circulation was redesigned so that a larger number of spaces received natural daylight and views outside. This scheme addresses a few of the programmatic needs of the facility but not all of them. The circulation and room layout was not ideal to the community center members or staff. This does not meet current or future program needs.

### OPTION 1

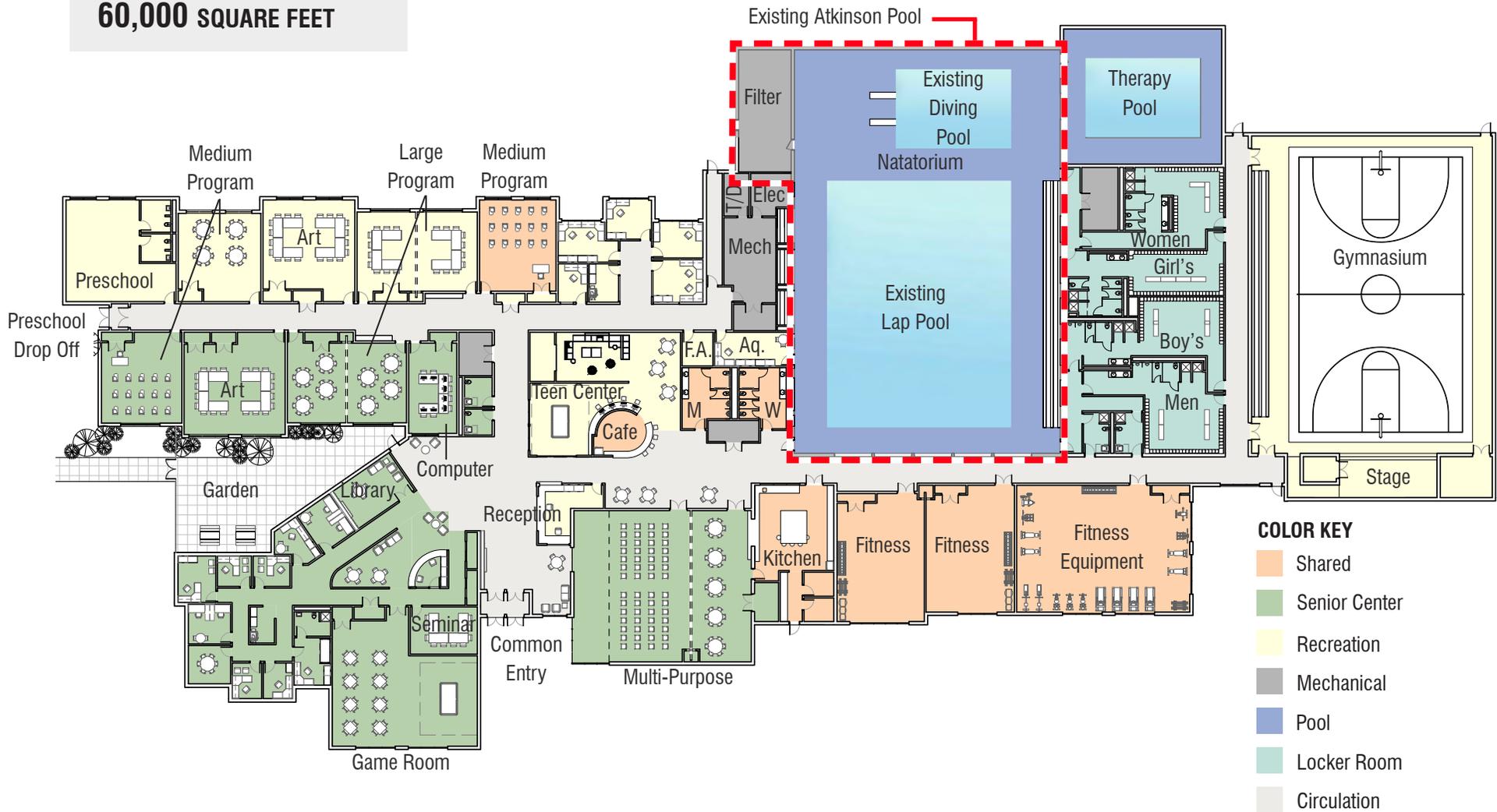
Is a further attempt to downsize to a 40,000 sf new building that sits on the footprint of the existing complex. This scheme has a plan layout similar to option 1, but eliminates the incorporation of a high school regulated gymnasium and some programmatic spaces used by both the Senior Center and Park & Recreation. This option does not meet current or future program needs.

**BUILDING PROGRAM: EXISTING**

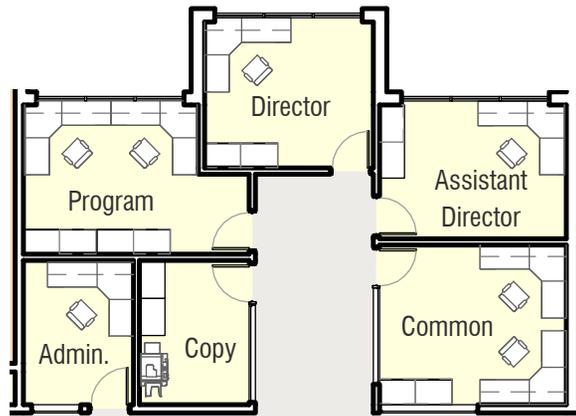
**EXISTING PLAN:  
33,732 SQUARE FEET**



**OPTION 3 PLAN:  
60,000 SQUARE FEET**



## BUILDING PROGRAM: OPTION 3



This scheme represents Option 3 which was designed to meet most of the comments and necessary needs received from the Fairbank Community Center. This is a 60,000sf facility that uses creative approaches to provide a communal neighborhood. Shared common circulation with varying welcoming breaks provides guests the opportunity to interact and socialize. The incorporation of shared program spaces such as a multi-purpose room, teaching kitchen, offices that can transition into consultation rooms, and program classrooms that can be divided or enlarged, make this building internally flexible. The desired common entry provides the ability to monitor guests while enhancing the multi-generational community vision. The building offers multiple views, fresh air, and natural daylight creating an efficient and sustainable design.

*SHARED SPACES* are represented in orange and can be occupied by both departments throughout the day. The specified fitness space is a large multi-purpose room with a shock absorbing wood floor for use by various group fitness

programs such as aerobics, dance, steps, “body pump,” Pilates and other programs that develop yearly. The desired space could be occupied as one large classroom or broken into two smaller ones with the integration of a movable partition. The adjacent fitness equipment room provides a flexible environment for treadmills, elliptical machines, stair masters, and other cardiovascular training equipment. Additional area’s would be dedicated for strength training used by teachers and students with a combination of resistance equipment and free weights. Another shared space would be the Atkinson Pool, specific locations around the pool would be renovated or expanded to accommodate additional spectator seating and incorporate a new warm water therapy pool. This enhancement would allow profitable programs to emerge in a small amount of space. The addition would accommodate rehabilitation services, personal training, arthritis aquatics classes, and swim lessons. Warm water can help guests improve their range of motion, balance, strength, and coordination.

*RECREATION SPACES* expressed in yellow contains a private suite to house its administrative services. The design proposes a gym that is based on one full size high school dimensioned practice court with a permanent stage, camp storage, and pull out bleachers for spectator seating. Located at the center of the building is a large Teen Center offering a more open, social, and technology driven space. The room provides a pool table, internet bar, video game/tv lounge, and additional flexible seating for varying activities to occur. A cafe borders this space offering guests the opportunity to have something to eat during varying times of the day. It becomes a great multi-generational spot. A common corridor between program classrooms allows generations to socialize.

**BUILDING PROGRAM: OPTION 3**



The *SENIOR CENTER* expressed in green, offers privacy to guests that are looking for counseling, assistance, or simply a place separated from the younger generation. A game room allows seniors to mingle and relax, the library provides a location for book club discussions or a quiet escape, and the seminar room provides information and resources for medicare, retirement, finances, fitness, nutrition, and preventive health. Dedicated offices offer privacy to staff and flexible offices can transition into consultation rooms for part time employees and counseling. A nurses suite also offers seniors assistance that is confidential. The addition of a multi-purpose room would provide a space for large special events to occur such as dances, movie nights, banquets, and performances as well as a space for the senior center lunch program to take place. A movable partition breaks the space up when two events need to occur. An adjacent teaching kitchen offers arrangement for demonstrations as well as hands on cooking by participants.

## SPACE ASSIGNMENT SUMMARY

### Senior Center

#### GENERAL

A list of current programs was derived from the Fairbank Community Center's Winter 2015 Brochure and Senior Center Monthly Calendar (October 2014 - March 2015). The programs were then overlaid onto Option 3's floor plan to ensure that spatial demands were being met and that all programming spaces were being reasonably occupied throughout the course of a week. Please refer to the chart for a more detailed list of the community centers winter programs.

#### CONCLUSION

The current programs being offered at the facility becomes a rather large list. Option 3 provides a building that would spatially meet the demands of the current community center with potential for future growth. Both Option 2 and Option 1 would not allow space for future program opportunities to occur. Adjusting the list of programs would not be ideal or preferred by the Fairbank community.

SENIOR CENTER	PROGRAM	SCHEDULE
Multi-Purpose	Soups On	Weekly
	Music of Steven Sondheim	Weekly
	Movie	Weekly
	Improv Workshop	Monthly
	Lunch	Daily
	Speaker	Weekly
	Breakfast	Monthly
	Fair/Open House/Craft Bazaar	Weekly
	Home and Fire Safety Breakfast	Semi-Annually
	Storyteller	Weekly
Arts and Crafts	Drawing	Weekly
	Quilting	Weekly
	Thursday Crafters	Weekly
	Watercolors	Weekly
Program Rooms	U.S. History	Weekly
	Evolution Of German Art	Weekly
	My Life My Health	Weekly
	Teen Tech	Weekly
	Classics Of American Lit.	Weekly
	Alzheimer's Training For Family Caregivers	Quarterly
	Myth and Mythology	Weekly
Fitness	Tai Chi	Weekly
	Tap Dance	Weekly
	Yoga For Living Well	Weekly
	Better Bones	Weekly
	Fit For The Future	Weekly
	Zumba	Weekly
Consultation Rooms	I&R Hours	Weekly
	Legal Clinic	Monthly
	BP Clinic	Weekly
	Memory Screenings	Monthly
	AARP Tax Help	Weekly
Game Room	Canasta	Weekly
	Bingo	Weekly
	Scrabble	Weekly
	Games, Games, Games	Weekly
	Cribbage	Weekly
	Bridge	Weekly
Seminar	SHINE	Weekly
	Current Events	Weekly
	Connection Circle	Weekly
	COA Meeting	Weekly
	Bereavement Group	Weekly
	Friends Of Sudbury Seniors	Monthly
	Council On Aging	Monthly

# SPACE ASSIGNMENT PLAN

## Senior Center

### ART ROOM

- Quilting
- Drawing
- Thursday Crafters
- Watercolors
- Arts & Crafts
- Photography
- Painting
- Oil
- Ceramics
- Clay
- Charcoal

### PROGRAM ROOMS

- Lectures
- Slide Shows
- Adult Education
- Care Giver Support
- Language Classes
- Photography Club
- Creative Writing
- Poetry Classes
- Memoirs Class
- Reminiscences
- Investment Club
- International Club
- U.S. History
- German Art
- My Life, My Health
- American Literature
- Workshops
- Myth & Mythology

### CONSULTATION

- Legal Clinic
- I&R Hours
- AARP Tax Help
- Health Insurance
- SHINE Counselor
- Private Meetings
- Real Estate Office

### WELLNESS

- Flu Shots
- BP Clinic
- Memory
- Screenings
- Massage/Reflex
- Vet. Services
- Podiatry
- Audiology
- Vision Clinic
- Reiki
- Cholesterol Nurse

### GAME ROOM

- Chess Club
- Bridge
- Canasta
- Cribbage
- Bingo
- Scrabble
- Knitting Group
- Puzzle Club
- Magic Instruction
- International Club

### SEMINAR

- Shine
- Current Events
- Connection Circle
- COA Meeting
- Bereavement Group
- Friends Of Seniors
- Council On Aging
- Diabetic Support
- Care Giver Support
- Care Giver Seminar
- Board Meetings
- Investment Club
- Smoking Cessation
- Weight Loss Classes

### MULTI-PURPOSE

- Lunch/Breakfast
- Supper Club
- Tournaments
- Singing Groups
- Lectures
- Performances
- Slide Shows
- Antique Appraisals
- Adult Education
- Luncheons
- "Soups On"
- Music Of . . .
- Movie Showings
- Concerts
- Improv Workshop
- Guest Speakers
- Fair/Open House
- Bazaar
- Storytellers
- Dances / Classes

## SPACE ASSIGNMENT SUMMARY

### Recreation

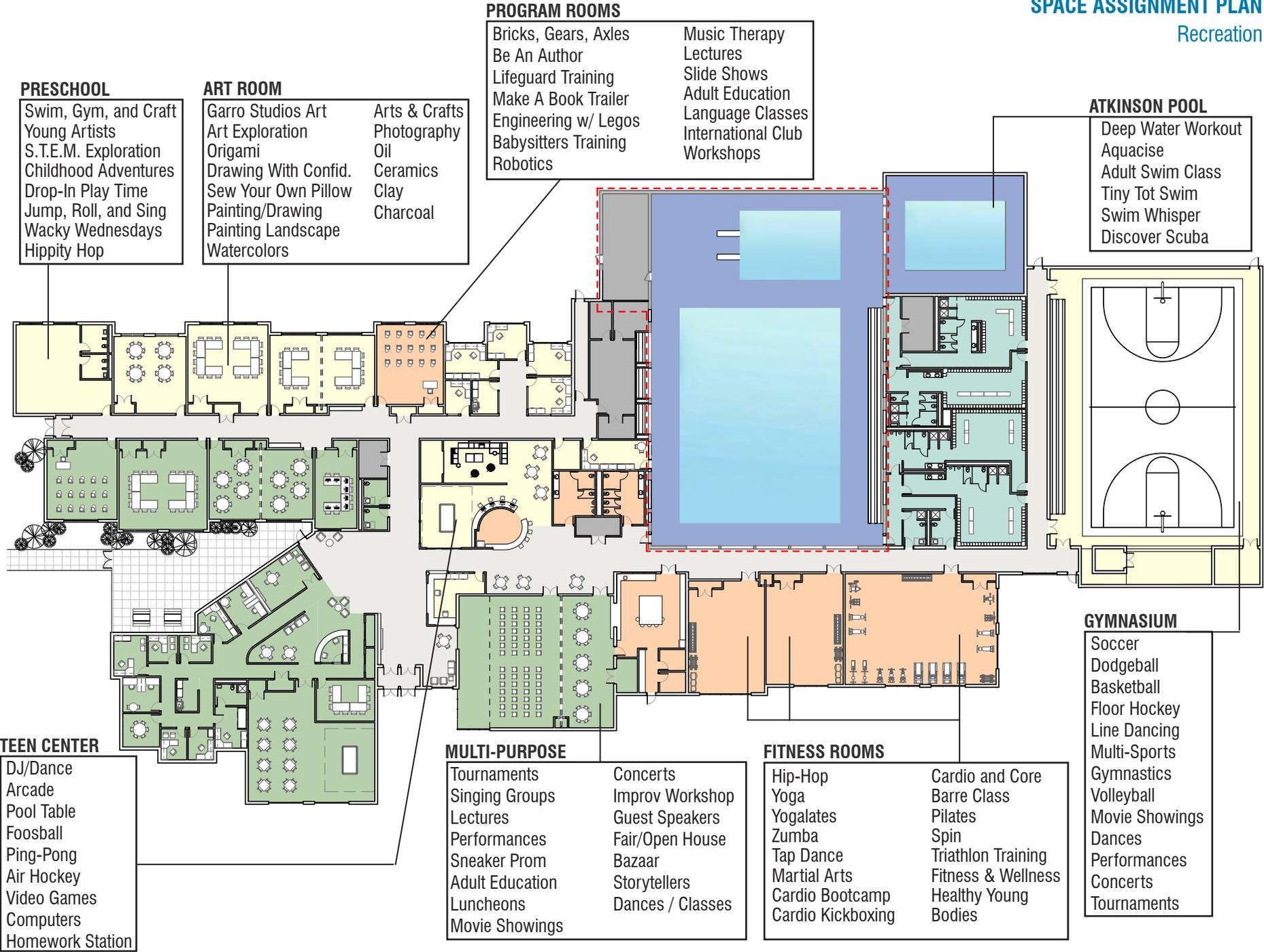
YOUTH RECREATION	PROGRAM	SCHEDULE
Gymnasium	Total Play Multisports	Weekly
	Viking Basketball K-2	Weekly
	Beginner's Line Dancing	Weekly
	Beginner Rhythmic Gymnastics	Weekly
	All-Sports Clinic	School Vacation
	Sportsmania	School Vacation
	Floor Hockey/Dodgeball	School Vacation
	Basketball Skill Development	Weekly
	Super Soccer Stars Shine	Weekly
Arts and Crafts	Sew Your Own Pillow Pet	Weekly
	Garro Studios Art Week	School Vacation
	Origami	School Vacation
	Garro Studios Drawing and Painting Lessons	Weekly
	Art Exploration	Weekly
Aquatic	Tiny Tot Swim	Weekly
	Discover Scuba	2 Days
	Swim Whisper Swim Lessons	Weekly
Program Rooms	Plastic Bricks, Gears, Axles, and Motors	Weekly
	Be an Author	Weekly
	Lifeguard Training	School Vacation
	Make a Book Trailer	Weekly
	Engineering With Legos	School Vacation
	Babysitters Training Course	Quarterly
	Robotics Levels 1 and 2	Weekly
	Music Therapy for Children that are Non-Verbal	Weekly
	Sneaker Prom	Yearly
Fitness	Hip Hop Dance	Weekly

PRESCHOOL	PROGRAM	SCHEDULE
Gymnasium	Pre-K Basketball	Weekly
	Mini Sports	Weekly
	Super Soccer Stars	Weekly
	British Mini Kickers Pre-K Soccer	Weekly
	Total Sports Squirts	Weekly
Preschool Program Space	Swim, Gym, and Craft	Weekly
	Young Artists	Weekly
	S.T.E.M. Exploration	Weekly
	Childhood Adventures	School Vacation
	Drop-In Play Time	Bi-Weekly
	Jump, Roll, and Sing	Weekly
	Wacky Wednesdays	Monthly
	Hippity Hop	Weekly

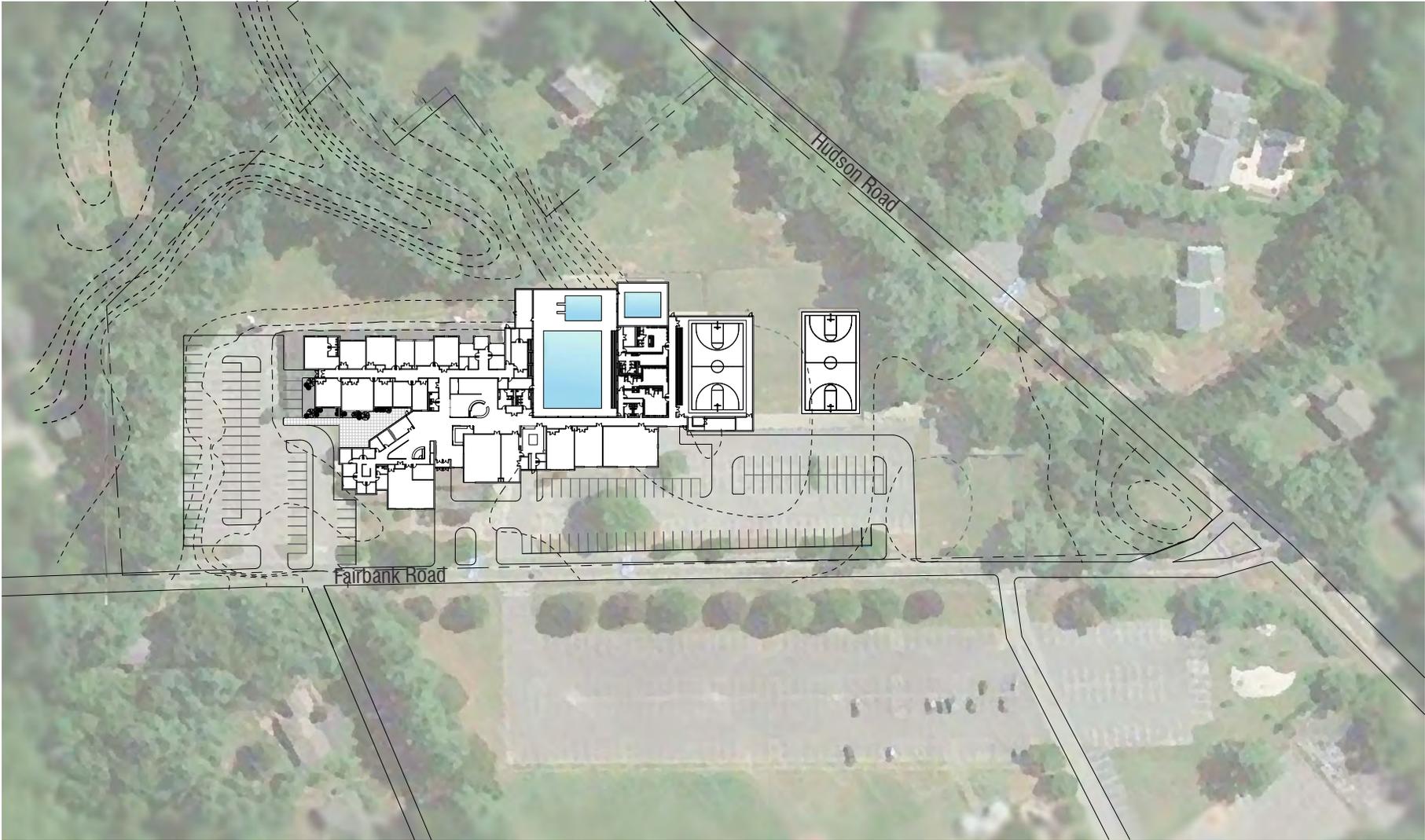
ADULT RECREATION	PROGRAM	SCHEDULE
Gymnasium	Men's 30+ Basketball	Weekly
	Beginner's Line Dancing	Weekly
	Co-Ed Volleyball	Weekly
Aquatic	Deep Water Workout	Weekly
	Aquacise	Weekly
	Awesome Aquatics	Weekly
	Adult Swim Class	Weekly
Arts and Crafts	Drawing With Confidence	Weekly
	Teen/Adult Drawing and Painting Evening Class	Weekly
	Garro Studios Drawing and Painting Lessons	Weekly
	Painting The New England Landscape	Weekly
Fitness	Yogalates	Weekly
	Triathlon Training	Weekly
	Mindful Yoga	Weekly

**SPACE ASSIGNMENT PLAN**

Recreation



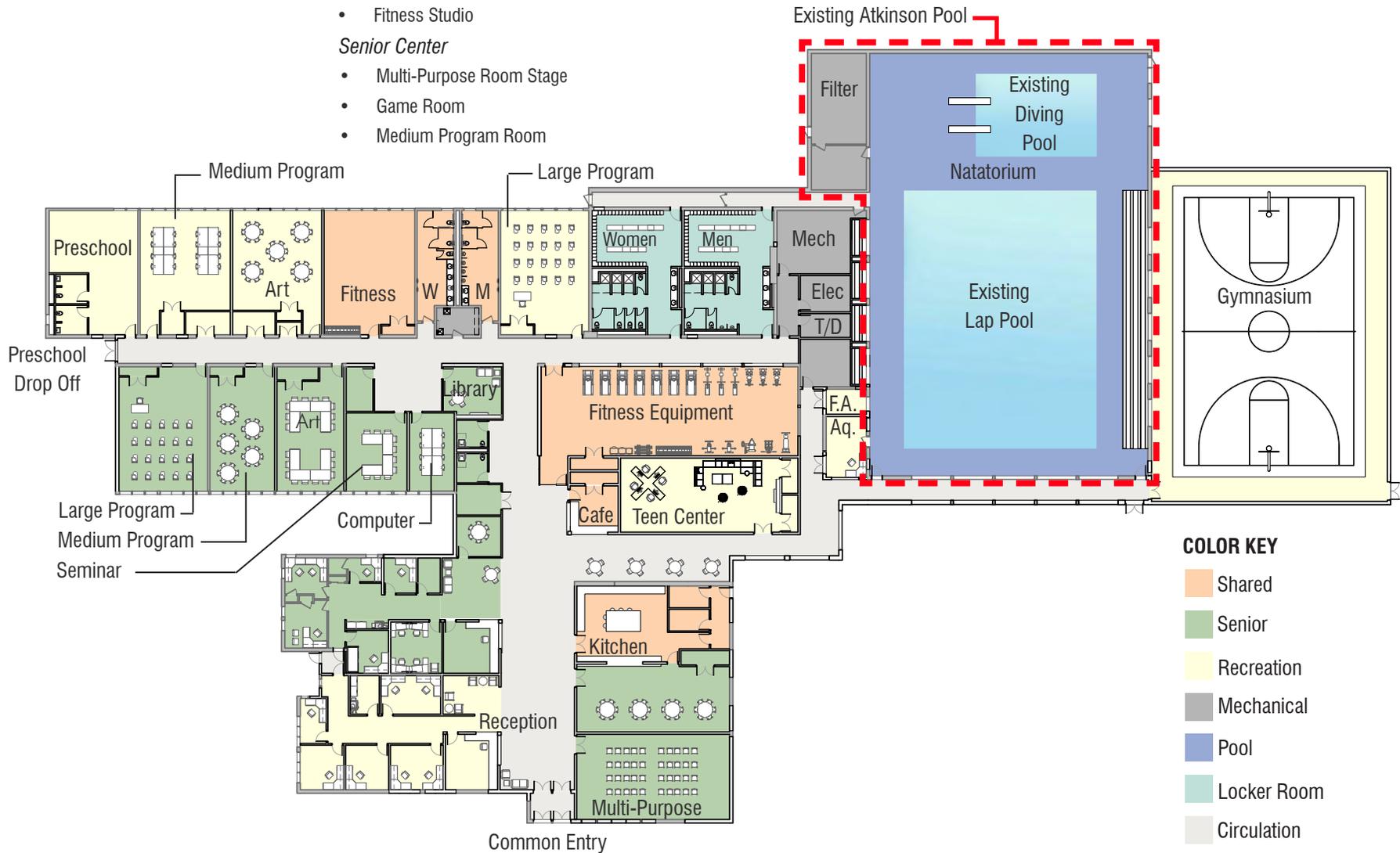
**BUILDING SITE PLAN: OPTION 3**



**OPTION 2 PLAN:  
50,000 SQUARE FEET**

**PROGRAM DOES NOT INCLUDE:**

- Recreation Department*
- Gymnasium Stage
  - Therapy Pool
  - Team Locker Room
  - Family/Companion Changing
  - Fitness Studio
- Senior Center*
- Multi-Purpose Room Stage
  - Game Room
  - Medium Program Room



## BUILDING PROGRAM: OPTION 2

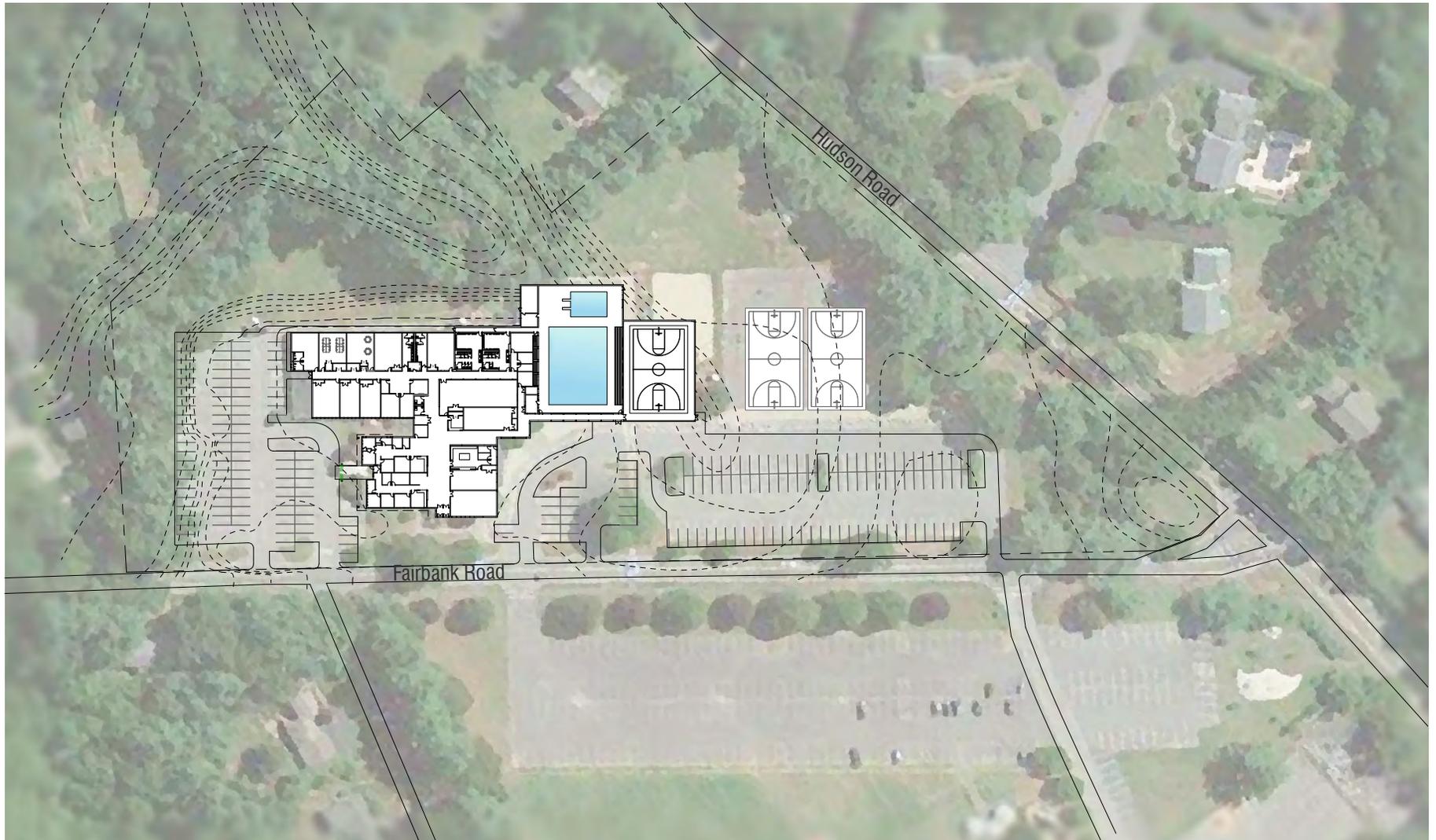


This scheme was an attempt to downsize from a new 60,000 sf. building to a new 50,000 sf. building that sits on the footprint of the existing complex. It is important to note that this option keeps the existing Atkinson Pool as it is today with minimal renovations to accommodate additional bleacher seating. This scheme provides a circulation that is not efficient and a minimal amount of privacy for administration offices.

*SHARED SPACES* are represented in orange and can be occupied by both departments throughout the day. This option does not offer multiple fitness classes to occur at the same time. Only one fitness studio is provided. The number of medium program rooms has also decreased.

*RECREATION* expressed in yellow, proposes a gymnasium that is based on one full size high school dimensioned practice court but does not include a stage. Team locker rooms and companion/family changing rooms have not been incorporated into this scheme which means that both children and adults would occupy the same space.

The *SENIOR CENTER* expressed in green, does not include a game room, therapy pool, or an additional 500 sf. space for a temporary stage located in the multi-purpose room. The addition of this area would more efficiently accommodate large special events such as dances, movie nights, banquets, and performances as well as a space for the senior center lunch program to take place. A movable partition breaks the space up when two events need to occur.

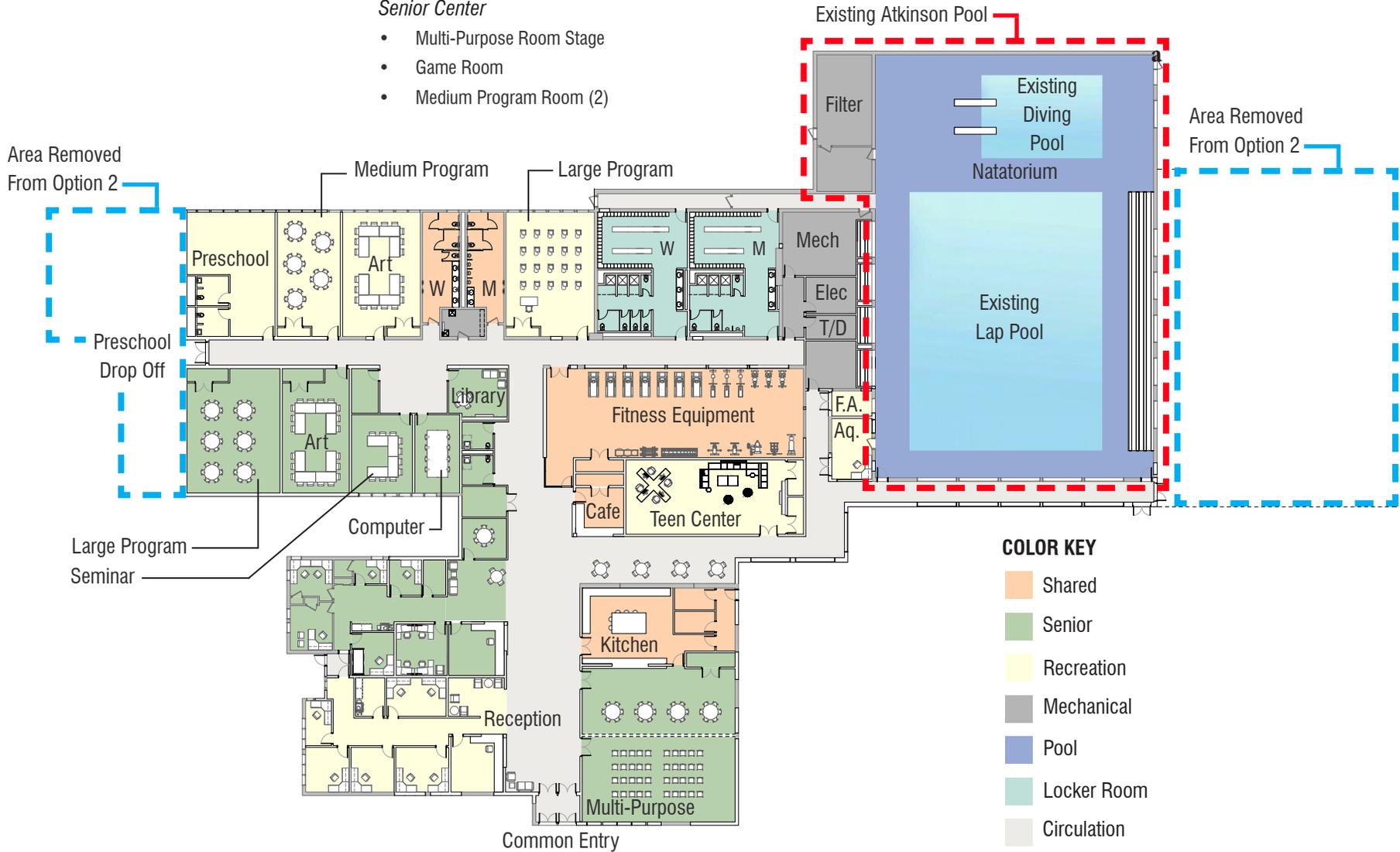


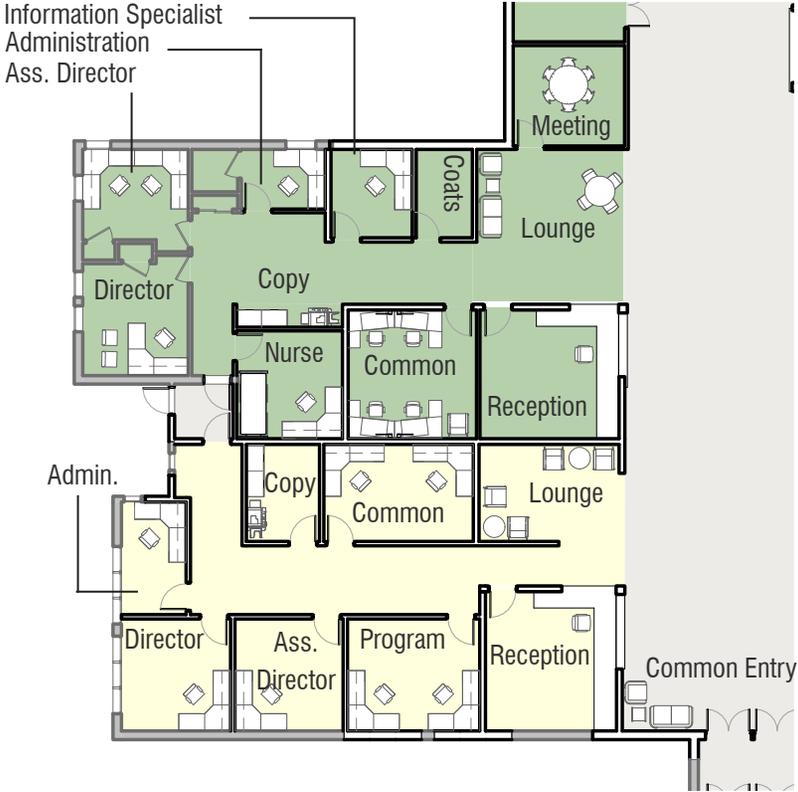
# BUILDING PROGRAM: OPTION 1

**OPTION 1 PLAN:  
40,000 SQUARE FEET**

**PROGRAM DOES NOT INCLUDE:**

- Recreation Department*
- Fitness Studio (2)
  - Gymnasium and Stage
  - Therapy Pool
  - Team Locker Room
  - Family/Companion Changing
- Senior Center*
- Multi-Purpose Room Stage
  - Game Room
  - Medium Program Room (2)





This scheme was a further attempt to downsize from a new 50,000 sf. building to a new 40,000 sf. building that sits on the footprint of the existing complex. It is important to note that this option keeps the existing Atkinson Pool as it is today with minimal renovations to accommodate additional bleacher seating. This scheme provides a circulation that is not efficient and a minimal amount of privacy for administration offices.

*SHARED SPACES* are represented in orange and can be occupied by both departments throughout the day. This option does not offer fitness studio rooms to provide aerobics, dance, steps, "body pump," Pilates and other programs that develop yearly. The number of medium program rooms has also decreased.

*RECREATION* expressed in yellow, does not provide a gymnasium. Team locker rooms and companion/family changing rooms have not been incorporated into this scheme which means that both children and adults would occupy the same space.

The *SENIOR CENTER* expressed in green, does not include a game room, therapy pool, or an additional 500 sf. space for a temporary stage located in the multi-purpose room. The addition of this area would more efficiently accommodate large special events such as dances, movie nights, banquets, and performances as well as a space for the senior center lunch program to take place. A movable partition breaks the space up when two events need to occur.

