Interim Report of the

Regional School District 13

Utilization Study Committee

June 5, 2015

Regional School District 13

Board of Education Members

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** Chair of the Utilization Study Committee

Also contributing:

Dr. Kathryn Veronesi, Superintendent
Ronald Melnik, Business Manager
Robert Francis, Supervisor of Buildings and Grounds
James Croteau, Facilities Manager

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Purpose

The purpose of this interim report is to update the community on the work of the RSD13 Facilities Utilization Committee, to document the approach taken by the Committee and to provide a framework for community discussion regarding the issue of declining enrollment in our school district and across much of our state. The work of the Committee is ongoing and subsequent reports will be issued as the Board of Education continues in their efforts to understand and address the issue of declining school enrollment.

Introduction

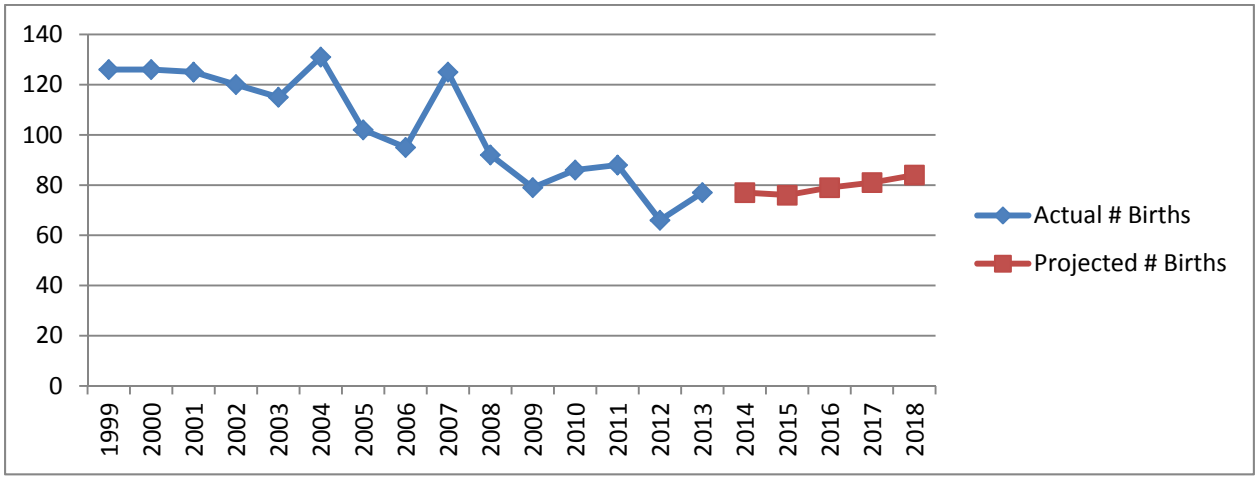
In the fall of 2011, the RSD13 Board of Education commissioned a demographic study to examine the trend of declining enrollment which the District had been experiencing since 2004. The study, conducted by H.C. Planning Consultants, Inc. concluded that student enrollment would continue to decline through the ten year period ending in 2021. Based on this projection the Board decided to pursue a long term plan to address the phenomenon of declining enrollment in our school system.

In May 2013 after approval of the 2013/14 school budget, the Board of Education voted to commission a Utilization Study to revisit the enrollment projections and submit recommendations to the Board summarizing possible building use configurations that could result in more effective use of District assets. A subcommittee of the Board, the "Utilization Study Committee" (the" Committee") was formed in September 2013. The firm Drummey Rosane Anderson (DRA) was hired in August 2013. In September 2014, after conducting three community workshops, completing an architectural, mechanical and plumbing evaluation of each building and updating the demographic study, DRA delivered to the Committee their Utilization report including several potential building use configurations.

Student Enrollment Projections

The standard methodology used to project student enrollments relies upon several external data points including housing development, economic conditions, student transfers and mobility in and out of the school district. Accurate birth rates are critical to the overall projection as kindergarten enrollments are largely based upon the number of births five years prior to the enrollment year. The following chart shows the *actual* births in Durham and Middlefield from 1999, 5 years prior to RSD 13 peak enrollment, through 2013 as well as the *projected* births through 2018.

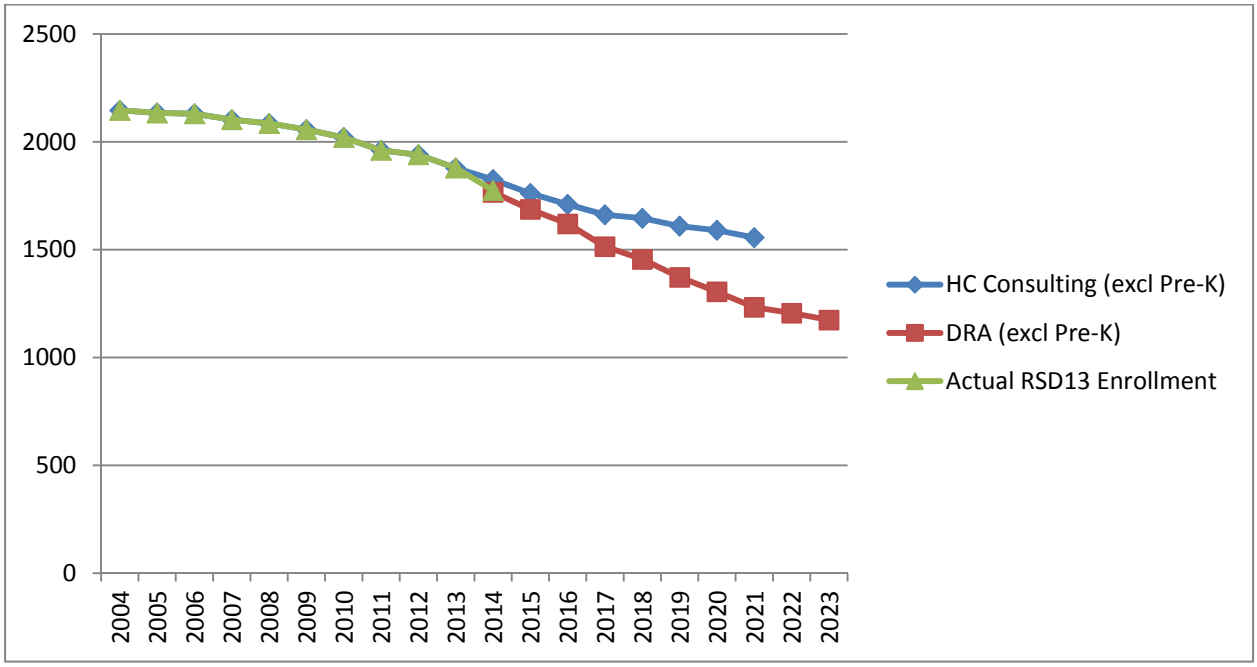
Regional School District 13 Durham and Middlefield Birth Rates



