# Table of Contents

1. Introduction and Overview

2. Fisher Mitchell School
   - Overview
   - Building Condition
   - Educational Program

3. Dike-Newell School
   - Overview
   - Building Condition
   - Educational Program

4. West Bath School
   - Overview
   - Building Condition
   - Educational Program

5. Phippsburg Elementary School
   - Overview
   - Building Condition
   - Educational Program

6. Existing Floor Plans and Site Plans
   - Fisher Mitchell Floor Plan
   - Dike-Newell Floor Plan
   - West Bath Floor Plan
   - Phippsburg Floor Plan
   - Fisher Mitchell Site Plan
   - Dike-Newell Site Plan
   - West Bath Site Plan
   - Phippsburg Site Plan

7. School Configurations
   - Grade Configuration Options
   - Grade Configuration Table
   - Annual Building Costs

8. Summary and Recommendations
Introduction and Overview

Elementary School Study

Harriman, Architects & Engineers, of Auburn has been retained by Regional School Unit 1 to prepare a study of four elementary schools in Bath, West Bath and Phippsburg. The goal of the study is to provide an assessment of each of the schools, including the condition of physical facilities and configuration of student population.
Map of school locations, including Woolwich Central School
### Introduction and Overview

#### Overview

The RSU 1 currently operates eight schools, including four elementary schools - Fisher Mitchell School, Dike Newell School, Phippsburg Elementary School and West Bath School. In addition, the new Woolwich Central School serves grades K-8.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Grades</th>
<th>Student Population</th>
<th>Building Area</th>
<th>Area per Student</th>
<th>Year Opened</th>
<th>Avg. area per Classroom</th>
<th>Avg. no. of Students per Classroom</th>
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</thead>
<tbody>
<tr>
<td>Fisher Mitchell School</td>
<td>3-5</td>
<td>220</td>
<td>33,225 sf</td>
<td>151</td>
<td>1953</td>
<td>816</td>
<td>18.3</td>
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<tr>
<td>Dike Newell School</td>
<td>K-2</td>
<td>282</td>
<td>49,250 sf</td>
<td>175</td>
<td>1963</td>
<td>817</td>
<td>18.8</td>
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<tr>
<td>Phippsburg Elementary School</td>
<td>K-5</td>
<td>84</td>
<td>23,292 sf</td>
<td>277</td>
<td>1958</td>
<td>771</td>
<td>14</td>
</tr>
<tr>
<td>West Bath School</td>
<td>K-5</td>
<td>140</td>
<td>19,980 sf</td>
<td>142</td>
<td>1958</td>
<td>883</td>
<td>17.5</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>726</strong></td>
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</tr>
</tbody>
</table>
Introduction and Overview

Assessment of Elementary Schools

The four elementary schools in this study are comprised of a variety of building conditions and student populations. Each of the four schools has been expanded over time in response to shifting numbers of students and changing curriculum needs. Some of the schools experience limited space while others are less heavily used. Some of the buildings have inefficient mechanical systems with poor air distribution while others have more efficient, recently replaced systems.

Other factors come into play with student demographics. Pre-K programs are becoming increasingly popular in Maine and are a consideration here as well. The Dike Newell School currently has one Pre-K classroom and more are desired.

This study provides an analysis of each of the individual schools with regard to building condition and program summary. It also takes a broader view of grade configuration options in order to discover the most efficient use of facilities within RSU 1.
Fisher Mitchell School

Overview

The existing Fisher Mitchell School was opened in 1953. The building was roughly doubled in size in 1978 with an addition that included classrooms, multi-purpose room, media center and offices. It is located on a site of approximately seven acres and is on the south side of town, within a mile of the town center. It is currently configured for grades three to five. The school population has decreased from about 300 to 220 students.
Fisher Mitchell School

The single-story total building area is 33,225 sf. The building is laid out in a U shape, with the multi-purpose room/kitchen and music room at the lower end and classroom wings extending outward. Refer to Tab 6 for a plan of the existing building.

The playground area is accessed over swales by “bridges”, which were added more recently. A small exterior storage shed is used for playground equipment. There is a separate bus loop for student drop-off. Parking is minimal along the south side of the building, and the drive around the east side of the building is sometimes used.
**Fisher Mitchell School**

**Building Condition**

The building exterior is a combination of clapboard siding, window wall, and brick veneer construction; the brick veneer appears to be in sound condition. The 1978 addition has undergone substantial settling resulting in noticeable cracking in the floor slab and walls as well as rendering some windows inoperable. Roofing over the original building is in need of replacement. A small greenhouse addition is on the south side of the original building and there are interior clerestory windows in the original building.