## BUILDING PROGRAM: MAINTAIN STATUS QUO

### MAINTAIN STATUS QUO PLAN: 33,732 SQUARE FEET

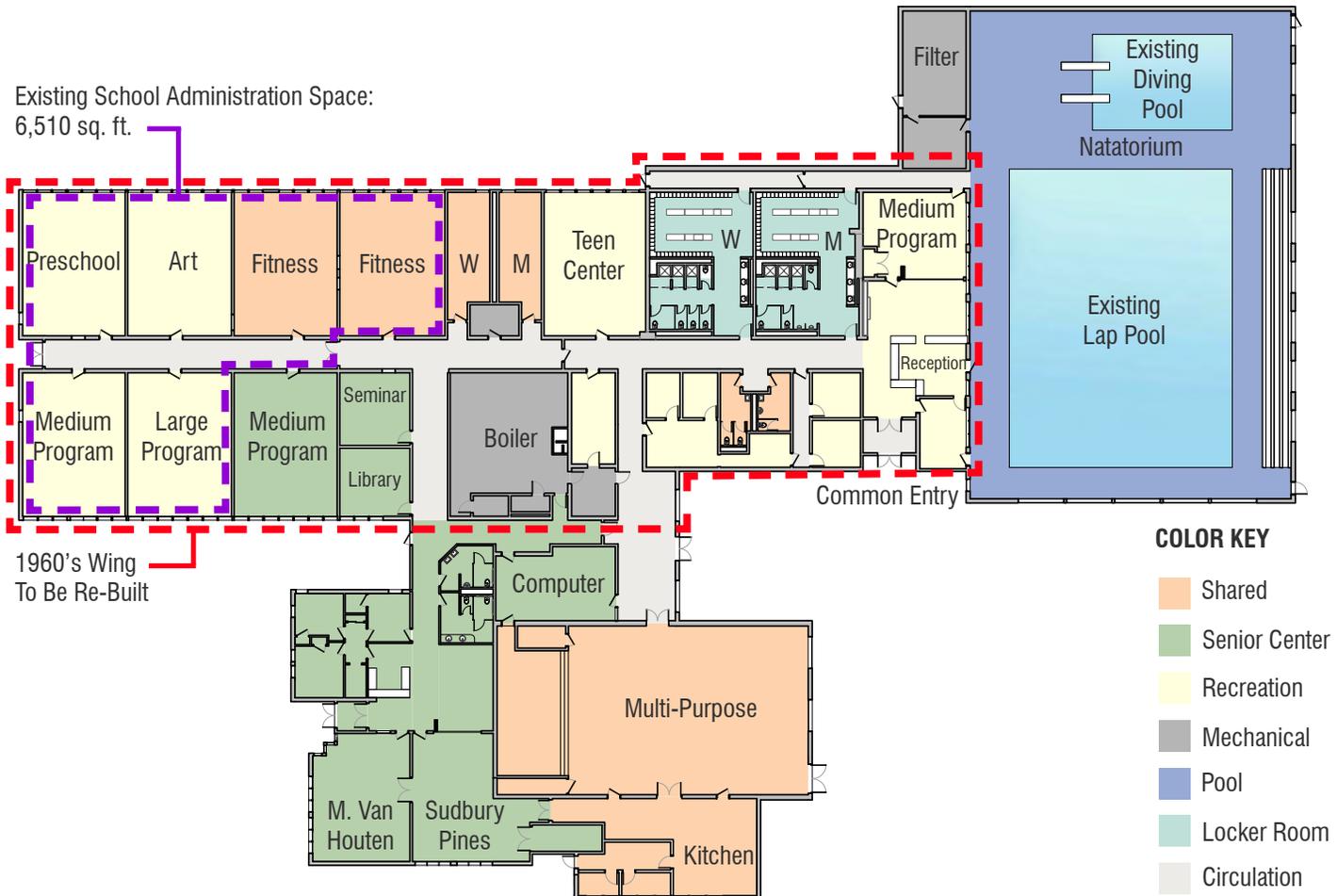
#### PROGRAM DOES NOT INCLUDE:

##### Senior Center

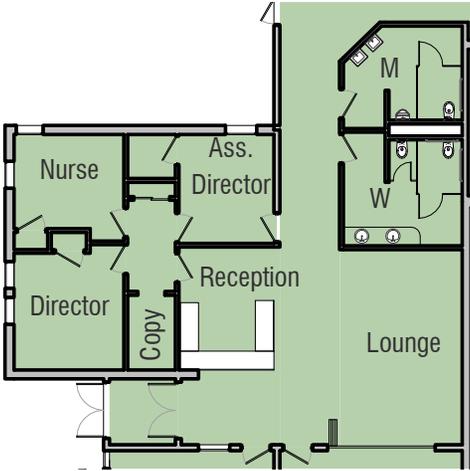
- Administrative Assistant
- Information Specialist
- Workspace for Four
- Small Meeting Room
- Game Room
- Storage

##### Recreation Department

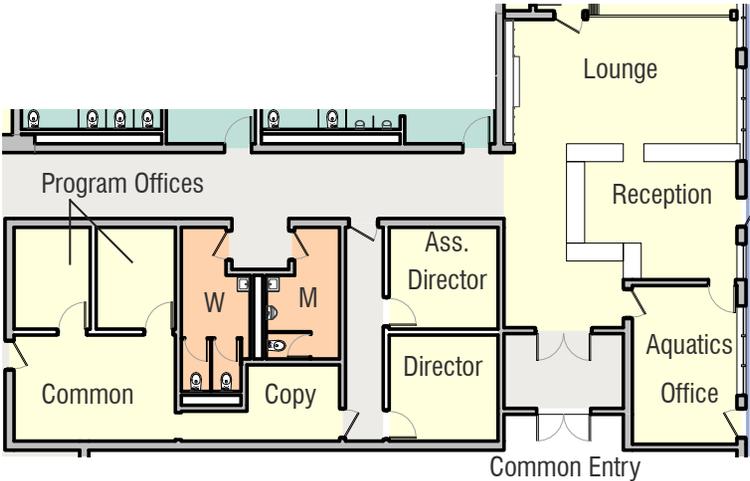
- Administrative Assistant
- First Aid
- Gymnasium
- Therapy Pool
- Bleachers
- Team Locker Room
- Family/Companion Changing
- Cafe
- Storage



**BUILDING PROGRAM: MAINTAIN STATUS QUO**

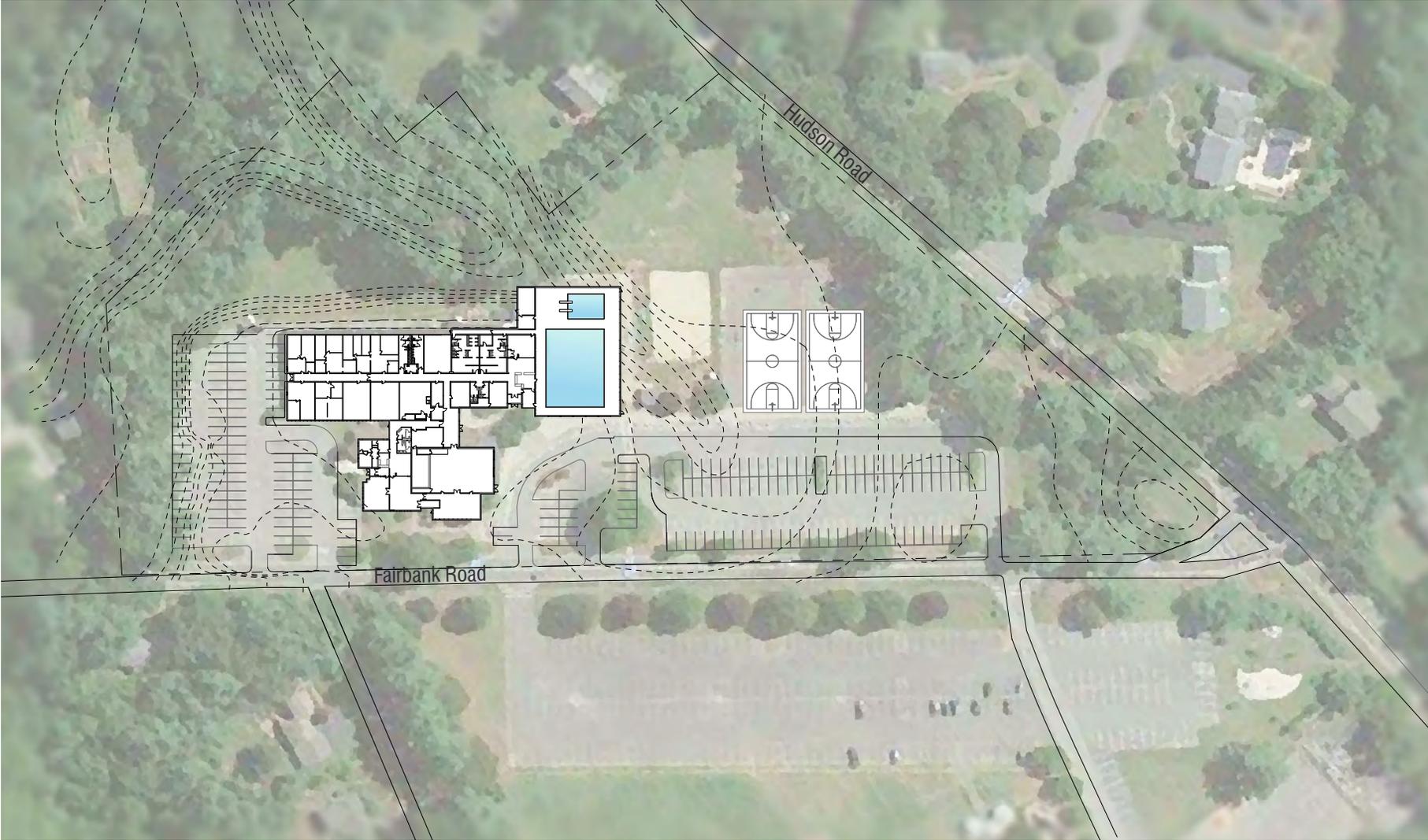


The plans for this scheme diagram are what are considered the most minimal for a facility utilizing the existing building and rebuilding the portion of the complex currently occupied by the Sudbury School Department. The program houses 40,000 sf of space. This scheme demolishes and rebuilds 6,510 sf. to accommodate growing demands of the community center. The programmatic need would continue to have significant deficiencies. The plan houses the same location and number of current administrative offices, no incorporation of a new gymnasium, an unaccommodating number of program rooms, and locker rooms that are not efficient.



The demand for an increased number of offices and consultation rooms for private conference space such as counseling, interviews, and tax return help as well as part time and full time staff is not being addressed. Adults, adolescents, and swim team members would continue to use the deficient locker rooms, sharing changing/shower rooms and restrooms that are minimally provided. The group recreation/arts rooms and education/seminar classrooms that are especially popular with both seniors and teenagers are not feasibly provided. The multi-purpose room would continue to be a shared space which would continue to be an ongoing scheduling conflict between the Recreation Department and Senior Center. Feasibly, this scenario does not work.

**BUILDING SITE PLAN: EXISTING**



**SECTION 6**  
**MARKET STUDY**



**MARKET ANALYSIS AND OPERATIONAL PLAN**

Ballard King undertook a market analysis and operational plan. The key takeaway from the market analysis is the median age and income of Sudbury compared nationally and statewide.

The comparison of the age distribution for the Town with the Sudbury population is higher in the 5-17 and 45-74 year age groups, favorably supporting demographic requirements for a community / senior center.

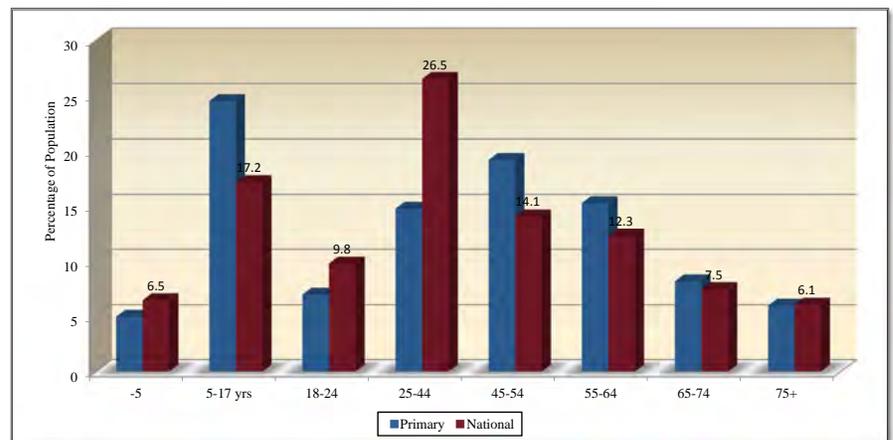
The operational plan projects that the 60,000 square foot facility will incur \$2,007,000 in annual expenses. These will be offset by a projected \$1,304,000 in revenues. This leaves approximately \$700,000 in annual subsidy for the building in addition to debt payment.

**MARKET ANALYSIS: AGE / INCOME**

	2010 Census	2014 Projection	2019 Projection
Town of Sudbury	42.4	44.1	45.3
State of Massachusetts	39.0	39.7	40.0
Nationally	37.1	37.7	38.2

	2014 Estimate	2019 Projection
Primary Service Area	\$163,668	\$196,071
State of Massachusetts	\$65,168	\$75,750
Nationally	\$52,076	\$59,599

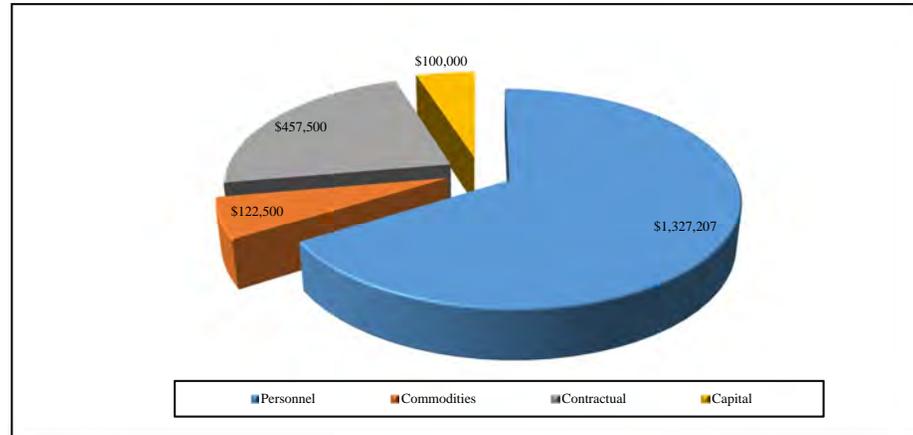
**MARKET ANALYSIS: AGE DIST.**



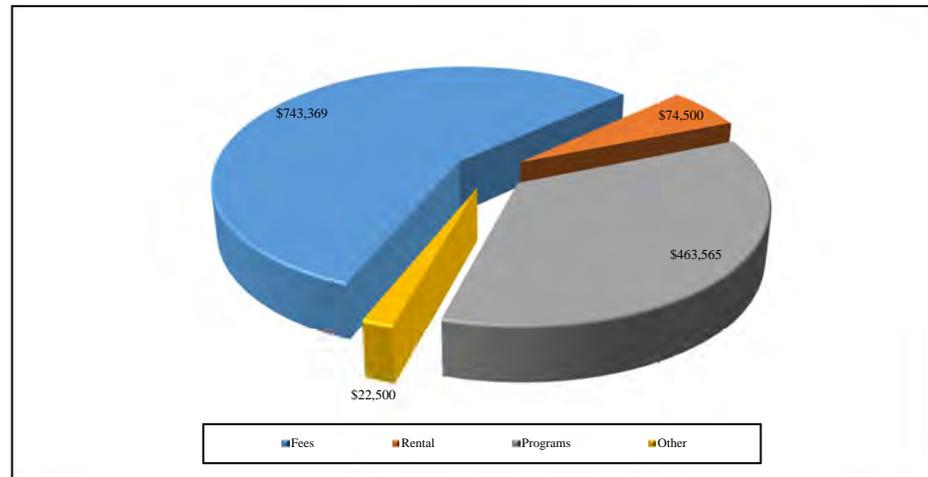
## INTRODUCTION

The revenue plan is impacted by the senior center which is not a revenue or fee based program in any community.

### OPERATIONS / EXPENSES



### OPERATIONS / REVENUE



**DEMOGRAPHIC SUMMARY & MARKET REVIEW**

Ballard\*King & Associates as part of the BH+A project team, has completed a market analysis to guide the redevelopment of the Fairbank Community Center.

The following is a summary of the basic demographic characteristics of the identified service areas along with recreation and leisure participation standards as produced by the National Sporting Goods Association and with participation statistics developed by the National Endowment of the Arts.

**SERVICE AREAS**

The goal of the Fairbank Community Center is to first and foremost serve the residents of Town of Sudbury. Therefore a single service area has been identified as the Town of Sudbury for the purposes of this study. That is not to say that non-Sudbury residents won't use the facility and associated programs, but the focus of the facility should be to serve the residents of the Town.

Primary service areas are usually defined by the distance people will travel on a regular basis (a minimum of once a week) to utilize a facility or its programs. Use by individuals outside of this area will be much more limited and will focus more on special activities or events (tournaments, etc.).

Service areas can vary in size with the types of components that are included in a facility. A center with active elements (pool, weight cardiovascular equipment area, gym, track, etc.) will generally have a larger service area than a more passively oriented facility. Specialized facilities such as a sports field house, ice arena or large competitive aquatic venue will have even larger service areas that make them more of a regional destination.

Service areas can also be based upon a facility's proximity to major thoroughfares. Other factors impacting the use as it relates to driving distance are the presence of alternative service providers in the service area. Alternative service providers can have an impact upon membership, daily admissions and the associated penetration rates for programs and services.

**TABLE A - SERVICE AREA COMPARISON CHART**

	<b>Town of Sudbury</b>
<b>Population:</b>	
2010 Census	17,659
2013 Estimate	17,841
2018 Estimate	18,400
<b>Households:</b>	
2010 Census	5,771
2013 Estimate	5,847
2018 Estimate	6,038
<b>Families:</b>	
2010 Census	4,946
2013 Estimate	5,004
2018 Estimate	5,164
<b>Average Household Size:</b>	
2010 Census	3.02
2013 Estimate	3.02
2018 Estimate	3.01
<b>Ethnicity:</b>	
Hispanic	2.3%
White	89.4%
Black	0.9%
American Indian	0.1%
Asian	6.9%
Pacific Islander	0.1%
Other	0.6%
Multiple	2.0%
<b>Median Age:</b>	
2010 Census	42.4
2013 Estimate	44.1
2018 Estimate	45.3
<b>Median Income:</b>	
2013 Estimate	\$163,668
2018 Estimate	\$196,071
<b>Household Budget Expenditures<sup>1</sup>:</b>	
Housing	274
Entertainment & Recreation	289

This information is placed on an index with a reference point being the National average of 100.

## MARKET REVIEW

Ballard\*King & Associates

### AGE AND INCOME

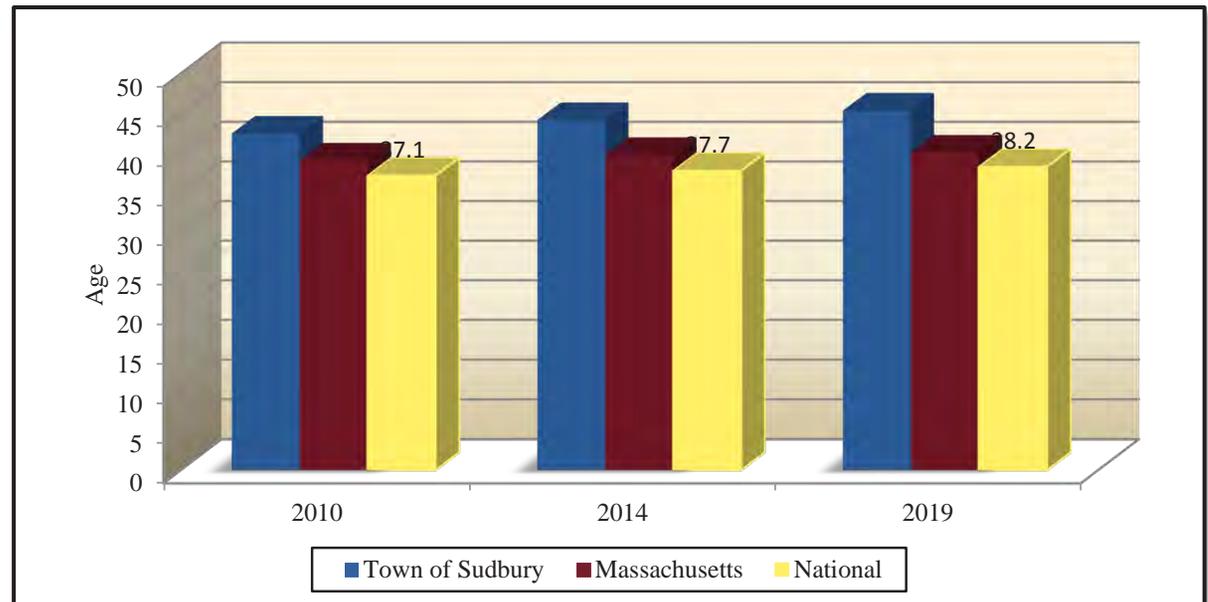
The median age and household income levels are compared with the national number. Both of these factors are primary determiners of participation in recreation activities. The lower the median age, the higher the participation rates are for most activities. The level of participation also increases as the median income level goes up.

The median age for the Primary Service Area along with the State of Massachusetts, is higher than the National number. This higher median age points to families with older children, retirees, and older families with young children.

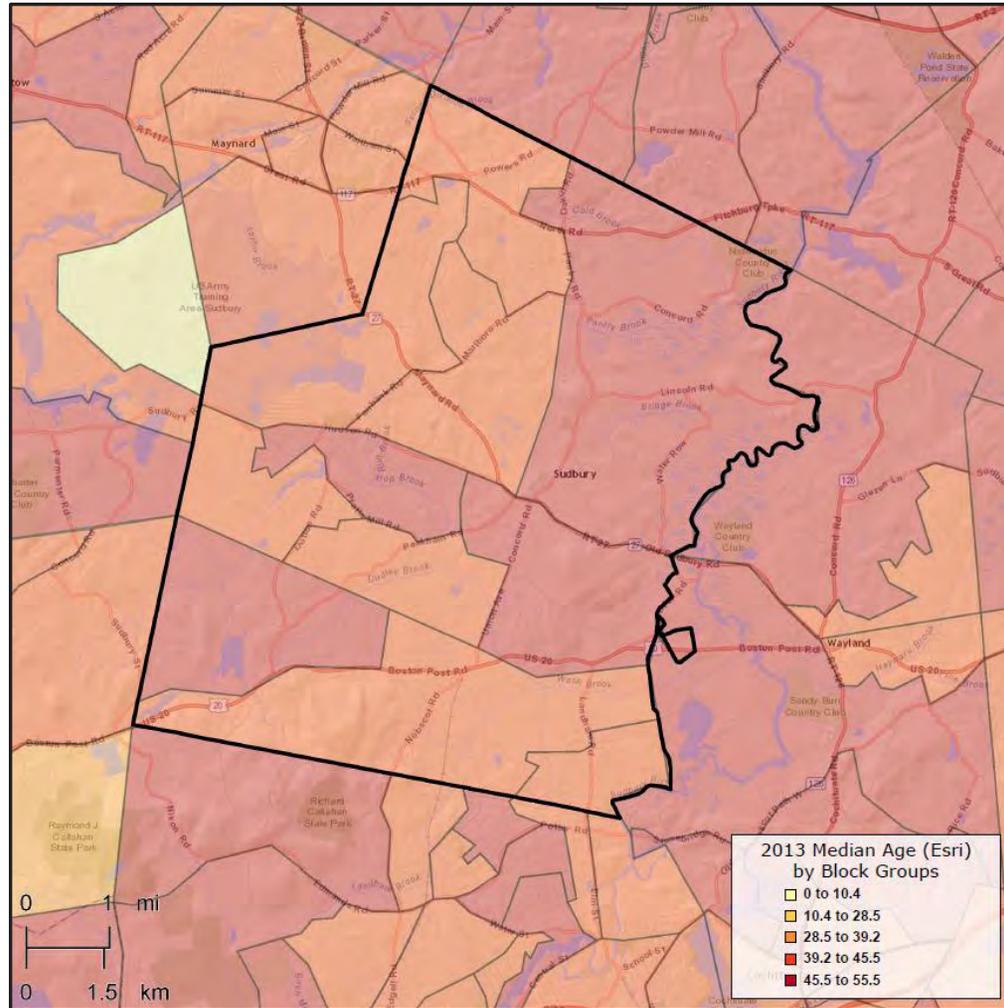
TABLE A - MEDIAN AGE

	2010 Census	2014 Projection	2019 Projection
Town of Sudbury	42.4	44.1	45.3
State of Massachusetts	39.0	39.7	40.0
Nationally	37.1	37.7	38.2

CHART A - MEDIAN AGE



**MAP A - MEDIAN AGE BY CENSUS BLOCK GROUP**



Based upon 2014 projections the following narrative can be provided the service areas:

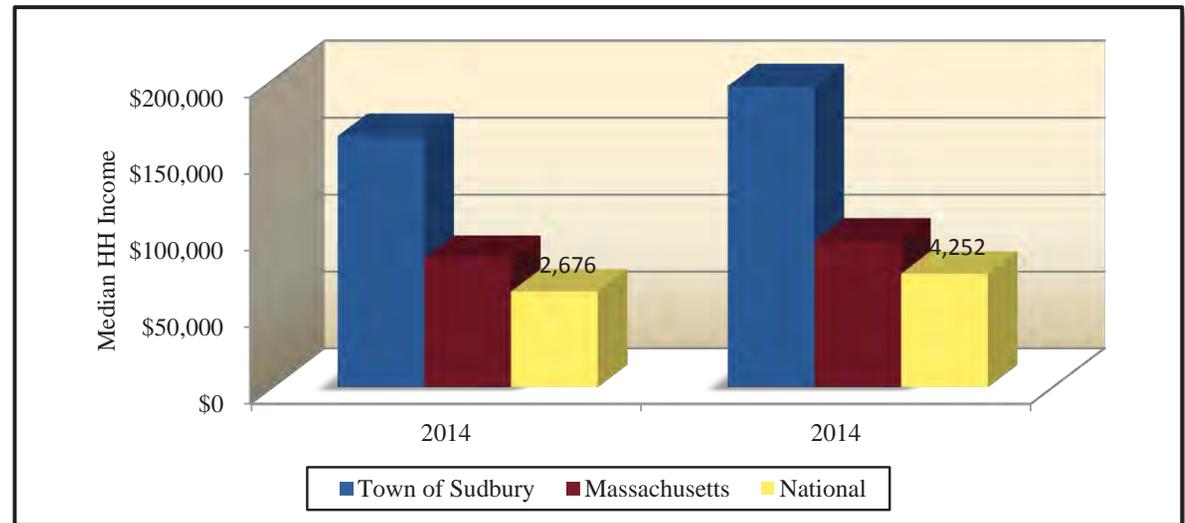
In the Primary Service Area the percentage of households with median income over \$50,000 per year is 88.3% compared to 50.1% on a national level. Furthermore, the percentage of the households in the service area with median income less than \$25,000 per year is 5.7% compared to a level of 24.7% nationally.

The median household income for the Primary Service Area along with the State of Massachusetts are higher than the National Numbers. In the case of the Primary Service Area the median household income is almost triple the National number. This indicates that residents of the Primary Service Area may have more dollars to spend on recreation services, however this information must be balanced with the overall cost of living.

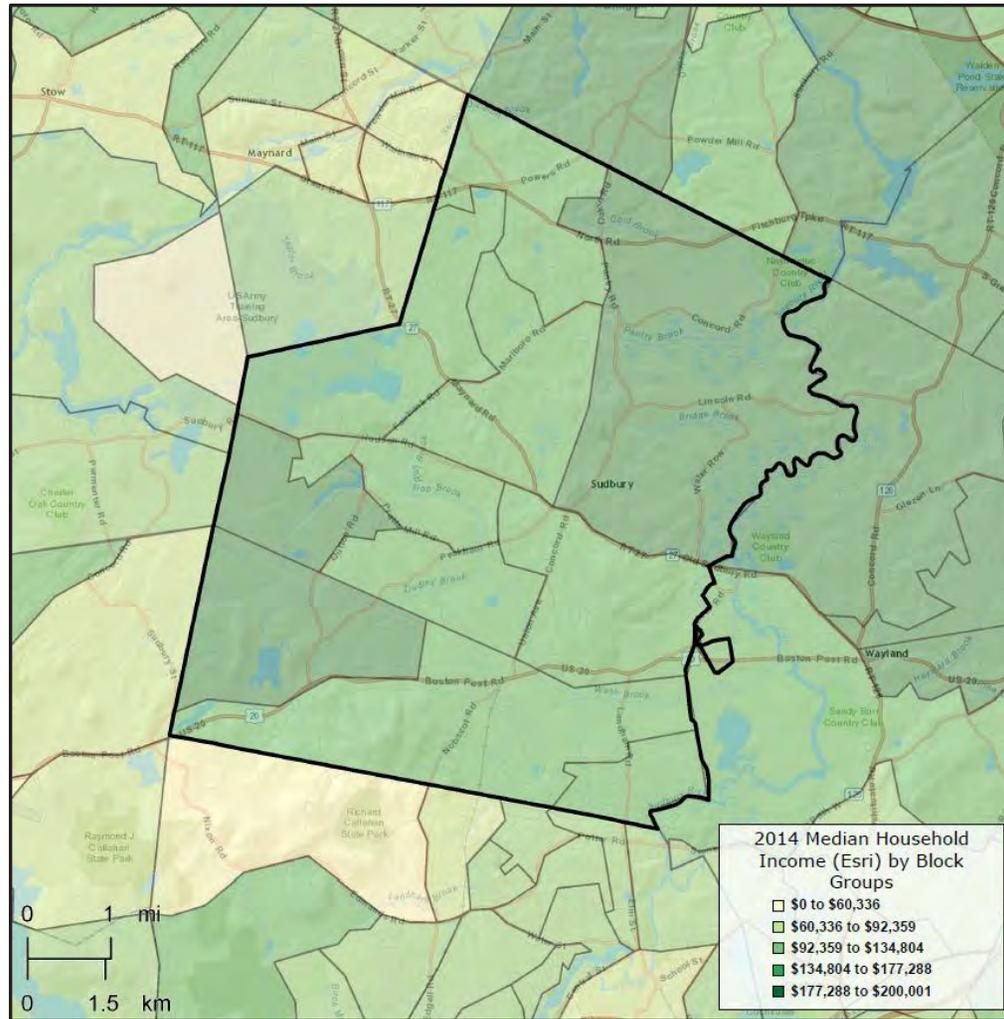
**TABLE B - MEDIAN HOUSEHOLD INCOME**

	<b>2014 Estimate</b>	<b>2019 Projection</b>
<b>Primary Service Area</b>	\$163,668	\$196,071
<b>State of Massachusetts</b>	\$65,168	\$75,750
<b>Nationally</b>	\$52,076	\$59,599

**CHART B - MEDIAN HOUSEHOLD INCOME**



**MAP B - MEDIAN HOUSEHOLD INCOME BY CENSUS BLOCK GROUP**



## MARKET REVIEW

### Ballard\*King & Associates

In addition to taking a look at Median Age and Median Income, it is important to examine Household Budget Expenditures. In particular looking at housing information; shelter, utilities, fuel and public services along with entertainment & recreation can provide a snap shot into the cost of living and spending patterns in the services areas. The table below looks at that information and compares the service areas.

#### SPI:

Spending Potential Index as compared to the National number of 100.

#### AVERAGE AMOUNT SPENT:

The average amount spent per household.

#### PERCENT:

Percent of the total 100% of household expenditures.

Note: Shelter along with Utilities, Fuel, Public Service are a portion of the Housing percentage.

Consumer Spending data are derived from the 2004 and 2005 Consumer Expenditure Surveys, Bureau of Labor Statistics. ESRI forecasts for 2014 and 2019.

**TABLE C - HOUSEHOLD BUDGET EXPENDITURES**

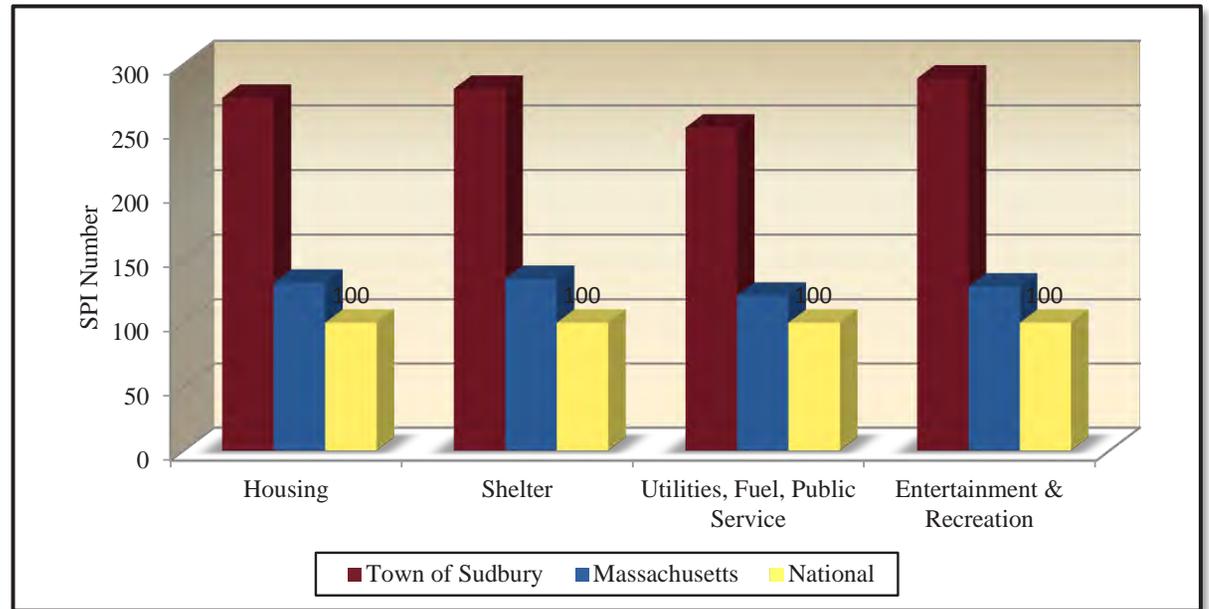
<b>Primary Service Area</b>	<b>SPI</b>	<b>Average Amount Spent</b>	<b>Percent</b>
Housing	274	\$57,370.37	29.9%
<i>Shelter</i>	281	\$44,987.21	23.5%
<i>Utilities, Fuel, Public Service</i>	251	\$12,383.16	6.5%
Entertainment & Recreation	289	\$9,313.58	4.9%

<b>State of Massachusetts</b>	<b>SPI</b>	<b>Average Amount Spent</b>	<b>Percent</b>
Housing	131	\$27,385.57	31.2%
<i>Shelter</i>	134	\$21,407.01	24.4%
<i>Utilities, Fuel, Public Service</i>	121	\$5,978.57	6.8%
Entertainment & Recreation	128	\$4,114.85	4.7%

Chart C, illustrates the Household Budget Expenditures Spending Potential Index in the service area. The index in the State of Massachusetts is higher than the National number while the Primary Service Area is significantly higher than the State number. In the case of the Primary Service Area the SPI is double the State number. This information points to the fact that the cost of living in service area is significantly greater than the State and National level.

It will be important to keep this information in mind when developing a fee structure and looking at an appropriate cost recovery philosophy for the community center.

**CHART C - HOUSEHOLD BUDGET EXPENDITURES SPENDING POTENTIAL INDEX**



## MARKET REVIEW

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### RECREATION EXPENDITURES SPENDING POTENTIAL INDEX

Finally, through the demographic provider that B\*K utilizes for the market analysis portion of the report, we are able to examine the overall propensity for households to spend dollars on recreation activities. The following comparisons are possible.

Consumer Spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys, Bureau of Labor Statistics.

#### SPI:

Spending Potential Index as compared to the National number of 100.

#### AVERAGE AMOUNT SPENT:

The average amount spent for the service or item in a year.

TABLE D - RECREATION EXPENDITURES SPENDING POTENTIAL INDEX

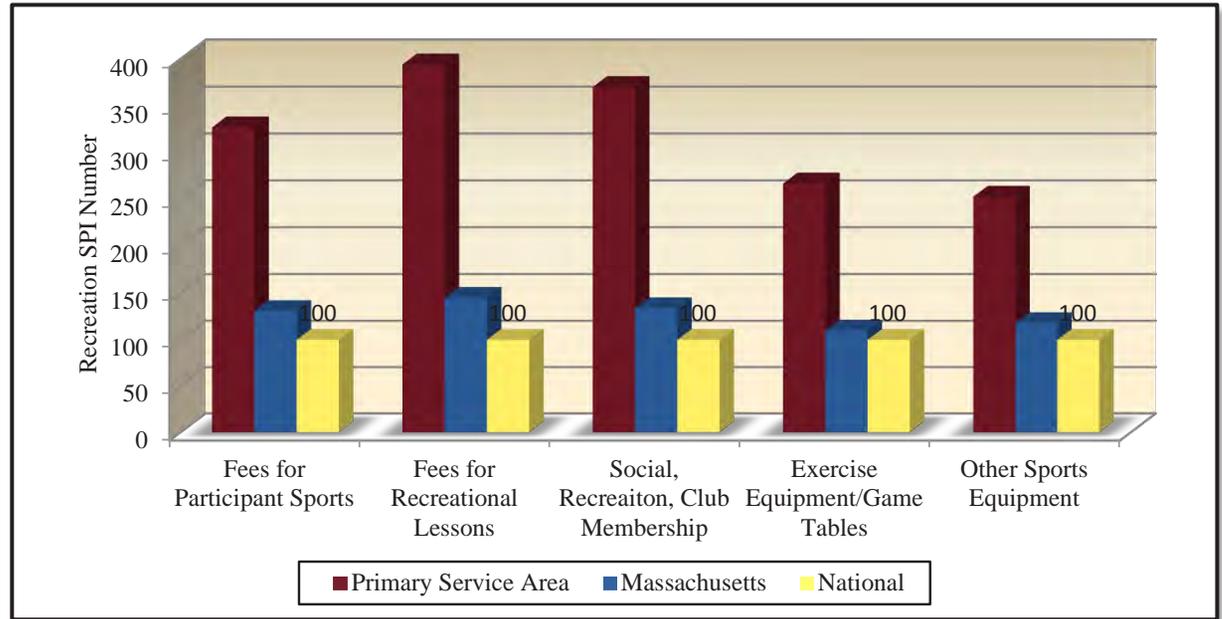
Primary Service Area	SPI	Average Spent
Fees for Participant Sports	327	\$384.08
Fees for Recreational Lessons	394	\$471.34
Social, Recreation, Club Membership	370	\$618.55
Exercise Equipment/Game Tables	267	\$199.97
Other Sports Equipment	253	\$19.67

State of Massachusetts	SPI	Average Spent
Fees for Participant Sports	131	\$154.18
Fees for Recreational Lessons	145	\$172.99
Social, Recreation, Club Membership	134	\$223.60
Exercise Equipment/Game Tables	110	\$82.56
Other Sports Equipment	118	\$9.17

The SPI distribution for Entertainment & Recreation Services is almost identical to the SPI for Household Budget Expenditures. The State of Massachusetts SPI is higher than the National number and the Primary Service Area is significantly greater than the State Number.

It is also important to note that these dollars are currently being spent, so the identification of alternative service providers and the ability of another facility to capture a portion of these dollars will be important.

**CHART D - RECREATION SPENDING POTENTIAL INDEX**



## MARKET REVIEW

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### SERVICE AREA ANALYSIS

Each of the identified service area's demographic characteristics is now analyzed individually.