- The average number of births per year from 1999 through 2005 was 121.
- The average number of births from 2006 through 2013 was 95; a decline of 21.5% in the most recent 8 years ended 2013.
- The lowest number of annual births to date was 66 and occurred in 2012. Kindergarten enrollment for 2017 reflects that lower birth rate and influences the subsequent 11 enrollment years.
- The birthrate projections used in the DRA study for the period from 2014 to 2018 averaged 79 births and was based on the previous five year average as well as the other external data points described earlier in this report. Though a slight increase in births is projected, the average remains well below the average number of births experienced in the recent past.

The following chart illustrates the actual and projected RSD13 student enrollment for the school years that correlate to the above birth years. Also shown is a comparison of the demographic projections received in the first two demographic studies, the first from H.C. Planning Consultants and the second from DRA. While the second study produced somewhat different results, the graph clearly demonstrates a persistent decline in student enrollment projections. A revised demographic study was approved in the 2015-16 budget. Revised demographic birth rate data will be updated upon completion of a revised demographic study.

Regional School District 13 Actual and Projected Student Enrollment



- The decline in actual RSD13 student enrollment from 2004 through 2018 shows a strong correlation to the decline in birth rates experienced from 1999 through 2014. The "enrollment cycle" spans 17 years from date of birth to graduation.
- In addition to the other external data points known to impact student enrollment, the projected decline from 2014 through 2023 reflects the cumulative effect of the 17 year enrollment cycle from birth through graduation from 12th grade.

Given the importance of these projections and their dependence on current births, economics, housing and other external factors, the Committee strongly recommends that updates to the demographic forecasts be commissioned at least bi-annually for the next 2 to 4 years during which time the process of re-configuration and building design is underway.

After careful review and consideration of both the H. C. Planning Consultants, Inc. and Drummey Rosane Anderson, Inc. enrollment projections, the Committee concludes that RSD13 can expect the current trend of significant declines in student enrollment to continue through the 2023/24 school year.

District Configuration Plan

Note: The following section pertains to the planning options presented by DRA. Based on the current demographic forecasts, the Committee does not support all aspects of the "C-3" option proposed by DRA. Specifically, based on current projections, the Committee does not support the addition of 4 classrooms to Brewster School. The Committee has recommended an updated demographic study to determine if there have been significant changes in demographic projections that warrant the addition of four classrooms at Brewster School.

Drummey, Rosane Anderson, Inc. Options

Contained within the Utilization Study conducted by DRA are several planning options considered by the Committee to address the issue of declining enrollment. After thorough consideration of all presented options the Committee concluded that Option C-3 provided the best framework to address the issue of declining enrollment while best meeting the future needs of students. The Board of Education and RSD13 administrators acknowledge that future considerations including updated demographics and visioning for educational programming may necessitate changes to the C-3 option as presented by DRA.

DRA's Option C3 includes two K – 5 elementary schools, a 6 – 8 middle school and the high school.

Some advantages of this configuration are:

- Under this proposed building configuration each of the four remaining school buildings will be below full capacity in 2021/22. Keeping in mind that current enrollment projections continue to decline beyond 2021, there is a high level of confidence that this configuration provides adequate space for our students. In its current K-4 configuration the addition of 4 classes is not currently necessary. The Brewster School capacity will be revisited upon review of an updated demographic study that was recommended in the 2015/16 school budget.
- Maintaining two elementary schools allows for the continuation of the ~~ID~~ Integrated Day and Contemporary programs in separate buildings.
- This configuration reduces the number of building transitions for elementary students from Kindergarten through high school.
- Combining grades 6 – 8 into one middle school provides educational program opportunities, particularly in the area of STEM (Science Technology Engineering and Mathematics).
- In addition to operational cost reductions and lower long term capital investment requirements, reductions in transportation costs are anticipated.
- School start times can be better correlated with fewer schools.

After careful review of each of the several options submitted by DRA, the Committee concludes that some version of Option C-3 is the most viable and appropriate at this time. The Committee strongly recommends a reconfiguration of the current school complex in order that the available school space is more appropriately matched to current and projected enrollments.

Building Conditions Summary

Several factors affect the decision regarding which two elementary schools to include in the on-going school district. The most important consideration is which buildings are best suited to meet the educational needs of our students. In addition to considering the physical capacity of each building, the Committee assessed the building infrastructure, relying on a thorough mechanical and electrical conditions analysis of each of the current school buildings. This work was completed by Consulting Engineering Services, Inc. of Middletown, CT based on industry standards. (See Appendix B, Capital Needs Survey Form for each school)

It is important to note that the Capital Needs Survey Form is intended to address only the major mechanical and engineering components of each school. Estimates of capital needs are based on industry standard useful life projections for the specific equipment. If the project is implemented, a detail engineering review of the building(s) to be renovated must be completed in order to develop more accurate construction estimates. Future planning and budgeting must include funding for all normal maintenance and anticipated repair work.