Many finishes throughout the building are worn, including carpeting and paint. There is VC tile throughout the building corridors, which appears to be in satisfactory condition, and mosaic tile in the addition entrance and some restrooms. A saltwater tank near the main entrance provides an interesting focal point.
Backed up storm drains need to be cleaned out every three years. Condensate lines are in need of replacement. The boiler is in good condition; the original 1953 building is heated by steam and the 1978 addition is heated by hot water, however, heat is poorly distributed throughout the building. The computer lab is heavily used and does not have adequate ventilation. Additional computer stations are needed in classrooms and there is a shortage of restrooms for both students and staff.

Electrical service is in need of upgrading and there are not adequate outlets for today's power needs. The building is alarmed with a system that is old and inadequate. Exterior cameras are needed and a card-reader access system is desirable.
Fisher Mitchell School

Because the Fischer Mitchell School is on one level, it is considered reasonably accessible. The elevated stage only has stair access. The main entrance is accessible at grade level. The parent drop off is directly in front of the main entrance and there is a curb ramp at the driveway. ADA compliant signage is lacking throughout the building. The toilet rooms in the original building do not have adequate turning radii for accessibility. The majority of doors throughout the building have proper hardware that can be operated without grasping or twisting.

Educational Program

The Fisher Mitchell School currently has four classrooms per grade, grades 3 - 5, with 17 - 22 students per class. The classrooms in the original building are larger, at about 840 sf, and the classrooms in the addition are about 770 sf. A dedicated space for Life Skills is needed, with restroom and flexible space.

Utilizing the state average of about 142 sf per student for elementary schools, the area here of 151 sf per student suggests that the school is not at capacity. However, the older classrooms are actually larger than needed and there is a shortage of storage space throughout the facility. In addition, the state average is just a rule of thumb and local programs may require additional space. The building appears to be at capacity for the current use with little or no margin for increase in student population.
Fisher Mitchell School

The multi-purpose room is heavily used as cafeteria, gymnasium, etc. There are currently three lunch periods. The kitchen has all electrical equipment and is poorly laid out and undersized. There is a general shortage of storage space throughout the school. The multi-purpose room does not have storage space for chairs and tables, which are pushed to one side of the space. The stage is used for storage: books, furniture, etc.

Following are some of the program areas that need to be addressed:

- Rooms for Special Services are needed for programs such as Functional Life Skills.
- The Media Center and Computer Lab are undersized for the size of school. The Media Center should have a separate office/work space and needs additional storage.
- The multi-purpose room lacks table/chair storage, bleachers and handicap access to the stage.
- General storage and restrooms are lacking throughout.
Dike Newell School

Overview

The existing Dike-Newell School was opened in 1963. The building was more than doubled in 1978 with a two-story addition that included new offices, several classrooms, a library, and a gymnasium. The school is situated on nearly 15 acres, only half of which is usable and is located within the town of Bath. The school serves a little less than 300 students and is configured as a K-2 school with an additional Pre-K class.
Dike Newell School

The total building area is 49,250 sf, which was more than doubled with the 1978 addition. The original one-story building consists of two classroom wings and a dining hall. Refer to Tab 6 for a plan of the existing building.

Original Building

Building Condition

The exterior of the original building is brick veneer and window wall construction. The sawtooth roof over the classroom wings is not compatible with Maine's winter climate and ice dams are created at the ends of the roof requiring frequent maintenance. The brick veneer at the original building is in need of repointing. Vinyl asbestos tile is in the corridor of the original building. The 1978 addition is brick veneer with a metal gambrel roof, both in satisfactory condition.

1978 Addition

Finishes throughout the original building have been partially updated and some carpeting is worn. Lighting is good; T8 fixtures are installed. The alarm system is two years old.
The building is accessible throughout and has an elevator serving the second floor. Nearly all door hardware is accessible and restrooms are compliant. ADA compliant signage is lacking throughout the building. The parent drop off is directly in front of the main entrance and there is a curb ramp at the driveway.

**Educational Program**

The Dike-Newell School currently has five classrooms per grade, grades K-2, plus one Pre-K class. The classrooms average 817 square feet. An additional Pre-K classroom and one additional Kindergarten classroom is desired. The Music Room is isolated and undersized. An option is to switch the Music room with the Odyssey space.

Using the state average of about 142 sf per student for elementary schools, the area here of 175 sf per student suggests that there is ample room. This is in part due to additional spaces such as professional development and Title 1, and a gymnasium in addition to the cafeteria. There are three lunch periods.
Following are some of the program areas that need to be addressed:

- One additional Kindergarten classroom is desired.
- Additional Pre-K classrooms are desired.
- An additional Special Education classroom is desired.
- Music Room inadequately sized - possibly to be switched with Odyssey.
- Storage space is slightly lacking; Gym storage is adequate.
West Bath School

Overview

The existing West Bath School was opened in 1958 and additional classrooms and an office area were added in 1982. The building is located on a site of approximately six acres. It is currently configured as a K-5 school with a population currently at 140.
West Bath School

The total building area is 19,980 sf, all on one level. The building is organized around a multi-purpose room core, with the expansion wing extending toward the south. Many of the spaces are configured with non-square angles derived from a hexagonal floor plan geometry. Refer to Tab 6 for a plan of the existing building.