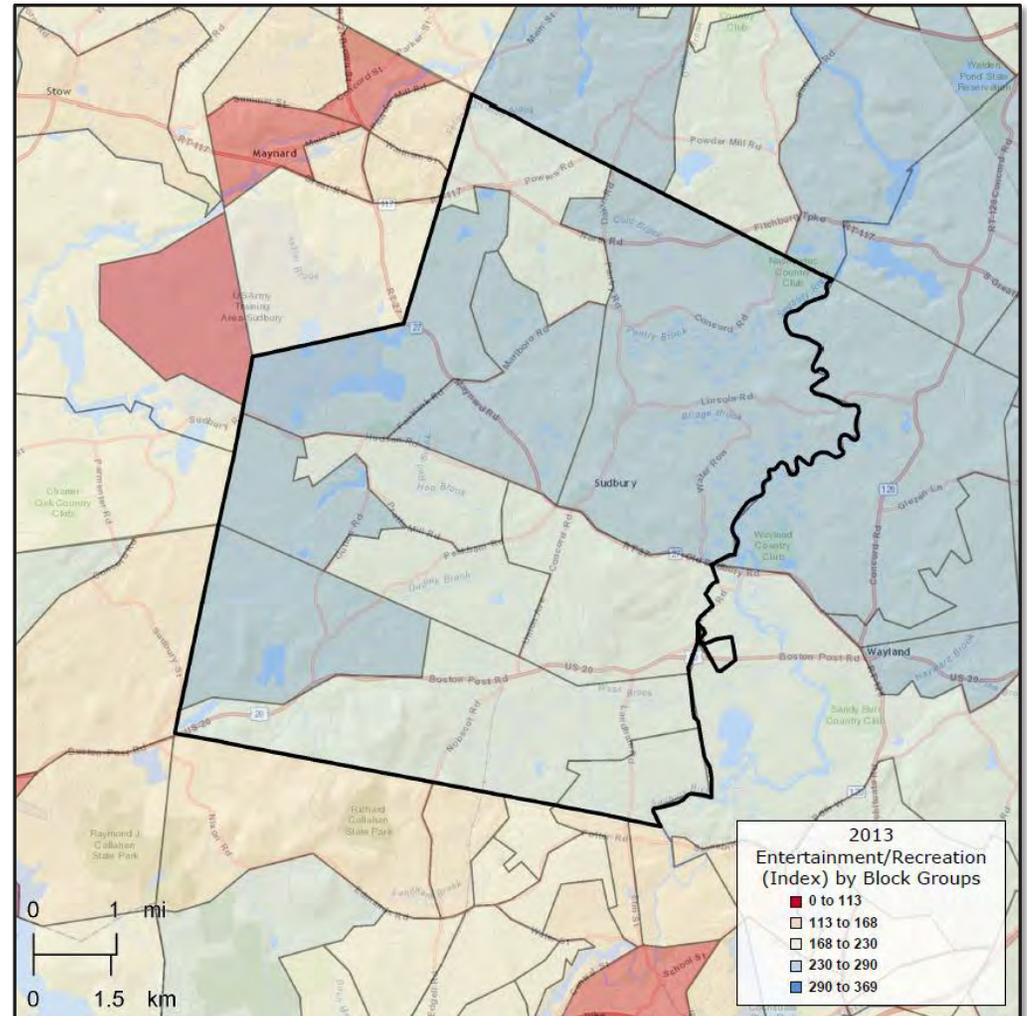
### PRIMARY SERVICE AREA

Basic drivers beyond age, median household income and recreation spending that influence whether or no individuals use a particular recreation facility or community center are:

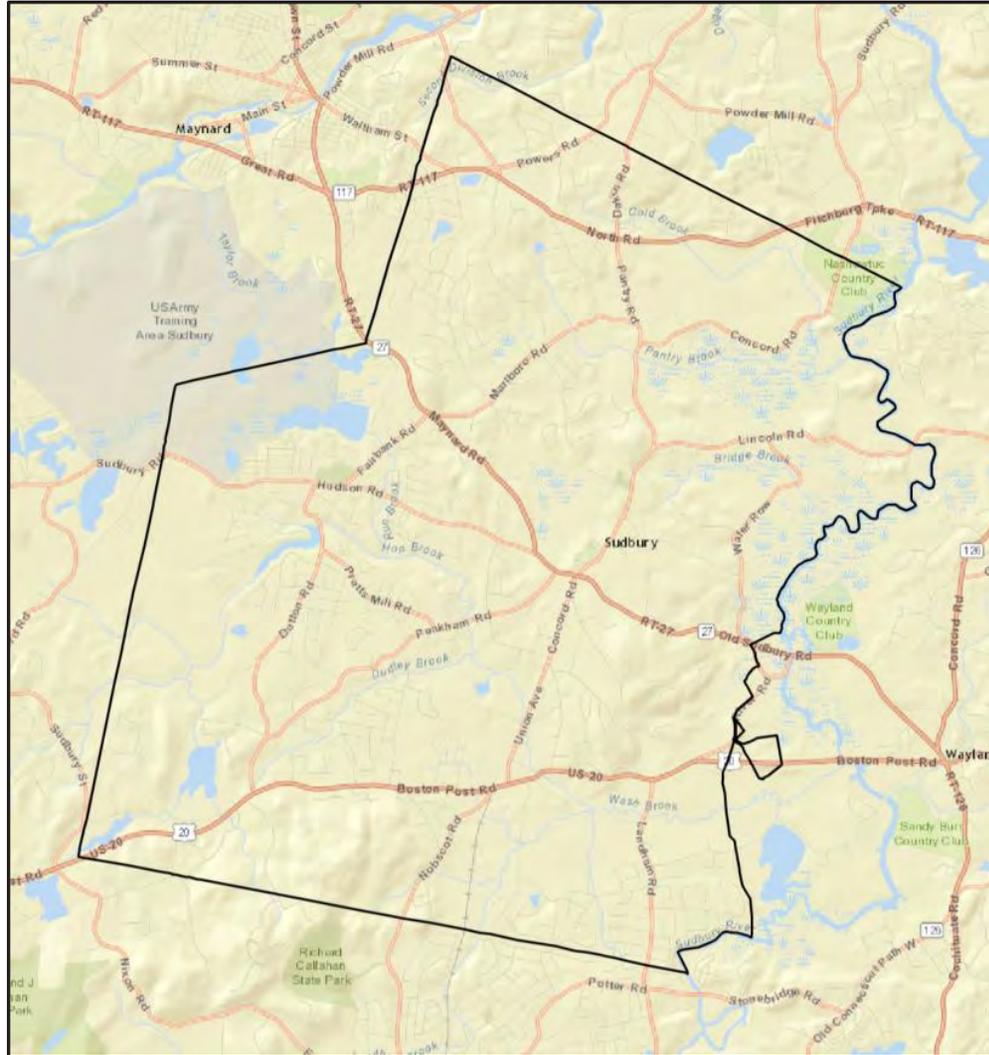
1. Proximity to Home
2. Proximity to Work
3. Value of Services

The following pages provide a demographic overview of the Town of Sudbury along with a demographic summary after the data.

MAP C - ENTERTAINMENT & RECREATION SPI BY CENSUS BLOCK GROUP



**MAP D - TOWN OF SUDBURY MAP**



## MARKET REVIEW

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### POPULATION DISTRIBUTION BY AGE

Utilizing census information for the Primary Service Area, the following comparisons are possible.

#### POPULATION

2014 census estimates in the different age groups in the Primary Service Area.

#### % OF TOTAL

Percentage of the Primary Service Area/population in the age group.

#### NATIONAL POPULATION

Percentage of the national population in the age group.

#### DIFFERENCE

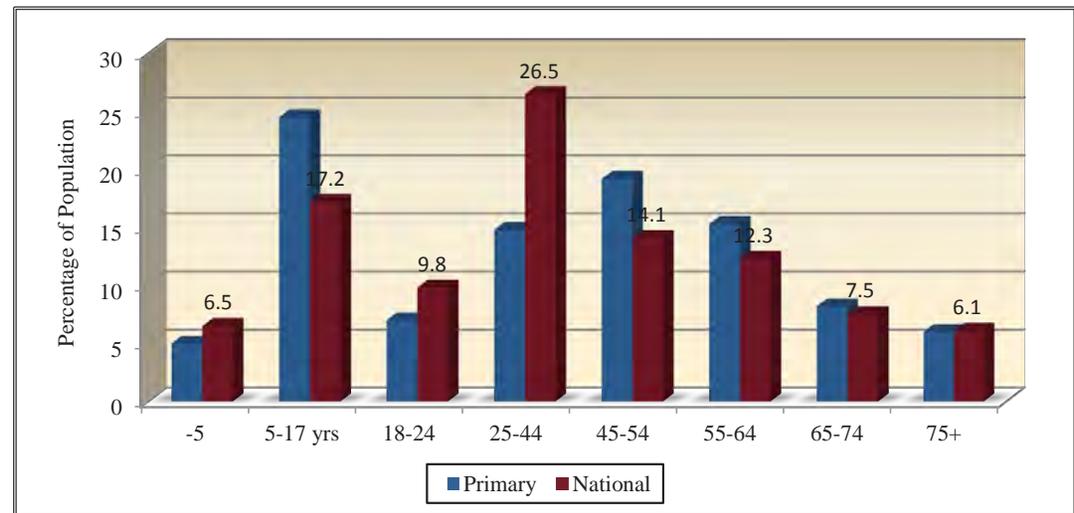
Percentage difference between the Primary Service Area population and the national population.

The demographic makeup of the Primary Service Area, when compared to the characteristics of the national population, indicates that there are some differences with an equal or larger population in the 5-17, 45-54, 55-65, 65-74 age groups and a smaller population in the -5, 18-24, 25-44 and 75+ age groups. The largest positive variance is in the 5-17 age group with +7.3%, while the greatest negative variance is in the 25-44 age group with -11.7%.

**TABLE E - 2014 PRIMARY SERVICE AREA AGE DISTRIBUTION**

Ages	Population	% of Total	Nat. Population	Difference
-5	876	5.0%	6.5%	-1.5%
5-17	4,386	24.5%	17.2%	+7.3%
18-24	1,239	7.0%	9.8%	-2.8%
25-44	2,632	14.8%	26.5%	-11.7%
45-54	3,438	19.2%	14.1%	+5.1%
55-64	2,734	15.3%	12.3%	+3.0%
65-74	1,466	8.2%	7.5%	+0.7%
75+	1,070	6.0%	6.1%	-0.1%

**CHART E - 2014 PRIMARY SERVICE AREA AGE GROUP DISTRIBUTION**

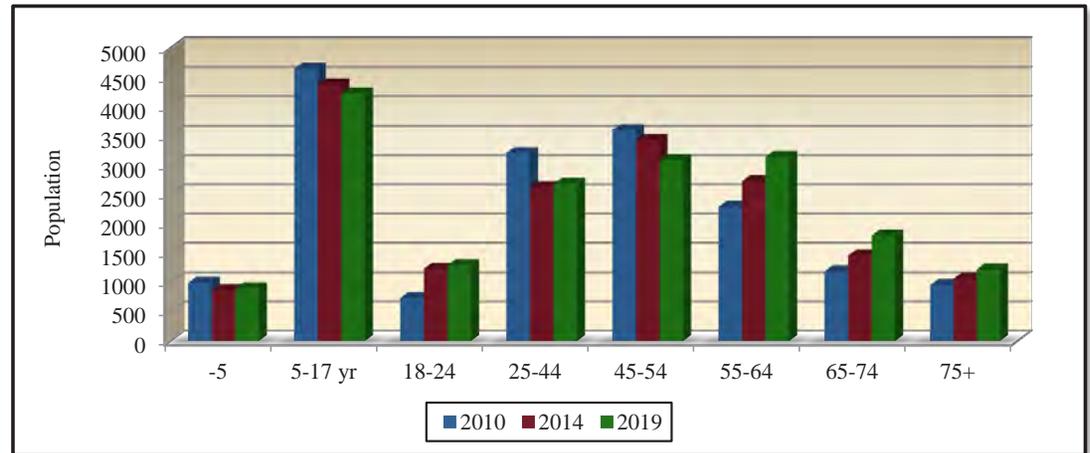


**POPULATION DISTRIBUTION COMPARISON BY AGE**

Utilizing census information from the Primary Service Area, the following comparisons are possible.

Table F, illustrates the growth or decline in age group numbers from the 2010 census until the year 2019. It is projected that all of the age categories, except -5, 5-17, 25-44 and 45-54 will see an increase in population or static growth. It must be remembered that the population of the United States as a whole is aging and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

**TABLE F- 2013 PRIMARY SERVICE AREA POPULATION ESTIMATES**



**CHART F- PRIMARY SERVICE AREA POPULATION GROWTH**

Ages	2010 Census	2014 Projection	2019 Projection	Percent Change	Percent Change Nat'l
-5	999	876	905	-9.4%	+4.7%
5-17	4,649	4,386	4,231	-9.0%	+1.8%
18-24	742	1,239	1,302	+75.5%	-2.4%
25-44	3,213	2,632	2,687	-16.4%	+10.4%
45-54	3,605	3,438	3,094	-14.2%	-6.2%
55-64	2,296	2,734	3,146	+37.0%	+13.7%
65-74	1,194	1,466	1,807	+51.3%	+32.9%
75+	961	1,070	1,228	+27.8%	+9.5%

## MARKET REVIEW

### Ballard\*King & Associates

Below is listed the distribution of the population by race and ethnicity for the Primary Service Area for 2014 population projections. Those numbers were developed from 2010 Census Data.

2014 Primary Service Area Total Population:  
17,841 Residents

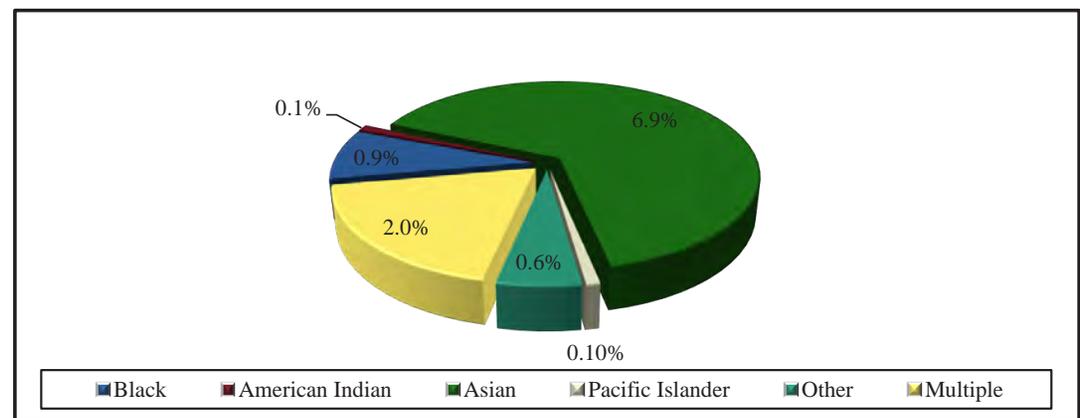
**TABLE G - PRIMARY SERVICE AREA ETHNIC POPULATION AND MEDIAN AGE**

Ethnicity	Total Population	Median Age	% of Population	% of MA Population
Hispanic	414	28.8	2.3%	10.6%

**TABLE H - PRIMARY SERVICE AREA POPULATION BY RACE AND MEDIAN AGE**

Race	Total Population	Median Age	% of Population	% of MA Population
White	15,954	45.3	89.4%	78.8%
Black	166	44.2	0.9%	6.9%
American Indian	9	37.5	0.1%	0.3%
Asian	1,227	39.9	6.9%	6.0%
Pacific Islander	9	41.9	0.1%	0.04%
Other	111	20.9	0.6%	5.1%
Multiple	365	11.6	2.0%	2.9%

**CHART G - PRIMARY SERVICE AREA NON-WHITE POPULATION BY RACE**



**TAPESTRY SEGMENTATION**

Tapestry segmentation represents the 4th generation of market segmentation systems that began 30 years ago. The 65-segment Tapestry Segmentation system classifies U.S. neighborhoods based on their socioeconomic and demographic compositions. While the demographic landscape of the U.S. has change significantly since the 2000 Census the tapestry segmentation has remained stable as neighborhoods have evolved.

The value of including this information for the City of Town of Sudbury is that it allows the organization to better understand the consumers/constituents in their service areas and supply them with the right products and services.

The tapestry segmentation system classifies U.S. neighborhoods into 65 distinctive market segments. Neighborhoods are sorted by more than 60 attributes including; income, employment, home value, housing types, education, household composition, age and other key determinates of consumer behavior.

The following pages and tables outline the top 5 tapestry segments in each of the service areas and provides a brief description of each. This information combined with the key indicators and demographic analysis of each service area help further describe the markets that the City of Town of Sudbury looks to serve with programs, services and special events.

**TOP RUNG (01)**

Residents of this tapestry are mature, married; highly educated, and wealthy. More than 77% of these households are composed of married couples; half of them have children and half do not. Except for the presence of children, this is a low-diversity monochromatic market. These residents are health conscious, they practice yoga, do aerobics, play golf and tennis, ski and ice skate

**SUBURBAN SPLENDOR (02)**

These residents are families who live in growing suburban neighborhoods. Married couple families with and without children comprise 8 in 10 of these households. These low diversity neighborhoods are predominantly white. These residents keep fit by working out weekly at a club or exercising on a treadmill or stationary bike at home in addition to skiing, ice skating, playing tennis and golf and bicycling.

**CONNOISSEURS (03)**

Residents of these neighborhoods are somewhat older with a median age of 45.8 years. Approximately 70% of the population is married. Although residents appear closer to retirement than child-rearing age, 30% of the households are married couples with children living at home. Exercise is a priority for these residents: they work out weekly at a club or other facility, ski, play golf and tennis, practice yoga and jog.

**TABLE I - PRIMARY SERVICE AREA TAPESTRY SEGMENT COMPARISON**

	Primary Service Area		U.S. Households	
	Percent	Cumulative Percent	Percent	Cumulative Percent
Top Rung (01)	67.6%	67.6%	0.9%	0.9%
Suburban Splendor (02)	21.0%	88.6%	1.7%	2.6%
Connoisseurs (03)	11.4%	100.0%	1.3%	3.9%

## MARKET REVIEW

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### DEMOGRAPHIC SUMMARY

The following summarizes the demographic characteristics of the service areas.

### OPPORTUNITIES

- The Primary Service Area is relatively small and will struggle to make a facility financially self-sufficient. However, it is recognized that the current facility draws participants from outside of the Town, enhancements to the current facility will only increase the draw.
- The population of the Town is older with Baby Boomers and retirees present, however there is also a significant population of youth as illustrated in the age distribution. Recreation centers are moving more towards the concept of being multi-generational centers, which is a philosophy that Fairbank Community Center already operates in. A future facility will only enhance that philosophy.
- The cost of living in the Primary Service Area is very high and is also reflected in the Recreation Spending Potential Index, however the median household income more than supports that rate of spending.
- There is relatively little diversity in the Primary Service Area.
- The Tapestry segments of the Town further reflects the demographic profile. It also points to the fact that the tapestry segments represented in the Town are health conscious and willing to pay for those services.

### SPORTS PARTICIPATION NUMBERS

In addition to analyzing the demographic realities of the service areas, it is possible to project possible participation in recreation and sport activities.

### PARTICIPATION NUMBERS

On an annual basis the National Sporting Goods Association (NSGA) conducts an in-depth study and survey of how Americans spend their leisure time. This information provides the data necessary to overlay rate of participation onto the Primary Service Area to determine market potential.

B\*K takes the national average and combines that with participation percentages of the Primary Service Area based upon age distribution, median income and region. Those four percentages are then averaged together to create a unique participation percentage for the service area. This participation percentage when applied to the population of the Primary Service Area then provides an idea of the market potential for various activities.

**COMMUNITY RECREATION RELATED ACTIVITIES PARTICIPATION**

These activities could take place in an active community recreation center.

**AGE**

Participation based on individuals ages 7 & Up of the Primary Service Area.

**INCOME**

Participation based on the 2014 estimated median household income in the Primary Service Area.

**REGION**

Participation based on regional statistics (New England).

**NATIONAL**

Participation based on national statistics.

**AVERAGE**

Average of the four columns.

It is important to note that some of these activities take place currently in the Fairbank Community Center and some do not. B\*K is not recommending that the Town get into the “business” of all these activities, however it does point to an available market.

**TABLE J - RECREATION ACTIVITY PARTICIPATION RATES FOR THE PRIMARY SERVICE AREA**

Activity	Age	Income	Region	Nation	Average
Aerobics	13.7%	25.8%	18.6%	15.3%	18.4%
Basketball	9.2%	10.2%	12.2%	8.9%	10.1%
Billiards/Pool	5.9%	7.9%	7.8%	6.8%	7.1%
Cheerleading	1.5%	1.7%	0.7%	1.2%	1.3%
Exercise Walking	32.9%	42.6%	37.1%	33.4%	36.5%
Exercise w/ Equipment	16.7%	29.3%	23.1%	18.4%	21.9%
Gymnastics	2.1%	2.3%	1.8%	1.8%	2.0%
Running/Jogging	12.9%	22.9%	15.8%	14.6%	16.6%
Swimming	16.4%	20.6%	21.9%	15.8%	18.7%
Volleyball	3.6%	5.4%	2.7%	3.5%	3.8%
Weight Lifting	9.7%	17.5%	11.4%	10.9%	12.4%
Workout @ Clubs	10.7%	0.0%	14.6%	11.8%	9.3%
Wrestling	1.2%	1.3%	0.7%	1.1%	1.1%
Yoga	7.6%	13.8%	10.9%	9.0%	10.3%

	Age	Income	Region	Nation	Average
Did Not Participate	21.8%	13.5%	17.4%	21.8%	18.6%

## MARKET REVIEW

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### ANTICIPATED PARTICIPATION NUMBERS BY ACTIVITY

Utilizing the average percentage from Table P above plus the 2010 census information and census estimates for 2014 and 2019 (over age 7) the following comparisons can be made.

Note: The estimated participation numbers indicated above are for indoor activities and do not translate into attendance figures for a new community center that is being proposed for the Primary Service Area. It should also be noted that the “Did Not Participate” statistics refers to all 51 activities outlined in the NSGA 2013 Survey Instrument.

The Fairbank Community Center currently taps into the swimming market. The participation percentages above would suggest that if the goal is to increase participation at the facility the ability to tap into the; aerobics, exercise walking and exercise w/ equipment markets will aid in that pursuit.

**TABLE K - PARTICIPATION RATES PRIMARY SERVICE AREA**

Activity	Average	2010 Part.	2014 Part.	2019 Part.	Difference
Aerobics	18.4%	2,947	3,028	3,124	+177
Basketball	10.1%	1,625	1,670	1,723	+98
Billiards/Pool	7.1%	1,139	1,170	1,208	+68
Cheerleading	1.3%	205	210	217	+12
Exercise Walking	36.5%	5,858	6,019	6,210	+352
Exercise w/ Equipment	21.9%	3,511	3,607	3,722	+211
Gymnastics	2.0%	320	329	339	+19
Running/Jogging	16.6%	2,659	2,732	2,818	+160
Swimming	18.7%	2,998	3,080	3,178	+180
Volleyball	3.8%	608	625	645	+37
Weight Lifting	12.4%	1,989	2,043	2,108	+119
Workout @ Clubs	9.3%	1,488	1,529	1,577	+89
Wrestling	1.1%	171	176	181	+10
Yoga	10.3%	1,658	1,703	1,757	+100

	Average	2010 Part.	2014 Part.	2019 Part.	Difference
Did Not Participate	18.6%	2,989	3,071	3,169	179

**PARTICIPATION BY ETHNICITY AND RACE**

Participation in sports activities is also tracked by ethnicity and race. The table below compares the overall rate of participation nationally with the rate for Hispanics and African Americans. Utilizing information provided by the National Sporting Goods Association’s 2013 survey, the following comparisons are possible.

**PRIMARY SERVICE PART**

The unique participation percentage developed for the Primary Service Area.

**NATIONAL RATE**

The national percentage of individuals who participate in the given activity.

**AFRICAN AMERICAN RATE**

The percentage of African Americans who participate in the given activity.

**HISPANIC RATE**

The percentage of Hispanics who participate in the given activity.

Based on the fact that there is not a significant Hispanic or African American population in the Primary Service Area those participation rates become less relevant to the impact on overall participation percentages. It should be noted that no participation rates are available for Asian or other minority populations.

While these numbers do not have significant impact to the Fairbank Community Center now, if the demographics of the Town were to begin to shift they could be relevant.

**TABLE L - COMPARISON OF NATIONAL, AFRICAN AMERICAN, AND HISPANIC PARTICIPATION RATES**

	<b>Primary Service Area</b>	<b>National Participation</b>	<b>African American Participation</b>	<b>Hispanic Participation</b>
Aerobics	18.4%	15.3%	13.0%	14.0%
Basketball	10.1%	8.9%	16.5%	10.4%
Billiards/Pool	7.1%	6.8%	5.8%	7.4%
Cheerleading	1.3%	1.2%	8.3%	12.4%
Exercise Walking	36.5%	33.4%	32.4%	27.2%
Exercise w/ Equipment	21.9%	18.4%	15.9%	14.9%
Gymnastics	2.0%	1.8%	5.1%	12.2%
Running/Jogging	16.6%	14.6%	12.0%	16.0%
Swimming	18.7%	15.8%	8.0%	11.8%
Volleyball	3.8%	3.5%	4.7%	4.5%
Weight Lifting	12.4%	10.9%	9.0%	9.7%
Workout @ Clubs	9.3%	11.8%	7.0%	9.6%
Wrestling	1.1%	1.1%	11.7%	14.2%
Yoga	10.3%	9.0%	7.5%	8.9%

## MARKET REVIEW

### Ballard\*King & Associates

In addition to developing a unique participation percentage for the Primary Service Area and looking at the number of swimmer days, B\*K also examines the frequency of participation in swimming according to the 2013 NSGA Survey. The chart below outlines that data.

**TABLE N - PARTICIPATION FREQUENCY**

	<b>Frequent</b>	<b>Occasional</b>	<b>Infrequent</b>
Swimming Frequency	110+	25-109	6-24
Swimming Percentage of Population	6.4%	45.0%	48.6%

In the chart above one can look at each activity and how it is defined with respect to visits being Frequent, Occasional or Infrequent and then the percentage of population that participates.

**TABLE O - PARTICIPATION NUMBERS**

	<b>Frequent</b>	<b>Occasional</b>	<b>Infrequent</b>	<b>Total</b>
Swimming	112	67	15	
Population	197	1,386	1,497	
<b>Visits</b>	<b>22,064</b>	<b>92,862</b>	<b>22,455</b>	<b>137,381</b>

The table above takes the frequency information one step further and identifies the number of times an individual may participate in the activity, applies the percentage from Table M to the population in Table K and then gives a total number of aquatic facility visits. Those visits are not specific to one facility, but rather specific to the Primary Service Area population. In other words those visits are already taking place at the facilities within and around the service area.

**SUMMARY OF SPORTS PARTICIPATION**

The following chart summarizes participation in indoor activities utilizing information from the 2013 National Sporting Goods Association survey.\

**NAT'L RANK**

Popularity of sport based on national survey.

**NAT'L PARTICIPATION**

Percent of population that participate in this sport on national survey.

**PRIMARY SERVICE RANK**

The rank of the activity within the Primary Service Area.

**PRIMARY SERVICE %**

Ranking of activities based upon average from Table P.

The top 4 activities based upon the Primary Service Area are consistent with the national participation rankings.

This rank is based upon the 51 activities reported on by NSGA in their 2013 survey instrument.

**TABLE P - SPORTS PARTICIPATION SUMMARY**

<b>Sport</b>	<b>Nat'l Rank<sup>4</sup></b>	<b>Nat'l Participation (in millions)</b>	<b>Primary Service Area</b>	<b>Primary Service Area</b>
Exercise Walking	1	102.1	1	36.5%
Exercising w/ Equipment	2	57.7	2	21.9%
Swimming	3	48.6	3	18.7%
Aerobic Exercising	5	44.8	4	18.4%
Running/Jogging	7	40.0	5	16.6%
Workout @ Club	10	35.2	9	9.3%
Weightlifting	11	31.1	6	12.4%
Yoga	13	25.9	7	10.3%
Basketball	14	25.6	8	10.1%
Billiards/Pool	15	19.5	10	7.1%
Volleyball	24	10.1	11	3.8%
Gymnastics	39	5.1	12	2.0%
Cheerleading	45	3.5	13	1.3%
Wrestling	48	3.1	14	1.1%

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In addition to examining the participation numbers for various indoor activities through the NSGA 2013 Survey and the Spending Potential Index for Entertainment & Recreation, B\*K can access information about Sports & Leisure Market Potential. The following information illustrates participation rates for adults in various activities in the Primary Service Area.

#### EXPECTED # OF ADULTS

Number of adults, 18 years of age and older, participating in the activity in the Primary Service Area.

#### PERCENT OF POPULATION

Percent of the service area that participates in the activity.

#### MPI

Market potential index as compared to the national number of 100.

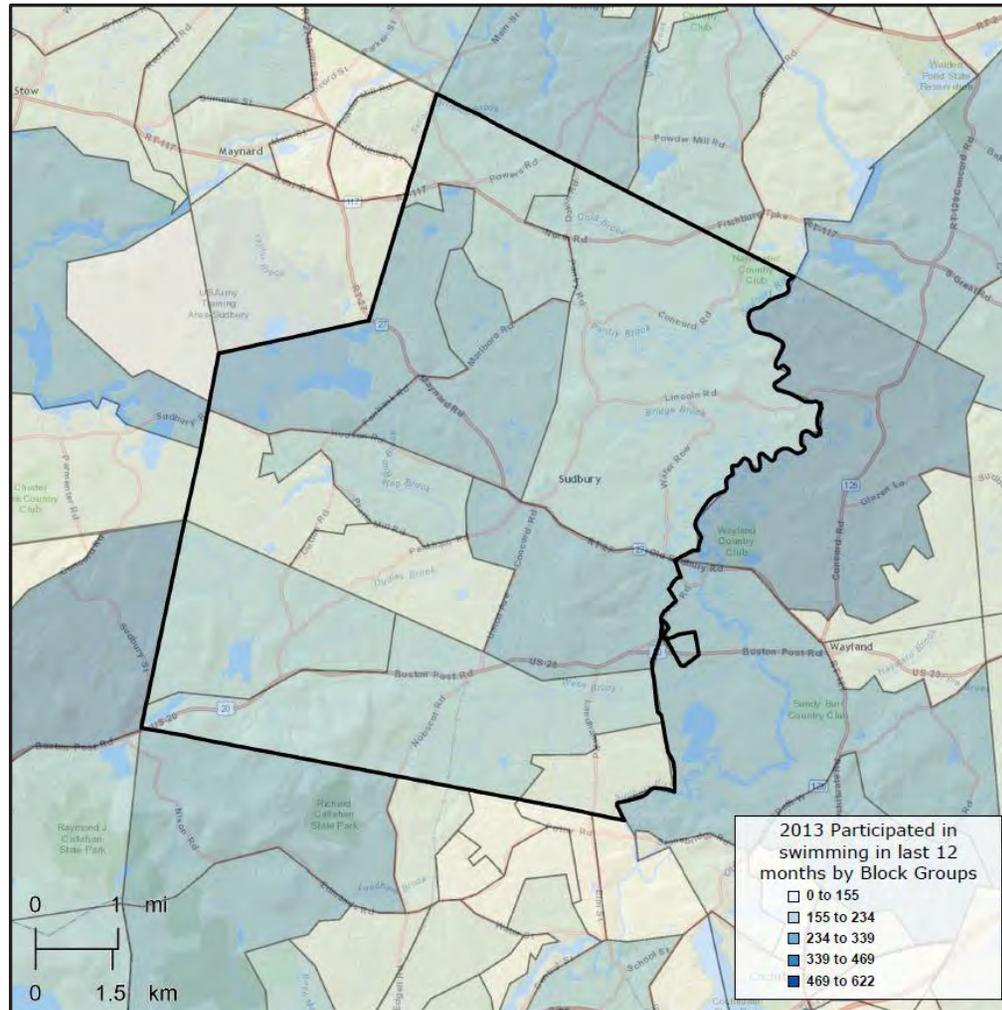
This table indicates that the overall propensity for adults to participate in the various activities listed is greater than the national number of 100 in every instance, except Volleyball. This can be attributed to a number of factors; with access to facilities and ability to pay being two of the most common.

Note: Information is only available for adult sports participation from this source.

**TABLE Q - MARKET POTENTIAL INDEX FOR ADULT PARTICIPATION IN ACTIVITIES**

<b>Adults participated in:</b>	<b>Expected Number of Adults</b>	<b>Percent of Population</b>	<b>MPI</b>
Aerobics	1,836	14.6%	163
Basketball	986	7.8%	94
Jogging/Running	2,576	20.5%	161
Pilates	698	5.5%	199
Swimming	3,024	24.0%	152
Volleyball	422	3.4%	95
Walking for Exercise	4,745	37.7%	135
Weight Lifting	2,196	17.5%	164
Yoga	1,731	13.8%	192

**MAP E - ADULT SWIMMING PARTICIPATION BY CENSUS BLOCK GROUP**



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#### NON-SPORT PARTICIPATION STATISTICS

It is recognized that most community centers are more than just sports oriented facilities. Participation in a wide variety of passive activities and cultural pursuits is common and essential to a well-rounded center. This information is useful in determining some of the program participation and revenue in the operations section of the report.

While there is not an abundance of information available for participation in these types of activities as compared to sport activities, there are statistics that can be utilized to help determine the market for cultural arts activities and events.

There are many ways to measure a nation's cultural vitality. One way is to chart the public's involvement with arts events and other activities over time. The NEA's Survey of Public Participation in the Arts remains the largest periodic study of arts participation in the United States, and it is conducted in partnership with the U.S. Census Bureau. The large number of survey respondents – similar in make-up to the total U.S. adult population – permits a statistical snapshot of American's engagement with the arts by frequency and activity type. The survey has taken place five times since 1982, allowing researchers to compare the trends not only for the total adult population, but also for demographic subgroups.

National Endowment for the Arts, Arts Participation 2008 Highlights from a National Survey.

Smaller percentages of adults attended performing arts events than in previous years.

- Opera and jazz participation significantly decreased for the first time, with attendance rates falling below what they were in 1982.
- Classical music attendance continued to decline – at a 29% rate since 1982 – with the steepest drop occurring from 2002 to 2008
- Only musical play saw no statistically significant change in attendance since 2002.

Attendance for the most popular types of arts events – such as museums and craft fairs – also declined.

- After topping 26% in 1992 and 2002, the art museum attendance rate slipped to 23 percent in 2008 – comparable to the 1982 level.
- The proportion of the U.S. adults touring parks or historical buildings has diminished by one-third since 1982.

**TABLE R - PERCENTAGE OF U.S. ADULT POPULATION ATTENDING ARTS PERFORMANCES:  
1982-2008**

					<b>Rate of Change</b>	
	<b>1982</b>	<b>1992</b>	<b>2002</b>	<b>2008</b>	<b>2002-2008</b>	<b>1982-2008</b>
Jazz	9.6%	10.6%	10.8%	7.8%	-28%	-19%
Classical Music	13.0%	12.5%	11.6%	9.3%	-20%	-29%
Opera	3.0%	3.3%	3.2%	2.1%	-34%	-30%
Musical Plays	18.6%	17.4%	17.1%	16.7%	-2%	-10%
Non-Musical Plays	11.9%	13.5%	12.3%	9.4%	-24%	-21%
Ballet	4.2%	4.7%	3.9%	2.9%	-26%	-31%

**TABLE S - PERCENTAGE OF U.S. ADULT POPULATION ATTENDING ARTS MUSEUMS, PARKS AND  
FESTIVALS: 1982-2008**

					<b>Rate of Change</b>	
	<b>1982</b>	<b>1992</b>	<b>2002</b>	<b>2008</b>	<b>2002-2008</b>	<b>1982-2008</b>
Art Museums/Galleries	22.1%	26.7%	26.5%	22.7%	-14%	+3%
Parks/Historical Buildings	37.0%	34.5%	31.6%	24.9%	-21%	-33%
Craft/Visual Arts Festivals	39.0%	40.7%	33.4%	24.5%	-27%	-37%

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Long-term trends suggest fundamental shifts in the relationship between age and arts attendance.

- Performing arts attendees are increasingly older than the average U.S. adult.
- Jazz concert-goers are no longer the youngest group of arts participants.
- Since 1982, young adult (18-24 year old) attendance rates have declined significantly for jazz, classical music, ballet, and non-musical plays.
- From 2002 to 2008, however, 45-54 year olds – historically a large component of arts audiences – showed the steepest declines in attendance for most arts events.

Adults generally are creating or performing at lower rates – despite opportunities for displaying their work line.

- Only photography increased from 1992 to 2008 – reflecting, perhaps, greater access through digital media.
- The proportion of U.S. adults doing creative writing has hovered around 7.0 percent.
- The rate of classical music performance slipped from 1992 to 2002 then grew over the next six years.
- The adult participation rate for weaving or sewing was almost twice as great in 1992 as in 2008. Yet this activity remains one of the most popular forms of art creation.

**TABLE T - MEDIAN AGE OF ARTS ATTENDEES: 1982-2008**

					Rate of Change	
	1982	1992	2002	2008	2002-2008	1982-2008
U.S. Adults, Average	39	41	43	45	+2	+6
Jazz	29	37	43	46	+4	+17
Classical Music	40	44	47	49	+2	+9
Opera	43	44	47	48	+1	+5
Musicals	39	42	44	45	+1	+6
Non-Musical Plays	39	42	44	47	+3	+8
Ballet	37	40	44	46	+2	+9
Art Museums	36	39	44	43	-1	+7

**TABLE U - PERCENTAGE OF U.S. ADULT PERFORMING OR CREATING ART: 1992-2008**

				Rate of Change	
	1992	2002	2008	2002-2008	1982-2008
<b>Performing:</b>					
Jazz	1.7%	1.3%	1.3%	+0.0%	-0.4%
Classical Music	4.2%	1.8%	3.0%	+1.2%	-1.2%
Opera	1.1%	0.7%	0.4%	-0.3%	-0.7%
Choir/Chorus	6.3%	4.8%	5.2%	+0.4%	-1.1%
Musical Plays	3.8%	2.4%	0.9%	-1.5%	-2.9%
Non-Musical Plays	1.6%	1.4%	0.8%	-0.6%	-0.8%
Dance	8.1%	4.3%	2.1%	-2.2%	-6.0%
<b>Making:</b>					
Painting/Drawing	9.6%	8.6%	9.0%	+0.4%	-0.6%
Pottery/Ceramics	8.4%	6.9%	6.0%	-0.9%	-2.4%
Weaving/Sewing	24.8%	16.0%	13.1%	-2.9%	-11.7%
Photography	11.6%	11.5%	14.7%	+3.2%	+3.1%
Creative Writing	7.4%	7.0%	6.9%	-0.1%	-0.5%

As in previous years, more Americans view or listen to broadcasts and recordings of arts events than attend them live.

- The sole exception is live theater, which still attracts more adults than broadcasts or recordings of plays or musicals (online media included).
- Classical music broadcasts or recordings attract the greatest number of adult listeners, followed by Latin or salsa music.
- 33.7 million Americans listened to or watched programs or recordings about books.

**RECREATION ACTIVITY AND FACILITY TRENDS**

There continues to be very strong growth in the number of people participating in recreation and leisure activities. The Physical Activity Council in its 2013 study indicated that 33% of Americans (age 6 and older) are active to a healthy level. However, the study also indicated that 28% of Americans were inactive. It is estimated that one in five Americans over the age of six participates in some form of fitness related activity at least once a week. American Sports Data, Inc. reported that membership in U.S. health clubs has increased by 10.8% from 2009 to 2010, and memberships in health clubs reached an all-time high of 50.2 million in 2010. Statistics also indicate that approximately 12 out of every 100 people of the U.S. population (or 12%) belong to a health club. On the other side most public recreation centers attract between 20% and 30% of a market area (more than once) during the course of

a year. All of this indicates the relative strength of a market for a community recreation facility. However, despite these increases the American population as a whole continues to lead a rather sedentary life with an average of 25% of people across the country reporting that they engage in no physical activity (according to The Center for Disease Control).