Some observations after detail review of the mechanical and electrical conditions report are:

- **Brewster School**, while generally suitable from a capacity perspective, will require some capital improvements over the next 5 years to replace several of the major mechanical, engineering and plumbing systems currently in use. Currently at Brewster School the cafeteria and gymnasium functions are combined into one space referred to as the Cafetorium. A new gymnasium must be added to allow for the conversion of the existing Cafetorium space into a full cafeteria. This is necessary in order to accommodate required lunch cycles for the increased number of students planned for Brewster School.
- A significant majority of the mechanical, engineering and plumbing systems at **Lyman School** require replacement in the near future.
- **Korn School**, in part because of a significant renovation completed in 2005 requires fewer improvements over the next five years. It is important to note however, that Korn School has the smallest capacity and therefore would require a large addition in order to be a viable option going forward.
- The maximum number of classrooms at Korn, Brewster and Lyman as currently constructed are 12, 18 and 15 respectively. The maximum number of classrooms at Memorial is 17. Memorial School does however need many significant capital improvements and upgrades.

- **Strong School** was renovated “as new” in 2005. With the exception of the exhaust system for the kitchen hood and the communication and technology systems, there are no major capital improvements anticipated through 2023.
- **Coginchaug Regional High School** was also renovated “as new” in 2005. Other than the communication and technology systems, no major improvements are anticipated.

Project Funding and Grant Application Process

In order to accommodate the changes proposed under a four building District configuration as well as to meet the capital needs for each of the remaining elementary schools, the Board of Education will have to seek financing. It is important to note that because of the significant current capital needs at all of our elementary schools, the Board would likely have to obtain financing to address those needs in each of the remaining elementary schools whatever the changes to the current district configuration.

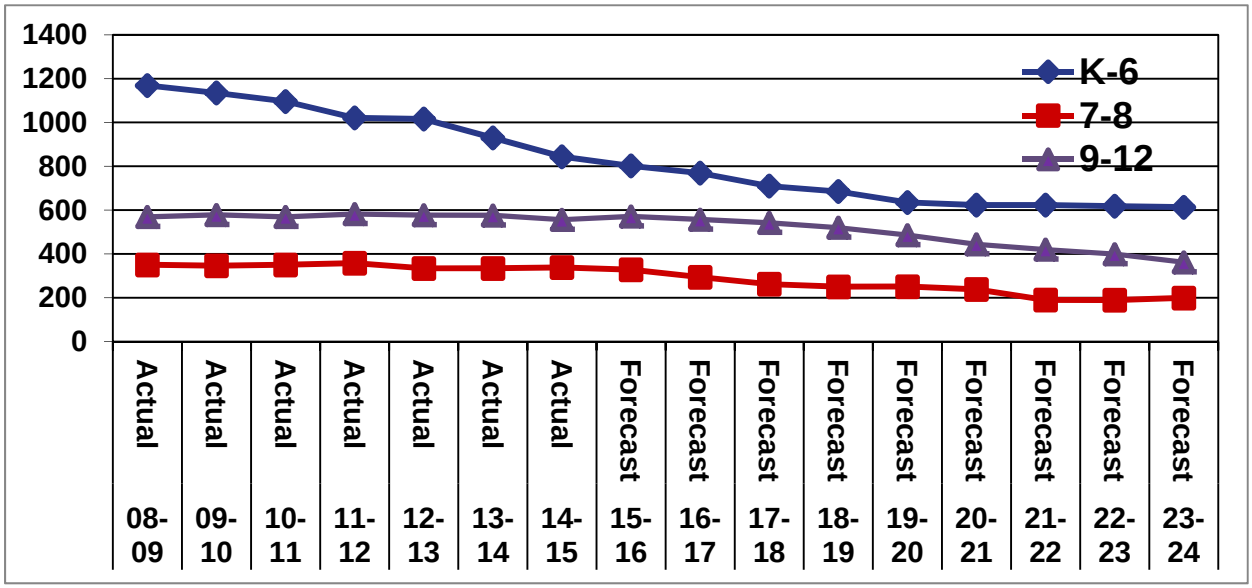
The process for obtaining funding (bond proposal) and realizing the maximum state building grant relative to this project is a lengthy one. Included in the process are local public hearings, referendum approval of the project and proposed bonding, application for state building grant, legislative approval of funding for state building grant and completion of all legal and financial requirements related to the bond filing. Depending on the final proposal, certain approvals may also be required from the local Planning and Zoning Commissions and other regulatory agencies.

After reviewing the timeline associated with this process, the Committee concluded that the most prudent approach would be to pursue a phased implementation in order to more immediately address the decline in enrollment already experienced within the District.