There is minimal parking space and a distinct bus loop for student drop-off. Expansion is desired for the playground. Site access is uncongested in this semi-rural area.

Playground, looking southwest

Main Entrance
West Bath School

Building Condition

The exterior of the building is brick and vertical wood siding on the original building and split-face block on the addition which appears to be in satisfactory condition. The original multi-purpose room was about 4’ below the main level of the first floor. It was subsequently raised to the same height as the rest of the building, leaving an abandoned space below. Restrooms in the building are adequate. Finishes in the building are aging but mostly adequate. There are no known mold problems in the building.

Multi-purpose Room

The boiler was replaced recently and is in excellent condition; however, controls are in need of updating. Air distribution in the building is inadequate resulting in spaces that are too hot or too cold.

Mechanical Room
West Bath School

The building is accessible and door hardware is ADA compliant. The main entrance to the building is on one level and has a curb ramp.

Typical Classroom

Educational Program

The West Bath School has one or two classrooms per grade K-5. There are eight classrooms for six grades, with the two largest grades using two classrooms each. An additional two classrooms are needed. The average class size is presently 17.5 students and average area per classroom is 883 square feet, which is generous. The Kindergarten space is oversized at about 1000 sf. The school operates with two lunch periods.
West Bath School

The school is at the state average for an elementary school of about 142 sf per student, however, there is still a lack of space in several areas. Cafeteria tables are being stored in a corridor and chairs are kept in the mechanical room due to lack of storage space. In addition, small groups sometimes meet in a corridor due to lack of meeting space. The conference room is undersized and office space is tight.

Following are some of the program areas that need to be addressed:

- Two additional classrooms are desired.
- Playground expansion is desired.
- General storage is lacking throughout.
The existing Phippsburg Elementary School was opened in 1958. Additions were built in 1982 and 1987. The school is located on a site of approximately five acres and is across the road from the town offices of Phippsburg. It is currently configured as a K-5 school with a current total student population of 84.
Phippsburg Elementary School

The total building area is 23,292 sf, on one floor. The original building is laid out in two hexagonal classroom wings joined by a central multi-purpose space. The later classroom addition sits opposite the multi-purpose room nearer the road. Refer to Tab 6 for a plan of the existing building.

The playground is located over a leach field which experiences occasional blowouts and drains into a nearby bog, requiring relocation. Parking is adequate and there is a bus loop with an accessible entrance. A portion of the site is used for gardening. An art classroom addition blocks off a swale resulting in poor drainage.
Building Condition

The building exterior is primarily brick and in good condition. The roof is in good condition. There are no mold issues or asbestos in the building and some carpeting is well worn. About 90% of windows have been replaced recently. The concrete slab floor of the art classroom was poorly installed and has an uneven surface. The art classroom is only accessed through the multi-purpose room.

The mechanical system in the building has fuel pumped around the perimeter of the building to remote units and creates an unsafe condition. Heat distribution in the building is poor. Lighting in the building is generally good.
Phippsburg Elementary School

Accessibility
Since the Phippsburg Elementary School is on one level, it is considered reasonably accessible. ADA compliant signage is installed and door hardware can be operated without grasping or twisting, with the exception of a few mechanical closets, etc.

Art Classroom

Educational Program
The Phippsburg Elementary School currently has one classroom per grade, grades K-5, with 8 - 19 students per class. There are also two Special Education classrooms. Classrooms vary in size from about 650 sf to 1050 sf.

The area here of 277 sf per student is nearly double the state average of about 142 sf per student for elementary schools. There are some inefficiencies in a smaller school, but the figure highlights the ample space in the school. There is plenty of room for growth or fluctuations in student population.

Typical Classroom
The multi-purpose room is adequately sized and has bleachers, although an area of the space has been carved out for storage.

Due to the more-than-adequate size of the building and area of individual classrooms, there do not appear to be any issues with educational programming due to inadequacy of the building.
Fisher-Mitchell School

Existing Site Plan
West Bath School  
Existing First Floor Plan
West Bath School

Existing Site Plan
Phippsburg Elementary School

Existing First Floor Plan
Elementary Grade Configurations

Grade Configuration Options

Several options for reconfiguring the elementary schools were considered. Many factors come into play when considering partial or total consolidation.