One of the areas of greatest participant growth over the last 10 years is in fitness related activities such as exercise with equipment, aerobic exercise and group cycling. This is also the most volatile area of growth with specific interest areas soaring in popularity for a couple of years only to be replaced by a new activity for the coming years. Also showing particularly

strong growth numbers are ice hockey and running/jogging while swimming participation remains consistently high despite recent drops in overall numbers. It is significant that many of the activities that can take place in an indoor recreation setting are ranked in the top fifteen in overall participation by the National Sporting Goods Association.

Below are listed those sports activities that would often take place either in an indoor community recreation facility, or in close proximity to, and the percentage of growth or decline that each has experienced nationally over the last 10 years (2003-2012).

**TABLE V - PERCENTAGE OF U.S. ADULT POPULATION VIEWING OR LISTENING TO ART BROADCASTS OR RECORDINGS, 2008 (ONLINE MEDIA INCLUDED)**

	1992	2002	2008	Rate of Change	
				2002-2008	1982-2008
<b>Performing:</b>					
Jazz	1.7%	1.3%	1.3%	+0.0%	-0.4%
Classical Music	4.2%	1.8%	3.0%	+1.2%	-1.2%
Opera	1.1%	0.7%	0.4%	-0.3%	-0.7%
Choir/Chorus	6.3%	4.8%	5.2%	+0.4%	-1.1%
Musical Plays	3.8%	2.4%	0.9%	-1.5%	-2.9%
Non-Musical Plays	1.6%	1.4%	0.8%	-0.6%	-0.8%
Dance	8.1%	4.3%	2.1%	-2.2%	-6.0%
<b>Making:</b>					
Painting/Drawing	9.6%	8.6%	9.0%	+0.4%	-0.6%
Pottery/Ceramics	8.4%	6.9%	6.0%	-0.9%	-2.4%
Weaving/Sewing	24.8%	16.0%	13.1%	-2.9%	-11.7%
Photography	11.6%	11.5%	14.7%	+3.2%	+3.1%
Creative Writing	7.4%	7.0%	6.9%	-0.1%	-0.5%

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### AQUATIC ACTIVITY AND FACILITY TRENDS

Without a doubt the hottest trend in aquatics is the leisure pool concept. This idea of incorporating slides, current channels, fountains, zero depth entry and other water features into a pool's design has proved to be extremely popular for the recreational user. The age of the conventional pool in most recreational settings has been greatly diminished. Leisure pools appeal to the younger children (who are the largest segment of the population that swim) and to families. These types of facilities are able to attract and draw larger crowds and people tend to come from a further distance and stay longer to utilize such pools. This all translates into the potential to sell more admissions and increase revenues. It is estimated conservatively that a leisure pool can generate up to 20% to 25% more revenue than a comparable conventional pool and the cost of operation, while being higher, has been offset through increased revenues. Of note is the fact that patrons seem willing to pay a higher user fee at a leisure pool than a conventional aquatics facility.

### 2013 PARTICIPATION

The number of participants per year in the activity (in millions) in the United States.

### 2004 PARTICIPATION

The number of participants per year in the activity (in millions) in the United States.

### PERCENT CHANGE

The percent change in the level of participation from 2004 to 2013.

TABLE W - NATIONAL ACTIVITY TREND (IN MILLIONS)

Sport/Activity	2013 Participation	2004 Participation	Percent Change
Yoga <sup>6</sup>	25.9	6.3	+311.1%
Wrestling <sup>7</sup>	3.1	1.3	+138.5%
Running/Jogging	42.0	24.7	+70.0%
Aerobic Exercising	44.1	29.5	+49.5%
Gymnastics	5.1	3.9	+30.8%
Weight Lifting	31.3	26.2	+19.5%
Exercise Walking	96.3	84.7	+13.7%
Workout @ Club	34.1	31.8	+7.2%
Exercising w/ Equipment	53.1	52.2	+1.7%
Volleyball	10.1	10.8	-6.5%
Basketball	25.5	27.8	-8.3%
Cheerleading	3.5	4.1	-14.6%
Swimming	45.5	53.4	-14.8%
Billiards/Pool	19.5	34.2	-43.0%

Since 2007 growth rate.

Another trend that is growing more popular in the aquatic's field is the development of a raised temperature therapy pool for rehabilitation programs. This has usually been done in association with a local health care organization or a physical therapy clinic. The medical organization either provides capital dollars for the construction of the pool or agrees to purchase so many hours of pool time on an annual basis. This form of partnership has proven to be appealing to both the medical side and the organization that operates the facility. The medical sector receives the benefit of a larger aquatic center, plus other amenities that are available for their use, without the capital cost of building the structure. In addition, they are able to develop a much stronger community presence away from traditional medical settings. The facility operators have a stronger marketing position through an association with a medical organization and a user group that will provide a solid and consistent revenue stream for the center. This is enhanced by the fact that most therapy use times occur during the slower mid-morning or afternoon times in the pool and the center.

Despite the recent emphasis on recreational swimming and therapy, the more traditional aspects of aquatics (including swim teams, instruction and aqua fitness) remain as the foundation for many aquatic centers. The life safety issues associated with teaching children how to swim is a critical concern in most communities and competitive swim team programs through USA Swimming, high schools, and other community based organizations continue to be important. Aqua fitness, from aqua exercise to

lap swimming, has enjoyed strong growth during the last ten years with the realization of the benefits of water-based exercise.

The multi-function indoor aquatic center concept of delivering aquatics services continues to grow in acceptance with the idea of providing for a variety of aquatics activities and programs in an open design setting that features a lot of natural light, interactive play features and access to an outdoor sundeck. The placing of traditional instructional/competitive pools, with shallow depth/interactive leisure pools and therapy water, in the same facility has been well received in the market. This idea has proven to be financially successful by centralizing pool operations for recreation service providers and through increased generation of revenues from patrons willing to pay for an aquatics experience that is new and exciting. Indoor aquatic centers have been instrumental in developing a true family appeal for community-based facilities. The keys to success for this type of center revolve around the concept of intergenerational use in a quality facility that has an exciting and vibrant feel in an outdoor like atmosphere. This is in stark contrast to the traditional flat water pool with separate diving well that is located in the Fairbank Community Center. It is possible to make a facility like this financially successful, however a body of water like this caters to the approximately 51% of swimmers that are classified as frequently and occasional by the NSGA. That still leaves 49% of the swimming population that will not have interest in the facility.

Also changing is the orientation of aquatic centers from stand-alone facilities that only have aquatic features to more of a full-service recreation center that has fitness, sports and community based amenities. This change has allowed for a better rate of cost recovery and stronger rates of use of the aquatic portion of the facility as well as the other "dry side" amenities.

Due to the increasing recreational demands there has been a shortage in most communities of the following spaces:

- Gymsnasiums
- Pools (especially leisure pools)
- Weight/cardiovascular equipment areas
- Indoor running/walking tracks
- Meeting/multipurpose (general program) space
- Senior's program space
- Pre-school and youth space
- Teen use areas
- Fieldhouses

As a result, many communities have attempted to include these amenities in public community recreation facilities. With the growth in youth sports and the high demand for school gyms, most communities are experiencing an acute lack of gymnasium space. Weight/cardiovascular space is also in high demand and provides a facility with the potential to generate significant revenues.

The success of most recreation departments is dependent on meeting the recreational needs of a variety of individuals. The fastest growing segment

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of society is the senior population and meeting the needs of this group is especially important now and will only grow more so in the coming years. Indoor walking tracks, exercise areas, pools and classroom spaces are important to this age group. Marketing to the younger more active senior (usually age 55-70) is paramount, as this age group has the free time available to participate in leisure activities, the desire to remain fit, and more importantly the disposable income to pay for such services.

Youth programming has always been a cornerstone for recreation services and will continue to be so with an increased emphasis on teen needs and providing a deterrent to juvenile crime. With a continuing increase in single parent households and two working parent families, the needs of school age children for before and after school child care continues to grow as does the need for preschool programming.

As more and more communities attempt to develop community recreation facilities the issues of competition with other providers in the market area have inevitably been raised. The loudest objections have come from the private health club market and their industry voice IHRSA. The private sector has vigorously contended that public facilities unfairly compete with them in the market and have spent considerable resources attempting to derail public projects. However, the reality is that in most markets where public community recreation centers have been built, the private sector has not been adversely affected and in fact in many cases has continued

to grow. This is due in large part to the fact that public and private providers serve markedly different markets. One of the other issues of competition comes from the non-profit sector (primarily YMCA's but also JCC's, and others), where the market is much closer to that of the public providers. While not as vociferous as the private providers, the non-profits have also often expressed concern over public community recreation centers. What has resulted from this is a strong growth in the number of partnerships that have occurred between the public and non-profit sector in an attempt to bring the best recreation amenities to a community.

### COMMUNITY CENTER BENCHMARKS

Based on market research conducted by Ballard\*King & Associates at community centers across the United States, the following represents the basic benchmarks.

- The majority of community centers that are being built today are between 65,000 and 75,000 square feet. Most centers include three primary components A) A pool area usually with competitive and leisure amenities, B) Multipurpose gymnasium space, and C) Weight/cardiovascular equipment area. In addition, most centers also have group exercise rooms, drop-in childcare, and classroom and/or community spaces.
- For most centers to have an opportunity to cover all of their operating expenses with revenues, they must have a service population of at least

50,000 and an aggressive fee structure.

- Most centers that are between 65,000 and 75,000 square feet have an operating budget of between \$1,500,000 and \$1,800,000 annually. Nearly 65% of the operating costs are from personnel services, followed by approximately 25% for contractual services, 8% for commodities, and 2% for capital replacement.
- For centers that serve a more urban population and have a market driven fee structure, they should be able to recover 70% to 100% of operating expenses. For centers in more rural areas the recovery rate is generally 50% to 75%. Facilities that can consistently cover all of their operating expenses with revenues are rare. The first true benchmark year of operation does not occur until the third full year of operation.
- The majority of centers of the size noted (and in an urban environment) above average daily paid attendance of 800 to as much as 1,000 per day. These centers will also typically sell between 800 and 1,500 annual passes (depending on the fee structure and marketing program).
- It is common for most centers to have a three-tiered fee structure that offers daily, extended visit (usually punch cards) passes, and annual passes. In urban areas it is common to have resident and non-resident fees. Non-resident rates can cost 25% to 50% higher than the resident rate and are usually a topic of discussion amongst elected officials. Daily rates for residents average between \$3.00 and \$6.00

for adults, \$3.00 and \$4.00 for youth and the same for seniors.

- Most centers are open an average of 105 hours a week, with weekday hours being 5:00 am to 10:00 pm, Saturdays 8:00 am to 8:00 pm and Sundays from noon to 8:00 pm. There is now a trend to open earlier on Sundays as well. Often hours are shorter during the summer months.

Note: These statistics vary by regions of the country.

### **RECREATION FACILITIES MARKET ORIENTATION**

Based on the demographic makeup of the service areas and the trends in indoor recreation amenities, there are specific market areas that need to be addressed with such community facilities. These include:

#### **GENERAL**

- 1 Drop-in recreation activities - Critical to the basic operation of any community center is the availability of the facility for drop-in use by the general public. This requires components that support drop-in use and the careful scheduling of programs and activities to ensure that they do not dominate the center and exclude the drop-in user. The sale of annual passes and daily admissions, potential strong revenue sources for a center, requires a priority for drop-in use.
2. Instructional programming - The other major component of a community center's operation is a full slate of programs in a variety of disciplines. The center should provide instruction for a broad

based group of users in a number of program areas. The primary emphasis should be on teaching basic skills with a secondary concern for specialized or advanced instruction.

3. Special events - There should be a market for special events including kid's birthday parties, community organization functions, sports tournaments and other special activities. The development of this market will aid significantly in the generation of additional revenues and these events can often be planned for before or after regular operating hours or during slow use times of the year. Care should be taken to ensure that special events do not adversely impact the everyday operations of the center.

4. Community rentals - Another aspect of a center's operation is providing space for rentals by civic groups or organizations as well as the general public. Gyms and multi-purpose rooms can be used as a large community gathering space and can host a variety of events from seminars, parties, receptions, arts and crafts sales and other events. It is important that a well-defined rental fee package is developed and the fee schedule followed closely. Rentals should not be done at the expense of drop-in use or programming in the center.

5. Social welfare programs – An emerging area for many centers is the use of space for social service activities and programs. Special population activities, teen and senior assistance programs, childcare and other similar uses are now common

in many facilities.

### **SPECIFIC MARKET SEGMENTS INCLUDE**

1. Families - Within most markets an orientation towards family activities is essential. The ability to have family members of different ages participate in a variety of activities together or individually, is the challenge.

2. Pre-school children - The needs of pre-school age children need to be met with a variety of activities and programs designed for their use. From drop-in childcare to specialized pre-school classes, a number of such programs can be developed. Interactive programming involving parents and toddlers can also be beneficial. It is significant that this market usually is active during the mid-morning time frame, providing an important clientele to the facility during an otherwise slow period of the day. For parents with small children who wish to participate in their own activities, babysitting services are often necessary during the morning and early evening time slots.

3. School age youth - Recreation programming has tended to concentrate on this market segment and this age group should be emphasized at a center as well. This group requires a wide variety of programs and activities that are available after school, during the summer, or during weekend hours. Instructional programs and competitive sports programs are especially popular, as well as drop-in use of the facility. Programs and competitive sports programs

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are especially popular, as well as drop-in use of the facility.

4. Teens - A major focus of many community center projects is on meeting the needs of teenagers in the community. There is a great debate among recreation providers throughout the country on how to best provide recreation programming for this age group. Some believe that dedicated teen space is required to meet their needs while others find that it is the activities and approach that is more important. Serving the needs of this age group will often require the use of many areas of the center at certain "teen" times of use.

5. Seniors - As the population of the United States and the service areas continue to age, continuing to meet the needs of an older senior population will be essential. As has been noted, a more active and physically oriented senior is now demanding services to ensure their continued health. Social programs as well as weight training and cardiovascular conditioning have proven to be popular with this age group. Again, the fact that this market segment will usually utilize a facility during the slower use times of early to mid-day also is appealing. Providing services for this age group should be more of a function of time than space.

6. Business/corporate - This market has a variety of needs from fitness/wellness and instruction, to recreation and social. The more amenities and services that can be offered at one location the more

appeal there is to this market segment. The business community should be surveyed to determine their specific needs and expectations.

7. Special needs population - This is a secondary market, but with the A.D.A. requirements and the existence of a number of recreation components, the amenities will be present to develop programs for this population segment. Association with health care providers and/or other social service agencies will be necessary to fully reach this market.

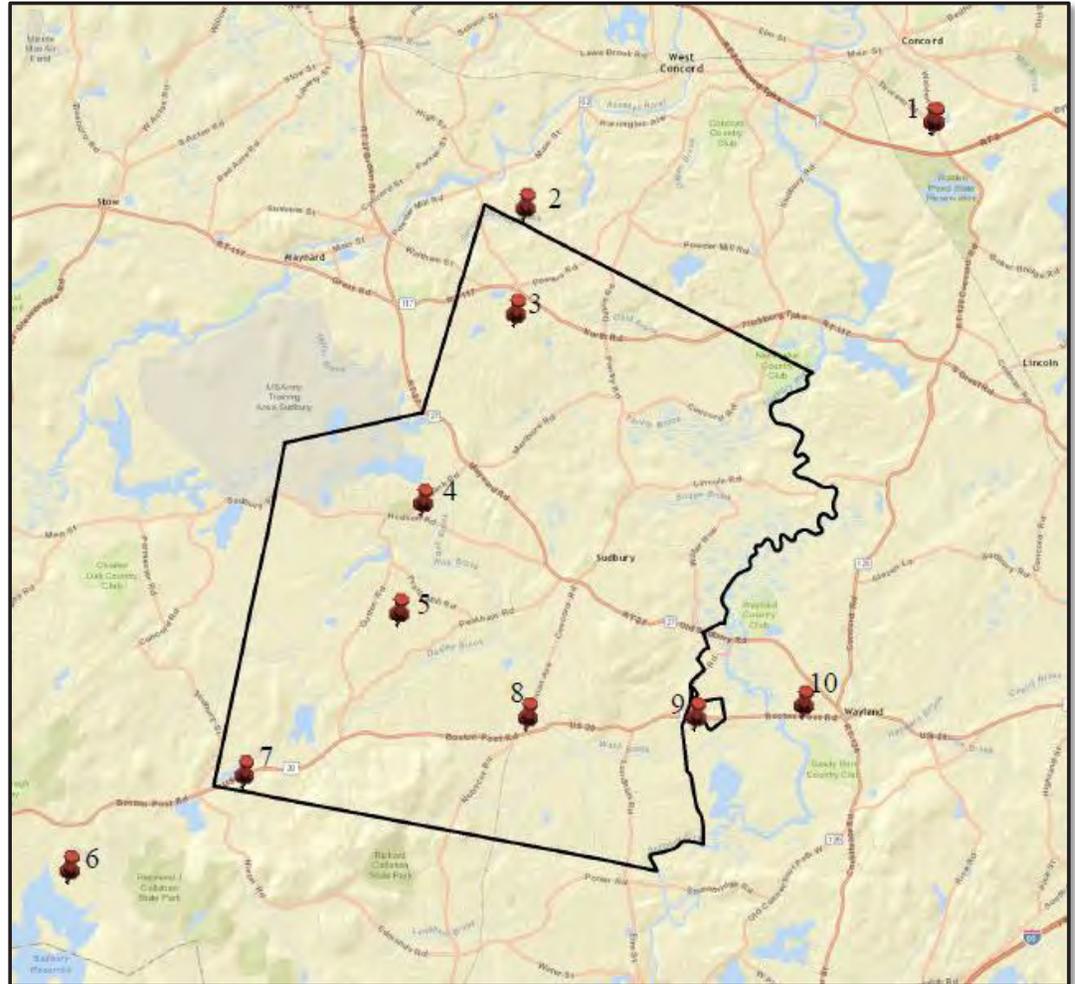
8. Special interest groups - This is a market that needs to be explored to determine the use potential from a variety of groups. These could include school functions, social service organizations and adult and youth sports teams. While the needs of these groups can be great, their demands on a center can often be incompatible with the overall mission of the facility. Care must be taken to ensure that special interest groups are not allowed to dictate use patterns for the center.

**SERVICE AREA PROVIDERS**

There are a limited number of facilities in the Town of Sudbury (primary service) vicinity that are supplying aquatic, recreation, fitness, and sports activities. The following is a brief review of each of the major providers in the area.

1. The Beede Swim & Fitness Center
2. The Thoreau Club
3. Greenwood Club
4. Fairbank Community Center
5. Sudbury Swim & Tennis
6. Wayside
7. Bosse Sport
8. Fieldhouse
9. The Longfellow Club
10. Boston Sports Club

**MAP F - ALTERNATIVE SERVICE PROVIDERS**



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#### FAIRBANKS COMMUNITY CENTER - PUBLIC FACILITY

Operated by the Town of Sudbury the facility includes a 25-yard lane lap pool with separate diving well, multi-purpose room(s), small gymnasium with stage, full service kitchen, teen area, child care area, senior center complete with distinct entrance and meeting rooms. In addition to these spaces this facility also houses school district offices, which utilize a separate entrance to the facility.

#### OTHER FACILITIES AND KEY COMPONENTS

Greenwood Club – Private Facility

- Seasonal facility that offers aquatics and tennis

The Thoreau Club – Private Facility

- This is a year around facility and serves as a full service fitness club for its members. In the facility proper there is weight and cardio training equipment, group exercise space and child watch services. The Club also offers multiple (10) indoor tennis courts, some of which are permanent indoor and others are covered by a “bubble.” In addition to the tennis courts there is also a lap pool and hot tub that is covered by a “bubble” and available year around. During the summer the bubble is removed from the pool and there is an additional outdoor pool and spray area that sits next to it.

The Beede Swim & Fitness Center – Public Facility

- This facility is located on a high school campus and is a full service public recreation facility that

caters to the students of the high school and the public at large.

Sudbury Swim & Tennis – Private Facility

- Seasonal facility that offers aquatics and tennis.

Fieldhouse – Private Facility

- This facility is actually 2 facilities within one. On one half of the structure there is a turf surface that can be rented for practices and competitive teams. Additionally, leagues are offered for both adults and children. On the other half of the structure there are 2 full-size basketball courts a pitching/batting cage, functional training area and a small weight and cardio training space.
- Another important note about this location is that there is a Tae Kwon Do studio located in the same strip-mall-like facility, along with a dance studio and a kid’s theater facility/program.

The Longfellow Club – Private Facility

- This facility has a multi-building, multi-faceted approach. The main facility houses a significant weight and cardio training area, multiple indoor tennis courts some of which are permanent indoor with other being located in a “bubble.” Additionally there is a lap pool and hot tub that sits adjacent to the main building which also has a “bubble” covering it during the winter time but the bubble is removed during the summer months. In an adjacent building there is another portion of the operation which focuses on group exercise classes such as Pilates, Yoga

and Hot Yoga. In addition there are weight and cardio training spaces and all of these spaces are geared specifically towards women.

Bosses Sport – Private Facility (located within 2 miles of The Longfellow Club)

- Of the facilities toured this one was by far and away the most “high end” of the facilities and is priced accordingly. This is a full service health club and space. There are a significant number of additional services offered such as nutrition, spa services, massage, etc. There is a significant weight and cardio training area along with permanent indoor lap pool and hot tub. There are multiple permanent indoor tennis courts along with multiple courts that have a “bubble.” There is a second “bubble” that covers one of the more unique offerings of all of the facilities we toured which is an indoor golf training area.

Wayside – Private Facility

- Outside of the Fairbank Community Center this is one of the older facilities that B\*K toured as evident by the look and décor of the facility. Included in the facility are a weight and cardio training space, child care area, permanent indoor pool, indoor tennis courts and “bubble” tennis courts.

Other Important Alternative Facility Notes:

- YMCA – There is a full-service YMCA facility located in Framingham, just to the south of Sudbury.

- High School – The local high school has a significant weight and cardio training area that has limited availability to the general public

### **OTHER PROVIDERS CONCLUSION**

In analyzing the other service providers in the area there are some conclusions that can be reached.

- A mainstay for facilities in this general area appears to be both aquatics of some variety and tennis.
- The existence of many indoor tennis providers in this area is consistent with not only the geographic location, but the socioeconomics of the area that groups demand for tennis
- In terms of aquatics there are many indoor and or “bubble” season pools, but all of those pools are traditional rectangle facilities. There is definitely an unmet market for indoor leisure water and/or therapeutic water.
- Most of the private facilities offer weight and cardio training, there is additional market space for that type of amenity, especially for individuals that may lead a sedentary lifestyle and need an “introductory” facility.

### **MARKET FOR A COMMUNITY CENTER**

With any proposed community center the issue of the size and qualification of the market for such a facility comes to the forefront. In the case of the Fairbank Community Center and the existence of a current facility the focus needs to be on what contraction of spaces should happen and where expansion could take place.

A review of the Fairbank Community Center coupled with the alternative service providers would lead B\*K to make the following recommendations about current and future facility amenities:

- The current competition pool is adequate based upon the need and use by the high schools. However, there is limited spectator seating and some of the mechanical systems in the pool need to be replaced and/or updated.
- The addition of an indoor leisure pool or a therapeutic pool would be a unique component to the market and should be considered.
  - A leisure pool typically includes a zero-depth entry, play features, current channel, vortex or bubble bench, minimal lap lanes and potentially a slide. Water temperature for a leisure pool typically varies between 86-88 degrees.
  - A therapeutic body of water is significantly smaller than a leisure pool, is a traditional rectangle or square, includes a step and ramp entry, includes a pre/post seating area in the water and is approximately 48” deep. Water temperature for a leisure pool varies between 88-94 degrees.
- Locker rooms need to be updated and enhanced. Individual showers should be include in the men’s locker rooms and fixtures along with lockers should be updated.
- Lobby and entry ways needs to be streamlined for the facility as a whole. Currently there is an entrance for the pool/main portion of the facility,

entrance for the senior center and entrance to the school district offices. While dedicated space for those groups are appropriate, a single point of entrance/egress would improve staffing, traffic flow and security of the spaces.

- Multi-purpose rooms are plentiful in the current facility and while they are being used for a large variety of program and program offerings some dedicated multi-purpose rooms would be appropriate. Specifically including spaces for group exercise classes along with dedicated space for youth, teens and seniors would be appropriate.
- The school district administrative offices have been located in this space for many years. An alternative location for those offices should be jointly investigated by the Town and School District.
- The gymnasium space needs to be upgraded. The current gymnasium is not adequate for any gym-like activities (basketball, volleyball, pickle ball, etc.). While the gym can be and is used for those activities is has to be youth activities and entry level. A full-size gymnasium that could potentially support an indoor walking track would be welcomed and well utilized by the community at large.
- The commercial kitchen is an amenity that is desired for the future facility and makes a great deal of sense given the programs that are offered to the seniors.
- Keeping the seniors at this location is very important. There is some unique synergy that

## MARKET REVIEW

### Ballard\*King & Associates

can be created with seniors, new active aging adults, families and youth. As earlier referenced B\*K would not recommend that the seniors have a dedicated entry into the facility, however parking accommodations for this population are important. They should have some dedicated space within the facility, but for educational sessions and other gatherings they should be able to utilize existing space and potentially eliminate some of the dedicated square footage.

- Finally something that is missing through the facility is storage. Building in storage with new spaces and/or enhance spaces is only going to enhance the flow, programmability and general appearance of cleanliness in the facility.

## MARKET CONCLUSION

Below are listed some of the market opportunities and challenges that exist with this community center project.

### OPPORTUNITIES

- The demographic characteristics of the Primary Service Area indicate households with children and significant levels of income.
- The population of the Primary Service Area is static with a slight increase projected, however the facility is land locked and the population would struggle to support a facility on its own. However, when you consider the population of the Secondary Service Area there is a significant population center.

- There are very few indoor public recreation opportunities in the area.
- The existing Fairbank Community Center is a known entity and is considered to be an asset by the community at large. The ability to enhance that facility and gain support from the public for said enhancement will be easier because of the connection.
- An indoor community center improves the quality of life in a community and often serves to bring more unity to the population.
- The inclusion of a public recreation facility would only enhance the other private providers in the community. In many instances private providers do not cater to families, nor do they cater to individuals that do not work out on a regular basis or lead a sedentary lifestyle. For those individuals a public recreation facility is much more comfortable, but over time may not serve all of their needs. This creates a transition from the public provider to the private and/or non-profit.

### CHALLENGES

- The population of the Primary Service Area cannot support the facility on its own. While the focus will be on residents of Sudbury there will need to be non-resident members/users in order to generate revenue.
- Funding the renovation of the Fairbank Community Center and the potential for additional operational subsidy could prove challenging in the overall process.

**SECTION 7**  
**OPERATIONAL PERFORMANCE ANALYSIS**



**SECTION II: OPERATIONS ANALYSIS**

The following operations analysis has been completed for the Fairbanks Community Center and their interest in re-developing their current facility. The following are the basic parameters for the project.

- The first year of operation will be 2017 or later.
- The presence of other providers in the market will remain the same.
- This operations estimate is based on a program and a basic concept plan for the facility that has been developed by BH+A.
- Maintenance and custodial services have been shown as being provided in-house but could be a contracted service.

As with all of our operational reports B\*K has approached this operational analysis in a conservative fashion. The staffing levels, operational hours, associated expenses and associated revenues are based on conservative penetration rates for the market. Staffing levels are also based upon best practices and industry standards. It should also be noted that while there is a current operation this plan was developed in a zero-based fashion. That is, the plan was developed as though there is not a current operation. Comparison with current operational number or incorporation of those numbers into this plan is an option that can be explored.

Facility Program: The following operations plan is based upon the schematic design below provided by BH+A.



## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

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### DIVISION I: EXPENDITURES

Expenditures have been formulated based on the costs that are typically included in the operating budget for this type of facility. The figures are based on the size of the center, the specific components of the facility and the projected hours of operation. All expenses were calculated as accurately as possible but the actual costs may vary based on the final design, operational philosophy, and programming considerations adopted by staff.

### OPERATION COST MODEL

<b>Personnel</b>	
Full-Time	785,751
Part-Time	541,456
<b>TOTAL</b>	<b>\$1,327,207</b>

<b>Commodities</b>	
Office Supplies (forms, paper, etc.)	12,500
Chemicals (pool)	15,000
Maintenance/Repair/Materials	25,000
Janitor Supplies	15,000
Recreation Supplies	20,000
Uniforms	5,000
Printing/Postage	10,000
Vending	15,000
Other	5,000
<b>TOTAL</b>	<b>\$122,500</b>

Rates are \$4.00 SF and include electric and natural gas. It should be noted that rates for electricity and gas have been very volatile and could result in higher cost for utilities over time. Total expense does include Capital dollars allocation.

Note: Line items not included in this budget are off-site maintenance and any vehicle costs.

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

Ballard\*King & Associates

<b>Contractual</b>	
Utilities (electric and gas) <sup>1</sup>	270,000
Water/Sewer	25,000
Insurance (property & liability)	67,500
Communications (phone)	12,000
Contract Services	13,000
Rent Equipment	7,500
Marketing/Advertising	10,000
Training (staff time)	12,000
Conference	8,000
Trash Pickup	10,000
Dues & Subscriptions	2,500
Bank Charges (charge cards, EFT)	15,000
Other	5,000
<b>TOTAL</b>	<b>\$457,500</b>

<b>Capital</b>	
Replacement Fund	\$100,000
<b>TOTAL</b>	<b>\$100,000</b>

<b>All Categories</b>	
Personnel	1,327,207
Commodities	122,500
Contractual	457,500
Capital	100,000
<b>TOTAL EXPENSE<sup>2</sup></b>	<b>\$2,007,207</b>

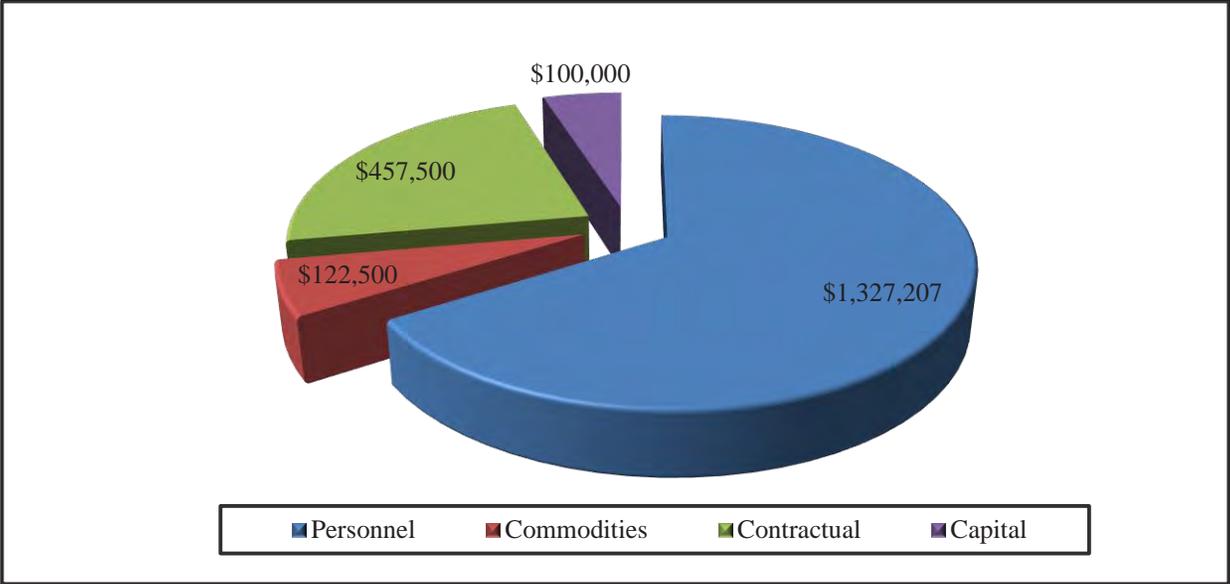
Rates are \$4.00 SF and include electric and natural gas. It should be noted that rates for electricity and gas have been very volatile and could result in higher cost for utilities over time. Total expense does include Capital dollars allocation.

Note: Line items not included in this budget are off-site maintenance and any vehicle costs.

**OPERATIONAL PERFORMANCE INDICATOR ANALYSIS**

Ballard\*King & Associates

**GRAPHIC REPRESENTATION OF TOTAL EXPENSES:**



Note: For most indoor recreation facilities personnel and contractual services comprise the bulk of the expenses related to the operating budget.

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

Ballard\*King & Associates

### HOURS OF OPERATION:

The following are the proposed hours of operation for the facility. It should be noted that when developing part-time staffing hours and a ¼ hour was added to the opening and closing time to account for opening and closing the building and securing the facility.

### FULL FACILITY HOURS:

Days	Hours	Total Time
Monday	5:30A-9:00P	15.5
Tuesday	5:30A-9:00P	15.5
Wednesday	5:30A-9:00P	15.5
Thursday	5:30A-9:00P	15.5
Friday	5:30A-7:00P	13.5
Saturday	7:00A-6:00P	11
Sunday	7:00A-4:00P	9
		95.5

### SENIOR CENTER HOURS:

Days	Hours	Total Time
Monday	8:30A-4:00P	7.5
Tuesday	8:30A-4:00P	7.5
Wednesday	8:30A-4:00P	7.5
Thursday	8:30A-4:00P	7.5
Friday	8:30A-4:00P	7.5
Saturday	Not Open	0
Sunday	Not Open	0
		37.5

Illustrate some information Saturday morning hours from 8:30A-1:00P

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

### Ballard\*King & Associates

One of the most significant increases in the proposed full-time staff plan is in the area of maintenance and custodial staff. It is important to note that the new and enhanced amenities should increase overall usage of the facility, as such it is important to have adequate staff to clean and maintain the structure. Based upon industry standards and level of cleanliness desired it is estimated that a single custodian could be responsible for 15,000-20,000 square feet.

#### FULL-TIME STAFFING LEVELS:

Full-Time Positions	Recommended Levels	New Facility Additions
Park, Rec. Aquatics Dir.	\$95,870	-
Assistant Rec. Dir. Adaptive Specialist	\$54,179	-
Assistant Aquatics Director	\$60,002	-
Aquatics Supervisor (2)	\$99,224	\$42,639
Head Lifeguard	\$40,945	-
Youth Coord. / Teen Center Director	\$45,834	-
Program Coordinator	\$42,639	-
Administrative Assistant (2)	\$91,775	\$39,487
Recreation Coordinator Fitness	\$39,487	\$39,487
Preschool Coordinator	\$46,466	-
Maintenance Worker	\$33,870	\$33,870
Custodian (4)	\$135,480	\$135,480
Positions	17	8
<b>TOTAL</b>	<b>\$785,751</b>	<b>\$290,9634</b>

Note: The full-time staffing levels were developed in conjunction with the staff of Fairbank Community Center. It is the opinion of B\*K that this level of staff is adequate to run a community center of this size, scope and magnitude.

**CURRENT & FUTURE PART-TIME STAFFING HOURS:**

<b>Part-Time Positions</b>	<b>Rate/Hour</b>	<b>Hours/Week</b>	<b>Weeks</b>	<b>Total</b>	<b>New Facility Additions</b>
Front desk supervisor	\$12.00	95.5	52	\$59,592.00	\$59,592
Front desk receptionist	\$10.00	79	52	\$41,080.00	\$12,132
Building supervisor	\$12.00	79	52	\$49,296.00	\$49,296
Head lifeguard	\$12.00	95.5	50	\$57,300.00	\$57,300
Lifeguard	\$10.00	174.5	50	\$87,250.00	\$29,083
Water Safety Instructor (WSI)	\$11.00	60	50	\$33,000.00	\$16,500
Swim Aide in Training	\$9.00	30	50	\$13,500.00	\$6,250
Water Exercise Instructor	\$25.00	11	50	\$13,750.00	\$6,875
Private swim lesson instructor	\$30.00	6	50	\$9,000.00	\$4,500
Semi private swim lesson instructor	\$55.00	6	50	\$16,500.00	\$8,250
Therapeutic swim instructor	\$30.00	10	50	\$15,000.00	\$15,000
Diving Instructor	\$23.00	4	50	\$4,600.00	\$2,300
Group Exercise Instructor	\$30.00	10	52	\$15,600.00	\$15,600
<b>Total</b>				<b>\$415,468</b>	<b>\$282,678</b>

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

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### CURRENT PART-TIME STAFFING HOURS:

<b>Part-Time Positions</b>	<b>Rate/Hour</b>	<b>Hours/Week</b>	<b>Weeks</b>	<b>Total</b>
Camp Swim Staff	\$10.00	168	7	\$11,760.00
Adaptive program instructor	\$30.00	3	52	\$4,680.00
Youth program instructor	\$12.00	5	52	\$3,120.00
Preschool program staff	\$12.00	10	52	\$6,240.00
Terrific Twos and Kreative Kids Staff	\$12.00	52.5	27	\$17,010.00
Jump Roll and Sing Instructor	\$25.00	1.5	24	\$900.00
Preschool Pals Counselors	\$9.50	100	7	\$6,650.00
Recreation Staff	\$10.00	3	52	\$1,560.00
Teen Center Staff	\$13.00	16	13	\$2,704.00
Teen Center Snackbar Staff	\$9.50	8	13	\$988.00
Recreation Program Instructors	\$30.00	15	30	\$13,500.00
Sudbury Summer Director	\$22.00	40	10	\$8,800.00
Sudbury Summer Assistant Director	\$15.00	40	10	\$6,000.00
CIT Director	\$14.00	37	9	\$4,662.00
Camp Nurse	\$22.50	37	9	\$7,492.50
Sudbury Summer Inclusion Aides	\$12.50	37	7	\$3,237.50
Sudbury Summer Program Specialists	\$11.50	37	8	\$3,404.00
Sudbury Summer Head Counselors	\$10.50	37	7	\$2,719.50
Sudbury Adventure Director	\$15.00	40	10	\$6,000.00
Sudbury Adventure Assistant Director	\$14.00	40	10	\$5,600.00
Sudbury Adventure Counselors	\$10.50	40	7	\$2,940.00
Summer Office Assistant	\$10.00	19	13	\$2,470.00
Summer Front Desk	\$10.00	35	13	\$4,550.00
<b>Total</b>				<b>\$125,987.50</b>

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

Ballard\*King & Associates

### DIVISION II - REVENUES

The following revenue projections were formulated from information on the specifics of the project and the demographics of the service area as well as comparing them to state and national statistics, other similar facilities and the competition for recreation services in the area. Actual figures will vary based on the size and make-up of the components selected during final design, market stratification, philosophy of operation, fees and charges policy, and priorities of use.