Phased Implementation Approach

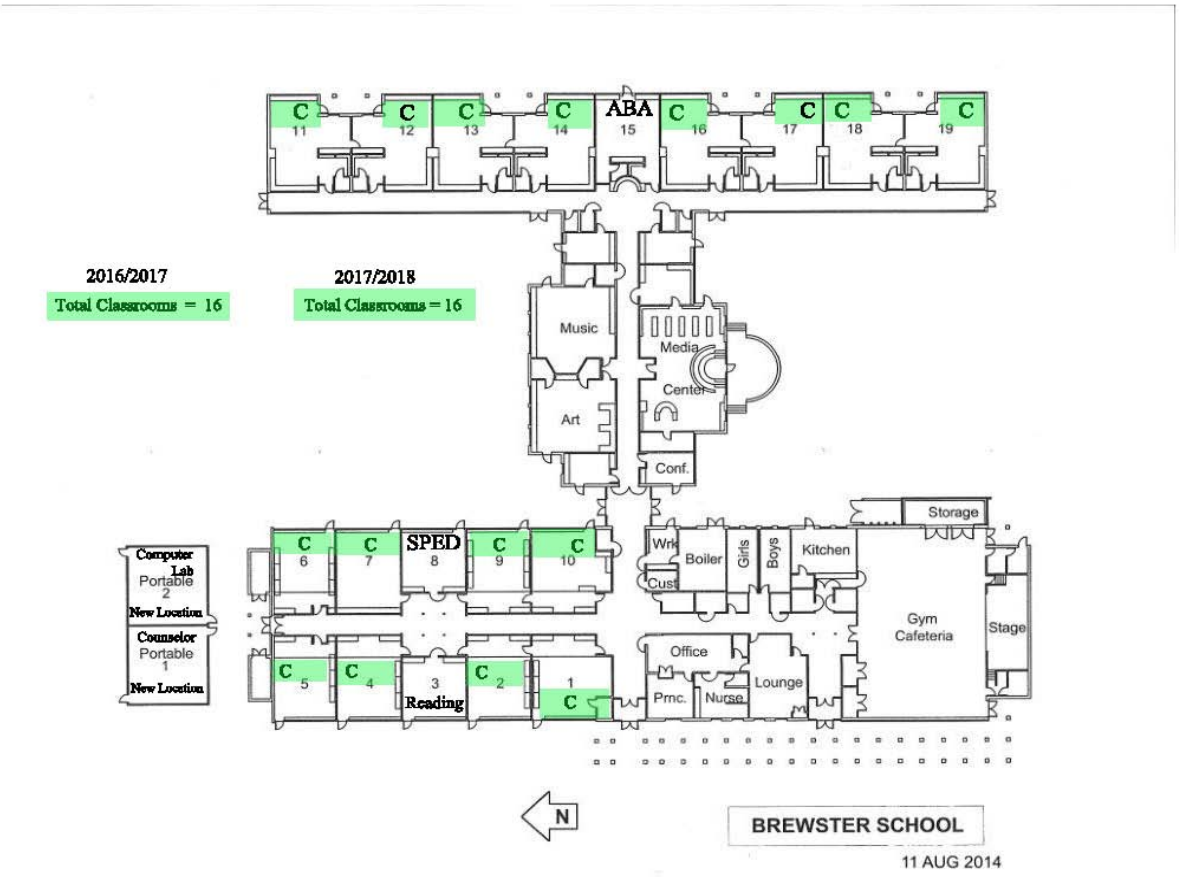
Student enrollment in grades K – 6 has dropped from a high of nearly 1200 in the 2008/09 school year to the estimate of 800 anticipated in the 2015/16 school year. Given the lengthy process of obtaining funding and state building grants and for the completion of the capital improvements needed in our schools, the Committee decided to pursue the possibility of consolidating schools prior to completion of these capital projects.

Regional School District 13 Actual and Projected Total Student Enrollment



Based on the educational programing needs of our students as well as the existing building capacity and current enrollments it is clear that Korn School can be closed at the end of the 2015/16 school year.

2016/17 Brewster School Classroom Capacity



The Committee recommends that the RSD13 Board of Education votes to approve the closing of Korn School at the end of the 2015/16 school year.

The following summarizes the primary considerations made by the Committee in reaching this recommendation:

- Projected enrollment for the 2016/17 Contemporary Program grades Pre-K through 4 can be fully accommodated at Brewster School while maintaining current Board of Education targeted class size guidelines.
- Student transitions in the Contemporary Program will be reduced for all affected students by 2017/18.
- Operational savings will be achieved in the 2016/17 school year as a result of closing Korn School.

- The closure of Korn School will have no impact on existing operations of both Lyman School and Memorial School.
- For the 2017/18 school year, Brewster School can accommodate over 40 students more than is currently projected. This provides a contingency factor in the event of changes in projected enrollments that may occur in the demographic update proposed for the 2015/16 school year.
- Closure of one school at a time is easier to plan and execute than attempting to close two schools in the same school year, especially if school construction projects are simultaneously underway.
- Experience gained with the logistics of the first move will certainly be helpful in planning for the second and larger move.
- The Committee can continue on with other aspects of this project while the Administration proceeds with the planning and implementation of closing Korn School.
- The District received a state building grant for partial renovations done at Korn School. That building project was approved by the state in 2007 at which point the amortization of that building grant was initiated. If the District disposes of Korn School under certain conditions, the unamortized portion of that state grant will have to be repaid to the state. That payback as of May 2016 is $708,032 or approximately $65,000 per year. The disposal of a school building is a complex issue and one that warrants careful consideration and planning by the Board.
- The District is not required to refund the unamortized balance of the state building grant pertaining to Korn School *as long as it retains ownership of the building*. This allows the Committee to "mothball" the school for a period of time while plans for the balance of the project are completed and disposition of the building for either school use or public use can be explored. During this mothballing period, the building grant continues to amortize.
- A detailed projection of the annualized costs associated with "mothballing" Korn School must be concluded as plans to complete the transition to Korn develop and interim accommodations are made for other community use of the building.
- The Board of Education must address alternative solutions to current "non-school" uses of Korn School. Costs associated with the potential partial usage of the facility during the mothballing period are to be determined. Specifically, accommodations must be made for BASREP, a Durham voting location and other non-school club and community organizations.

Next Steps

The work of the Utilization Study Committee must continue into the foreseeable future. Some of the most pressing immediate next steps to be taken include:

- Schedule forum for a community discussion of the project.

- Develop plans for alternate use, disposition or temporary mothballing of Korn School including all associated costs.
- Identify alternative accommodations for non-school uses of Korn.
- Early action by the Board of Education is essential in order to provide one year lead time to develop detailed transition plans for the Korn School closing that include logistics of the move, revision of transportation routes, budgetary impacts and personnel impacts.
- Revise bus routes to determine impact on transportation costs.
- Complete cost analysis of the move including costs to relocate Korn classrooms to Brewster,
- Determine costs associated with the mothballing period, including estimates of the costs of partial use of Korn School should that become necessary and viable.
- Commission a revision of the 2013 demographic study.
- Determine impacts of any significant variations in updated demographic study including but not limited to evaluating the recommendation by DRA to add 4 classrooms to Brewster School.
- Select a design firm to begin development of architectural proposals for building changes required within the on-going schools.
- Develop a detailed timeline for completion of necessary funding and bonding activities.
- Develop a detailed project timeline to coordinate construction activities with planned student transitions.
- Develop a coordinated plan to ensure continued progress with the implementation of Common Core Curriculum and other program enhancements to our educational programs within RSD13.
- Establish a building committee to oversee future renovation projects.
- Evaluate Korn School building disposition alternatives.