Four basic options were developed and considered as follows:

- **Option 1**
  - Results in three elementary schools, excluding Woolwich.
  - Closes West Bath School
  - Relocates West Bath students to Woolwich Central School

- **Option 2**
  - Results in three elementary schools, excluding Woolwich.
  - Closes Phippsburg Elementary School
  - Relocates Phippsburg students to Fisher Mitchell, Dike Newell and Woolwich Central

- **Option 3**
  - Results in one new elementary school, excluding Woolwich.
  - Closes the four elementary schools

- **Option 4**
  - Results in three elementary schools, excluding Woolwich.
  - Closes Fisher Mitchell School
  - Relocates Fisher Mitchell students to Dike Newell and Woolwich Central

In addition to these, sub-options were developed, exploring different ways to reconfigure the remaining schools. The Woolwich Central School was seen as a resource for school expansion since there is some margin for growth within the school as well as the potential for expansion. The four elementary schools in this study are not candidates for school expansion due to limited sites, except for new construction replacing existing buildings.

**Option 1**

The first option explores the ramifications of closing the West Bath School. Due to its location near two other elementary schools, its closure would result in shorter additional bussing distances. Also, the building is in good condition and could have value for another type of school such as a charter school.

A few options were reviewed for the relocation of 140 students, based on the current enrollment. The size of the Fisher Mitchell and Dike Newell schools would not allow for absorbing many additional students, so the Woolwich Central School was considered. In order to take on an additional 140 students, two options for doing so were explored. The school could be reconfigured as a K-5 school with approximately 110 grade 6-8 students being transferred to Bath Middle School, assuming capacity, or the school would need a classroom addition. There is currently one vacant classroom and expansion area to allow a six-classroom addition, which would accommodate the additional 140 students.
Elementary Grade Configurations

Relocating grade 6-8 students from the Woolwich Central School to Bath Middle School may meet opposition from the residents of Woolwich since there is a perceived preference to keep all Woolwich students at the same location. Also, since the school received state funding as a K-8 school, there may be a challenge in reconfiguring the school.

Option 2

The second option involves the closure of the Phippsburg Elementary School. The facility itself has many challenges, such as an inefficient mechanical system and a leach field in need of relocation. In addition, the student population is very low based on the size of the school. The school is central in the town of Phippsburg and its closure would result in greater bussing distances, especially for students at the southern end of the peninsula. There is potential for use of the school by the town, with its location near town offices.

For student relocation, not all students could be accommodated by the Fisher Mitchell and Dike Newell schools alone. The option explored would reconfigure Fisher Mitchell as a 4-5 school and Dike-Newell as a K-3 school. The Pre-K classroom in Dike Newell would be replaced by a K-3 classroom and some students would need to be relocated to the Woolwich Central School since Dike Newell could not accommodate all K-3 students. The capacity of Woolwich would be exceeded by over 20 students so a building addition there would need to be considered for this option.

Option 3

The third option entails closing all four elementary schools and building a new school for all students within the three towns. This option does not affect the Woolwich Central School and reduces overall bussing compared with the other options. Administration costs would also be reduced with a centralized school. Operations and Maintenance costs as well as school repairs would similarly be reduced. Again, closing the West Bath school would result in the loss of “school choice”.

One option for building a new K-5 school would be to locate it on the Fisher Mitchell site and temporarily locate students to Woolwich. This move would also necessitate temporarily relocating Woolwich grade 6-8 students to Bath Middle School in order to accommodate 220 additional students, and Woolwich would even then be beyond its capacity of 375 by about sixty students. The Department of Education recommendation for a minimum usable site for an elementary school is 5 acres plus 1 acre per 100 students, which would be a 13 acre site. The Fisher Mitchell site is only 5.36 acres, so the resulting school, even if multi-story, would be extremely tight on the site.

Another option for location of a new K-5 school would be a more centralized site within the three towns. There would be additional costs for a new site, and a site could be chosen that would be adequate for the number of students.
Elementary Grade Configurations

Option 4

The fourth option closes the Fisher Mitchell School. The school facility is at or beyond capacity for its current use and has several maintenance challenges. The school also lacks storage space and the library and gym are cramped. One scenario for relocating students is to send grade 3 students to Dike Newell and grade 4-5 students to Woolwich. The Dike Newell School is not well situated to accommodate 74 additional students in four classrooms and such an increase would be a strain on the school. The Woolwich school would need to be expanded to accommodate an additional 148 students.

Other Options

The option of closing both Phippsburg and West Bath schools was considered, however relocating approximately 220 students from both schools could not be accommodated with constructing a new school building, so this option was not further explored.

Simple Annual Building Costs

A tabulation of simple annual building costs is included in this section. These costs are based on projected expenses from VFA reports, O&M costs provided by the district, and on typical new construction costs. It should be noted that the projected expenses for repairs from VFA reports are frequently not undertaken. There is also a value in properties that are closed, which is not included in the figures provided.

Pre-K Program

Implementing a half-day Pre-K program for 4-year old children in the district school system is also a consideration. There is currently one Pre-K classroom in the Dike Newell school. Pre-K programs are already being offered in about 100 different school districts or departments throughout the State of Maine. Because demand has been greater than space permits, some school districts have had to implement a lottery system to select students who will be allowed into the program. An indication that the Pre-K program has become very popular with parents for getting a head start on their children’s education.