### REVENUE PROJECTION MODEL:

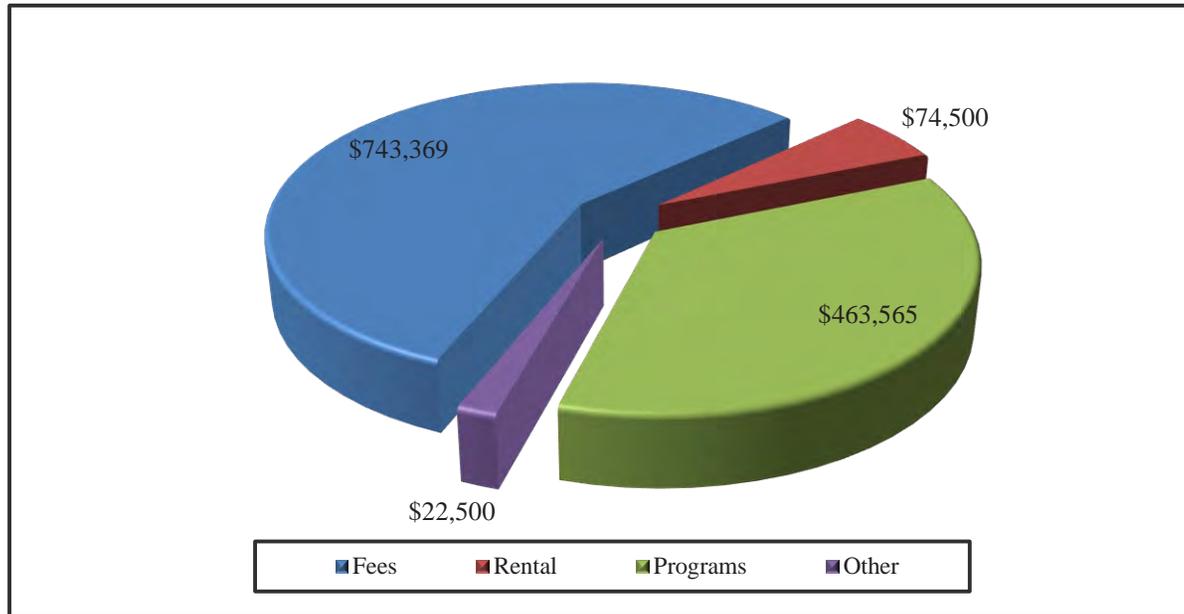
Future Revenue Categories	
Fees	
Daily	61,424
Lunchtime	16,340
Tiny Tot	2,000
Swim Passes	15,425
Memberships	648,180
Rentals	74,500
Programs	
General	55,440
Fitness Passes	90,000
Sports	76,400
Aquatics	159,225
Babysitting / Tot-Drop	82,500
Other	
Vending	22,500
<b>Total Revenue</b>	<b>\$1,303,934</b>

All Categories	
Fees	743,369
Rental	74,500
Programs	463,565
Other	22,500
<b>TOTAL REVENUE</b>	<b>\$1,303,934</b>

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

Ballard\*King & Associates

GRAPHIC REPRESENTATION OF TOTAL REVENUE:



**FUTURE YEARS**

Revenue growth in the first three years is attributed to increased market penetration and in the remaining years to continued population growth. In most recreation facilities the first three years show tremendous growth from increasing the market share of patrons who use such facilities, but at the end of this time period revenue growth begins to flatten out. Additional revenue growth is then spurred through increases in the population within the market area, a specific marketing plan to develop alternative markets, the addition of new amenities or by increasing user fees.

This operations pro-forma was completed based on general information and a basic understanding of the project with a basic program and concept plan for the center. As a result, there is no guarantee that the expense and revenue projections outlined above will be met as there are many variables that affect such estimates that either cannot be accurately measured or are not consistent in their influence on the budgetary process.

It should be noted that there are opportunities for additional revenue that B\*K did not factor into the operations pro-forma. Some of those revenue opportunities are:

- Strategic partnerships to increase programming levels and revenue with:
  - Hospitals
  - Rehabilitation Facilities
  - Day Care
  - Home School Groups
- Strategic partnerships with local hotels where the facility receives a room per night fee.

**DIVISION III – EXPENDITURE/REVENUE COMPARISON**

Category	
Expenditures	\$2,007,207
Revenues	\$1,303,934
Difference	(\$703,273)
Recovery Rate	65.0%

**5 YEAR PROJECTION**

	Year 1	Year 2	Year 3	Year 4	Year 5
Expense	\$2,007,207	\$2,047,351	\$2,088,298	\$2,150,947	\$2,215,475
Revenue	\$1,303,934	\$1,369,131	\$1,437,587	\$1,480,715	\$1,525,136
	(\$703,273)	(\$678,220)	(\$650,710)	(\$670,232)	(\$690,339)
Percentage	65.0%	66.9%	68.8%	68.8%	68.8%
Capital	\$100,000	\$200,000	\$300,000	\$400,000	\$500,000

- Development of an endowment the interest of which is used to either off-set an operational deficit, make capital improvements to the facility or is reinvested back into the endowment fund.
- Corporate sponsorship of the facility or programs.
- Corporate wellness memberships or programs.
- Advertising dollars.
- Naming rights to the facility as a whole or portions of the facility.

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS

### Ballard\*King & Associates

#### CAPITAL REPLACEMENT

A significant topic of discussion through the course of the project has been capital replacement. B\*K has made it a practice to allocate dollars towards a capital reserve that agencies can access in the event that they need to replace equipment around the building, or if they need to make significant capital repair/improvement to the facility. In the case of Maryland Heights, B\*K would recommend deferring a minimum of \$200,000 per year towards a capital replacement/improvement fund that left untouched for a 5-year period of time would have a \$1 million balance. Over time those dollars could be used to do any of the following:

- Replacement of cardio equipment
- Replacement of weight equipment
- Upgrade or update chemical controllers in the pool
- Upgrade of HVAC mechanical systems
- Replacement of furniture and office equipment facility wide
- Repair and replacement of pool shell
- Replacement of equipment associated with preschool and child watch
- Upgrade of registration software
- Replacement of pool filtration system
- Replacement of roof
- Replacement of HVAC equipment

This is not an exhaustive list of equipment that could fall under capital improvement or replacement.

#### DIVISION IV – FEES, ATTENDANCE, RENTALS, PROGRAMS

##### PROJECTED FEE SCHEDULE:

Revenue projections will be calculated from this fee model. The monthly rate listed is the cost of an annual pass broken down into twelve equal payments and does not include any handling fees. It should be noted that monthly bank draft convenience for customers would encourage more annual pass sales. However, there are bank fees and a substantial amount of staff time spent managing the bank draft membership base and consideration should be given to pass on some form of a handling fee for bank draft customers.

<b>Daily Admission</b>	<b>Resident</b>	<b>Non-Resident</b>
Adult (18+)	7.00	8.00
Youth	5.00	6.00
Senior (65+)	5.00	5.00

<b>Category</b>	<b>Resident</b>	<b>Non-Resident</b>
Lunchtime	\$268	\$294
Tiny Tot Pass	\$20	\$20

<b>Swim Pass</b>	<b>Resident</b>	<b>Non-Resident</b>
Family	\$85	\$100
Adult	\$35	\$40
Youth	\$25	\$30
Senior	\$25	\$25

Category	Monthly	6 Month	Annual
Family Resident	\$52	\$300	\$600
Family Non-Resident	\$58	\$336	\$672
Adult Resident	\$38	\$216	\$432
Adult Non-Resident	\$43	\$246	\$492
Youth Resident	\$27	\$150	\$300
Youth Non-Resident	\$30	\$168	\$336
Senior Resident	\$25	\$138	\$276
Senior Non-Resident	\$28	\$156	\$312
Couple Resident	\$48	\$276	\$552
Couple Non-Resident	\$56	\$318	\$636

	Per Hour Rate	Day Rate
25Y Lane	\$15.00	-
25Y Pool (8 lanes)	\$120	\$1,200
Full Facility	-	\$6000
Conference Room	\$45	-
Staff	\$15	-
Court (bb, vb, pb, tn)	\$25	\$250

	Fees
Birthday Parties <sup>4</sup>	\$250
Group Swim Lessons <sup>5</sup>	\$45
Private Swim Lessons <sup>6</sup>	\$150
Semi-Private Swim Lessons <sup>7</sup>	\$225
Aquatic Group Exercise Classes <sup>8</sup>	\$50
Therapeutic Aquatic Group Exercise <sup>9</sup>	\$50
Little Swimmers <sup>10</sup>	\$4.00
Dry Group Exercise Classes <sup>11</sup>	\$150

- 2 hours of pool time and 1 hour of party room time, 15 kids
- 8, 45-minute classes
- 4, 30-minute classes
- 4, 30-minute classes,
- maximum 3 participants of similar skill level
- 8, 1-hour classes
- 8, 1-hour classes
- 1-hour of pool time, mid-day with only parents and children in leisure pool
- 1-hour of pool time, mid-day
- 15, 1-hour classes offered per week with a quarterly membership required.

## OPERATIONAL PERFORMANCE INDICATOR ANALYSIS SUMMARY

### SUMMARY

The Operational Performance Indicator Analysis for the preferred option shows projected Operational Expenses of \$2.0M and projected Revenues of \$1.3M. The gap between revenues and expenses is \$700,000. The above numbers are all inclusive of Senior Center and Recreation Department expenses except for current Senior Center staff.

Today, the Town pays all expenses related to the Senior Center and for maintenance and operations of the School Administration space. When taking these costs into account, as well as any expenses the Town pays for the Recreation Department, the delta between today's funding level and that required for the new facility is significantly less than \$700,000.

**SECTION 8**  
**COST ESTIMATE**

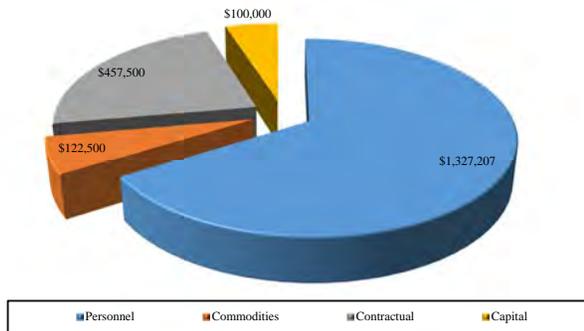


**SUMMARY:**

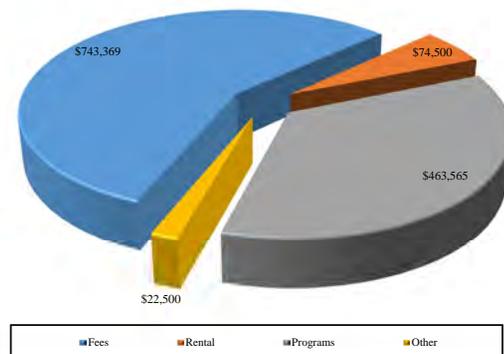
A detailed cost estimate was created for the Fairbank Community Center in September 2014. The basis for the estimate was Option 3, the 60,000 square foot plan. A second cost estimate was generated for a plan based on the renovation of the existing facility.

Ballard King undertook a market analysis that provided a revenue plan demonstrating the impact of the Senior Center which is not a revenue or fee based program in any community.

**OPERATIONS / EXPENSES**



**OPERATIONS / REVENUE**



**Fairbank Community Center  
 Sudbury, MA**

**Cost Study**

Prepared for:  
 BH+A  
 Boston, MA

Prepared by:  
 D G Jones International, Inc.  
 3 Baldwin Green Common, #202  
 Woburn, MA 01801  
 email : boston@dgjonesboston.com  
 Tel: 781-932-3131  
 Fax: 781-932-3199

September 8, 2014

## COST ESTIMATE

DJ Jones International, Inc.

Fairbank Community Center, Sudbury MA  
Cost Study: Notes

September 8, 2014

### Notes

1. Brief project description:-
  - Three options to renovate and add to existing community building with associated site work and site utilities.
2. The estimate is based on the following:-
  - Prevailing wage.
  - General Contractor type project.
  - Receipt of 4# bona fide bids.
  - Building will be unoccupied during construction work.
  - Bid date - unknown
  - Construction period - unknown
3. The gross floor areas are based on the following:-
  - Measurement is taken to the outside face of the exterior wall, measured through all stair wells, elevator shafts and ducts.
4. Story heights:-
  - Varies.
5. General Requirements/Conditions are itemized and priced later in this document.
6. Special Conditions for this project are included with General Requirements.
7. Escalation is excluded.
8. Estimating Contingency is an allowance for future design modifications/additions, which alter the cost of the building as the design progresses, this percentage reduces as the design develops. It is based on a percentage of the sum of Sub-Total Construction, General Requirements/Special Conditions and Escalation. For this level of estimate the following has been included:-
  - 15.00%
9. Construction Contingency is an allowance for scope/design modifications made by the owner during construction and also for any unforeseen circumstances. It is based on a percentage of the sum of Sub-Total Construction, General Requirements/Special Conditions, Escalation and Design Contingency. The following has been included:-
  - Excluded

Fairbank Community Center, Sudbury MA  
Cost Study: Notes

September 8, 2014

### Notes (Cont'd)

10. This estimate has been prepared from the following design information:-
  - Drawings received 07/24/14
  - Emails/Meeting with BH+A
  - Telecons with BH+A
11. The estimate includes the following:-
  - Building permit fees.
  - Security (conduit & cabling).
  - Telephone/data (conduit & cabling).
12. The estimate excludes the following:-
  - Utility company backcharges.
  - Sales tax.
  - Design consultants fees.
  - Hazardous material abatement and removal.
  - Excavation in rock.
  - Removal of water during excavation work.
  - Replacement of existing roof except at reframed area 4.
  - Loose furniture, fittings and equipment.
  - Fixed furniture, fittings and equipment except work normally included in GC work.
  - Window treatment.
  - Fire pump.
  - Third-party building Commissioning.
13. Allowances:-
  - Estimate is based on allowances at this stage of the design.
14. Assumptions:-
  - To arrive at a \$/sf cost reasonable assumptions have been made.
15. Estimates by other firms:-
  - None.

**Fairbank Community Center, Sudbury MA**  
**Cost Study: Grand Summary**

September 8, 2014

**GRAND SUMMARY**

Gross Floor Area (SF)	OPTION 2		OPTION 3		
	64,421		62,088		
	Element (\$)	\$/sf	Element (\$)	\$/sf	
<b>A Substructure</b>	1,311,837	20.36	1,248,617	20.11	
A10 Foundations	1,311,837	20.36	1,248,617	20.11	
A20 Basement Construction	0	0.00	0	0.00	
<b>B Shell</b>	4,242,061	65.85	3,958,892	63.76	
B10 Superstructure	1,641,248	25.48	1,569,316	25.28	
B20 Exterior Enclosure	1,628,045	25.27	1,446,868	23.50	
B30 Roofing	972,767	15.10	942,708	15.18	
<b>C Interiors</b>	1,860,711	28.88	1,787,023	28.78	
C10 Interior Construction	832,472	12.92	807,767	13.01	
C20 Stairs	0	0.00	0	0.00	
C30 Interior Finishes	1,028,339	15.96	979,256	15.77	
<b>D Services</b>	3,791,327	58.83	3,628,777	58.45	
D10 Conveying Systems	0	0.00	0	0.00	
D20 Plumbing	254,486	3.95	255,682	4.12	
D30 HVAC	1,856,179	28.81	1,771,629	28.53	
D40 Fire Protection Systems	276,779	4.30	265,114	4.27	
D50 Electrical Systems	1,403,892	21.79	1,336,367	21.52	
<b>E Equipment and Furnishings</b>	432,355	6.71	428,362	6.90	
E10 Equipment	158,490	2.46	158,400	2.55	
E20 Furnishings	273,955	4.25	269,962	4.35	
<b>F Special Construction and Demolition</b>	735,334	11.41	735,334	11.84	
F10 Special Construction	168,800	2.62	168,800	2.72	
F20 Selective/Building Demolition	566,534	8.79	566,534	9.12	
F20 Asbestos Abatement	0	0.00	0	0.00	
<b>Sub Total Building Cost</b>	<b>12,373,625</b>	<b>192.07</b>	<b>11,787,005</b>	<b>189.84</b>	
<b>G Building Sitework</b>	668,800	10.38	642,860	10.35	
G10 Site Preparation	16,125	0.25	16,125	0.26	
G20 Site Improvements	485,300	7.53	466,310	7.51	
G30 Site Civil/Mechanical Utilities	100,688	1.56	96,213	1.55	
G40 Site Electrical Utilities	60,188	0.93	57,513	0.93	
G90 Other Site Construction	6,500	0.10	6,500	0.10	
<b>Sub Total Construction</b>	<b>13,042,425</b>	<b>202.46</b>	<b>12,429,865</b>	<b>200.20</b>	
General Conditions/General Requirements	1,956,364	30.37	1,864,480	30.03	
Escalator to mid point of construction	Excluded	0.00	Excluded	0.00	
Estimating Contingency	15.00%	2,249,818	34.92	2,144,152	34.53
Building Permit Fee	1.00%	172,486	2.68	164,385	2.65
<b>Total Construction Cost</b>	<b>17,421,093</b>	<b>270.43</b>	<b>16,602,882</b>	<b>267.41</b>	

**Fairbank Community Center, Sudbury MA**  
**Cost Study: Option 1 Estimate**

September 8, 2014

**OPTION 1**

Gross Floor Area (sf)	Addition		Renovation	
	16,194		46,400	
	Element (\$)	\$/sf	Element (\$)	\$/sf
<b>A Substructure</b>	364,657	22.52	0	0.00
A10 Foundations	364,657	22.52	0	0.00
A20 Basement Construction	0	0.00	0	0.00
<b>B Shell</b>	1,278,722	78.96	1,363,128	29.38
B10 Superstructure	497,424	30.72	140,520	3.03
B20 Exterior Enclosure	480,162	29.65	1,111,775	23.96
B30 Roofing	301,136	18.60	110,832	2.39
<b>C Interiors</b>	569,816	35.19	1,044,456	21.33
C10 Interior Construction	161,632	9.98	719,246	15.50
C20 Stairs	0	0.00	0	0.00
C30 Interior Finishes	408,184	25.21	725,210	15.63
<b>D Services</b>	1,171,475	72.34	1,309,671	27.33
D10 Conveying Systems	0	0.00	0	0.00
D20 Plumbing	136,019	8.40	592,424	12.30
D30 HVAC	545,564	33.69	1,675,260	36.10
D40 Fire Protection Systems	80,970	5.00	35,680	1.20
D50 Electrical Systems	408,922	25.25	1,286,300	27.72
<b>E Equipment and Furnishings</b>	180,140	11.12	260,810	5.62
E10 Equipment	151,800	9.37	7,260	0.16
E20 Furnishings	28,340	1.75	253,550	5.46
<b>F Special Construction and Demolition</b>	168,800	10.42	451,580	9.73
F10 Special Construction	168,800	10.42	0	0.00
F20 Selective/Building Demolition	0	0.00	451,580	9.73
F20 Asbestos Abatement	0	0.00	0	0.00
<b>Sub Total Building Cost</b>	<b>3,733,610</b>	<b>230.56</b>	<b>6,829,647</b>	<b>147.18</b>
<b>G Building Sitework</b>	731,430	11.69		
G10 Site Preparation	16,125	0.26		
G20 Site Improvements	336,600	8.89		
G30 Site Civil/Mechanical Utilities	90,213	1.54		
G40 Site Electrical Utilities	57,513	0.92		
G90 Other Site Construction	5,000	0.08		
<b>Sub Total Construction</b>	<b>11,294,707</b>	<b>180.44</b>		
General Conditions/General Requirements	1,694,206	27.07		
Escalator to mid point of construction	Excluded	0.00		
Estimating Contingency	15.00%	1,948,337	31.13	
Building Permit Fee	1.00%	149,372	2.30	
<b>Total Construction Cost</b>	<b>15,086,622</b>	<b>241.82</b>		

# COST ESTIMATE

DJ Jones International, Inc.

Fairbank Community Center, Sudbury MA  
Cost Study: Option 2 Estimate

September 8, 2014

## OPTION 2

Gross Floor Area (sf)	Addition		Renovation	
	52,493		11,928	
	Element (\$)	\$/sf	Element (\$)	\$/sf
A Substructure	1,311,857	24.99	0	0.00
A10 Foundations	1,311,857	24.99	0	0.00
A20 Basement Construction	0	0.00	0	0.00
B Shell	4,192,913	79.88	49,148	4.12
B10 Superstructure	1,635,748	31.16	5,500	0.46
B20 Exterior Enclosure	1,584,397	30.18	43,648	3.66
B30 Roofing	972,767	18.53	0	0.00
C Interiors	1,812,326	34.53	48,385	4.00
C10 Interior Construction	800,831	15.26	31,541	2.64
C20 Stairs	0	0.00	0	0.00
C30 Interior Finishes	1,011,495	19.27	16,844	1.41
D Services	3,789,489	71.81	21,839	1.83
D10 Conveying Systems	0	0.00	0	0.00
D20 Plumbing	254,486	4.85	0	0.00
D30 HVAC	1,854,020	35.32	2,150	0.18
D40 Fire Protection Systems	262,465	5.00	14,514	1.20
D 50 Electrical Systems	1,398,517	26.64	5,375	0.45
E Equipment and Furnishings	432,355	8.24	0	0.00
E10 Equipment	158,400	3.02	0	0.00
E 20 Furnishings	273,955	5.22	0	0.00
F Special Construction and Demolition	168,800	3.22	566,534	47.50
F10 Special Construction	168,800	3.22	0	0.00
F20 Selective Building Demolition	0	0.00	566,534	47.50
F20 Asbestos Abatement	0	0.00	0	0.00
<b>Sub Total Building Cost</b>	<b>11,687,720</b>	<b>222.65</b>	<b>685,905</b>	<b>57.50</b>

G Building Sitework	668,800	10.38
G10 Site Preparation	16,125	0.25
G20 Site Improvements	485,300	7.53
G30 Site Civil/Mechanical Utilities	100,688	1.56
G40 Site Electrical Utilities	60,188	0.93
G90 Other Site Construction	6,500	0.10
<b>Sub Total Construction</b>	<b>13,042,425</b>	<b>202.46</b>

General Conditions/General Requirements	1,956,364	30.37	
Escalation to mid point of construction	Excluded	0.00	
Estimating Contingency	15.00%	2,249,818	34.92
Building Permit Fee	1.00%	172,486	2.68
<b>Total Construction Cost</b>	<b>17,421,093</b>	<b>270.43</b>	

Fairbank Community Center, Sudbury MA  
Cost Study: Option 3 Estimate

September 8, 2014

## OPTION 3

Gross Floor Area (sf)	Addition		Renovation	
	50,160		11,928	
	Element (\$)	\$/sf	Element (\$)	\$/sf
A Substructure	1,244,741	24.82	3,876	0.32
A10 Foundations	1,244,741	24.82	3,876	0.32
A20 Basement Construction	0	0.00	0	0.00
B Shell	3,895,782	77.67	63,110	5.29
B10 Superstructure	1,564,066	31.18	5,250	0.44
B20 Exterior Enclosure	1,403,220	27.97	43,648	3.66
B30 Roofing	928,496	18.51	14,212	1.19
C Interiors	1,738,638	34.66	48,385	4.06
C10 Interior Construction	776,227	15.48	31,541	2.64
C20 Stairs	0	0.00	0	0.00
C30 Interior Finishes	962,412	19.19	16,844	1.41
D Services	3,614,463	72.06	18,514	1.20
D10 Conveying Systems	0	0.00	0	0.00
D20 Plumbing	255,682	5.10	0	0.00
D30 HVAC	1,771,620	35.32	0	0.00
D40 Fire Protection Systems	250,800	5.00	14,514	1.20
D 50 Electrical Systems	1,336,362	26.64	0	0.00
E Equipment and Furnishings	428,262	8.54	0	0.00
E10 Equipment	158,400	3.16	0	0.00
E 20 Furnishings	269,862	5.38	0	0.00
F Special Construction and Demolition	168,800	3.37	566,534	47.50
F10 Special Construction	168,800	3.37	0	0.00
F20 Selective Building Demolition	0	0.00	566,534	47.50
F20 Asbestos Abatement	0	0.00	0	0.00
<b>Sub Total Building Cost</b>	<b>11,099,787</b>	<b>221.11</b>	<b>696,218</b>	<b>58.27</b>

G Building Sitework	642,800	10.35
G10 Site Preparation	16,125	0.26
G20 Site Improvements	466,510	7.51
G30 Site Civil/Mechanical Utilities	96,213	1.55
G40 Site Electrical Utilities	57,513	0.93
G90 Other Site Construction	6,500	0.10
<b>Sub Total Construction</b>	<b>12,429,865</b>	<b>208.20</b>

General Conditions/General Requirements	1,864,480	30.03	
Escalation to mid point of construction	Excluded	0.00	
Estimating Contingency	15.00%	2,144,152	34.53
Building Permit Fee	1.00%	164,385	2.65
<b>Total Construction Cost</b>	<b>16,602,882</b>	<b>267.41</b>	

Fairbank Community Center  
January 21, 2015

**PRELIMINARY PROJECT BUDGETS**

	Renovated Area (Pool)	New Area	Total Area	Cost psf	Construction cost	Total Project Multiplier	Total Project
Existing	11,110	29,360	40,470	\$280	<b>\$11,330,000</b>	1.25	<b>\$14,163,000</b>
Base	11,110	41,170	52,280	\$280	<b>\$14,640,000</b>	1.25	<b>\$18,300,000</b>
Enhanced	11,110	46,680	57,790	\$280	<b>\$16,180,000</b>	1.25	<b>\$20,225,000</b>
<i>These costs should be compared with the ten year cost of simply maintaining the Fairbank Building as currently used and configured</i>							
Maintain Existing	40,000		40,000	\$225	<b>\$9,000,000</b>	1.25	<b>\$12,000,000</b>

Note: the total project cost multiplier includes fixtures & equipment, printing, fees and other soft costs. (see attached worksheet for detail)

## COST ESTIMATE

DJ Jones International, Inc.

### SUMMARY CONTINUED:

As noted previously, this cost exercise led to a series of meetings with the Permanent Building Committee, Fairbank Community Center Study Task Force, Park and Recreation staff, and Senior Center staff.

Based on these meetings, three design options were re-developed between November and March 2015. The goal was to express the programmatic impact of different price points and building sizes. For this exercise, 40,000 sf, 50,000 sf and 60,000 sf plans were prepared and evaluated.

Cost estimate for reuse of the existing building.

Cost estimate for all new 60,000 square foot facility.

Once a construction cost was established "Total Project Costs" were developed for each scheme. Total Project Costs includes cost that the town needs to fund to undertake the project short of the building costs. These costs include design fee's, furniture, equipment, temporary space, working costs, and construction related expenses. A sample Total Project Cost is attached for reference.

### TOTAL PROJECT COSTS:

#### Option 1

Construction Cost	\$12 million
Total Project Cost	\$15.5 million

#### Option 2

Construction Cost	\$15 million
Total Project Cost	\$19 million

#### Option 3

Construction Cost	\$18 million
Total Project Cost	\$23 million

All options should be evaluated against the "no action" decision. The 1960's wing requires extensive maintenance, has poor windows and walls, and substandard interiors. The baseline cost to simply maintain the status quo is approximately \$1 million, and to replace the 1960's wing would be \$3 million. These costs would do nothing to address the program deficiency and would significantly depress the revenue projections of Option 3.

**COST ESTIMATE: OPTION 3**

Option number 3 proposed keeping the existing Atkinson Pool and creating a new building. The previously stated cost was extrapolated to express the new design. This scheme meets the needs of the community center while providing a building that would have a longer life span.



Sudbury Fairbank Community Center  
 TOTAL PROJECT COST  
 March 1, 2015

HARD COST		pre-bid
Estimated Construction Cost		\$18,000,000
Furniture, Fixtures & Equipment		\$700,000
Furniture		\$300,000
Technology		\$250,000
Janitorial Equipment		\$150,000
<b>Hard Cost Subtotal</b>		<b>\$18,700,000</b>
SOFT COST		
Permits & Approvals		\$0
Permits & Approvals		Assume waived by Town
Hazardous Materials		\$10,000
Architecture & Engineering		\$1,605,000
A & E fees (inc cost.)		\$1,080,000
Construction Administration		\$360,000
Geotechnical Engineer (geo contng)		\$10,000
Site Survey		\$10,000
Perq Test		\$1,000
Traffic Report		\$15,000
FF&E selection & specification		\$30,000
Town Meeting Renderings		\$4,000
Technology Design		\$25,000
Additional Estimate Validation		\$20,000
Reimbursables		\$50,000
Testing & Inspections		\$30,000
Project Management		\$360,000
Owner's Project Manager (OPM)		\$360,000
Moving		\$40,000
Moving (two times)		\$40,000
Marketing & Advertising		\$9,000
Bid Advertisement		\$1,000
Bid Document Printing		\$8,000
Other		\$80,000
Utility Backcharges		\$40,000
Commissioning (Roof & HVAC)		\$40,000
<b>Soft Cost Subtotal</b>		<b>\$2,134,000</b>
CONTINGENCY		
Contingency		\$1,976,700
Hard Cost Contingency		10.0% \$1,870,000
Soft Cost Contingency		5.0% \$106,700
PROJECT TOTAL		
<b>Project Total</b>		<b>\$22,810,700</b>

## COST ESTIMATE - OPTION #2

### COST ESTIMATE: OPTION 2

Is an attempt to downsize to a 50,000 sf new building that sits on the footprint of the existing complex. Option number 2 proposed keeping the existing Atkinson Pool. The previously stated cost was extrapolated to express the new design. It is important to keep in mind, that this scheme does not adequately meet the needs of the community center. The overall cost difference between options does not appear to be that significant.



Sudbury Fairbank Community Center  
 TOTAL PROJECT COST  
 March 1, 2015

HARD COST		pre-bid
Estimated Construction Cost		\$15,000,000
Furniture, Fixtures & Equipment		\$700,000
Furniture		\$300,000
Technology		\$250,000
Janitorial Equipment		\$150,000
Hard Cost Subtotal		\$15,700,000
SOFT COST		
Permits & Approvals		\$0
Permits & Approvals		Assume waived by Town
Hazardous Materials		\$10,000
Architecture & Engineering		\$1,365,000
A & E fees (inc cost.)		\$900,000
Construction Administration		\$300,000
Geotechnical Engineer (geo contig)		\$10,000
Site Survey		\$10,000
Perq Test		\$1,000
Traffic Report		\$15,000
FF&E selection & specification		\$30,000
Town Meeting Renderings		\$4,000
Technology Design		\$25,000
Additional Estimate Validation		\$20,000
Reimbursables		\$50,000
Testing & Inspections		\$30,000
Project Management		\$300,000
Owner's Project Manager (OPM)		\$300,000
Moving		\$40,000
Moving (two times)		\$40,000
Marketing & Advertising		\$9,000
Bid Advertisement		\$1,000
Bid Document Printing		\$8,000
Other		\$80,000
Utility Backcharges		\$40,000
Commissioning (Roof & HVAC)		\$40,000
Soft Cost Subtotal		\$1,834,000
CONTINGENCY		
Contingency		\$1,661,700
Hard Cost Contingency		10.0% \$1,570,000
Soft Cost Contingency		5.0% \$91,700
PROJECT TOTAL		
Project Total		\$19,195,700

**COST ESTIMATE: OPTION 1**

Option number 1 is a further attempt to downsize to a 40,000 sf new building that sits on the footprint of the existing complex. This scheme proposes keeping the existing Atkinson Pool. The layout is similar to option 2, but eliminates the incorporation of a high school regulated gymnasium and some programatic spaces used by both the Senior Center and Park & Recreation. It is important to keep in mind, that this scheme does not adequately meet the needs of the community center. The overall cost difference between options does not appear to be that significant.



Sudbury Fairbank Community Center		TOTAL PROJECT COST	
March 1, 2015			
<b>HARD COST</b>		pre-bid	
Estimated Construction Cost		\$12,000,000	
Furniture, Fixtures & Equipment		\$700,000	
Furniture		\$300,000	
Technology		\$250,000	
Janitorial Equipment		\$150,000	
<b>Hard Cost Subtotal</b>		<b>\$12,700,000</b>	
<b>SOFT COST</b>			
Permits & Approvals		\$0	
Permits & Approvals		Assume waived by Town	
Hazardous Materials		\$10,000	
Architecture & Engineering		\$1,125,000	
A & E fees (inc cost.)		\$720,000	
Construction Administration		\$240,000	
Geotechnical Engineer (geo contig)		\$10,000	
Site Survey		\$10,000	
Perq Test		\$1,000	
Traffic Report		\$15,000	
FF&E selection & specification		\$30,000	
Town Meeting Renderings		\$4,000	
Technology Design		\$25,000	
Additional Estimate Validation		\$20,000	
Reimbursables		\$50,000	
Testing & Inspections		\$30,000	
Project Management		\$240,000	
Owner's Project Manager (OPM)		\$240,000	
Moving		\$40,000	
Moving (two times)		\$40,000	
Marketing & Advertising		\$9,000	
Bid Advertisement		\$1,000	
Bid Document Printing		\$8,000	
Other		\$80,000	
Utility Backcharges		\$40,000	
Commissioning (Roof & HVAC)		\$40,000	
<b>Soft Cost Subtotal</b>		<b>\$1,534,000</b>	
<b>CONTINGENCY</b>			
Contingency		\$1,346,700	
Hard Cost Contingency		10.0%	\$1,270,000
Soft Cost Contingency		5.0%	\$76,700
<b>PROJECT TOTAL</b>			
<b>Project Total</b>		<b>\$15,580,700</b>	

## COST ESTIMATE - MAINTAIN EXISTING BUILDING

### COST ESTIMATE: MAINTAIN EXISTING BUILDING

If the Town desires simply maintain the building and use as currently configured there will be a cost incurred over the coming ten years. Locker rooms, Senior Center, pools and buildings all need upgrades; structural, systems and finishes.

#### Renovate existing building

renovate the Senior Center	10,000 sf
renovate Atkinson Pool	11,000 sf
redo the 1960's wing	19,000 sf
<b>Total</b>	<b>40,000 sf</b>

Construction Cost	<b>\$9M</b>
Total Project Cost	<b>\$12M</b>

Temporary Space Rental	same as Options 1 - 3
Relocate School Administration	same as Options 1 - 3



Sudbury Fairbank Community Center			
TOTAL PROJECT COST			
March 1, 2015			
<b>HARD COST</b>			pre-bid
Estimated Construction Cost			\$9,000,000
Furniture, Fixtures & Equipment			\$700,000
Furniture			\$300,000
Technology			\$250,000
Janitorial Equipment			\$150,000
<b>Hard Cost Subtotal</b>			<b>\$9,700,000</b>
<b>SOFT COST</b>			
Permits & Approvals			\$0
Permits & Approvals			Assume waived by Town
Hazardous Materials			\$10,000
Architecture & Engineering			\$885,000
A & E fees (inc cost.)			\$540,000
Construction Administration			\$180,000
Geotechnical Engineer (geo contig)			\$10,000
Site Survey			\$10,000
Perq Test			\$1,000
Traffic Report			\$15,000
FF&E selection & specification			\$30,000
Town Meeting Renderings			\$4,000
Technology Design			\$25,000
Additional Estimate Validation			\$20,000
Reimbursables			\$50,000
Testing & Inspections			\$30,000
Project Management			\$180,000
Owner's Project Manager (OPM)			\$180,000
Moving			\$40,000
Moving (two times)			\$40,000
Marketing & Advertising			\$9,000
Bid Advertisement			\$1,000
Bid Document Printing			\$8,000
Other			\$80,000
Utility Backcharges			\$40,000
Commissioning (Roof & HVAC)			\$40,000
<b>Soft Cost Subtotal</b>			<b>\$1,234,000</b>
<b>CONTINGENCY</b>			
Contingency			\$1,066,000
Hard Cost Contingency			crease 1% for reuse unforeseen conditions 11.0% \$1,000,000
Soft Cost Contingency			5.0% \$66,000
<b>PROJECT TOTAL</b>			
<b>Project Total</b>			<b>\$12,000,000</b>

**SECTION 9**  
**IMPLEMENTATION PLAN**



The implementation plan for the community center is dependant on several variables. Once it has been decided to proceed with the project the following steps come into play.

**1. School Administration**

The school administration occupies 5,750 square feet of space in the Fairbank Building. Based on a 2012 report, the projected program for the school administrative is 5,035 square feet.

**Step 1:** Involves soliciting and undertaking a study for where school administration should be located.

**Step 2:** Involves design of the space where the administration is to be located.

**Step 3:** Construction of school administration space.

**Step 4:** Concurrent with step one is solicitation of final design for the community center.

**Step 5:** Concurrent with steps two and three will be final design of the community center.

**Step 6:** Vote to fund the community center.

**Step 7:** Locate a temporary location for the Senior Center and Recreation Department.

**Step 8:** Relocate Senior Center and Recreation Department.

**Step 9:** Demolish Fairbank except for Atkinson Pool Building.

**Step 10:** Design specification for furniture, fixtures, and equipment.

**Step 11:** Construct new community center.

**Step 12:** Installation of furniture, fixtures and equipment.

**Step 13:** Relocate Senior Center and Recreation Department.

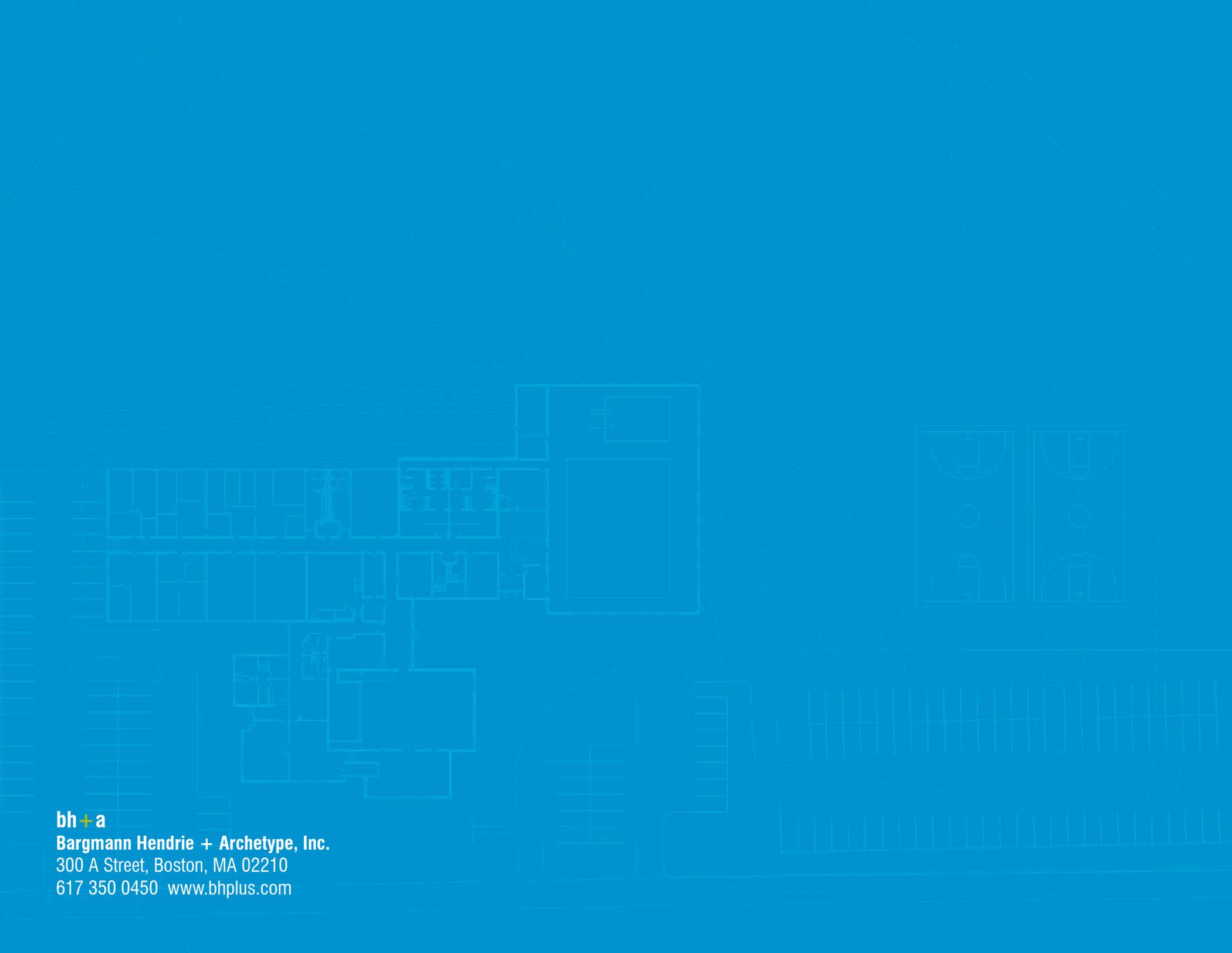
**Step 14:** Open

The overall timeline is approximately 4 years from beginning to occupancy. Note that general inflation rates range between 3% and 4% annually. The cost estimate utilizes current costs since the actual implementation date is unknown.