While significant progress has been made, there remains much work to do in order to carefully address the needs of our District. We strongly urge the RSD13 Board of Education to support the recommendation of this Committee to close Korn School at the end of the 2015/16 school year. This action is essential to the on-going efforts of the Utilization Committee to address the long term needs of our school district.

Appendix A

The following are the Capital Needs Survey Forms for each school.

Brewster School

Regional School District 13 - Durham/Middlefield/Rockfall								
Capital Needs Survey Form								
Brewster ES								
May 12, 2014						40,240		40,240 sf
SYSTEM	**System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)**	**System Rating 1 to 5 (1 Poor, 5 Excellent)**	**Last Major Reconstruction (Year)**	**Projected Replacement (Year)Based on 20Year Service Life**	**Quantity**	**Unit Price**	**Current Replacement Cost**	**REMARKS**
Division 2 - Site Construction								
Site - Electrical								
Site - Lighting	1	5	2010	2020	1	$ 20,000.00	$ 20,000.00	Updated in 2010
Building Mounted Fixtures								included in site lighting
Pole Mounted Fixtures								included in site lighting
Site - Fuel Tanks - Propane	4	3	1990	2010	1	$ 10,000.00	$ 10,000.00	
Site - Fuel Tanks - Oil	2	3	2012	2032	1	$ 30,000.00	$ 30,000.00	
Division 21/22/23 - Mechanical								
Water Main	1	3	2011	2031	1	$100,000.00	$ 100,000.00	New Well, atmospheric and pneumatic tanks, new pump system
Water Distribution System	1	3	2001	2051	1	$ 50,000.00	$ 50,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2001
Plumbing Drainage System	1	3	2001	2051	1	$ 60,000.00	$ 60,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2001
Fire Protection	1	1	1990	2010	40,240	$ 9.00	$ 362,160.00	Replace limited area sprinkler system with full NFPA 13 system. Includes costs of tanks and fire pump.
Plumbing Fixtures / Equipment	1	3	2001	2023	5,000	$ 6.00	$ 30,000.00	Partial replacement in 2001
Plumbing Fixtures / Equipment	1	3	1960	1980	35,240	$ 6.00	$ 211,440.00	Original fixtures 1960
Water Heaters	1	4	2010	2030	1	$ 7,500.00	$ 7,500.00	
Boiler	2	3	1990	2010	2	$ 25,650.00	$ 51,300.00	943 MBH Weil McLain
Heating Hot Water Pumps	2	1	1990	2010	2	$ 13,462.50	$ 26,925.00	Pumps are in poor condition
Chiller	4	4	2001	2021	1	$133,500.00	$ 133,500.00	100Ton, R-22 Trane split barrel
Chilled Water Pumps	4	3	2001	2021	2	$ 15,000.00	$ 30,000.00	
Fuel Oil Transfer System	2	5	2012	2032	1	$ 10,000.00	$ 10,000.00	Replaced in 2012
Ventilation Systems	2	3	2001	2021	40,240	$ 25.00	$ 1,006,000.00	
Air Handling Systems - General	2	3	2001	2021			Inc w/ vent sys	Gym/Cafeteria units difficult to access
Air Handling Systems - Admin	2	1	1990	2010	1	$ 12,400.00	$ 12,400.00	Does not operate in the winter. Lack of ventilation air in the winter for these spaces
Terminal Units	3	3	1990	2010			Inc w/ vent sys	Fin-tube radiation
Exhaust Systems - General	4	3	2001	2021			Inc w/ vent sys	
Exhaust Systems - Kitchen Hood	2	1	1990	2010	1	$ 5,212.50	$ 5,212.50	
Control Systems	3	3	2001	2021	40,240	$ 5.00	$ 201,200.00	Landis & Gyr (Siemens) DDC
Cold Rooms								None noted.
Indoor Air Quality								No issues noted.
Division 26 - Electrical								
General Electrical (Starters, VFD's, etc...)	2	3	2001	2021	40,240	$ 6.00	$ 241,440.00	General replacement of all branch circuit wiring included in this cost.
Electrical Service / Distribution	3	4	2001	2021	1	$ 60,000.00	$ 60,000.00	Service entrance equipment only
Transformer					1			Utility Company Owned
Lighting - General	2	4	1990	2010	40,240	$ 6.00	$ 241,440.00	Upgraded to T8 lamps.
Emergency Lighting	1	3	2001	2021	40,240	$ 0.50	$ 20,120.00	
Communication Systems	1	4	2009	2029	40,240	$ 0.75	$ 30,180.00	
Technology Systems	2	3			40,240	$ 2.00	$ 80,480.00	
Fire Alarm System	1	5	2012	2032	40,240	$ 1.25	$ 50,300.00	
Clock System	4	5	2009	2029	40,240	$ 0.50	$ 20,120.00	