If RSU #1 were to implement such a program, it is projected that as many as 160 students would apply to attend the program. Being a half-day program, half of the students would attend in the morning and half would attend in the afternoon. To accommodate this number of students, it is estimated that 5 to 6 classrooms, of about 1,000 sf each, would be needed based on an optimum class size of between 12 and 16 students each. In addition to the new classrooms, teachers and support staff would need to be hired for the program. At this point, Pre-K classrooms would not be considered as part of K-5 facilities.
# RSU #1 Study  
## Elementary Grade Configuration Options

<table>
<thead>
<tr>
<th><strong>B A S E S T U D Y</strong></th>
<th><strong>Fisher Mitchell</strong></th>
<th><strong>Dike Newell</strong></th>
<th><strong>West Bath</strong></th>
<th><strong>Phippsburg</strong></th>
<th><strong>New K-5, New Site</strong></th>
<th><strong>Woolwich Central</strong></th>
<th><strong>Bath M. S.</strong></th>
<th><strong>Remarks</strong></th>
</tr>
</thead>
</table>
| **Current Configuration** | Grades: 3-5  
Year Opened: 1953  
Additions: 1978  
(Classroom/Gym)  
Exg. Area: 33,225 sf  
Population: 220  
Classrooms per Grade: 4  
Total Classrooms: 12  
Avg. Class Size: 18.3  
Area per Student: 151  
Design Capacity:  
Site Size: 5.36 acres  
Recommended Min. Site Size: 7 acres  
Annual O&M Costs: $214,451  
20 yr. VFA Needs: $9,191,706 | Grades: K-2  
Year Opened: 1963  
Additions: 1978  
(Classroom/Gym)  
Exg. Area: 49,250 sf  
Population: 282  
Classrooms per Grade: 5  
Total Classrooms: 15  
Avg. Class Size: 18.8  
Area per Student: 14.76 acres  
Recommended Min. Site Size: 8 acres  
Annual O&M Costs: $292,275  
20 yr. VFA Needs: $9,437,489 | Grades: K-5  
Year Opened: 1958  
Additions: 1982/1987  
(Classroom)  
Exg. Area: 23,292 sf  
Population: 140  
Classrooms per Grade: 1  
Total Classrooms: 6  
Avg. Class Size: 14.2  
Area per Student: 7 acres  
Recommended Min. Site Size: 6 acres  
Annual O&M Costs: $172,371  
20 yr. VFA Needs: $3,743,332 | Grades: K-8  
Exg. Area: 66,000 sf  
Population: 324 | Grades: 6-8  
Exg. Area: 100,987 sf  
Population: 345 |  
• Four Elementary Schools  
(excluding Woolwich Central)  
• Current K-5 population: 726 students  
• Total Classrooms: 41  
• Average Class Size: 17.7 |
| **Option 1A** | Close  
West Bath, relocate students to Woolwich;  
relocate Woolwich 6-8 students to B.M.S. | Grades: 3-5  
Exg. Area: 33,225 sf  
New Area: 0 sf  
Total Area: 33,225 sf  
Population: 220  
Classrooms./Grade: 4  
Total Classrooms: 12  
Area per Student: 151 | Grades: K-2  
Exg. Area: 49,250 sf  
New Area: 0 sf  
Total Area: 49,250 sf  
Population: 282  
Classrooms./Grade: 5  
Total Classrooms: 15  
Area per Student: 175 | Grades: K-5  
Exg. Area: 23,292 sf  
New Area: 0 sf  
Total Area: 23,292 sf  
Population: 140  
Classrooms./Grade: 1  
Total Classrooms: 6  
Area per Student: 277 | Grades: K-8  
Exg. Area: 66,000 sf  
New Area: 0 sf  
Total Area: 66,000 sf  
Population: 333 | Grades: 6-8  
Exg. Area: 100,987 sf  
New Area: 0 sf  
Total Area: 100,987 sf  
Population: 333 |  
• Three Elementary Schools  
(excluding Woolwich Central)  
• Relocate 140 K-5 students from West Bath to Woolwich Central  
• Relocate 125 grade 6-8 students from Woolwich Central to Bath Middle School  
• Increased bussing of students from West Bath to Woolwich Central and from Woolwich to Bath Middle School  
• Decreased O&M and repair costs from closing of West Bath, potential income from building  
• Potential challenge in relocating grade 6-8 students permanently to Bath Middle School since state funded as a K-8 school  
• Perceived preference in town of Woolwich to keep all Woolwich students at the same location |
## RSU #1 Study
### Elementary Grade Configuration Options