## IMPLEMENTATION SCHEDULE

	2015		2016		2017		2018		2019		2020	
<b>SCENARIO IMPLEMENTATION</b>												
Determine Course of Action for School Administration & Community Center		■	■									
Town Meeting to Approve Design & Construction Funds for School Administration			➤									
Design & Build New School Administration Offices			■	■	■							
Town Meeting to Approve Design of Community Center					➤							
Design Community Center					■	■						
Town Vote to Fund Construction of Community Center Phase I							➤					
Build Community Center							■	■	■			
Temporary Location for Recreation and Senior Center							■	■	■			
Move In and Occupancy											■	





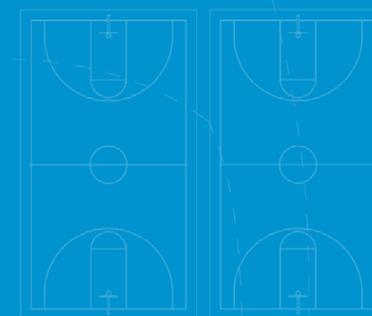
**bh + a**

**Bargmann Hendrie + Archetype, Inc.**

300 A Street, Boston, MA 02210

617 350 0450 [www.bhplus.com](http://www.bhplus.com)

**APPENDIX**



# **FAIRBANK COMMUNITY CENTER FEASIBILITY STUDY**

**MARCH 2015**

**bh + a**

Bargmann Hendrie + Archetype, Inc.



# SECTION 10

## APPENDIX

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE FOR THE TOWN OF SUDBURY COUNCIL  
ON AGING

This space planning (or "programming") questionnaire is designed to help our design team learn about how you work, what you do, how you do it, and whether your space could be redesigned to help you work better. The questionnaire is a critical component of good facilities planning and it initiates an interactive process that would benefit greatly from your careful thought and participation. Thank you in advance for your time and effort!

The questionnaire is broken into twelve categories: Department Overview, Meals & Nutrition Program, Multi-Purpose Spaces, Arts & Crafts, Fitness, Media, Counseling & Screening, Staff Offices, Storage, Site Considerations, Space Impressions, and Other Thoughts.

Your Name and Title: Debra Galloway, Director, Sudbury Senior Center  
Telephone numbers: 978-443-3055, 978-639-3266  
Email address: gallowayd@sudbury.ma.us

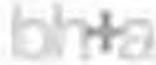
A. DEPARTMENT OVERVIEW

How many full-time employees (FTE's) currently work within your department?  
3 full time - Director, Administrative Assistant and Van Driver  
How many part-time employees (PTE's) currently work within your department?  
4 part-time - Information Specialist, Morning receptionist, Volunteer Coordinator, and part-time Van driver  
We do have a 2 stipended positions, Trips Coordinator (in office 5-10 hours/week), Senior Community Work Program Coordinator (in office 2-5 hours/week).  
How does this change seasonally?  
There is no seasonal change for employee numbers.  
TAX AIDE 3 TO 4  
What are your hours of operation? Monday-Friday from 9:00 AM - 4:00 PM  
Do you anticipate any changes in staff size and type (FTE vs. PTE) in the near future?

# SENIOR CENTER QUESTIONNAIRE

## Director's Response

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We anticipate an additional part-time staff position for the next fiscal year – FY15 – beginning in July 2014.

### Do you anticipate any changes in your hours of operation in the near future?

We are examining options for extended hours in the near future. This could mean changing the hours to 9:00-5:00 or extending the hours one day a week to perhaps 7:00 PM.

## B. MEALS & NUTRITION PROGRAM

Do you operate an in-house congregate meals program? Yes.

If so, how many meals are currently offered at your facility per day, broken down by breakfast, lunch, and dinner?

We serve lunch Tuesdays and Wednesdays at noon. There are generally about 5 – 10 diners.

Relating to the questions above, are these meals prepared in-house or brought to the facility in either frozen or warmed form by an outside vendor?

BayPath Elder Services contracts with a caterer for our congregate meals. They are brought to the Center warm and kept warm for serving.

How often are special congregate meals offered in-house, such as holiday meals or meals by separate clubs or organizations, and for how many people on average?

We have large special events about 5-7 times each year. There are generally 80-100 people at these events.

Relating to the question above, are these meals prepared in-house or brought to the facility in either frozen or warmed form by an outside vendor or organization?

These meals are usually prepared by another facility and delivered here, kept warm and then served.

Do you operate a home-delivery meals program?

Yes.

If so, are the meals brought to homes directly by a vendor, or are the meals prepared in some form in your facility and then delivered to homes?

Meals are portioned out here and delivered by volunteers.

Relating to the question above, if home-delivery meals are prepared in your facility, what does that process consist of?

They are not prepared here.

How many meals per day, on average, are delivered to homes through this program, broken down by breakfast, lunch, and dinner?

Lunch is delivered to about 25 people per day.

How well does your current facility meet the needs of your congregate and home-delivery meals programs?

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The kitchen is adequate for heating and keeping meals warm, and there is counter space for portioning meals. The kitchen is equipped for meals because it was originally a school lunch kitchen. However, the large gas stove has problems and would need to be replaced.

What changes would you like to see in your meals program if your current facility was not a limiting factor?

We would like to see a nicer space for dining. Because the meals are not popular, we might consider preparing meals in-house.

Does your current kitchen allow the opportunity to provide cooking classes?

We have not thought of offering cooking classes, but could consider it. I'm not sure whether there would be enough space for this.

If not, is this a program that you would ideally like to offer?

-

## C. PROGRAM SPACES: MULTI-PURPOSE SPACES

Multi-purpose spaces are critical to the mission of most senior centers since, if planned properly, they allow for a wide variety of program offerings to take place within a single space on a given day. These questions relate as much to the multi-purpose spaces in your facility as to the programs offered within them, and how you would like this to change (if at all).

Currently, in how many spaces in your facility do you offer programming, with the exception of private services such as SHINE counseling and medical screenings?

We use two program rooms in the Senior Center and share 3 other rooms and the gym with the Park and Recreation department.

Do the size and quality of these spaces meet the needs of the programs held in them?

The three smaller shared rooms are old and need updating, one is outfitted with video games for a Teen Center night program. These rooms also do not lend themselves to some of the programming, such as card playing, fitness classes, or meetings. The rooms do not have appropriate lighting or tables and chairs.

Within the Senior Center space, the current Senior Center rooms are sometimes too small for the demand, or are too large for the particular program.

How many people participate in these programs, taking into consideration which programs have a higher attendance than others?

The programs that are moved to shared Park and Rec space include: 8-10 people for card playing, 4-6 people for Teen Tech (workshops with teens helping seniors), 4-8 people for Tax assistance, 12-20 people for fitness classes, and 4-10 people for meetings (among others at times).

The Senior Center main program room holds about 55 people comfortably for lifelong learning classes. There are many classes that have small waiting lists.

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The second Senior Center program room is used more often for Bridge, cards, and arts classes, as well as meetings, our Soup and salad day (Soups On), pizza, and after-exercise chatting. The arts classes are popular but the space allows for only about 18 or 19 people.

**How does the amount of storage space available to these rooms meet the needs of the programs offered within them?**

Of the Senior Center rooms, one has a large storage closet, the other does not. We could use a better storage space in the room without a closet. The storage would be used for arts and crafts donations for the Crafts fair. It could also be used for temporary housing for medical equipment that is donated. These items are currently tucked in a corner alcove or along the wall.

**What spaces do you utilize within the Fairbanks Complex; outside of the designated Senior Center Space. Do you currently use any multi-purpose program spaces in other facilities? If so, where and how often?**

We use Rooms 1, 2, and 3 in the Park and Recreation section of the building between September and June (on an as needed basis, and if there is not a conflict with the Park and Rec programming). We have occasionally also scheduled a class at the Goodnow Library. In the summer, we move our aerobics class to the L-3 high school (but only for about 6 weeks, as the floors there get maintenance in the summer). For the other weeks of the summer, we move aerobics to the Senior Center main program room. (All of our other fitness classes are either cancelled or moved into the Senior Center program rooms for the summer.)

We use the Park and Rec small rooms about 1 to 7 times each week. We use the gym 5 days each week (except during the summer).

**And if so, is the reason that these programs are offered outside of your facility due to the inability of your facility to accommodate them?**

We use the Park and Rec small rooms when our two program rooms are in use. We use the gym every week except in summer.

**Relating to these programs, how many people participate in these programs, taking into consideration which programs have a higher attendance than others?**

Approximately, 4 – 20 people participate in the programs that are scheduled into the Park and Rec rooms. When we have a special event, such as a luncheon, we may have 80-100 people in the gym.

**Relating to both programs offered at your facility and elsewhere, how does participation fluctuate seasonally?**

We offer Tax preparation assistance from February to April and use Park and Rec room 3 for this. Other uses for the Park and Rec rooms vary throughout the year (except summer when we do not use them at all).

**Are there programs you would like to offer at your facility or elsewhere that you cannot currently?**

If we had more space we could offer additional art and lifelong learning classes. The issue is also that we would like to offer our current programs in nicer rooms.

We definitely have to limit summer programming due to the loss of the gym and the other rooms in the Park and Rec spaces.

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**If so, what are they, and is it possible to estimate how often you would have these programs and estimated attendance levels?**

In the short term, we could potentially provide arts/lifelong learning classes to an additional 50-70 people during the year, and an additional 35 over the summer. As the population of residents over 60 years of age increases, we expect to provide programming for a much larger number.

**Given the normal pattern of use in your facility, what number and size of multi-purpose program spaces would you have at your disposal?**

It would be useful to have a larger classroom for lifelong learning, information sessions, etc., than our current room. Our current room is outfitted with a projector, screen and room darkening shades. We would want the same for a new room. The current room has an odd shape, with one wing that juts out at the front. It would be better to have a square or rectangular room.

Our Arts/Cards room needs to be bigger. We have a limit of about 19-20 people for our arts classes, often with a small waiting list. Part of the room holds our coffee machine, sink and refrigerator. We also place our coffee and baked goods on tables on this side of the room. This can result in people making noise that can disturb the class. We could use a larger room that has resources for arts classes, and does not include the refrigerator, coffee area.

While our luncheons are popular in the gym, it would be better to be in a "great room". The gym has poor sound quality, is not very attractive for events, and has no ambience. We also need to schedule events on days when the Park and Rec department or the Town Clerk (for voting) is not using the gym.

**How often are special programs that see a noticeably higher attendance offered in your facility or elsewhere?**

One to three times each year we have informational sessions that can bring in large numbers – potentially 80-90 people who need to squeeze into our main program room with the projector. We open the partition but the audio and visual quality is poor for the people in the back (and they are exposed to our Front Desk telephones).

Five to 7 times each year we have special luncheon events that draw 80-100 or more people. These are held in the gym.

**What are these programs and how often do they occur?**

See above.

**How well does your current facility meet the needs of these special programs?**

The information sessions are frustrating for many attendees, as those who are at the back have difficulty seeing and hearing, while those in the front may be overly warm due to the crowd.

As mentioned earlier, the special events (luncheons, usually) are held in the gym which is not ideal.

**D. PROGRAM SPACES: ARTS & CRAFTS**

Some arts and crafts programs can be held within multi-purpose spaces provided they do not have special requirements that prohibit efficient use for other purposes. Other arts and crafts programs do have special requirements that lead to a space being dedicated to a specific purpose (such as with a pottery studio or woodworking shop). These questions relate to programs in both categories.

**How often are arts and crafts programs offered at your facility, and of what type?**

# SENIOR CENTER QUESTIONNAIRE

## Director's Response

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We currently offer two arts class each week. We also have a Crafts group that meets once a week. There is demand for a jewelry class and we are trying to schedule one.

**For each type of arts and crafts program offered, what is the average attendance?**

Watercolors 18-20 participants  
Drawing 14 participants  
Crafts group 15 participants

**Do you offer any special arts and crafts programs that require a dedicated space?**

The Watercolors class needs access to a sink and would benefit from a dedicated space but we use the same room for other arts programs, as well as lunches, and card games.

**If so, what are they, and how often is use of these spaces permitted and desired?**

**Do you offer any arts and crafts programs at other facilities?**

No.

**If so, what are these programs, and how often do they occur?** N/A

**Relating to the question above, what is the attendance for these programs?** N/A

**Is there a reason why these programs are not offered at your facility?**

We do not have a room that we can dedicate to any particular activity or program.

**How does the amount of storage space available to these rooms meet the needs of the programs offered within them?**

We are fortunate to have large cabinets in the Van Houten room (small program room) that house the card players and arts and crafts supplies.

### E. PROGRAM SPACES: FITNESS

As with arts and crafts programs, fitness programs can be held within multi-purpose spaces provided they do not have special requirements that prohibit efficient use for other purposes. Other fitness programs do have special requirements that lead to a space being dedicated to a specific purpose (such as with a treadmill or exercise studio). These questions relate to programs in both categories.

**How often are fitness programs offered at your facility, and of what type?**

Five days each week.

Better Bones/Strength – balance and strength class – 2x week  
Aerobics – 3x week  
Zumba – 1x week  
Tap Dance – 1x week  
Tai Chi – 1x week (soon to be 2x week)  
Yoga – 2x week

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**For each type of fitness program offered, what is the average attendance?**

Better Bones/Strength – 35  
Aerobics – 35-45  
Zumba – 8-10  
Tap Dance – 5-10  
Tai Chi – 15  
Yoga – 40

**Do you offer any special fitness programs or activities that require a dedicated space?**

No.

**If so, what are they, and how often is use of these spaces permitted and desired?** N/A

**Do you offer any fitness programs at other facilities?**

No, except when we move the aerobics class to L-S high school for a few weeks in the summer.

**If so, what are these programs, and how often do they occur?** N/A

**Relating to the question above, what is the attendance for these programs?** N/A

**Is there a reason why these programs are not offered at your facility?**

We would not have a space to accommodate such a program.

**How does the amount of storage space available to these rooms meet the needs of the programs offered within them?**

The Yoga and Better Bones class instructor stores her equipment in a closet in the Senior Center. It is not ideal, as staff uses this closet for their coats and other items.

**Of fitness programs offered at your facility, is it necessary to provide a changing or shower area for any of them?**

There has not been a request for this, though I know that some of the programs are quite vigorous.

### F. PROGRAM SPACES: MEDIA

**Is there any technology that is used by visitors to the senior center, for example, computers and televisions?**

Yes.

**If so, what are these items and where are they located?**

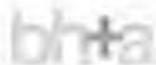
Our main program room is outfitted with a projection system, screen and room darkening shades. This room and the system are used every week for classes and movies.

We have a computer on a cart as well as 3 laptops that are available for various programs. Seniors can use the cart computer for their needs. The laptops are used mostly by the Teen Tech program (high school teens teach seniors) and the Tax assistance program, as well as to show powerpoint presentations of some of our speakers.

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**How often is this technology used, and for how long?**

The projection system is used several times each week for 1 – 2 hours each time. The computer/laptops are used most frequently during the Teen Tech (2x monthly) and during tax season.

**Do you offer any educational programming that either uses or relates to any of this technology?**

We currently do not. We would like to offer classes on email, facebook, etc., and/or on the use of loads.

**How often are movies shown at your facility?**

Once a month from Sept. – May and then twice a week from June – August.

**Where are they shown, and what has attendance been?**

They are shown in the main program room (Sudbury Pines).

**How has your current facility met the needs of these offerings?**

The Sudbury Pines room projection system works very well for showing movies. We occasionally have 50 people come to a movie and it can become a bit stuffy in the room.

We do not have an ideal space for the Teen Tech program. The students can only come on Wednesday afternoons and we do not always have a room available for them. Sometimes they are working with seniors in the lounge area.

**Is there an area for television viewing in your facility, and if so how often is it used?**

We do not have a television viewing area.

**Where is this area located? N/A**

**How has the quality and size of this space met the needs of those wishing to watch television? N/A**

**For all of the categories above, how does the amount of storage space available to these technological resources meet your needs?**

We need to have a better storage area for the rolling cart computer as it is in the office supply closet and gets in the way. Even better would be a permanent place for some computers/laptops or loads.

**Do you currently offer any technology program in other facilities?**

No.

**If so, what are these programs, and how often are they offered? N/A**

**Relating to the question above, what is the attendance for these programs? N/A**

**Would it be preferable to hold these programs within your facility? N/A**

**G. PROGRAM SPACES: COUNSELING & SCREENING**

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**What type of private (meaning, not a group activity out of respect for confidentiality and privacy) counseling and assistance programs are currently offered at your facility?**

We offer SHINE health insurance counseling, legal counseling, tax preparation assistance, tax relief assistance, information and referral (which may include financial, fuel assistance, caregiver, family issues), and Board of Health Nurse.

**What are these services, and where in your facility are they currently offered?**

We try to offer this counseling in the small office space in the back right corner. This office has a small table and chairs and a desk and computer. Sometimes we have conflicts and some of the counseling is moved to a different location (a Park and Rec room (room 3 or 1)).

**How many people typically participate in these sessions/appointments?**

The SHINE program provides counseling to about 150 – 200 people each year.  
Legal counseling is provided to about 50 different individuals each year.  
Tax preparation/relief assistance is provided to about 75 individuals each year.  
Information and referral is provided to 350 different individuals each year.  
The Board of Health Nurse interacts with about 150 different people each year.

**Do any of these services bring special requirements of the space they are held in (for example, an examination table or a beauty parlor chair)?**

The SHINE program needs access to a table/desk and computer.  
The volunteer attorney needs only a table and chairs.  
The Tax assistance program requires tables, chairs and a computer.  
Information and referral requires table and chairs.  
The Board of Health nurse could use a dedicated room. She needs a medically oriented room, with a sink, storage for first aid supplies, and other supplies relating to blood pressure/blood sugar testing, as well as a computer, chairs, and table. She would like to offer weekly health and wellness consultations but this is difficult with the competition for space.

**Where do the people queuing for these services wait?**

They wait in our main lobby/lounge area. I think there are some people who would be more comfortable waiting in a separate area for privacy reasons (for example, if they are coming to consult about financial difficulties, or serious illness).

**For each type of counseling or screening service offered, how often are these services offered, and what has the attendance been?**

SHINE health insurance counseling is offered 6 times each month, except during Medicare Open Enrollment (October – December) when SHINE counseling is offered 2-3 times each week.  
The volunteer attorney visits about 1x each month.  
Tax assistance is offered once or twice each week from February through April. However, we offer Tax relief assistance as needed year round.  
Information and referral is offered 3 days each week year round.  
Board of Health nurse is in the office once a week year round.

**Are the quality and quantity of space within your facility adequate for these offerings?**

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# SENIOR CENTER QUESTIONNAIRE

## Director's Response

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No. We frequently have to move regular staff out of their offices, or move the counseling service into a Park and Rec room due to conflicts for space.

If not, how could these spaces be improved?

We could use at least one additional consultation space, but really need two more. This would allow the various counselors to have access to appropriate private space while minimizing disruption to regular staff.

Are there services of this nature that you would like to offer in your current facility but cannot because of limitations of the facility? If so, what services would be offered in addition to what is currently offered?

We would like to offer Information and Referral services on an additional day, but can't as the office is not available due to the other services being provided. We cannot expand the services of the Board of Health Nurse (for wellness monitoring) and have a high demand for a podiatrist to be on site, but do not have a space for him.

Relating to the question above, who would take place in these sessions?

Older adults and their family members often call or stop by the Senior Center with questions about resources and need the assistance of the Information and Referral Specialist, but she is in only on Monday, Wednesday and Friday.

There are many older adults who struggle with chronic health issues who would like to consult with the Nurse for education and support about their diagnoses (diabetes, high blood pressure, arthritis, etc.). We have had many requests for a podiatrist to help with toenail and foot care.

And for each type of service that would be offered in an expanded/altered setting, how often would the service be offered?

We would like to add at least one additional day to the Information Specialist schedule and then as demand grows, have her available Monday – Friday. There is a definite need for the Nurse to be here an additional day each week. A podiatrist service would be offered 2x each month to start with.

Do your current offer or take advantage of counseling or screening services offered outside of your facility?

If so, what types of services and how often?

During Medicare Open Enrollment in the fall, there is great demand for SHINE counselor appointments. The overflow goes to either Framingham or Wayland Senior Center. During tax season, when our Tax Aides schedules are full, we refer people to Wayland Senior Center.

How often are these outside resources used by people who would otherwise access them at your facility if they were offered there?

We refer approximately 10 people to other Senior Centers for SHINE counseling in the fall. We refer approximately 5 people to other Senior Centers for Tax assistance.

Would it be preferable to offer these services within your facility?

If so, what types of services and how often would they be offered?

Yes, we do offer them, but we sometimes cannot handle the demand.

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### H. STAFF OFFICES

Does your current facility have an administrative area?

Yes, the administrative area is the same area that is used for counseling.

Of the staff members mentioned in Part A, including anticipated staff size changes, how many of these employees have work space within this administrative area?

4 employees

There is a designated office for the Director, Administrative Assistant and the Information specialist. Both the Administrative Assistant office and the information office are used for other services also. The receptionist sits in the Front Desk area. She is often accompanied by a volunteer working on the computer, or the Volunteer Coordinator or Trips Coordinator who are working at the side desk.

Of all staff members, how many would work within open space workstations, and how many would work in private offices, ideally?

1 employee should be working in open space (receptionist).

2 should be working in a partially private space (Van Driver, part-time Van Driver)

6 should be working in private offices: Director, Administrative Assistant, Volunteer Coordinator, Information Specialist, Trips Coordinator, Senior Community Work Program Coordinator

Where are staff meetings currently held (this does not include the counseling and screening services mentioned above)? Please include meetings held within the private offices, the open workspace, and elsewhere in the building (such as in a shared conference room).

Staff meetings are currently held in the Director's office, the Information specialist office or one of the main program rooms.

How many people typically participate in each of these meetings?

2-5 people

Ideally where would these meetings occur (if the current location is not ideal)?

The meetings must be scheduled around other uses for these rooms.

Is the quality of space provided for meetings adequate (e.g. privacy, noise control, etc.)?

When the meetings are held in a program room there is not a high level of privacy and we are using a program room that might otherwise be used for a program or activity.

If some or all of these meetings are not currently within the administrative suite, is it due to lack of meeting space?

Yes, when all staff are together they do not fit into one of the administrative offices.

Do visitors to the senior center currently use meeting space within your facility?

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Yes.

**If so, how often, and how many people typically participate?**

There is a Stamp Group and a Current Events group that meets at the Senior Center. We are hoping to start a Book Group.

We also allow town related groups to utilize our space in the evening.

**Has this use prohibited staff access to these areas?**

Yes

**Do either your staff or activity/social groups related to your program offerings use meeting space outside of your facility?**

No.

**If so, what groups are these, and how often do they meet?** N/A

**What size are these meetings?** N/A

**Thinking about both staff meetings and visitor group meetings, what would be the ideal amount of meeting space in your facility, and how often would it be used?**

We need to have a small meeting room for staff related meetings, but this could also be used for other meetings/groups.

**And by how many people?**

The staff meetings are usually no more than 5 people. Stamp Group is generally about 6-10 people and the Current Events group varies between 8 and 18 people.

**Where are office supplies currently stored?**

Supply closet.

**How much space would be ideal for this purpose?**

**Is there a staff coat closet?**

Yes

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**J. STORAGE**

**Thinking of program-specific storage, are there any programs that have not already been mentioned that require special storage areas?**

**If so, what are these programs, and how much storage space is required for them?**

**Thinking of general storage, how much is needed by your facility?**

**Ideally what would be kept in ideal storage?**

**And ideally where would central storage be located?**

**How has your current facility been meeting your storage needs, both in terms of quality and quantity?**

**d. SITE CONSIDERATIONS**

**Does your current facility provide the opportunity for outside programming or amenities (such as planting beds tended to by senior center visitors, or barbecue equipment)?**

**If so, what activities take place outdoors and how often?**

**How many people participate in these activities?**

**Are there any tools or outside program offerings that require storage either on the grounds of your facility or within the building itself (such as snow removal equipment or lawn furniture that is protected during the winter months)?**

**How does your current facility relate to its site, both in the macro context of its placement within town and in the immediate context of your site, such as the proximity to the parking area and access drives, natural light, and the amount of space available for outside programming?**

**How do you wish it related to the site differently, if at all?**

**K. SPACE IMPRESSIONS**

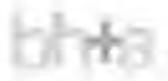
**What adjectives describe your current space?**

**If applicable, what adjectives should describe your future space?**

# SENIOR CENTER QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



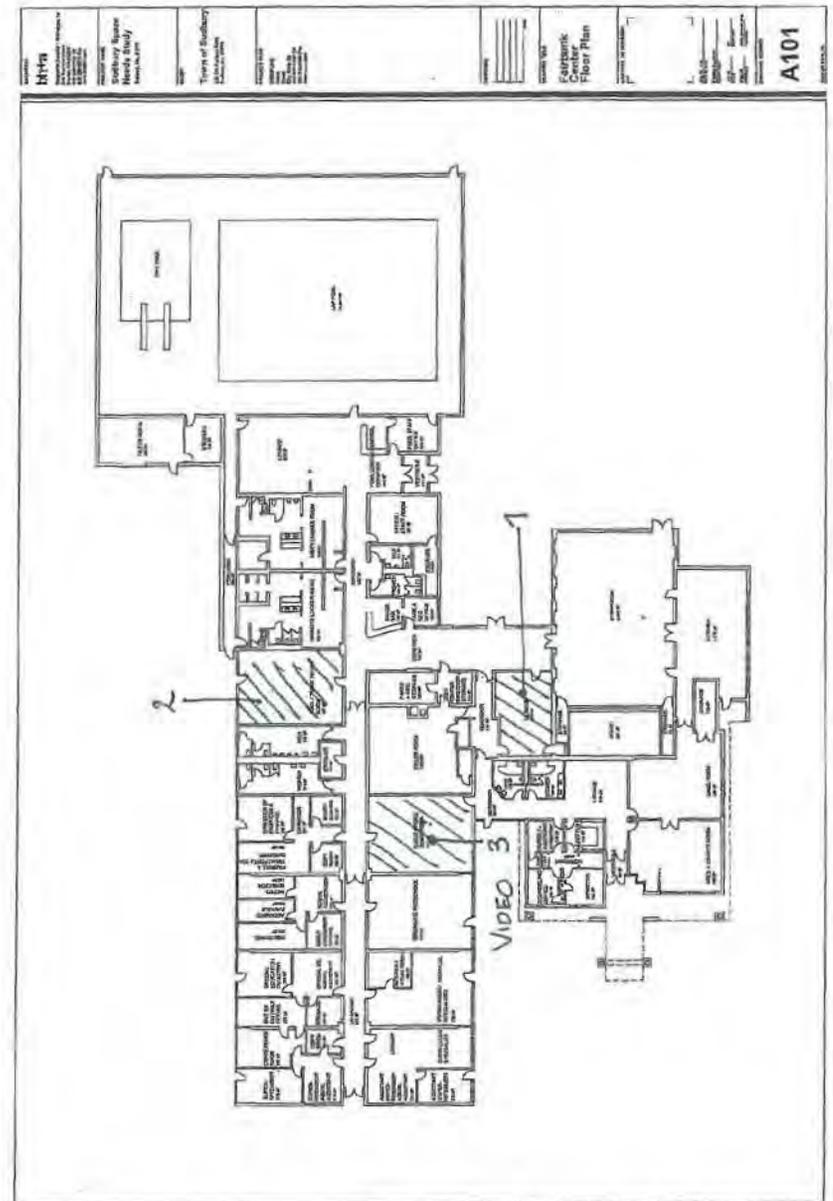
### L. OTHER THOUGHTS

Are there any items that were not mentioned in this questionnaire that you feel should be taken into consideration in the discussion of your current facility?

### K. STAKEHOLDERS

In addition to your own staff, can you identify other stakeholders and program operators that the Design Team should speak with?

**THANK YOU!** We greatly appreciate your cooperation and assistance.



# RECREATION DEPARTMENT QUESTIONNAIRE

## Director's Response

October 15

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE

Amber



**Sudbury**  
Massachusetts

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts

SPACE PLANNING QUESTIONNAIRE FOR THE PARK & RECREATION  
DEPARTMENT

This space planning (or "programming") questionnaire is designed to help our design team learn about how you work, what you do, how you do it, and whether your space could be redesigned to help you work better. The questionnaire is a critical component of good facilities planning and it initiates an interactive process that would benefit greatly from your careful thought and participation. Thank you in advance for your time and effort.

The questionnaire is broken into ten categories: Department Overview, Multi-Purpose Spaces, Dedicated Use Spaces, Fitness, Media, Meeting & Counseling & Support, Staff Offices, Storage, Site Considerations, Space Impressions, and Other Thoughts.

Your Name and Title: Nancy M. Shea Park & Recreation Director

Telephone numbers: 978 639-3259 office 978 870-2792 cell

Email address: mshea@SudburyMa.us

**A. DEPARTMENT OVERVIEW**

How many full-time employees (FTE's) currently work within your department?

How many part-time employees (PTE's) currently work within your department?

How does this change seasonally?

What are your hours of operation?

Do you anticipate any changes in staff size and type (FTE vs. PTE) in the near future?

Do you anticipate any changes in your hours of operation in the near future?

How many programs are provided by outside vendors?

What is the typical contractual arrangement with outside vendors?

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# RECREATION DEPARTMENT QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



### B. PROGRAM SPACES: MULTI-PURPOSE PROGRAM SPACES

Multi-purpose spaces are critical to the mission of most Recreation Departments since, if planned properly, they allow for a wide variety of program offerings to take place within a single space on a given day. These questions relate as much to the multi-purpose spaces in the Community Center and schools as to the programs offered within them, and how you would like this to change (if at all).

Currently, in how many spaces in the Community Center do you offer programming?

3 classrooms, gym, lobby, pool

Do the size and quality of these spaces meet the needs of the programs held in them?

Somewhat - could use an exercise or fitness room for pilates, yoga, etc.

How often is each program space within the Community Center used by your Department currently?

Daily

How many people participate in these programs, taking into consideration which programs have a higher attendance than others?

How does this change seasonally?

Summer season has each run booked to capacity every day.

How often is each program space within the Community Center used by outside groups?

User groups and scouts use multi purpose rooms monthly for meetings.

Which spaces, how often, and by how many people on average for each space?

For all uses, how does the amount of storage space available to these rooms meet the needs of the programs offered within them?

not enough - large middle closet but little to no classroom storage in rooms 30-3

What multi-purpose program spaces in other facilities do you currently use, such as with the after-school program?

tennis on langfellow, art classes @ an space, ice skating @ valley sports, gym @ key area

Relating to the question above, where are these spaces and how often do you use them?

we use these spaces all year round. They are within 15 min drive

How does this change seasonally?

We use gym space at most schools all summer long.

Is the reason that these programs are offered outside of your facility due to the inability of your facility to accommodate them, either because of a lack of space or because the requirements of the activities are not met by the space?

we don't have a full size gym. Other programs are quite specialized.

Relating to these programs, how many people participate in these programs, taking into consideration which programs have a higher attendance than others?

Summer camps have 20-40 a week.

Are there programs you would like to offer at your facility or elsewhere that you cannot currently?

Yes

If so, what are they, and is it possible to estimate how often you would have these programs and estimated attendance levels?

A full size gym w/ divider would double our space

Given the normal pattern of use in your facility, ideally what number and size of multi-purpose program spaces would you have at your disposal?

need an art/music space, conference room, multi use space

full size gym, dedicated yoga/dance/group x space, fitness/weight room

How often are special programs that see a noticeably higher attendance offered in your facility or elsewhere?

Special Events - monthly team center, summer camps, swim meets

What are these programs and how often do they occur?

How well do your current facility or the pertinent facilities meet the needs of these special programs?

we are limited by space and size we need better

gym and workout spaces as well as conference or "club"

spaces for meetings or classes.

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



### C. PROGRAM SPACES: DEDICATED USE

Some programs can be held within multi-purpose spaces provided they do not have special requirements that prohibit efficient use for other purposes. These activities were addressed in the question above. Other programs do have special requirements that lead to a space being dedicated to a specific purpose (such as with a pottery studio or a gymnastics space). These questions relate to programs that require a dedicated-purpose space.

How many of such spaces are there within your current facility, if any, and of what purpose do they serve?

3 multi purpose rooms, 0 dedicated.

For each dedicated-purpose space mentioned above, how often is it used and what is the average attendance when in use?

How does the amount of storage space available to these rooms meet the needs of the programs offered within them?

rooms 30-3 do not have storage room (has enough)

Do you offer any programs at other facilities that have a dedicated-purpose space, such as a swimming pool?

Art programs at an art studio, tennis at a tennis facility.

If so, what are those programs, and how often do they occur?

All year round, including for camp.

Relating to the question above, what is the attendance for these programs?

500 art students a week, 80 tennis students.

Is there a reason why these programs are not offered at your facility?

### D. PROGRAM SPACES: FITNESS

As with arts and crafts programs, fitness programs can be held within multi-purpose spaces provided they do not have special requirements that prohibit efficient use for other purposes. Other fitness programs do have special requirements that lead to a space being dedicated to a specific purpose (such as with a treadmill or pilates studio). These questions relate to programs in both categories. While the questions below relate to the two categories above, people often omit spaces like weight rooms when answering the questions above.

Does your current facility contain a weight room or cardiovascular area that is always used for this purpose?

No

If so, what equipment is contained within these spaces, and how often is use of these spaces permitted and desired?

How does the amount of storage space available to these rooms meet the needs of the programs offered within them?

In your current facility, are there changing or shower areas located within your facility that relate to these areas?

Of fitness programs offered at your facility, is it necessary or desired to provide a changing or shower area for any of them?

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



**E. PROGRAM SPACES: MEDIA**

Is there any technology that is used by visitors to the senior center, for example, computers and televisions?  
 If so, what are these items and where are they located?  
 How often is this technology used, and for how long?  
 Do you offer any educational programming that either uses or relates to any of this technology?  
 How often are special media programs, such as movies, offered at your facility?  
 Where are these programs, and what has the level of attendance been?  
 How has your current facility met the needs of these offerings?  
 For all of the categories above, how does the amount of storage space available to these technological resources meet your needs?  
 Do you currently offer any technology programs or use technology in other facilities?  
 If so, what are these programs and facilities, and how often are they offered?  
 Relating to the question above, what is the attendance for these programs?  
 Would it be preferable to hold these programs within your facility?  
 Would offer computer classes to children or adults if we had equipment.  
 Digital photography would be a popular addition.

**F. PROGRAM SPACES: MEETING, COUNSELING & SUPPORT**

What type of meeting, counseling, and support programs and/or spaces are currently offered at your facility?  
 What are these services, and where in your facility are they currently offered?  
 How many people typically participate in these meetings/appointments?  
 If people have to queue for these services, where does that occur?  
 For each type of counseling or support service offered, how often are these services offered, and what has the attendance been?  
 Are the quality and quantity of space within your facility adequate for these offerings, including meetings held within space in your facility?  
 If not, how could these spaces be improved?  
 Are there services of this nature or additional meetings that you would like to offer in your current facility but cannot because of limitations of the facility?  
 If so, what services would be offered in addition to what is currently offered?  
 Relating to the question above, what is the estimated number of people that would take place in these meetings/sessions?

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



And for each type of service that would be offered in an expanded/altered setting, how often would the service be offered (as an estimate)?  
 Likewise for additional meeting space offered in an expanded/altered setting, how often would this meeting space be used (as an estimate)?  
 Does your department currently offer or take advantage of counseling or screening services offered outside of your facility?  
 If so, what types of services and how often?  
 How often are these outside resources used by people who would otherwise access them at your facility if they were offered there?  
 Would it be preferable to offer these services within your facility?  
 If so, what types of services and how often would they be offered?  
 Likewise for meetings held by groups associated or affiliated with the Recreation Department, how often do these groups hold meetings outside of your the Community Center?  
 Would it be preferable for these groups to meet at the Community Center?  
 If so, how large would these meetings be, and how often would they occur?

**G. STAFF OFFICES**

Does your department have a central administrative area?  
 Of the staff members mentioned in Part A, including anticipated staff size changes, how many of these employees have work space within this area?  
 Of all staff members mentioned above, how many would work within open space workstations, and how many would work in private offices, ideally?  
 Where are staff meetings currently held (this does not include the meeting, counseling, and support services mentioned above)? Please include meetings held within the private offices, the open workspace, and elsewhere in the building (such as in a shared conference room).  
 Open Work  
 How many people typically participate in each of these meetings?  
 5  
 Ideally where would these meetings occur (if the current location is not ideal)?  
 Is the quality of space provided for meetings adequate (e.g. privacy, noise control, etc.)?  
 If some or all of these meetings are not currently within the administrative area, is it due to lack of meeting space?  
 Thinking about staff meetings, what would be the ideal amount of meeting space in your facility, and how often would it be used by your staff?  
 And by how many people?

# RECREATION DEPARTMENT QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE

Where are office supplies currently stored?  
How much space would be ideal for this purpose?  
Is there a staff coat closet?

**H. STORAGE**  
Thinking of program-specific storage, are there any programs that have not already been mentioned that require special storage areas?  
If so, where would this storage ideally be located?  
And what programs or activities would this storage be for, and how much storage space is required for them?  
Thinking of general storage, how much is needed by your facility?  
Ideally what would be kept in general storage?  
And ideally where would central storage be located?  
How has your current facility been meeting your storage needs, both in terms of quality and quantity?  
Ideally would any of the programs offered outside of the Community Center have the use of storage space within the Community Center (soccer uniforms for outdoor soccer leagues, for example)?  
If so, how much storage space would be required for these groups, and where in the building would it be located?  
Does the current Community Center provide this opportunity?

**I. SITE CONSIDERATIONS**  
Does your current facility provide the opportunity for outside programming or amenities at your location (such as basketball courts, for example)?  
If so, what activities take place outdoors at your facility and how often?  
How many people participate in these activities?  
Are there any tools or outside program offerings that require storage either on the grounds of your facility or within the building itself (such as snow removal equipment, sports equipment, or lawn furniture that is protected during the winter months)?  
How does your current facility relate to its site, both in the macro context of its placement within town and in the immediate context of your site, such as the proximity to the parking area and access drives, supervision requirements for outside programming, and the amount of space available for outside programming?  
How do you wish it related to the site differently, if at all?

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE

**J. SPACE IMPRESSIONS**  
What adjectives describe the Community Center?  
If applicable, what adjectives should describe your future spaces?

**K. OTHER THOUGHTS**  
Are there any items that were not mentioned in this questionnaire that you feel should be taken into consideration in the discussion of your current facility?

**L. STAKEHOLDERS**  
In addition to your own staff, can you identify other stakeholders and program operators that the Design Team should speak with?

**THANK YOU!** We greatly appreciate your cooperation and assistance.

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE

Jessica  
10/15



Sudbury  
Massachusetts

Teen Center



Sudbury Adventure

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts

SPACE PLANNING QUESTIONNAIRE FOR THE PARK & RECREATION DEPARTMENT

This space planning (or "programming") questionnaire is designed to help our design team learn about how you work; what you do, how you do it, and whether your space could be redesigned to help you work better. The questionnaire is a critical component of good facilities planning and it initiates an interactive process that would benefit greatly from your careful thought and participation. Thank you in advance for your time and effort.

The questionnaire is broken into ten categories: Department Overview, Multi-Purpose Spaces, Dedicated Use Spaces, Fitness, Media, Meeting & Counseling & Support, Staff Offices, Storage, Site Considerations, Space Impressions, and Other Thoughts.

Your Name and Title: Nancy McShea Park & Recreation Director  
Telephone numbers: 978 639-3259 office 978 870-2792 cell  
Email address: mshean@Sudbury.ma.us

A. DEPARTMENT OVERVIEW

- How many full-time employees (FTE's) currently work within your department?  2 1/2 *timekeeper*
- How many part-time employees (PTE's) currently work within your department? 12 + 1 + 1 *SE*
- How does this change seasonally? Summer Camp
- What are your hours of operation? 8:30-11 pm after hours
- Do you anticipate any changes in staff size and type (FTE vs. PTE) in the near future? No
- Do you anticipate any changes in your hours of operation in the near future? X
- How many programs are provided by outside vendors? None
- What is the typical contractual arrangement with outside vendors?