Lyman School

Regional School District 13 - Durham/Middlefield/Rockfall								
Capital Needs Survey Form								
Lyman ES								
May 12, 2014						30,223		30,223 sf
SYSTEM	**System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)**	**System Rating 1 to 5 (1 Poor, 5 Excellent)**	**Last Major Reconstruction (Year)**	**Projected Replacement (Year)Based on 20Year Service Life**	**Quantity**	**Unit Price**	**Current Replacement Cost**	**REMARKS**
Division 2 - Site Construction								
Site - Electrical								
Site - Lighting	1	3	1995	2015	12	$ 2,500.00	$ 30,000.00	Site lighting is metal halide
Building Mounted Fixtures			2012	2032				Some bldg. mounted fixtures replaced
Pole Mounted Fixtures			1995	2015				
Site Waste Removal System	1	3	1996	2016	1	$ 50,000.00	$ 50,000.00	Includes force main and pump station.
Site - Fuel Tanks - Propane	4	3	1996	2016	1	$ 5,000.00	$ 5,000.00	Condition Unknown
Site - Fuel Tanks - Oil	2	4	1995	2015	1	$ 32,000.00	$ 32,000.00	4,000 gallon Steel AST
Division 21/22/23 - Mechanical								
Fire Protection System	1	3	1995	2015	30,223	$ 9.00	$ 272,007.00	Limited Area now. Will require full sprinkler protection if renovated. Costs include costs of storage tanks and fire pump.
Water Main	1	3	2011	2031	1	$ 60,000.00	$ 60,000.00	New Well, atmospheric and pneumatic tanks, new pumps
Water Distribution System	1	3	1995	2035	1	$ 50,000.00	$ 50,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 1995
Plumbing Drainage System	1	3	1995	2035	1	$ 60,000.00	$ 60,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 1995
Plumbing Fixtures / Equipment	1	3	1995	2015	5,000	$ 6.00	$ 30,000.00	Partial replacement in 1995.
Plumbing Fixtures / Equipment	1	3	1965	1985	25,223	$ 6.00	$ 151,338.00	Original fixtures need replacement
Water Heaters	1	3	2009	2029	1	$ 10,000.00	$ 10,000.00	
Boiler	2	4	1995	2025	2	$ 25,650.00	$ 51,300.00	992 MBH Smith
Heating Hot Water Pumps	2	3	1995	2015	2	$ 13,462.50	$ 26,925.00	Includes installation of redundant pump
Chiller	4	3	1995	2015	1	$141,750.00	$ 141,750.00	110T, R-22 McQuay Air Cooled
Chilled Water Pumps	4	3	1995	2015	2	$ 15,000.00	$ 30,000.00	Includes installation of redundant pump
Ventilation Systems	2	3	1995	2015	30,223	$ 25.00	$ 755,575.00	No corridor ventilation
Air Handling Systems - Gym/Cafeteria	2	4	1995	2015			Inc w/ vent sys	
Terminal Units	3	3	1995	2015			Inc w/ vent sys	Miscellaneous fin-tube radiation & cabinet unit heaters
Exhaust Systems - General	4	3	1995	2015			Inc w/ vent sys	
Exhaust Systems - Kitchen Hood	2	3	1995	2015	1	$ 5,212.50	$ 5,212.50	
Control Systems	3	3	2000	2020	30,223	$ 5.00	$ 151,115.00	Landis & Gyr (Siemens) DDC
Cold Rooms								None noted.
Indoor Air Quality								No issues noted.
Division 26 - Electrical								
General Electrical (Starters, VFD's, etc...)	2	4	1993	2015	30,223	$ 6.00	$ 181,338.00	
Electrical Service / Distribution	1	5	1995	2015	1	$ 60,000.00	$ 60,000.00	
Transformer							$ -	Utility company owned
Lighting - General	2	3	1995	2015	30,223	$ 1.50	$ 45,334.50	
Emergency Lighting	1	3	1995	2015	30,223	$ 2.00	$ 60,446.00	
Communication Systems	1	3	1995	2015	30,223	$ 2.00	$ 60,446.00	
Technology Systems	2	3	1995	2015	30,223	$ 2.50	$ 75,557.50	
Fire Alarm System	1	3	1996	2016	30,223	$ 1.00	$ 30,223.00	Fire Alarm control panel replaced in 2012
Clock System	4	5	2012	2022	1	$ 35,000.00	$ 35,000.00	

Korn School

Regional School District 13 - Durham/Middlefield/Rockfall								
Capital Needs Survey Form								
Korn ES								
May 12, 2014						29,478		29478
SYSTEM	**System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)**	**System Rating 1 to 5 (1 Poor, 5 Excellent)**	**Last Major Reconstruction (Year)**	**Projected Replacement (Year)Based on 20Year Service Life**	**Quantity**	**Unit Price**	**Current Replacement Cost**	**REMARKS**
Division 2 - Site Construction								
Site - Electrical								
Site - Lighting	1	3	2011	2031	11	$ 2,500.00	$ 27,500.00	some wall packs already replaced
Building Mounted Fixtures								
Pole Mounted Fixtures								
Site - Fuel Tanks - Oil	2	5	2010	2030	1	$ 50,000.00	$ 50,000.00	12,500 gallon underground storage tank
Division 21/22/23 - Mechanical								
Water Main	1	3	2003	2023	1	$ 50,000.00	$ 50,000.00	Partial cost of water vault replacement
Water Distribution System	1	3	2003	2023	1	$ 50,000.00	$ 50,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2003
Plumbing Drainage System	1	3	2003	2023	1	$ 60,000.00	$ 60,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2003
Fire Protection System	1	3	2003	2023	29,478	$ 4.50	$ 132,651.00	
Plumbing Fixtures / Equipment	1	3	2003	2023	29,478	$ 6.00	$ 176,868.00	
Water Heaters	1	3	2004	2024	1	$ 7,500.00	$ 7,500.00	
Boiler	2	3	2003	2023	2	$ 25,650.00	$ 51,300.00	
Heating Hot Water Pumps	2	3	2003	2023	2	$ 13,462.50	$ 26,925.00	
Chiller	4	4	2003	2023	1	$133,500.00	$ 133,500.00	90T, R-22 Trane split barrel
Chilled Water Pumps	4	3	2003	2023	2	$ 15,000.00	$ 30,000.00	
Ventilation Systems	2	3	2003	2023	29,478	$ 25.00	$ 736,950.00	
Air Handling Systems - General	2	3	2003	2023			Inc w/ vent sys	
Air Handling Systems - Admin	2	1	2003	2023	1	$ 12,400.00	$ 12,400.00	
Terminal Units	3	3					Inc w/ vent sys	
Exhaust Systems - General	4	3	2003	2023			Inc w/ vent sys	
Exhaust Systems - Kitchen Hood	2	1	1990	2013	1	$ 5,212.50	$ 5,212.50	
Control Systems	3	3	2003	2023	29,478	$ 5.00	$ 147,390.00	Landis & Gyr (Siemens) DDC
Cold Rooms								None noted.
Indoor Air Quality								No issues noted.
Division 26 - Electrical								
General Electrical (Starters, VFD's, etc...)	2	3	2003	2023	29,478	$ 5.00	$ 147,390.00	
Electrical Service / Distribution	3	4	2003	2023	1	$100,000.00	$ 100,000.00	
Transformer					1	$ -	0	Utility company owned
Lighting - General	2	4	2003	2023	29,478	$ 6.00	$ 176,868.00	
Emergency Lighting	1	3	2003	2023	29,478	$ 1.50	$ 44,217.00	
Communication Systems	1	3	2003	2013	29,478	$ 2.00	$ 58,956.00	
Technology Systems	2	3	2003	2013	29,478	$ 2.00	$ 58,956.00	
Fire Alarm System	1	3	2003	2023	29,478	$ 2.50	$ 73,695.00	
Clock System	4	3	2003	2023	29,478	$ 1.00	$ 29,478.00	