<table>
<thead>
<tr>
<th>Option 1B</th>
<th>Close West Bath, relocate students to Woolwich new addition</th>
</tr>
</thead>
</table>
| Fisher Mitchell | Grades: 3-5  
Exg. Area: 33,225 sf  
New Area: 0 sf  
Total Area: 33,225 sf  
Population: 195  
Classrooms/Grade: 5  
Total Classrooms: 10  
Area per Student: 170 | Dike Newell | Grades: K-2  
Exg. Area: 49,250 sf  
New Area: 0 sf  
Total Area: 49,250 sf  
Population: 282  
Classrooms/Grade: 5  
Total Classrooms: 16  
Area per Student: 157 | West Bath | Close School  
Repurpose as a Charter School? | Phippsburg | Grades: K-5  
Exg. Area: 19,980 sf  
New Area: 0 sf  
Total Area: 19,980 sf  
Population: 140  
Classrooms/Grade: 1.33  
Total Classrooms: 8  
Area per Student: 142 | New K-5, New Site | Grades: K-8  
Exg. Area: 23,292 sf  
New Area: 0 sf  
Total Area: 23,292 sf  
Population: 84  
Classrooms/Grade: 5  
Total Classrooms: 6  
Area per Student: 277 | Woolwich Central | Grades: 6-8  
Exg. Area: 100,987 sf  
New Area: 0 sf  
Total Area: 100,987 sf  
Population: 345 | Bath M. S. | Remarks |

- Three Elementary Schools (excluding Woolwich Central)
- Relocate 140 K-5 students from West Bath to Woolwich Central: one vacant classroom and new six-classroom addition
- Increased bussing of students from West Bath to Woolwich Central
- Decreased O&M and repair costs from closing of West Bath, potential income from building

<table>
<thead>
<tr>
<th>Option 2</th>
<th>Close Phippsburg, relocate students to Fisher-Mitchell (4-5) Dike-Newell (K-3) and Woolwich (K-3)</th>
</tr>
</thead>
</table>
| Fisher Mitchell | Grades: 4-5  
Exg. Area: 33,225 sf  
New Area: 0 sf  
Total Area: 33,225 sf  
Population: 195  
Classrooms/Grade: 5  
Total Classrooms: 10  
Area per Student: 170 | Dike Newell | Grades: K-3  
Exg. Area: 49,250 sf  
New Area: 0 sf  
Total Area: 49,250 sf  
Population: 313  
Classrooms/Grade: 5  
Total Classrooms: 16  
Area per Student: 157 | West Bath | Close School  
Repurpose for town use? | Phippsburg | Grades: K-5  
Exg. Area: 19,980 sf  
New Area: 0 sf  
Total Area: 19,980 sf  
Population: 140  
Classrooms/Grade: 1.33  
Total Classrooms: 8  
Area per Student: 142 | New K-5, New Site | Grades: K-8  
Exg. Area: 66,000 sf  
New Area: 0 sf  
Total Area: 66,000 sf  
Population: 397  
(capacity: 375; building addition required) | Woolwich Central | Grades: 6-8  
Exg. Area: 100,987 sf  
New Area: 0 sf  
Total Area: 100,987 sf  
Population: 345 | Bath M. S. | Remarks |

- Three Elementary Schools (excluding Woolwich Central)
- Relocate 84 K-5 students from Phippsburg to Dike Newell and Fisher Mitchell; overflow students to Woolwich Central
- Convert Dike Newell to K-3 and Fisher Mitchell to 4-5
- Remove Pre-K from Dike Newell to create additional classroom
- Increased bussing of students from Phippsburg, extended ride for some students
- Decreased O&M and repair costs from closing of Phippsburg, potential income from building
## RSU #1 Study
### Elementary Grade Configuration Options

### BASE STUDY

<table>
<thead>
<tr>
<th>Fisher Mitchell</th>
<th>Dike Newell</th>
<th>West Bath</th>
<th>Phippsburg</th>
<th>New K-5, New Site</th>
<th>Woolwich Central</th>
<th>Bath M. S.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close School, Build new K-5 school on existing site</td>
<td>Close School</td>
<td>Close School</td>
<td>Close School</td>
<td>Repurpose for town use?</td>
<td>Grades: K-5</td>
<td>Grades: 6-8</td>
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<tr>
<td>New Area: 112,500 sf</td>
<td>Population: 726</td>
<td>Classrooms/Grade: 7</td>
<td>Total Classrooms: 42</td>
<td>Area per Student: 140</td>
<td>Site Size: 13 acres</td>
<td>Exg. Area: 66,000 sf</td>
<td>New Area: 0 sf</td>
</tr>
<tr>
<td>New Area: 112,500 sf</td>
<td>Population: 726</td>
<td>Classrooms/Grade: 7</td>
<td>Total Classrooms: 42</td>
<td>Area per Student: 140</td>
<td>Recommended Min. Site Size: 13 acres</td>
<td>Exg. Area: 66,000 sf</td>
<td>New Area: 0 sf</td>
</tr>
</tbody>
</table>