# RECREATION DEPARTMENT / TEEN CENTER QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



### B. PROGRAM SPACES: MULTI-PURPOSE PROGRAM SPACES

Multi-purpose spaces are critical to the mission of most Recreation Departments since, if planned properly, they allow for a wide variety of program offerings to take place within a single space on a given day. These questions relate as much to the multi-purpose spaces in the Community Center and schools as to the programs offered within them, and how you would like this to change (if at all).

Currently, in how many spaces in the Community Center do you offer programming? *4 rooms including gym*

Do the size and quality of these spaces meet the needs of the programs held in them? *Depends on program*

How often is each program space within the Community Center used by your Department currently? *See print out*

How many people participate in these programs, taking into consideration which programs have a higher attendance than others? *≤ 151 program*

How does this change seasonally? *Summer increases to 70*

How often is each program space within the Community Center used by outside groups? *At night - 1/ month*

Which spaces, how often, and by how many people on average for each space?

For all users, how does the amount of storage space available to these rooms meet the needs of the programs offered within them? *Not enough*

What multi-purpose program spaces in other facilities do you currently use, such as with the after-school program? *Agassiz*

Relating to the question above, where are these spaces and how often do you use them? *X*

How does this change seasonally? *X*

Is the reason that these programs are offered outside of your facility due to the inability of your facility to accommodate them, either because of a lack of space or because the requirements of the activities are not met by the space? *N/A*

Relating to these programs, how many people participate in these programs, taking into consideration which programs have a higher attendance than others? *N/A*

Are there programs you would like to offer at your facility or elsewhere that you cannot currently? *Yes*

If so, what are they, and is it possible to estimate how often you would have those programs and estimated attendance levels? *After school program for middle school 20-30/day*

Given the normal pattern of use in your facility, ideally what number and size of multi-purpose program spaces would you have at your disposal? *Larger gym, Fitness Center, Play space for kids*

How often are special programs that see a noticeably higher attendance offered in your facility or elsewhere? *Summer weeks, Teen Center*

What are these programs and how often do they occur? *All meeting program*

How well do your current facility or the pertinent facilities meet the needs of these special programs? *6 in summer 15 a year*

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



### C. PROGRAM SPACES: DEDICATED USE

Some programs can be held within multi-purpose spaces provided they do not have special requirements that prohibit efficient use for other purposes. These activities were addressed in the question above. Other programs do have special requirements that lead to a space being dedicated to a specific purpose (such as with a pottery studio or a gymnastics space). These questions relate to programs that require a dedicated-purpose space.

How many of such spaces are there within your current facility, if any, and of what purpose do they serve?

*Not a room* For each dedicated purpose space mentioned above, how often is it used and what is the average attendance when in use? *Physical Room Every day, including*

How does the amount of storage space available to these rooms meet the needs of the programs offered within them? *Not enough*

Do you offer any programs at other facilities that have a dedicated-purpose space, such as a swimming pool?

If so, what are these programs, and how often do they occur?

Relating to the question above, what is the attendance for these programs?

Is there a reason why these programs are not offered at your facility?

### D. PROGRAM SPACES: FITNESS

As with arts and crafts programs, fitness programs can be held within multi-purpose spaces provided they do not have special requirements that prohibit efficient use for other purposes. Other fitness programs do have special requirements that lead to a space being dedicated to a specific purpose (such as with a treadmill or pilates studio). These questions relate to programs in both categories. While the questions below relate to the two categories above, people often omit spaces like weight rooms when answering the questions above.

Does your current facility contain a weight room or cardiovascular area that is always used for this purpose?

If so, what equipment is contained within these spaces, and how often is use of these spaces permitted and desired? *No Good*

How does the amount of storage space available to these rooms meet the needs of the programs offered within them? *No*

In your current facility, are there changing or shower areas located within your facility that relate to these areas? *Yes*

Of fitness programs offered at your facility, is it necessary or desired to provide a changing or shower area for any of them?

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



**E PROGRAM SPACES: MEDIA**

Is there any technology that is used by visitors to the senior center, for example, computers and televisions?  
*TVs to show information*

If so, what are these items and where are they located?

How often is this technology used, and for how long?

Do you offer any educational programming that either uses or relates to any of this technology?  
*No*

How often are special media programs, such as movies, offered at your facility?  
*1-2 times a week*

Where are these programs, and what has the level of attendance been?  
*25 kids @ Teen Center*

How has your current facility met the needs of those offerings?  
*Yes*

For all of the categories above, how does the amount of storage space available to these technological resources meet your needs?

Do you currently offer any technology programs or use technology in other facilities?  
*No*

If so, what are these programs and facilities, and how often are they offered?

Relating to the question above, what is the attendance for these programs?

Would it be preferable to hold these programs within your facility?

**F PROGRAM SPACES: MEETING, COUNSELING & SUPPORT**

What type of meeting, counseling, and support programs and/or spaces are currently offered at your facility?  
*Meeting room*

What are these services, and where in your facility are they currently offered?

How many people typically participate in these meetings/appointments?

If people have to queue for these services, where does that occur?

For each type of counseling or support service offered, how often are these services offered, and what has the attendance been?

Are the quality and quantity of space within your facility adequate for these offerings, including meetings held within space in your facility?

If not, how could these spaces be improved?

Are there services of this nature or additional meetings that you would like to offer in your current facility but cannot because of limitations of the facility?

If so, what services would be offered in addition to what is currently offered?

Relating to the question above, what is the estimated number of people that would take place in these meetings/sessions?

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



And for each type of service that would be offered in an expanded/altered setting, how often would the service be offered (as an estimate)?

Likewise for additional meeting space offered in an expanded/altered setting, how often would this meeting space be used (as an estimate)?

Does your department currently offer or take advantage of counseling or screening services offered outside of your facility?

If so, what types of services and how often?

How often are these outside resources used by people who would otherwise access them at your facility if they were offered there?

Would it be preferable to offer these services within your facility?

If so, what types of services and how often would they be offered?

Likewise for meetings held by groups associated or affiliated with the Recreation Department, how often do these groups hold meetings outside of your Community Center?

Would it be preferable for these groups to meet at the Community Center?

If so, how large would these meetings be, and how often would they occur?

**G. STAFF OFFICES**

Does your department have a central administrative area?  
*No*

Of the staff members mentioned in Part A, including anticipated staff size changes, how many of these employees have work space within this area?  
*25 staff*

Of all staff members mentioned above, how many would work within open space workstations, and how many would work in private offices, ideally?

Where are staff meetings currently held (this does not include the meeting, counseling, and support services mentioned above)? Please include meetings held within the private offices, the open workspaces, and elsewhere in the building (such as in a shared conference room).

How many people typically participate in each of these meetings?

Ideally where would these meetings occur (if the current location is not ideal)?  
*Meeting room*

Is the quality of space provided for meetings adequate (e.g. privacy, noise control, etc.)?

If some or all of these meetings are not currently within the administrative area, is it due to lack of meeting space?  
*No*

Thinking about staff meetings, what would be the ideal amount of meeting space in your facility, and how often would it be used by your staff?

And by how many people?

# RECREATION DEPARTMENT / TEEN CENTER QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



Where are office supplies currently stored?  
How much space would be ideal for this purpose?  
Is there a staff coat closet?  
No

**H. STORAGE**

Thinking of program-specific storage, are there any programs that have not already been mentioned that require special storage areas?  
If so, where would this storage ideally be located?  
And what programs or activities would this storage be for, and how much storage space is required for them?  
Thinking of general storage, how much is needed by your facility?  
Ideally what would be kept in general storage?  
And ideally where would central storage be located?  
How has your current facility been meeting your storage needs, both in terms of quality and quantity?  
Ideally would any of the programs offered outside of the Community Center have the use of storage space within the Community Center (soccer uniforms for outdoor soccer leagues, for example)?  
If so, how much storage space would be required for these groups, and where in the building would it be located?  
Does the current Community Center provide this opportunity?

**I. SITE CONSIDERATIONS**

Does your current facility provide the opportunity for outside programming or amenities at your location (such as basketball courts, for example)? *Yes*  
If so, what activities take place outdoors at your facility and how often?  
How many people participate in these activities?  
*Placemat & volleyball*  
*During nice days about 20*  
Are there any tools or outside program offerings that require storage either on the grounds of your facility or within the building itself (such as snow removal equipment, sports equipment, or lawn furniture that is protected during the winter months)? *Yes*  
How does your current facility relate to its site, both in the macro context of its placement within town and in the immediate context of your site, such as the proximity to the parking area and access drives, supervision requirements for outside programming, and the amount of space available for outside programming?  
How do you wish it related to the site differently, if at all?  
*Closer to schools*

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



**J. SPACE IMPRESSIONS**

What adjectives describe the Community Center?  
If applicable, what adjectives should describe your future space?  
*adequate, older, must work*  
*Inviting, Community Resource, The Place to go*

**K. OTHER THOUGHTS**

Are there any items that were not mentioned in this questionnaire that you feel should be taken into consideration in the discussion of your current facility?  
*Like to tour other facilities to see what works and what doesn't*

**L. STAKEHOLDERS**

In addition to your own staff, can you identify other stakeholders and program operators that the Design Team should speak with?  
No

**THANK YOU!** We greatly appreciate your cooperation and assistance.

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts

SPACE PLANNING QUESTIONNAIRE FOR THE PARK & RECREATION  
DEPARTMENT

This space planning (or "programming") questionnaire is designed to help our design team learn about how you work, what you do, how you do it, and whether your space could be redesigned to help you work better. The questionnaire is a critical component of good facilities planning and it initiates an interactive process that would benefit greatly from your careful thought and participation. Thank you in advance for your time and effort.

The questionnaire is broken into ten categories: Department Overview, Multi-Purpose Spaces, Dedicated Use Spaces, Fitness, Media, Meeting & Counseling & Support, Staff Offices, Storage, Site Considerations, Space Impressions, and Other Thoughts.

Your Name and Title: \_\_\_\_\_  
Telephone numbers: \_\_\_\_\_  
Email address: \_\_\_\_\_

A. DEPARTMENT OVERVIEW

How many full-time employees (FTE's) currently work within your department? 4 Pool  
5 Recreation

How many part-time employees (PTE's) currently work within your department?

123 (20 SD are pool)

How does this change seasonally?

YES

What are your hours of operation? Recreation M-F 8:30-4 Pool M-Th 5:30am-9pm F 5:30-7pm

Do you anticipate any changes in staff size and type (FTE vs. PTE) in the near future?

NO

Do you anticipate any changes in your hours of operation in the near future?

NO

How many programs are provided by outside vendors?

What is the typical contractual arrangement with outside vendors?  
Pool- Payment of rent for use of space.  
Recreation- same rent space some % of revenue.

PT1157 Fairbanks Community Center/Doc/Program/Space Planning Questionnaire- Recreation Department.doc

# ATKINSON POOL QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE

*Time*



### Fairbanks Community Center Complex Masterplan Sudbury, Massachusetts

#### SPACE PLANNING QUESTIONNAIRE FOR THE ATKINSON POOL

This space planning (or "programming") questionnaire is designed to help our design team learn about how you work, what you do, how you do it, and whether your space could be redesigned to help you work better. The questionnaire is a critical component of good facilities planning and it initiates an interactive process that would benefit greatly from your careful thought and participation. Thank you in advance for your time and effort.

Your Name and Title: Tim Goulding - Aquatics Facility Director Chery Finley Aquatics Supervisor  
Telephone numbers: 978-443-1092 John Barrett  
Email address: gouldingt@sudbury.ma.us

#### A. DEPARTMENT OVERVIEW

How many full-time employees (FTE's) currently work at the Atkinson Pool? 4  
How many part-time employees (PTE's) currently work at the Atkinson Pool? 30-50  
How does this change seasonally? YES  
What are your hours of operation? M-Th 5:30am-9pm, F 5:30-7pm, SA 7am-6pm, Sun 7-4pm.  
Do you anticipate any changes in staff size and type (FTE vs. PTE) in the near future? no  
Do you anticipate any changes in your hours of operation in the near future? no  
How many programs are provided by outside vendors? 10-20  
What is the typical contractual arrangement with outside vendors?  
payment of rent for use of space.

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE

*Time*

#### B. PROGRAM SPACES:

Currently, in how many spaces in the Community Center do Atkinson Pool Activities take place (beyond the pool)?  
2013 - gym for swim meets, classrooms for PE/ART, lifeguard training, baby sitters training  
Do the size and quality of these spaces meet the needs of the programs/activities held in them?  
not always  
How often is each program space within the Community Center used for Atkinson Pool Activities?  
sometimes weekly, sometimes monthly  
How many people participate in these programs, taking into consideration which programs have a higher attendance than others? classes 5-20, swim meets 200-400  
How does this change seasonally? yes  
How often is each pool used by outside groups? daily  
For all users, how does the amount of storage space available to these rooms meet the needs of the programs offered within them? we don't allow outside vendors to store due to space limitations  
Are there programs you would like to offer at your facility or elsewhere that you cannot currently?  
If so, what are they, and is it possible to estimate how often you would have these programs and estimated attendance levels?

#### C. STAFF OFFICES

Does your Atkinson Pool have a central administrative area?  
Of the staff members mentioned in Part A, including anticipated staff size changes, how many of these employees have work space within this area? 3  
Of all staff members mentioned above, how many would work within open space workstations, and how many would work in private offices, ideally? private space would be ideal, we all share 1 small office now.  
Where are staff meetings currently held (this does not include the meeting, counseling, and support services mentioned above)? Please include meetings held within the private offices, the open workspace, and elsewhere in the building (such as in a shared conference room). Pool Lobby

#### D. STORAGE - None

Thinking of program specific storage, are there any programs that have not already been mentioned that require special storage areas?  
If so, where would this storage ideally be located?  
And what programs or activities would this storage be for, and how much storage space is required for them?  
Thinking of general storage, how much is needed by your facility?  
Ideally what would be kept in general storage?  
And ideally where would central storage be located?

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



How has your current facility been meeting your storage needs, both in terms of quality and quantity?

Ideally would any of the programs offered outside of the Community Center have the use of storage space within the Community Center (soccer uniforms for outdoor soccer leagues, for example)?

If so, how much storage space would be required for these groups, and where in the building would it be located?

Does the current Community Center provide this opportunity?

**E. LOCKER CHANGING FACILITIES**

Do the current locker/changing facilities meet the needs of the programs being offered? *-N/C*

If not, what can be improved?

Do the current locker/changing facilities meet the needs of swim teams using the facility?

Does Atkinson Staff use the same facilities as the general public?

What is the policy for opposite sex children in locker and changing areas?

What additional amenities/features are desired?

**F. AQUATIC FACILITIES**

Do you see a demand or desire to have expanded aquatic offerings at the Atkinson Pool?

If so, what are your impressions?

**G. POOL IMPRESSIONS**

What adjectives describe the Atkinson Pool?

If applicable, what adjectives should describe your future facility?

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



**H. POOL OPERATIONS**

Who is the certified pool operator(s)? *Tim, John, Cheryl*

How is daily maintenance handled? *by Tim Boulding -> Complete Industrial cleaning & daily cleanings*

Who performs daily testing and reporting? *Lifeguards, supervisors, + director*

What water temperature is maintained in the pools? *Lap pool 82.5° Dive well 85°*

How frequently are the filters being backwashed? *Typically 6 weekly - more often as needed*

How many gallons of chlorine being purchased and used? *Dive well ~ 300 gal/yr Lap pool - acetals - 24-30 weeks/yr*

How much acid/CO2 being used? *6-CO2 biweekly*

What other chemicals are being purchased and used on regular basis? *muratic acid, clearblue, testing chems.*

Who provides outside service for the pool?

*Guerina's - South Shore quite*

If a trouble single is tripped within the pool equipment room; what notifications are provided?

*Impact controller sends email + text on no flow signal*

**I. OTHER THOUGHTS**

Are there any items that were not mentioned in this questionnaire that you feel should be taken into consideration in the discussion of your current facility?

# ATKINSON POOL QUESTIONNAIRE

## Director's Response

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



### J. LSRHS SWIM TEAM

When is the facility used by the swim team, tryouts through final meets?

How is the pool used when LS is practicing or hosting a meet?

What equipment at the pool is utilized only by LS?

Does LS have dedicated space or storage areas?

During us be LS, how many Atkinson staff members are present?

How is a typical meet set-up (physical arrangements)?

How is typical meet operated or controlled?

Related to the question above, is this by LS or Atkinson staff?

Are typical meets two or multiple team events?

What are accommodations for spectators?

What elements would improve the pools for competitive swim meets and practices?

### K. SUDBURY SWIM TEAM

When is the facility used by the swim team, tryouts through final meets?

How is the pool used when Sudbury Swim Team is practicing or hosting a meet?

What equipment at the pool is utilized only by Sudbury Swim Team?

Does Sudbury Swim Team have dedicated space or storage areas?

During us be Sudbury Swim Team, how many Atkinson staff members are present?

How is a typical meet set-up (physical arrangements)?

How is typical meet operated or controlled?

Related to the question above, is this by Sudbury Swim Team or Atkinson staff?

Are typical meets two or multiple team events?

What are accommodations for spectators?

What elements would improve the pools for competitive swim meets and practices?

P:\3167 Fairbanks Community Center\doc\program\SpacePlanningQuestionnaire- Atkinson Pool.doc

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Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



### L. STAKEHOLDERS

In addition to your own staff, can you identify other stakeholders and program operators that the Design Team should speak with?

**THANK YOU!** We greatly appreciate your cooperation and assistance.

P:\3167 Fairbanks Community Center\doc\program\SpacePlanningQuestionnaire- Atkinson Pool.doc

6 of 6

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts

SPACE PLANNING QUESTIONNAIRE FOR THE ATKINSON POOL

This space planning (or "programming") questionnaire is designed to help our design team learn about how you work, what you do, how you do it, and whether your space could be redesigned to help you work better. The questionnaire is a critical component of good facilities planning and it initiates an interactive process that would benefit greatly from your careful thought and participation. Thank you in advance for your time and effort.

Your Name and Title: \_\_\_\_\_  
Telephone numbers: \_\_\_\_\_  
Email address: \_\_\_\_\_

A. DEPARTMENT OVERVIEW

How many full-time employees (FTE's) currently work at the Atkinson Pool? 4  
How many part-time employees (PTE's) currently work at the Atkinson Pool? 30  
How does this change seasonally? -  
What are your hours of operation? M-Tu 5:30-7:00 F 5:30-7:00 Sat 10:00-12:00  
Do you anticipate any changes in staff size and type (FTE vs. PTE) in the near future?  
Do you anticipate any changes in your hours of operation in the near future? Y  
How many programs are provided by outside vendors? 7  
What is the typical contractual arrangement with outside vendors?

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



*Better Viewing & Access to Markets*  
*Work on...*

B. PROGRAM SPACES:

Currently, in how many spaces in the Community Center do Atkinson Pool Activities take place (beyond the pool)?  
Do the size and quality of these spaces meet the needs of the programs/activities held in them? Not always  
How often is each program space within the Community Center used for Atkinson Pool Activities?  
How many people participate in these programs, taking into consideration which programs have a higher attendance than others? 10-15  
How does this change seasonally? - Drop  
How often is each pool used by outside groups? - Season - 3 times a week  
For all users, how does the amount of storage space available to these rooms meet the needs of the programs offered within them?  
Are there programs you would like to offer at your facility or elsewhere that you cannot currently?

*Need Storage*

If so, what are they, and is it possible to estimate how often you would have these programs and estimated attendance levels? Yoga 2-3 times per week, Enter...

C. STAFF OFFICES

Does your Atkinson Pool have a central administrative area? Yes  
Of the staff members mentioned in Part A, including anticipated staff size changes, how many of these employees have work space within this area? 3 out of 4  
Of all staff members mentioned above, how many would work within open space workstations, and how many would work in private offices, ideally?  
Where are staff meetings currently held (this does not include the meeting, counseling, and support services mentioned above)? Please include meetings held within the private offices, the open workspace, and elsewhere in the building (such as in a shared conference room).

D. STORAGE - Never Enough

Thinking of program-specific storage, are there any programs that have not already been mentioned that require special storage areas?  
If so, where would this storage ideally be located?  
And what programs or activities would this storage be for, and how much storage space is required for them?  
Thinking of general storage, how much is needed by your facility?  
Ideally what would be kept in general storage?  
And ideally where would central storage be located?

**ATKINSON POOL STAFFING QUESTIONNAIRE**

Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



How has your current facility been meeting your storage needs, both in terms of quality and quantity?

NOT  
Enough

Ideally would any of the programs offered outside of the Community Center have the use of storage space within the Community Center (soccer uniforms for outdoor soccer leagues, for example)? - *A.R.C. Storage*

*Lesson Storage Team Storage*  
If so, how much storage space would be required for these groups, and where in the building would it be located?  
*Timing System Storage*

Does the current Community Center provide this opportunity? *Not really*

**E. LOCKER CHANGING FACILITIES**

Do the current locker/changing facilities meet the needs of the programs being offered?

If not, what can be improved? *New lockers New Showers*

*NO* Do the current locker/changing facilities meet the needs of swim teams using the facility?

Does Atkinson Staff use the same facilities as the general public? *Yes*

What is the policy for opposite sex children in locker and changing areas? *Need staff only*

What additional amenities/features are desired? *Coaches Room*

**F. AQUATIC FACILITIES**

Do you see a demand or desire to have expanded aquatic offerings at the Atkinson Pool?

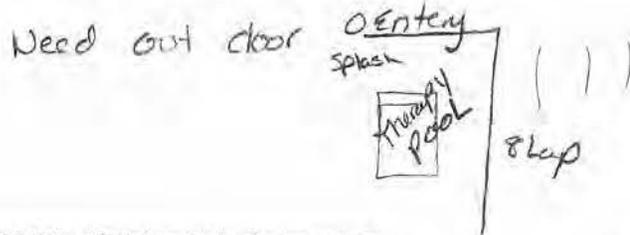
If so, what are your impressions?

**G. POOL IMPRESSIONS**

What adjectives describe the Atkinson Pool?

If applicable, what adjectives should describe your future facility?

*Nice - Sunny - Great windows  
- dated Locker Rooms Need  
Lots of Work*



Fairbanks Community Center Complex Masterplan  
Sudbury, Massachusetts  
SPACE PLANNING QUESTIONNAIRE



**H. POOL OPERATIONS**

Who is the certified pool operator(s)?

How is daily maintenance handled?

Who performs daily testing and reporting?

What water temperature is maintained in the pools?

How frequently are the filters being backwashed?

How many gallons of chlorine being purchased and used?

How much acid/CO2 being used?

What other chemicals are being purchased and used on regular basis?

Who provides outside service for the pool?

If a trouble single is tripped within the pool equipment room, what notifications are provided?

**I. OTHER THOUGHTS**

Are there any items that were not mentioned in this questionnaire that you feel should be taken into consideration in the discussion of your current facility?



BARGMANN HENDRIE + ARCHETYPE, INC.

Architecture | Planning | Interior Design

300 A Street  
Boston, MA 02210-1710

617 350 0450 tel  
617 350 0215 fax

bha@bhplus.com  
www.bhplus.com

**MEMO**

Subject: Overlapping Needs

Job Name and Number: Fairbank Community Center Masterplan

cc: BH+A

Nancy McShea, Park and Rec Director, and I talked about the overlapping needs of the Senior Center and Park and Rec for the future Community Center.

- Additional fitness rooms appropriate for yoga, pilates, better balance/better bones, Zumba, tap dance, etc. Rooms would have appropriate flooring, equipment storage space related to these types of classes, stereo equipment (and would be warmer than the drafty gym).
- Medical/Wellness Room for nurse (Senior Center Board of Health Nurse and Park and Rec Summer Camp Nurse), first aid, blood pressure, consults with nurse, etc. Would have a sink, bathroom, storage space, appropriate seating.
- Consultation rooms, that double as temporary office spaces, also. This is for the many Senior Center programs we offer that require private consult space: health insurance counseling (SHINE), tax return help, legal consults, information specialist consultations, along with Volunteer interviews, and Senior Community Work program interviews. In addition, there are many part-time staff (at Senior Center (and Park and Rec?)) who need office space but only for 10-15 hours/week and need access to a computer, phone and desk. Park and Rec needs this type of space for interviewing applicants for Summer Camp jobs, interviewing vendors, small meetings.
- Fitness center with machines, fitness equipment (balls, bands, etc.) – more of a priority for Park and Rec, but I believe would be used by the younger baby boomer cohort as they move into the 60+ category, and possibly our more fit seniors. Perhaps could be useful for fitness instructors – teaching a class about using the machines. This space could be less intimidating than other fitness centers, we might be able to designate hours for seniors. Park and Rec considers this a high need.





BARGMANN HENDRIE + ARCHETYPE, INC.  
Architecture Planning Interior Design

300 A Street  
Boston, MA 02210-1710  
617 350 0450 tel  
617 350 0215 fax  
bha@bhplus.com  
www.bhplus.com

April 8, 2014

Michael E. Melnick, Co-Chairman  
Town of Sudbury Permanent Building Committee  
278 Old Sudbury Road  
Sudbury, MA 01776

re: Fairbank Community Center Complex-Master Plan  
Condition of EPDM Roofing

Dear Mike,

BH+A's review of the Fairbank Community Center includes an assessment of the existing building conditions, review of previous studies and reports, and a building code analysis of the existing building and identification of code requirements for potential alterations, renovations and additions to the complex.

It has become clear from numerous site visits, interviews and meetings, that the current complex would require significant modifications and upgrades to meet the stated needs and desired program identified by staff, stakeholders and the public. An alteration, renovation or addition of this magnitude would trigger code upgrades including:

- Installation of an automatic sprinklers system throughout the complex; a limited system is located in the Atkinson pool wing.
- Upgrade HVAC systems to provide required temperature control, ventilation, and energy provisions mandated by the building code.
- Upgrade lighting to provide code mandated fixture types and controls.
- Upgrade roofing insulation to provide needed thermal and drainage requirements of the code.
- Replacement of the curtain wall system along the east and west elevations of the original Fairbank School building.
- Seismic and structural upgrades of the original Fairbank School building to meet current code requirements.

Our structural engineer has noted that the original Fairbank School roof structure, which includes the large flat EPDM roof areas, was designed close to the code minimum required in 1959. The roof structure requires significant reinforcement to its framing and roof deck to meet current code requirements triggered by a renovation. The existing school's masonry walls are not reinforced and require reconstruction, replacement, or supplemental framing to meet lateral and seismic loading requirements.

To put this in simple terms, installation of sprinkler piping, ductwork, HVAC equipment, or new roof insulation would require new structural framing to reinforce the roof and walls. This reinforcement work would require removal of the existing roof assembly and large portions of the existing structure.

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Michael E. Melnick  
Fairbank Complex Master Plan  
Roofing at Original Fairbank School  
April 8, 2014  
Page 2

At the completion of the master plan study, the Town may decide to advance a conceptual design option for further study and planning. Based on the current findings, it appears that the original Fairbank School's roof structure, if not the entire Fairbank School wing, would be demolished as part of a future renovation.

As the continued use of the Fairbank Complex is expected for the next 3 to 5 years, maintenance and repairs of the existing EPDM membrane roof must continue. A new roof assembly installed over the existing Fairbank School structure at this time would be removed as part of a larger renovation project in the future.

The Town should follow the recommendations of their roofing consultant to extend the life of the roof and address immediate repairs.

Sincerely,

Thomas A. Scarfata, CSI, CCS, AIA  
Principal

cc: James Kelly Facility Director Town of Sudbury  
enc: none

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JUN -6-73 PM 12:00 187HE#10  
 The within acquisition is under application made in accordance with P.L. RR - 578

MASSACHUSETTS QUITCLAIM DEED SHORT FORM (INDIVIDUAL) 10

KNOW ALL MEN BY THESE PRESENTS, that we, MERTON L. HASKELL and T. MARY HASKELL, husband and wife, both of Sudbury, Middlesex County, Massachusetts,

for consideration paid, the receipt of which is hereby acknowledged, and

for consideration of ONE HUNDRED EIGHTY THOUSAND (\$180,000.00) Dollars paid, grant to the TOWN OF SUDBURY, a Municipal corporation located in said Middlesex County, with the address: Town Hall, Sudbury, Massachusetts, 01776, with QUITCLAIM COVENANTS

theland in said SUDBURY; situated on the NORTHERLY side of HUDSON ROAD, on the NORTHWESTERLY side of FAIRBANK ROAD, and on the SOUTHWESTERLY side of BUTLER ROAD; shown as a 28.77 acre parcel on a plan entitled: "PLAN OF LAND IN SUDBURY, MASSACHUSETTS TO BE CONVEYED TO THE TOWN OF SUDBURY", dated: December 4, 1972, by Town of Sudbury Engineering Department, the original of which will be recorded herewith, which plan is incorporated herein by reference; and bounded and described, according to said plan as follows:

- Containing 28.77 acres, and bounded
- SOUTHERLY by HUDSON ROAD, by various courses and distances, a total distance of 1,035.28 feet;
- WESTERLY by land of various owners, a total distance of 1,092.89 feet;
- NORTHEASTERLY by land of various owners, a total distance of 654.40 feet;
- SOUTHWESTERLY by land of SCHULTZ, 1.84 feet;
- NORTHEASTERLY by BUTLER ROAD, 969.92 feet; and
- SOUTHEASTERLY by FAIRBANK ROAD, 923.49 feet;

Meaning and intending to describe and convey and hereby describing and conveying the land situated at the corner of HUDSON ROAD and FAIRBANK ROAD and at the corner of FAIRBANK ROAD and BUTLER ROAD, conveyed to us by deed dated: September 15, 1959, recorded with Middlesex South District Deeds in Book 9459, Page 132. The above described land is conveyed to the Town of Sudbury for Park and Recreation Purposes, in accordance with the vote of authorization passed under Article 15 in the Warrant for the January 30, 1973, Special Town Meeting.

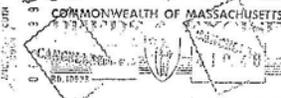
Witness our hands and seals this FIFTEEN day of June, 1973.

*Merton L. Haskell*  
*T. Mary Haskell*

The Commonwealth of Massachusetts

Middlesex: ss. June 5<sup>th</sup>, 1973.

Then personally appeared the above named MERTON L. HASKELL and T. MARY HASKELL and acknowledged the foregoing instrument to be their free act and deed, before me



*Baronette Kerell*  
 Notary Public  
 My commission expires February 14, 1980.

January 30, 1973

**ARTICLE 15:** To see if the Town will vote to authorize and empower the selectmen to acquire in fee simple, by purchase, by gift or by a taking by eminent domain, for park and recreation purposes, the land located on the Northerly side of Hudson Road and on the Westerly side of Fairbank Road, owned in whole or in part by Merton Haskell, containing approximately 28.77 acres, shown on a plan entitled: "Plan of Land in Sudbury Massachusetts to be conveyed to the Town of Sudbury", by Town of Sudbury Engineering Department, dated: December 4, 1972, a copy of which is on file in the Town Clerk's office, which plan is incorporated herein by reference, and to appropriate therefor, and all expenses in connection therewith, \$180,000.00, or any other sum, and to determine whether the same shall be raised by taxation, transferred from available funds, provided by borrowing or any combination of the foregoing, or act on anything relative thereto.  
 Submitted by the Park and Recreation Commission.



ARTICLE 15 - HASKELL LAND - HUDSON ROAD

**Park and Recreation Commission Report:** The Park and Recreation Commission has proposed the acquisition of this property for use as a multi-purpose recreational area to be developed over the next few years. The need for a park in this area has long been recognized by the Park and Recreation Commission. This new park would provide recreational activities within walking distance for residents in one of the most densely populated areas in Town. Also, this park is ideally situated near schools, main roads, and is located at the junction of a walkway network presently in use. Most important, this land is ideal for development at a minimum cost. It is flat, well above the water table and as former farm land will be easy to level, grass over and maintain. Water and electric power are also readily available for development of this property for recreational needs.

The Park and Recreation Commission has conducted a survey of available water sites in Town and have concluded that the poor accessibility to water sites, high iron content, and new State turbidity requirements negate the feasibility of developing a natural swimming site in Town. Therefore, the Park and Recreation Commission plans to propose to the townspeople that a swimming pool be considered as an alternative.

This property would be a first choice for location of a Town swimming facility in that it would provide a much needed recreational activity to a large group of townspeople within easy walking distance. Also, the cost would be less to build a facility where the terrain is flat and where main roads, water, and power are already available. The site is large enough to allow for strategic location of the swimming facility so that the aesthetic and property values of the surrounding homes would be maintained. Our plans also include providing other support type recreational facilities on the same property which would allow for all age groups to use this land for recreational activities.

Mr. Edward P. Rawson further reported to the meeting for the Park and Recreation Commission as follows:

January 30, 1973

This land came on the market in 1972, and at that time, with the cooperation of the Conservation Commission, negotiations were started regarding the purchase of this area. Two professional appraisals were made. The owner agreed to sell at \$180,000.00, and an option was obtained at this price for \$1,000.00.

Application has been made for 50% reimbursement on this purchase from the State. The final application cannot be made until such time as the Town appropriates the full amount of the purchase price. Chances of our getting this reimbursement seem excellent.

This area is very desirable for the following reasons: level and free of stones making site development costs minimal; excellent drainage according to the tests; central location for the most heavily populated area of Sudbury; ample area for the development of a proposed swimming pool with necessary buildings without placing it too close to abutters; plenty of open space for athletic fields, tennis courts and other open air recreation.

The proposed pool has an estimated cost of \$400,000.00, 50% reimbursable if the State accepts our proposal.

A vote for this land purchase is not a vote for or against a swimming pool. As an elected commission, we feel obligated to periodically offer the Town the privilege of voting for or against a pool, as we did in the early 1960's. If this area is purchased, we will ask for planning money for a pool at the Annual Town Meeting.

Mr. Rauson then yielded to Mrs. Margaret E. Langmuir of the Conservation Commission for a further report under the article.

The Conservation Commission has been advocating the purchase of this land for park and recreation purposes ever since we heard of its availability from the Planning Board in early '72. We believe that no one, including the Town Meeting, should buy land sight unseen.

Mrs. Langmuir then showed a series of slides of the area to the Town Meeting and continued her comments describing the property in question.

There are well developed trees along Hudson Road, and the open fields are ideal for the development of field sports. Most of the houses on Durlor Road are shielded by a thick growth of young trees along the road. There is a wooded section which covers one-quarter of the total 29 acres. A short walk into the woods shows that with a little judicious cutting, we could have a picnic grove as an adjunct to the proposed swimming pool. We have a beautiful grove of grown pine and oak which form a buffer to the north and west.

To anyone who would say that we cannot afford to spend \$180,000.00 today on park land, I say, "Consider these three facts." The cost of land is constantly increasing. The price will never be better than it is today. Second, the probability of 50% reimbursement of the land purchase and the development is high now because Massachusetts has been allotted six million dollars to spend for outdoor recreation under the B.O.R. program. We have already been told that this project qualifies under the program. In later years, this funding may not be available. Finally, this particular piece of land will not be available again. Picture in your mind's eye about 25 houses as an alternative to a Town swimming facility and a multi-purpose park on this field. It is up to you.

I urge your support for this article.

Finance Committee Report: (Mr. Ronald L. Blecher) Purchase of this very desirable property at the option price will permit the Park and Recreation Commission to implement this portion of their five-year plan to provide a much needed swimming facility as well as another multi-purpose recreational area. Informal meetings with cognizant State agencies have indicated 50% reimbursement, but the full purchase price must first be voted by the Town. The Finance Committee unanimously supports this article and recommends approval with the funds to be raised by taxation.

After discussion it was

VOTED: THAT THE TOWN AUTHORIZE AND EMPOWER THE SELECTMEN TO ACQUIRE IN FEE SIMPLE, BY PURCHASE, BY GIFT OR BY A TAKING BY EMINENT DOMAIN, FOR PARK AND RECREATION PURPOSES, THE LAND LOCATED ON THE NORTHERLY SIDE OF HUDSON ROAD AND ON THE WESTERLY SIDE OF FAIRBANKS ROAD, OWNED IN WHOLE OR IN PART BY MERTON HASKELL, AND CONTAINING

P-25

January 30, 1973

APPROXIMATELY 26.77 ACRES, SHOWN ON A PLAN ENTITLED: "PLAN OF LAND IN SUDBURY MASSACHUSETTS TO BE CONVEYED TO THE TOWN OF SUDBURY", BY TOWN OF SUDBURY ENGINEERING DEPARTMENT, DATED: DECEMBER 4, 1972, A COPY OF WHICH IS ON FILE IN THE TOWN CLERK'S OFFICE, WHICH PLAN IS INCORPORATED HEREIN BY REFERENCE, AND RAISE AND APPROPRIATE \$180,000.00 THEREFOR, AND ALL EXPENSES IN CONNECTION THEREWITH.

In favor - 242; Opposed - 50 (Total - 292).

ARTICLE 16: To see if the Town will vote to raise and appropriate, or appropriate from available funds, \$10,000.00, or any other sum, to be expended under the direction of the Park and Recreation Department, for the acquisition of a tractor and accessories, including but not limited to mower, harrow, rake, loader, for use by the Park and Recreation Department, or act on anything relative thereto.  
Submitted by the Park and Recreation Commission.

Park and Recreation Commission Report: At the present time all the parks and recreational areas under the direction of the Commission are maintained by either hand mowing, or by tractor. The present tractor purchased in 1968 is a small garden type unit of 12½ horsepower that no longer justifies the cost of repairs. Last year during the height of the mowing season this tractor broke down and was out of operation for six weeks because parts were not readily available for repairs. This year, over the road, unit will eliminate trailer hauling and save the time of loading and unloading at each of the park areas requiring grounds maintenance.

This tractor and accessory equipment is needed this year (1973), and from past experience of the time interval for bidding and delivery after placing of purchase order, it was decided to request authorization for purchase of this unit at the earliest Town Meeting to have this equipment available for the growing season this year. Also, this request for equipment is in line with the equipment plans as outlined in the recently submitted five year plan for Park and Recreation growth in the Town.

Mr. Ronald J. Griffin further reported to the meeting for the Park and Recreation Commission as follows:

This would be a sort of farm type tractor which was very prevalent in this Town years ago, but which is pretty scarce right now. We need it to cover the multitude of acreage that we now have under green grass. This includes about six ballfields, a football field, a soccer field, etc. At the present time, we only have a small garden type tractor which many people might use on their own property, plus two hand mowers which are going from one end of the summer to the other. This requires us to keep three fellows going all summer long just mowing grass. We feel that with this type of a vehicle, we could accomplish this with just one man in less time, probably only two days a week. I urge you to buy this piece of equipment. It will save us money in the long run and in the years to come.

Finance Committee Report: (Mr. Karl E. Clough) We urge trade in of the present equipment against the purchase price of the new tractor and recommend approval with funds to be raised by taxation.

VOTED: THAT THE TOWN RAISE AND APPROPRIATE \$10,000.00 TO BE EXPENDED UNDER THE DIRECTION OF THE PARK AND RECREATION DEPARTMENT, FOR THE ACQUISITION OF A TRACTOR AND ACCESSORIES INCLUDING, BUT NOT LIMITED TO, MOWER, HARROW, RAKE, LOADER, FOR THE USE BY THE PARK AND RECREATION DEPARTMENT.

ARTICLE 17: To see if the Town will vote to authorize and empower the Selectmen to acquire easements, by purchase, by gift or by a taking by eminent domain, for walkway and sidewalk construction, maintenance, reconstruction and use easements, over, across and through the land, shown on the plan entitled: "Plan of Land in Sudbury Massachusetts showing Walkway Easements Concord Road", (5 sheets), by Town of Sudbury Engineering Department, dated: December 5, 1972, and to amend the vote passed under Article 50 of the 1972 Annual Town Meeting to authorize the Selectmen to expend funds appropriated under Article 50 for the acquisition or taking of these easements, or act on anything relative thereto.