Memorial School

Regional School District 13 - Durham/Middlefield/Rockfall								
Capital Needs Survey Form								
Memorial MS								
May 12, 2014						48,330		48,330 sf
SYSTEM	**System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)**	**System Rating 1 to 5 (1 Poor, 5 Excellent)**	**Last Major Reconstruction (Year)**	**Projected Replacement (Year)Based on 20Year Service Life**	**Quantity**	**Unit Price**	**Current Replacement Cost**	**REMARKS**
Division 2 - Site Construction								
Site - Electrical								
Site - Lighting	1	3	1995	2015	1	$ 20,000.00	$ 20,000.00	
Building Mounted Fixtures	1	4	2012	2022	1	$ 10,000.00	$ 10,000.00	
Pole Mounted Fixtures								
Site - Fuel Tanks - Propane	4	3	1995	2015	1	$ 10,000.00		
Site - Fuel Tanks - Oil	2	4	2012	2042	1	$ 35,000.00	$ 35,000.00	8,000 gallon UST
Division 21,22,23 - Mechanical								
Water Main	1	3	2011	2021	1	$100,000.00	$ 100,000.00	Includes new well, atmospheric and pneumatic tanks and new pumps.
Water Distribution System	1	3	1995	2045	1	$ 50,000.00	$ 50,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer.
Plumbing Drainage System	1	3	1995	2045	1	$ 60,000.00	$ 60,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer.
Fire Protection System	1	1	1995	2015	48,330	$ 4.50	$ 217,485.00	Limited area sprinklers currently. Will need full sprinkler system if renovated.
Plumbing Fixtures / Equipment	1	3	1995	2015	48,330	$ 6.00	$ 289,980.00	
Water Heaters	1	3	2000	2023	1	$ 7,500.00	$ 7,500.00	
Boiler	2	4	1995	2015	2	$ 34,650.00	$ 69,300.00	1,689 MBH Weil McLain
Boiler feed tank & pumps	2	1	1955	1975	1	$ 5,000.00	$ 5,000.00	
Chiller	4	3	1995	2015	1	$166,500.00	$ 166,500.00	120T, R-22 Dunham Bush Air Cooled
Chilled Water Pumps	4	3	1995	2015	2	$ 15,000.00	$ 30,000.00	
Ventilation Systems	2	3	1995	2015	48,330	$ 25.00	$ 1,208,250.00	No corridor ventilation
Air Handling Systems - Gym/Cafeteria	2	3	1995	2015			Inc. above	
Terminal Units	3	3	1995	2015			Inc. above	Miscellaneous fin-tube radiation & cabinet unit heaters
Exhaust Systems - General	4	3	1995	2015			Inc. above	
Exhaust Systems - Kitchen Hood	2	3	1995	2015			Inc. above	
Control Systems	3	3	2000	2020	48,330	$ 5.00	$ 241,650.00	Landis & Gyr (Siemens) DDC
Cold Rooms								None noted.
Indoor Air Quality								No issues noted.
Division 26 - Electrical								
General Electrical (Starters, VFD's, etc...)	2	2	1995	2015	48,330	$ 5.00	$ 241,650.00	
Electrical Service / Distribution	3	3	1995	2015	1	$100,000.00	$ 100,000.00	
Transformer					1	$ -	$ -	Utility company owned
Lighting - General	2	3	1995	2015	48,330	$ 6.00	$ 289,980.00	
Emergency Lighting	1	3	1995	2015	48,330	$ 1.50	$ 72,495.00	
Communication Systems	1	3	1995	2015	48,330	$ 2.00	$ 96,660.00	
Technology Systems	2	3	1995	2015	48,330	$ 2.00	$ 96,660.00	
Fire Alarm System	1	3	1995	2015	48,330	$ 2.50	$ 120,825.00	
Clock System	4	3	2012	2032	48,330	$ 1.00	$ 48,330.00	