- One new Elementary School (excluding Woolwich Central)
- Relocate grade 6-8 students from Woolwich Central temporarily to Bath Middle School
- Relocate grade 6-8 students temporarily from Fisher-Mitchell to Woolwich Central
- Construct new multi-story K-5 school on Fisher-Mitchell site
- Increased bussing of students from Phippsburg and West Bath.
- Decreased O&M and repair costs from closings of four existing elementary schools.
- Site size is well under recommended minimum area
- Reduced administration staff from centralized school

### Option 3B

<table>
<thead>
<tr>
<th>Fisher Mitchell</th>
<th>Dike Newell</th>
<th>West Bath</th>
<th>Phippsburg</th>
<th>New K-5, New Site</th>
<th>Woolwich Central</th>
<th>Bath M. S.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Area: 112,500 sf</td>
<td>Population: 726</td>
<td>Classrooms/Grade: 7</td>
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<td>Area per Student: 140</td>
<td>Recommended Min. Site Size: 13 acres</td>
<td>Exg. Area: 66,000 sf</td>
<td>New Area: 0 sf</td>
</tr>
</tbody>
</table>

- One new Elementary School (excluding Woolwich Central)
- Construct new K-5 school on site central to Bath, West Bath and Phippsburg.
- Overall increased bussing of students.
- Decreased O&M and repair costs from closings of four existing elementary schools.
- Reduced administration staff from centralized school
### Elementary Grade Configurations

#### Option 4

**Close Fisher Mitchell, relocate students to Dike-Newell (3) and Woolwich (4-5)**

<table>
<thead>
<tr>
<th></th>
<th>Fisher Mitchell</th>
<th>Dike Newell</th>
<th>West Bath</th>
<th>Phippsburg</th>
<th>New K-5, New Site</th>
<th>Woolwich Central</th>
<th>Bath M. S.</th>
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<td>Grades</td>
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<td>K-5</td>
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<td>K-8</td>
<td>6-8</td>
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</tr>
<tr>
<td>Exg. Area</td>
<td>49,250 sf</td>
<td>19,980 sf</td>
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<td>23,292 sf</td>
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<td>66,000 sf</td>
<td>100,987 sf</td>
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<tr>
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<td>0 sf</td>
<td></td>
<td>6,700 sf</td>
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<tr>
<td>Total Area</td>
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<td>23,292 sf</td>
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<td>73,700 sf</td>
<td>100,987 sf</td>
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<tr>
<td>Population</td>
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<td>140</td>
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<td>84</td>
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<td>472</td>
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<td>Classrooms./Grade</td>
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<td>1</td>
<td>1</td>
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<td>277</td>
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</table>

**Note:** The above grade configurations do not include a Pre-K program. If a Pre-K program is initiated, it is estimated that the program would accommodate approximately 160 students with 80 students attending in the AM and 80 students attending in the PM. This would require the addition of five or six classrooms of approximately 1,000 sf net each.

- Three Elementary Schools (excluding Woolwich Central)
- Relocate 4-5 students from Fisher Mitchell to Woolwich Central: one vacant classroom and new six-classroom addition
- Relocate 74 3rd grade students from Fisher Mitchell to Dike Newell - creating a strain on that facility
- Increased bussing of students from Bath to Woolwich Central
- Decreased O&M and repair costs from closing of Fisher Mitchell, potential income from property
## RSU #1 SIMPLE ANNUAL BUILDING COSTS

<table>
<thead>
<tr>
<th>Option</th>
<th>Fisher Mitchell</th>
<th>Dike Newell</th>
<th>West Bath</th>
<th>Phippsburg</th>
<th>New K-5</th>
<th>Woolwich</th>
<th>Total Cost</th>
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<td>$14,204.00</td>
<td>$1,283,034.00</td>
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<tr>
<td>Annual O&amp;M</td>
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<td>$292,275.00</td>
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</table>

1. Annual costs do not reflect interest accrued over twenty years.
2. Annual VFA costs averaged from twenty year total.
3. Six-classroom addition to Woolwich Central School calculated at $190/sf.
4. New K-5 school on Fisher Mitchell site calculated at $240/sf for total project cost, annual cost averaged over twenty years.
5. New K-5 school on new site calculated at $250/sf for total project cost, averaged over twenty years.
6. Building area for new school options derived from 150 sf/student state average x 750 students.
7. 100% local funding is assumed for all new construction.
8. Total cost for a new 750 student elementary is estimated to be $28,125,000.
Summary & Recommendations

Summary

The four elementary schools outlined in this study range in age from fifty to sixty years old. The new Woolwich Central School also factors into some of the reconfiguration scenarios. All of the schools have been well maintained over the years through regular repair and maintenance programs.