Submitted by the Board of Selectmen.

P-26

FAIRBANK COMMUNITY CENTER FEASIBILITY STUDY  
PUBLIC FORUM- PROGRAMMING THE CENTER

February 27, 2014



### Fairbank Community Center Feasibility Study

#### Project Tasks

- **Programming Interviews** ..... **Completed**  
*Recreation, Senior Center, Users and Stakeholders*
- **Programming Site Visits** ..... **Completed**  
*Observe Daily Program Operations, Special Events, Swim Meet, etc.*
- **Facility Assessment** ..... **Completed**  
*Site and Building Inspections by Consultant Team*
- **Programming Space Needs** ..... **Draft Prepared**  
*Required Square Footage vs. Existing Square Footage, Define Shared Space Use*
- **Public Programming/Ideas Meeting** ..... **February 27, 2014**  
*Obtain Public input on ideas for the Community Center*
- **Conceptual Schemes:** ..... **In progress**  
*To be presented to the Permanent Building Committee Mid-February (After Public Meeting)*
- **Market Analysis/Program Analysis** ..... **February 2014**  
*Confirm Program, Determine Need,*
- **Complete Study** ..... **April 2014**  
*Design Options, Cost Estimates, Operating Budgets, Business Plan*

### Fairbank Community Center Feasibility Study Programming, Meetings & Site Visits



Program Questionnaires for Senior Center  
Recreation Department Staff



Veteran's Luncheon



DCL Swim Relays Meet

### Existing Conditions: Exterior



Confirmed Roofing Deficiencies



Masonry at Pool Wing



Senior Center Window Finish



Failed Window Wall of Original School



Moisture Issues at Pool Wing

### Existing Conditions: Interior Space Deficiencies



Lack of Storage (Building Wide)



Locker Rooms/Toilet Rooms Not Meeting Current Needs



Lack of Program Space in Senior Center



No Spectator Seating for Pool Events

### Existing Conditions: Services

#### General Recommendations

##### Fire Protection

- Provide sprinkler system In entire building

##### Plumbing

- Provide family changing rooms
- Increase number of plumbing fixtures to meet current pool codes
- Piping is original to dates of construction

##### HVAC

- Remove window AC units in 1959 wing  
Provide building wide HVAC controls connected to Town system.
- Replace electrical baseboard heating where currently used.

##### Electrical

- Update lighting systems with efficient equipment and controls
- Upgrade emergency lighting system
- Provide addressable fire alarm system
- Replace Equipment that is past its useful service life.



Original 1959 Plumbing Fixtures



Inefficient Lighting- Lack of Lighting Controls

### Existing Conditions: Flat Room Above 1959 Wing



Figure 4- Typical Classroom Framing



- Existing Roof Structure is under-designed for current structural loading
- Roof assembly does not meet current design requirements of the code
- Existing masonry walls require reinforcing to meet structural codes.
- Roof structure would need to be replaced in order to install a sprinkler system, additional ductwork, roof top mechanical equipment and other elements typically required in a renovation project.

## Market Analysis

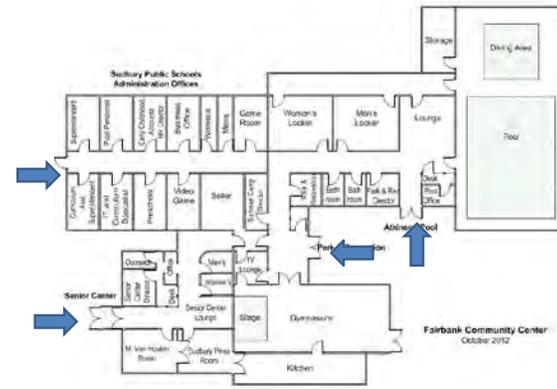


- Step 1 Determine the Important Drivers
- Step 2 Fiscal Planning Approach
- Step 3 Develop the Fiscal Planning Tools
- Step 4 Assemble the Operational Revenue Measurements
- Step 5 Assemble the Operational Expense Measurements
- Step 6 Develop Project Recommendations & Management Strategy

### Community Centers Ideas



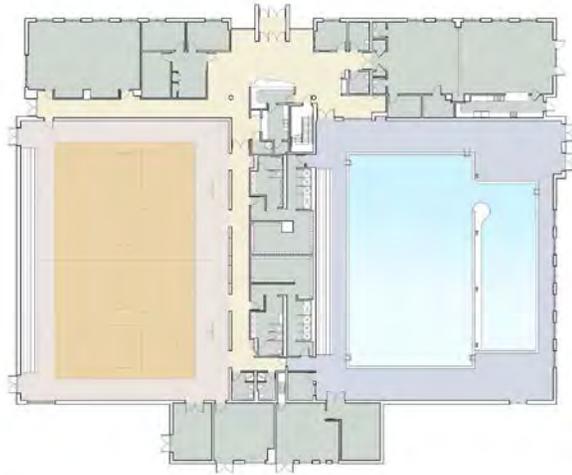
### Building Entries & Circulation



- Access Control
- Security
- Privacy
- Multiple Occupants
- Secure Spaces
- Noise Transmission
- User Requirements
- Storage
- Access to Toilets
- Scheduling Solutions



### One Building-Multiple Users



### Entry, Access, & Control



Maximize Visual Control of Facility

Provide Single Control Point

Minimize Staffing Requirements



Different Age Groups



Different Programs

## A Multi-Generational Community Center



### Transformed Classrooms



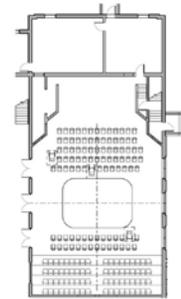
### Community Room Former Cafeteria for Multi-purpose Use



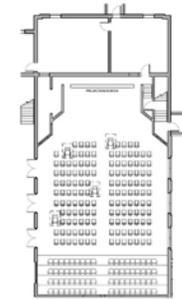
Community Room  
Flexibility and Revenue Generation



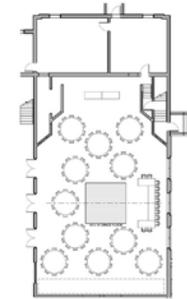
Community Room  
Vision & Budgeting



THEATER IN THE ROUND  
150 SEATS



PROSCENIUM THEATER  
MOVIE NIGHT  
200 SEATS



BANQUET  
120 SEATS

Collapsible Theater Seating	\$56K
AV Phase 1A – Pipe Grid, Infrastructure	\$72K
AV Phase 1B – Dimming System	\$58K
AV Phase 2A – Theater Lighting, Curtains	\$46K
AV Phase 2B – Audio System	\$45K

## Project Components



Senior Center Reception  
Separation from Activities



Daily Drop-In/Socializing Space

## Project Components



Multi-Use Spaces



Project Components



Fully Accessible Food Service  
Teaching Kitchen

Project Components



Recreation/Game Rooms



Art Room

### Project Components



Senior Center Library Space



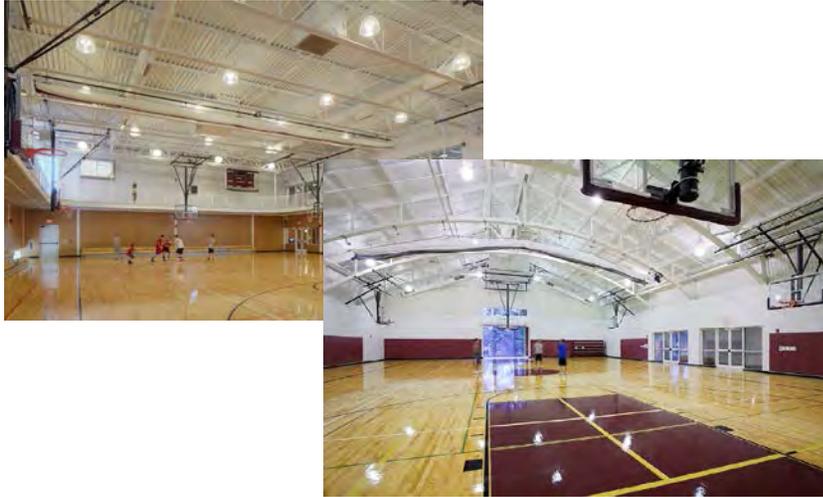
Waiting Areas for the Center

### Project Components



Locker Rooms for All Users/Family Facilities

Project Components



Gymnasium Space

Project Components



A Space for Summer Camp

## Multi-Purpose Activity Spaces

*Some Flexible and others specific*



## Different approaches to Wellness rooms



### Project Components



Multi-Use Stage/Platform

### Aquatic Program Improvements



### Aquatic Program Improvements



### Aquatic Program Improvements



# TOWN HALL FORUM PRESENTATION

02/27/14

Your Input is Needed



Q&A?

# Fairbank Community Center PUBLIC FORUM

March 26, 2015

Hosted by: The Fairbank Community Task Force & Permanent Building Committee

## Welcome

- **Fairbank Community Task Force (FBCTF)**  
Current Members: Jack Ryan (Chair), Bob Haarde (BOS), Len Simon (BOS), Sarah Troiano, Jim Kelly, Dick Williamson, Greg George, Bob Armour, Joe Sziabowski, Rick Johnson
- **Bargmann, Hendrie + Archetype (bh+a)**  
Joel Bargmann, Tom Scarlata
- **Permanent Building Committee (PBC)**  
Michael Melnick, Elaine Jones, Craig Blake, Bill Braun, John Porter, Joe Sziabowski
- **Town Staff**  
Nancy McShea (Parks & Rec), Debra Galloway (COA)

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## Forum Agenda

- Welcome and Introductions
- Objectives of tonight's Forum  
A Word from the Park & Recreation Department and the Senior Center
- Feasibility Study Process Overview  
Constituent Input  
Existing Conditions Analysis
- Design Vision and Key Program Elements  
Program elements included and those not included
- Presentation of 3 Conceptual Designs  
Market Plan  
Cost
- Project Dependencies & Timeframe
- Next Steps  
Questions and Comments

3

## Forum Objectives

- Provide update on the status of the project
  - Program Definition
  - Market Analysis
  - Operational Plans
  - Conceptual Designs
- Start the conversation
  - We need your input and comments
  - Reaction to the program elements presented and general design elements

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## Sudbury Park and Recreation / Atkinson Pool

- Community Center established in 1983 in the old school building.
- Atkinson Pool was built in 1987.
- Currently over 72,000 individuals utilize the pool in a given year.
- Over 691 programs offered to over 9,700 participants
- Day camp programs sell out in under 10 minutes each year. No opportunity for growth due to building constraints. 40-50 kids on wait list each week.
- Only Nationally Certified Park and Recreation Department in Massachusetts, the 2<sup>nd</sup> in New England and the 118<sup>th</sup> in the country.



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## Parks and Recreation

- Year round programs
- Ages 18 months – senior citizen
- Passive classes such as art and lego engineering
- Active classes such as sports and line dancing
- Self directed recreation such as snowshoe and pickleball
- Oversee ballfields, playgrounds, basketball court, volleyball court, 2 outdoor ice rinks, tennis courts, walking paths, outdoor fitness equipment, Heritage Park, Willis Pond, etc.



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## Atkinson Pool

- Learn to swim programs
- Diving programs
- Swim teams
- Scuba programs
- Triathlon programs
- Summer camps
- Birthday parties
- Lap swim
- Family swim
- Lifeguard training



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## Special Events

- Summer concerts
- Teen Centers
- Drop in Gyms
- Youth Triathlons
- Halloween 5K
- Family Fun Day
- Do you want to build a snowman?

Just to name a few.....



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## Why a new community center?

- Space is too crowded, programs can't grow
- COA needs more room, often we need same spaces at the same time.
- Summer time programs need room to expand
- No dedicated art space
- No dedicated technology space
- No dedicated adaptive space
- Elections close gym for 4 days, loss of programming time and revenue



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## Why a new community center?

- Locker rooms are not ADA accessible
- Need ADA accessible family changing room
- Need team locker rooms for camp programs
- Building needs upgrades to heating and roofing. Severe leaks this winter made some rooms inoperable for weeks



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## Why a new community center?

- Limited in our program offerings
- Building is aging rapidly
- New facility enables expansion of current program offerings
- Updating the facility makes it compliant, improves condition and brings new programs



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## Strengthening Sudbury

- Beautiful town, Rich history, Great People
- Our Elders Have Provided Decades of Service, and Counting...
- Creating and Maintaining an Age and Family Friendly Community



## Sudbury's Population is Changing

### In the United States, Massachusetts and Sudbury

Change is happening because:

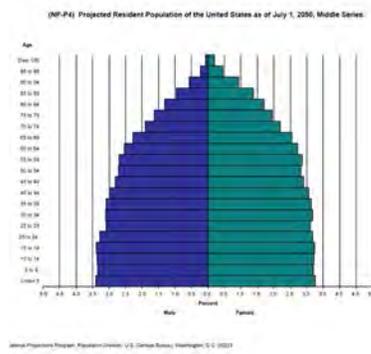
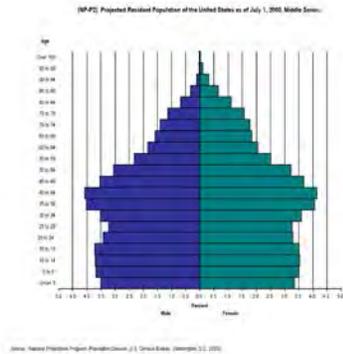
- Baby boomers are aging, 8,000 turning 65 every day now (source: AARP)
- We are living longer
- Sudbury's seniors would like to "age in place"
- Sudbury has added age-restricted housing over the last several years



# U S Projected Population Growth

Population Pyramid 2000

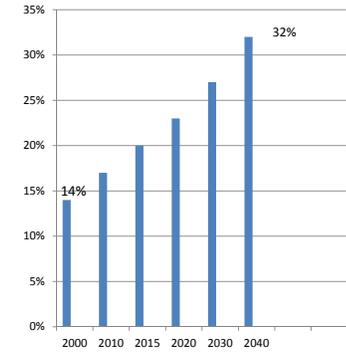
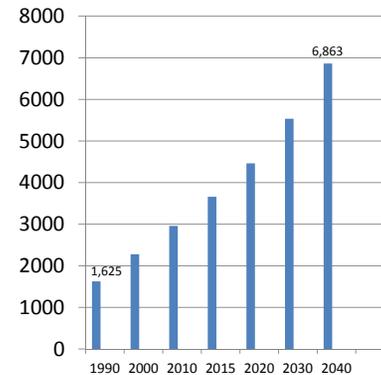
Population Pyramid 2050



# Growth of 60+ Population - Sudbury

By the Numbers  
Growth of 60+ Adult Population in Sudbury

By Percentage  
60+ Adults as Percentage Total Sudbury Population



## Senior Center Participation

### Numbers

- 1,600 different individuals participate in the Senior Center each year
- And 200 people under 60 who need help with a parent, or who have a disability
- Approximately 34,000 visits or services provided each year



### Programs/Services

- Lifelong learning classes: history, art, science
- Fitness classes: Fit for the Future, Yoga, Tai Chi, Tap Dance, Better Bones
- Arts and Crafts classes
- Information and Assistance
- Rides to employment, doctors, and shopping



## Aging in Place in Sudbury

- Staying active
  - Keeping fit
  - Continuing to learn
  - Access to safe transportation
  - Sidewalks/safe places to walk
- Staying connected
  - Promoting community engagement for all ages
  - Support for family caregivers and referral services for frail elders
- Benefits everyone to live in age-friendly community
- Struggling to meet these needs, limited by space.



Annual Veterans Appreciation Luncheon in Fairbank Gym

## Senior Center Space Issues

- Building is old, leaking from old roof made some rooms unusable this winter, leaking and other issues ongoing
- Fitness programs are sometimes cancelled or need to be moved to different rooms, some rooms are not appropriate, sometimes off site
- Elections close the gym off for a few days and conflict with Senior Center programs
- Not enough space for consultations and counseling – need to move staff out of their offices
- Park and Recreation programs during school vacations and summer use the gym and other rooms



## Key Programs for the Future

### Staying Active/Staying Fit

- More Fitness programming - need clean, safe, appropriate space available
- Wellness/health counseling services – need clean, private space for nurse, other counseling
- Education/Lifelong Learning
- Transportation



### Staying Connected

- Socialization/Recreation opportunities
- Healthy Aging programs
- Intergenerational programs
- Information/Referral for supportive home care and other needs
- Volunteer opportunities



## Comments Regarding Concept Plans

- The Council on Aging supports a plan to meet the growth needs of older adults
- Benefits of such a plan:
  - Based on need/future population trends
    - Supports need for additional programming
    - Supports need for increased diversity of programs, including more healthy aging and intergenerational programs
    - Supports Sudbury's goal to be age and family friendly into the future

## In Summary

- The senior population has doubled since the Senior Center addition was built, and will continue to grow for 35 more years
- Seniors have been and continue to be contributors to quality of life in Sudbury
- The Senior Center is already having space constraints
- The Council on Aging recognizes the need to plan ahead for the future

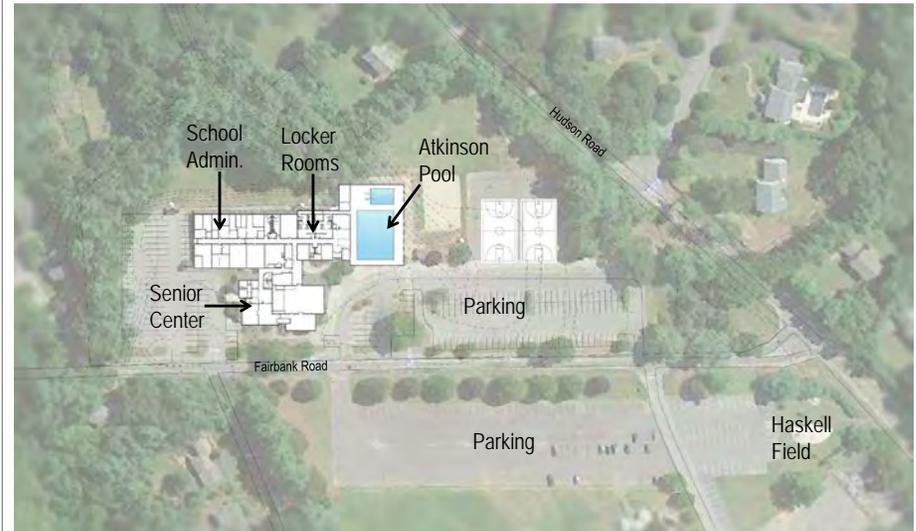
## The Future

We're not sure our Sudbury seniors will be living to 142, but just in case... Let's be prepared!

*Thank you!*



## EXISTING SITE PLAN





EXISTING CONDITIONS: EXTERIOR



Confirmed Roofing Deficiencies



Masonry at Pool Wing



Senior Center Window Finish



Failed Window Wall of Original School



Moisture Issues at Pool Wing

EXISTING CONDITIONS: INTERIOR SPACE



Lack of Storage (Building Wide)



Locker Rooms/Toilet Rooms Not Meeting Current Needs



Lack of Program Space in Senior Center



No Spectator Seating for Pool Events

EXISTING CONDITIONS: SERVICES

PROBLEMATIC ROOF

- Continual Leaks

FIRE PROTECTION

- Suggest sprinkler system

PLUMBING

- No Family changing rooms
- Needs more fixtures to meet demand and current codes
- Old Piping

HEATING & COOLING

- Window air conditioning units in 1959 wing
- Electrical baseboard heating used.
- Need efficiency controls connected to Town system.

ELECTRICAL

- Needs energy efficient lights and controls
- Out of date emergency lighting
- No addressable fire alarm
- Lots of old equipment past its useful service life.



Original 1959 Plumbing Fixtures



Inefficient Lighting- Lack of Lighting Controls

### EXISTING CONDITIONS: 1959 WING



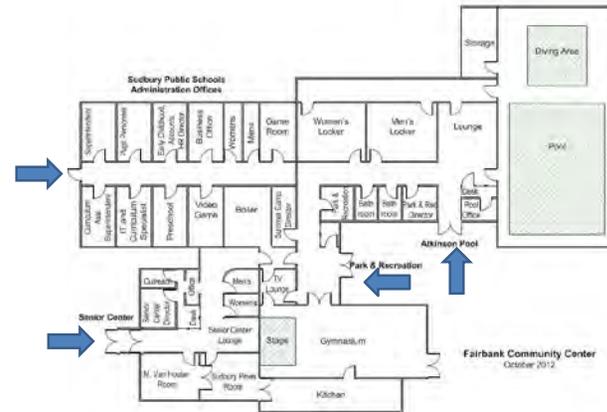
- Existing Roof Structure is under-designed for current building code
- Roof has been patched and patched
- Existing masonry walls require reinforcing to meet structural codes.
- Roof structure would need to be replaced in order to install a sprinkler system, additional ductwork, roof top mechanical equipment and other elements typically required in a renovation project.



Figure 4-Typical Classroom Example



### TOO MANY ENTRY POINTS & CIRCULATION



- Access Control
- Security
- Privacy
- Multiple Occupants
- Secure Spaces
- Noise Transmission
- User Requirements
- Storage
- Access to Toilets
- Scheduling Solutions

## VISION FOR A MULTIGENERATIONAL COMMUNITY CENTER

- Common Entrance
- Shared Program Space
- Circulation/ Communal Neighborhood
- Internal Flexibility
- Natural Daylight/ Fresh Air/ Views Outside
- Welcoming Breaks For Socializing

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## Vision: DIFFERENT AGE GROUPS



Children, Teens, Adults, Seniors

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### Vision: ENTRY ACCESS CONTROL

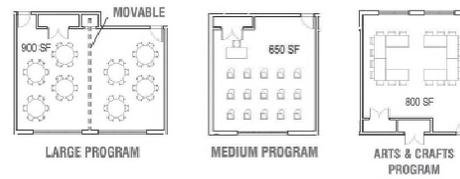


- Maximize Visual Control of Facility
- Provide Single Control Point
- Minimize Staffing Requirements



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### Vision: MULTI-USE SPACES



Different styles in rooms for recreation versus seniors

33

Vision: DEDICATED USE SPACES



Vision: GATHERING SPACES



## PROGRAMMING METHODOLOGY

### Town Staff

- Police & Fire Chiefs
- Head of DPW
- Head of Health Department, Building Inspector

### Departments & Groups

- Council on Aging
- Senior Center Director
- Friends of the Sudbury Senior Center
- Recreation Commission
- Director Parks & Recreation
- Sudbury Family Network

### Visited the building during events including

- Dual County Kick-Off Meet. (All DCL teams)
- Veterans Lunch
- Senior Center's Harvest Festival

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## PROGRAMMING WITH TOWN STAFF & ORGANIZATIONS

- Scott Nix, Police Chief
- William Miles, Fire Chief
- William Place, Director of Public Works
- William Murphy, Director of Health Department
- Mark Herweck, Building Inspector
- School Administration (with previous study)
- Nancy McShea, Director of Parks and Recreation
- Debra Galloway, Council on Aging Director
- Council on Aging
- Friends of the Sudbury Senior Center
- Recreation Commission
- Sudbury Family Network

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## INDIVIDUAL REPORTS FOR DEPARTMENTS



Program Questionnaires for Senior Center Recreation Department Staff



Veteran's Luncheon



DCL Swim Relays Meet

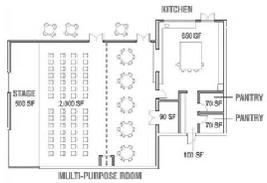
## KEY PROGRAM ELEMENTS

1. Multi-use spaces combined with dedicated spaces
2. Gathering spaces to foster community
3. Food Service space for functions AND teaching kitchen
4. Computer lab
5. Library
6. Aquatics: Pool/Therapy
7. Fitness
8. Teen spaces
9. Gymnasium
10. Summer Camp: Multi-use Stage/Platform as part of gym
11. Better Locker rooms to increase patronage



Not a professional kitchen

### TEACHING KITCHEN



Accessible & useable by senior and recreation users

40

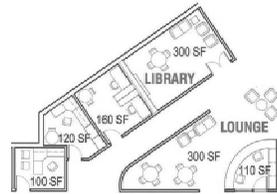


### GAME AND ART ROOMS



41

SENIOR CENTER LIBRARY



42

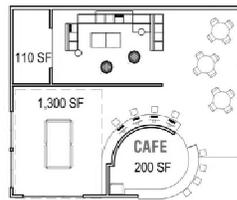
ACCESS TO TECHNOLOGY



43



### TEEN SPACES



TEEN CENTER



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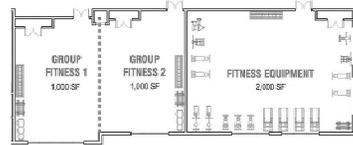
### GYM:

Winter Sports & Summer Camp with Stage



45

### FITNESS



46

### ATKINSON POOL



47

### THERAPY POOL



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### IMPROVED LOCKER ROOMS



PROGRAM COMPARISON

	Actual Existing	40,000 SF PLAN	50,000 SF PLAN	60,000 SF PLAN
<b>COMMON AREAS</b>				
Total Net Square Feet	2,210	2,390	2,390	2,280
Grossing Factor	1.20	1.20	1.20	1.20
<b>Building Common Program Gross Area</b>	<b>2,652</b>	<b>2,868</b>	<b>2,868</b>	<b>2,736</b>
<b>SENIOR CENTER</b>				
Senior Area Lobby / Reception	230	620	620	480
Administrative Offices	920	2,280	2,280	2,440
Program Spaces (includes Multi-purpose Room)	6,070	4,890	5,560	7,760
Kitchen	1,090	890	890	890
Restrooms	160	150	150	150
Total Net Square Feet	8,470	8,830	9,500	11,720
Grossing Factor	1.20	1.20	1.20	1.20
<b>Senior Center Program Gross Area</b>	<b>10,164</b>	<b>10,596</b>	<b>11,400</b>	<b>14,064</b>
<b>RECREATION</b>				
Recreation Offices	1,270	1,170	1,170	1,170
Program Spaces (includes Gymnasium)	2,830	6,440	14,440	17,450
Aquatics, Offices and Changing Facilities	13,330	13,400	13,330	17,070
Total Net Square Feet	17,430	21,010	28,940	35,690
Grossing Factor	1.20	1.20	1.20	1.20
<b>Recreation Program Gross Area</b>	<b>20,916</b>	<b>26,536</b>	<b>35,732</b>	<b>43,068</b>
<b>Total Program Gross Area</b>	<b>33,732</b>	<b>40,000</b>	<b>50,000</b>	<b>60,000</b>

Grouping related departments in a community center saves up to 40% of space by sharing underused spaces and avoiding duplication of stairs, circulation, mechanical rooms and other spaces.

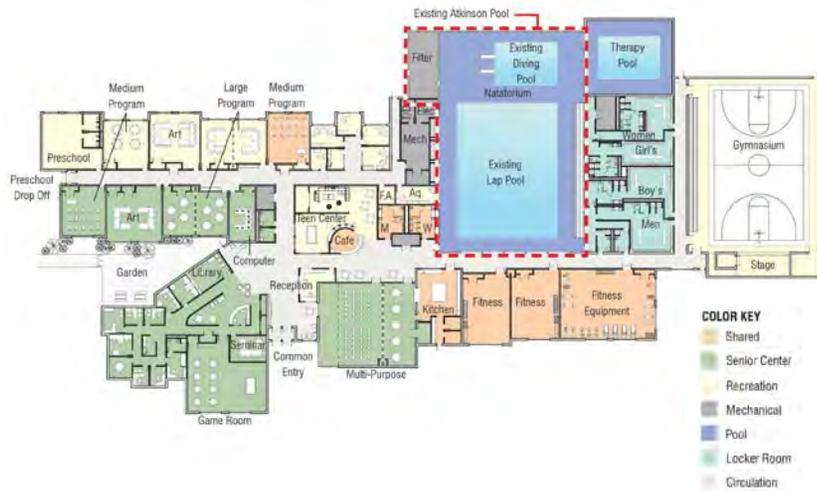
50

PROGRAMS DISCUSSED BUT NOT INCLUDED

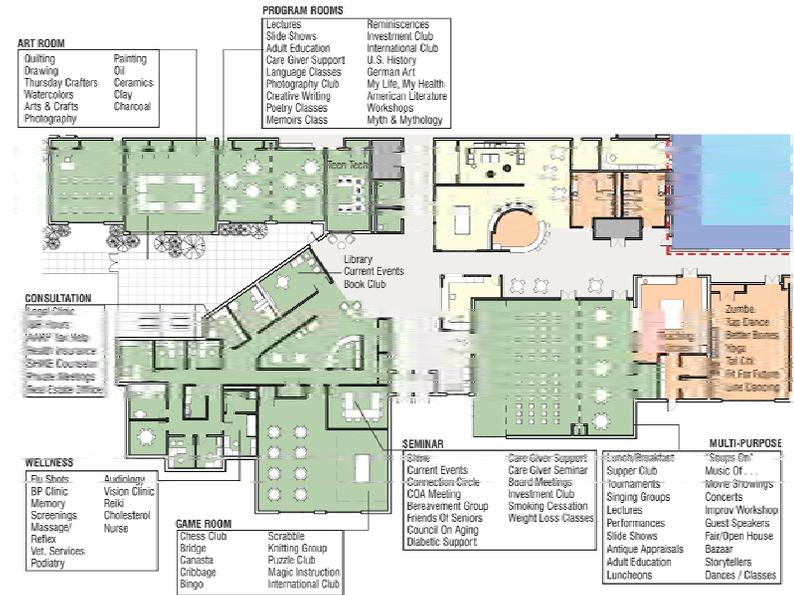
50 meter indoor swimming pool	25,000 sf
Outdoor pool	na
Family Aquatic Center/Leisure Pool	10,000 sf
Ice/Hockey Arena	25,000 sf
Indoor Turf Center	30,000 sf
Black Box/Regular Theatre	8,000 sf
Climbing Wall	5,000 sf
Indoor Playground/Trampoline Center	15,000 sf
Indoor Track Above Gym	2,500 sf (plus elevator & stairs)

### OPTION 3 PROGRAM

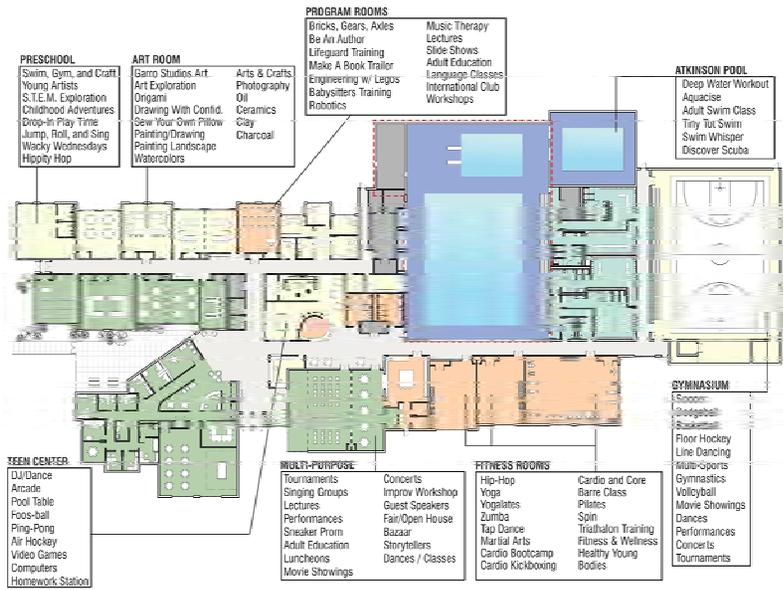
11,000 sf Existing  
 49,000 sf New  
 60,000 sf Total



### SENIOR CENTER PROGRAMS



PARK & REC. PROGRAMS



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OPTION 2 PROGRAM

PROGRAM DOES NOT INCLUDE:

- Recreation Department*
- Gymnasium Stage
  - Therapy Pool
  - Team Locker Room
  - Family/Companion Changing
  - Fitness Studio
- Senior Center*
- Multi-Purpose Room Stage
  - Game Room
  - Medium Program Room

11,000 sf	Existing
39,000 sf	New
50,000 sf	Total



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### OPTION 1 PROGRAM

**PROGRAM DOES NOT INCLUDE:**

- Recreation Department*
  - Fitness Studio (2)
  - Gymnasium - Stage
  - Therapy Pool
  - Team Locker Room
  - Family/Companion Changing
- Senior Center*
  - Multi-Purpose Room Stage
  - Game Room
  - Medium Program Room (2)

11,000 sf	Existing
29,000 sf	New
40,000 sf	Total



56

### COMMUNITY CENTER COST

<b>OPTION 1:</b> 40,000 sf	
Construction Cost	\$12 m
Total Project	\$15.5 m
<b>OPTION 2:</b> 50,000 sf	
Construction Cost	\$15 m
Total Project	\$19 m
<b>Option 3:</b> 60,000 sf	
Construction Cost	\$18 m
Total Project	\$23 m

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TOTAL PROJECT COST

Items that add 30% to the Construction Cost

- Furniture & Equipment
- Permitting & Approvals
- Hazardous Materials Testing
- Architectural & Engineering Fees
- Owner's Project Manager
- Equipment Commissioning
- Testing & Inspection
- Moving of Departments
- Advertising
- Utility Costs
- Contingencies

OTHER RELATED COSTS

OTHER PROJECT COSTS

Relocate School Administration	\$ 3,900,000
site relocation study and design	\$400,000
construction 10,000 sf	\$3,000,000
move & other soft costs	\$500,000
 Rental of Temporary Space	 \$ unknown
for Recreation & Senior Center	
18-24 months	
 Summer Camp relocation	 \$ unknown
2 summers	

These costs are incurred for a new center or to renovate the existing

### What if a new Community Center is not Constructed?

You will have to renovate the existing building within ten years  
40,500 sf Total

**PROGRAM DOES NOT INCLUDE:**

- Senior Center**
  - Administrative Assistant
  - Information Specialist
  - Workspace for Four
  - Small Meeting Room
  - Game Room
  - Storage
- Recreation Department**
  - Administrative Assistant
  - First Aid
  - Gymnasium
  - Therapy Pool
  - Bleachers
  - Team Locker Room
  - Family/Companion Changing
  - Cafe
  - Storage



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### FUTURE COST TO MAINTAIN THE EXISTING BUILDING

An incurred cost within the next ten years expressed in today's dollars

#### Renovate existing building

renovate the Senior Center:	10,000 sf
renovate Atkinson Pool*:	11,000 sf
redo the 1960's wing:	19,000 sf
<b>Total</b>	<b>40,000 sf</b>

Construction Cost	\$9 M
<b>Total Project Cost</b>	<b>\$12 m</b>

Temporary Space Rental same as options 1 - 3

Relocate School Administration same as options 1 - 3

\* Pool would likely have to be closed during some of the complex demolition and reconstruction due to rebuilding of utilities and safety concerns

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**Operational Performance Indicator Analysis**   
*Town of Sudbury*  
*Fairbanks Community Center Feasibility Study*

*Full-Time Staffing Levels:*

Full-Time Positions	Recommended Levels	New Facility Additions
Park, Rec. Aquatics Dir.	\$96,000	-
Assistant Rec. Dir. Adaptive Specialist	\$54,000	-
Assistant Aquatics Director	\$60,000	-
Aquatics Supervisor (2)	\$99,000	\$43,000
Head Lifeguard	\$41,000	-
Youth Coord. / Teen Center Director	\$46,000	-
Program Coordinator	\$43,000	-
Administrative Assistant (2)	\$92,000	\$39,000
Recreation Coordinator Fitness	\$39,000	\$39,000
Preschool Coordinator	\$46,000	-
Maintenance Worker	\$34,000	\$34,000
Custodian (4)	\$135,000	\$135,000
Positions	17	8
<b>TOTAL</b>	<b>\$785,000</b>	<b>\$290,000</b>

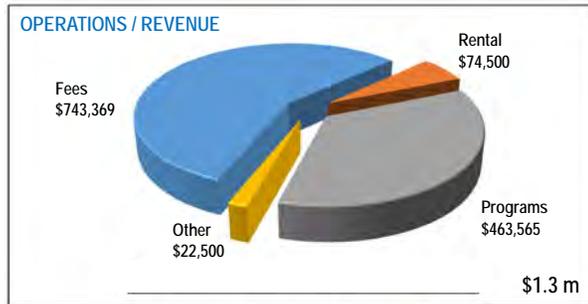
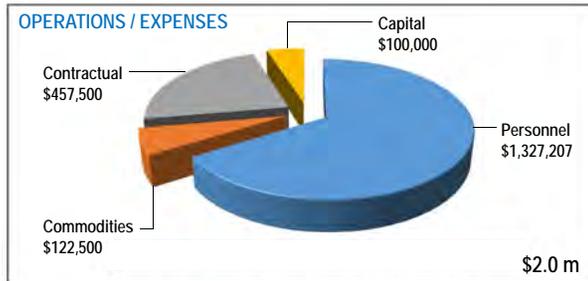
The rates above include benefits.

**Operational Performance Indicator Analysis**   
*Town of Sudbury*  
*Fairbanks Community Center Feasibility Study*

*Current & Future Part-Time Staffing Hours:*

Part-Time Positions	Rate/Hour	Hours/Week	Weeks	Total	New Facility Additions
Front desk supervisor	\$12.00	95.5	52	\$60,000	\$60,000
Front desk receptionist	\$10.00	79	52	\$41,000	\$12,000
Building supervisor	\$12.00	79	52	\$49,000	\$49,000
Head lifeguard	\$12.00	95.5	50	\$57,000	\$57,000
Lifeguard	\$10.00	174.5	50	\$87,000	\$29,000
Water Safety Instructor (WSI)	\$11.00	60	50	\$33,000	\$17,000
Swim Aide in Training	\$9.00	30	50	\$13,000	\$6,000
Water Exercise Instructor	\$25.00	11	50	\$14,000	\$7,000
Private swim lesson instructor	\$30.00	6	50	\$9,000	\$4,000
Semi private swim lesson instructor	\$55.00	6	50	\$16,000	\$8,000
Therapeutic swim instructor	\$30.00	10	50	\$15,000	\$15,000
Diving Instructor	\$23.00	4	50	\$5,000	\$2,000
Group Exercise Instructor	\$30.00	10	52	\$16,000	\$16,000
Total				<b>\$415,000</b>	<b>\$282,000</b>

The rates above include benefits.



## PROJECT DEPENDENCIES & TIMEFRAME

- Sudbury Public Schools Administration Move
- Locating Flex Space during construction
- Timeframe dependent on timing of other capital projects, dependencies and town support

## SCENARIO IMPLEMENTATION PLAN

	2015	2016	2017	2018	2019	2020
<b>SCENARIO IMPLEMENTATION</b>						
Determine Course of Action for School Administration & Community Center						
Town Meeting to Approve Design & Construction Funds for School Administration						
Design & Build New School Administration Offices						
Town Meeting to Approve Design of Community Center						
Design Community Center						
Town Vote to Fund Construction of Community Center Phase I						
Build Community Center						
Temporary Location for Recreation and Senior Center						
Move In and Occupancy						

← The Minimum timeframe is 5 ½ years →

## NEXT STEPS

- We have a need. What do we do next?
- Gather and incorporate feedback
- Obtain final report on Community Center
- Work with Board of Selectmen to determine next steps



The image is a white line-art architectural site plan on a blue background. It depicts a school campus with a central building complex, two basketball courts to the right, and several parking lots. The central building has a large rectangular section on the right and a more complex, multi-winged section on the left. The basketball courts are rectangular with standard court markings. The parking lots are shown as grids of rectangular spaces, with one large lot at the bottom right and several smaller ones scattered around the building.

**bh + a**

**Bargmann Hendrie + Archetype, Inc.**

300 A Street, Boston, MA 02210

617 350 0450 [www.bhplus.com](http://www.bhplus.com)