Fisher Mitchell School

The Fisher Mitchell School is the oldest elementary school in this study, the original building built in 1953. The building functions at capacity and is has maintenance issues due to its age. Its location in the town of Bath is convenient and the site is small but adequate. Needs for added programs would necessitate expansion of the building.

Dike Newell School

At fifty years old, the original Dike Newell School building shows signs of aging and the sawtooth roof over the classroom wings requires regular maintenance and is in need of a better long-term solution. The 1978 addition is spacious and in good condition. The overall facility has space to meet program needs. Similar to Fisher Mitchell, it has a convenient location in the town of Bath.

West Bath School

The West Bath School is a small, compact building and is in good condition. There is a lack of storage space and a need for additional program space for the number of students served. The location is semi-rural and uncongested.

Phippsburg Elementary School

The Phippsburg Elementary School is the most remote of the elementary schools and least populated. It also has some of the greater physical challenges of the four schools and has more than enough space to serve the number of students attending. Its location is advantageous in that it serves students at the far end of the peninsula with a much closer commute than they would have to any of the other schools.

Recommendations

In light of all the information presented in this report, there are a few basic needs to be considered. The condition of each of the aging schools and long-term maintenance costs is an important factor. Also, the area per student is a good indicator of whether each of the facilities is adequate to fulfill program needs. Finally, location plays a key role in determining how students are best served, in terms of proximity to the core of communities as well as commuting distance, especially for elementary students.
Summary & Recommendations

The current configuration of schools was compared with various options to close individual schools – or all of them – in order to get a sense of the ramifications for partial or total consolidation, both from an economic standpoint as well as the impact on the other schools and on all the communities.

Option 1: Close West Bath School

The West Bath School is only a few miles from the other elementary schools and would have less of an impact on bussing than a closure of the Phippsburg school. At the same time, there are more students attending West Bath so there would be a greater impact with relocating the students. Expanding the Fisher Mitchell or Dike Newell schools is not considered a good option due to the limitations of each of the sites – Fisher Mitchell School more so. For this reason, the Woolwich Central School was considered for relocation of the students. Some of the number of students could be absorbed by Dike-Newell, but the Woolwich school would need to take in the greater majority of them. This could be done by considering making Woolwich Central School a K-5 school and relocating students from grades 6-8 to Bath Middle School, or by building an addition to Woolwich.

Cost for addition could potentially be recouped by sale of the West Bath School property. Impacts on the Woolwich community by relocating students might not be received favorably by the town residents. There does not appear to be a clear advantage in closing the West Bath School from an economic or community standpoint.

Option 2: Close Phippsburg Elementary School

The Phippsburg Elementary School initially appears to be a more likely candidate for closure, based on the condition of the school and the low number of students. The major obstacle for closing the school is increased bussing costs and longer commute for many of the students. A way to accommodate the students would be to change Fisher Mitchell School to a grade 4-5 school, Dike-Newell School to a K-3, and relocate others to Woolwich Central School, which would require a minor addition based on capacity. Closing the Phippsburg school would reduce overall annual building costs compared with closing the West Bath school. Also, the building would have a value to the Town of Phippsburg.

Option 3: Close all four schools and build a new K-5 school

Closing all four elementary schools and building a new K-5 school would appear to reduce overall building costs and administration costs. The projected long-term repair costs from VFA used in the RSU 1 Simple Annual Building Costs table are generous and may be somewhat higher than what would actually be implemented. At the same time, value gained from closed school properties is not factored in.
Summary & Recommendations

Two options for achieving a new school were reviewed. One option would be to build a new school building on the Fisher Mitchell School site, temporarily relocating those students to Woolwich Central School, and grade 6-8 students from Woolwich to Bath Middle School. The Fisher Mitchell School site is only 5.36 acres and well below the recommended minimum site size of 13 acres for an elementary school designed for 750 students, thus it’s not considered a viable option.

The second option would be to build a new K-5 school on a larger site, more central to the population of the three towns involved. There would be added costs for obtaining and developing a new site, but there could be value gained from the closed school properties. Consolidating the four schools would also be seen more favorably by the Bureau of General Services and would be more likely to obtain state funding. A down side of consolidating and closing the four schools would be increased student commutes and possibly less connection with local communities due to greater overall distance to a central school.

Option 4: Close Fisher Mitchell School

As the oldest elementary school in the study, the Fisher Mitchell School warrants consideration for closure. In addition, it is at capacity and has several undersized spaces. An advantage for the school is its location near the population center of Bath. Relocating the 220 students from Bath would involve sending some to the Dike Newell School and some to the Woolwich Central School. The Dike Newell School would be strained to accommodate one grade level and the Woolwich Central School would require an addition to house an additional 140+ students. The cost for an addition could be offset by the value of the property at Fisher Mitchell.

Option 5: Maintain Current Configuration of Schools

Another option is to move forward without any school closures or reconfigurations. Ongoing maintenance and upgrading of varying states would be required for the individual schools.