Strong School

Regional School District 13 - Durham/Middlefield/Rockfall								
Capital Needs Survey Form								
Strong MS								
March 26, 2014						74,217		74,217 sf
SYSTEM	**System Priority 1 to 4** (1-Health & Safety, 2-High, 3-Medium, 4-Low)	**System Rating 1 to 5** (1 Poor, 5 Excellent)	**Last Major Reconstruction (Year)**	**Projected Replacement (Year)Based on 20Year Service Life**	**Quantity**	**Unit Price**	**Current Replacement Cost**	**REMARKS**
Division 2 - Site Construction								
Site - Electrical								
Site - Lighting	1	3	2003	2023	18	$ 2,500.00	$ 45,000.00	
Building Mounted Fixtures								
Pole Mounted Fixtures								
Site - Fuel Tanks - Propane	4	3	2003	2023	1	$ 10,000.00	$ 10,000.00	
Site - Fuel Tanks - Oil	2	4	2003	2033	1	$ 35,000.00	$ 35,000.00	12,500 gallon UST
Division 21/22/23 - Mechanical								
Water Main	1	3	2003	2023	1	$ 50,000.00	$50,000.00	Partial cost of water vault replacement
Water Distribution System	1	3	2003	2053	1	$ 50,000.00	$50,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2003
Plumbing Drainage System	1	3	2003	2053	1	$ 60,000.00	$60,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2003
Fire Protection System	1	3	2003	2023	74,217	$ 4.50	$ 333,976.50	
Plumbing Fixtures / Equipment	1	3	2003	2023	74,217	$ 6.00	$ 445,302.00	
Water Heater - 2008	1	4	2008	2028	1	$ 7,500.00	$ 7,500.00	
Water Heater - 2003	1	3	2003	2023	1	$ 7,500.00	$ 7,500.00	
Boiler	2	4	2003	2033	2	$123,000.00	$ 246,000.00	4,689 MBH Weil McLain
Heating Hot Water Pumps	2	4	2003	2023	2	$ 10,000.00	$ 20,000.00	Valves whistle
Chiller	4	4	2003	2023	1	$204,000.00	$ 204,000.00	155T, R-134A Trane Air Cooled
Chilled Water Pumps	4	4	2003	2023	3	$ 21,150.00	$ 63,450.00	
Ventilation Systems	2	4	2003	2023	74,217	$ 25.00	$ 1,855,425.00	
Air Handling Systems - Cafeteria	2	4	2003	2023			Inc. above	Verify kitchen air flow balance
Terminal Units	3	4	2003	2023			Inc. above	VAV boxes & radiant ceiling panels
Exhaust Systems - General	4	4	2003	2023			Inc. above	EF-6, EF-7 & EF-11 require repair or replacement ($3,000 cost)
Exhaust Systems - Kitchen Hood	2	4	2003	2023			Inc. above	Verify kitchen air flow balance
Exhaust Systems - Dust Collector	2	1		2013	1	$ 10,950.00	$ 10,950.00	
Control Systems	3	3	2003	2023	74,217	$ 5.00	$ 371,085.00	Siemens DDC
Cold Rooms								Cold in the connecting corridor & main entrance vestibule. "Green Team" classrooms struggle to recover from night setback.
Indoor Air Quality								No issues noted.
Division 26 - Electrical								
General Electrical (Starters, VFD's, etc...)	2	3	2003	2023	74,217	$ 5.00	$ 371,085.00	
Electrical Service / Distribution	3	4	2003	2023	1	$100,000.00	$ 100,000.00	
Transformer					1	$ -	$ -	Utility company owned
Lighting - General	2	4	2003	2023	74,217	$ 6.00	$ 445,302.00	
Emergency Lighting	1	3	2003	2023	74,217	$ 1.50	$ 111,325.50	
Communication Systems	1	3	2003	2013	74,217	$ 2.00	$ 148,434.00	
Technology Systems	2	3	2003	2013	74,217	$ 2.00	$ 148,434.00	
Fire Alarm System	1	3	2003	2023	74,217	$ 2.50	$ 185,542.50	
Clock System	4	3	2003	2023	74,217	$ 1.00	$ 74,217.00	
Emergency Generator	1	5		2014	1	$ 35,000.00	$ 35,000.00	Not reliable, needs replacement

Coginchaug Regional High School

Regional School District 13 - Durham/Middlefield/Rockfall								
Capital Needs Survey Form								
Coginchaug HS								
March 26, 2014						138,250		138250
SYSTEM	**System Priority 1 to 4** (1-Health & Safety, 2-High, 3-Medium, 4-Low)	**System Rating 1 to 5** (1 Poor, 5 Excellent)	**Last Major Reconstruction (Year)**	**Projected Replacement (Year)Based on 20Year Service Life**	**Quantity**	**Unit Price**	**Current Replacement Cost**	**REMARKS**
Division 2 - Site Construction								
Site - Electrical								
Site - Lighting	1	2	2003	2023	24	$ 2,500.00	$ 60,000.00	Includes building mounted and pole mounted fixtures.
Site - Fuel Tanks - Propane	4	3	2003	2023	1	$ 5,000.00	$ 5,000.00	
Site - Fuel Tanks - Oil	2	4	2003	2023	1	$ 30,000.00	$ 30,000.00	10,000 underground storage tank
Division 21/22/23 - Mechanical								
Water Main	1	3	2003	2023	1	$ 50,000.00	$ 50,000.00	Partial cost of water vault replacement
Water Distribution System	1	3	2003	2053	1	$100,000.00	$ 100,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2003
Plumbing Drainage System	1	3	2003	2053	1	$ 60,000.00	$ 60,000.00	This is an exception to the 20 year service life. Typically the piping lasts much longer. Partially replaced in 2003
Fire Protection Systems	1	3	2003	2023	138,250	$ 4.50	$ 622,125.00	
Plumbing Fixtures / Equipment	1	3	2003	2023	138,250	$ 6.00	$ 829,500.00	
Water Heaters	1	3	2012	2032	1	$ 10,000.00	$ 10,000.00	
Boiler	2	3	2003	2023	2	$ 45,000.00	$ 90,000.00	
Heating Hot Water Pumps	2	3	2003	2023	2	$ 15,000.00	$ 30,000.00	
Chiller	4	4	2003	2023	1	$160,000.00	$ 160,000.00	300T, R-22 Trane split barrel
Chilled Water Pumps	4	3	2003	2023	2	$ 15,000.00	$ 30,000.00	
Ventilation Systems	2	3	2003	2023	138,250	$ 25.00	$ 3,456,250.00	
Air Handling Systems - General	2	3	2003	2023			Inc w/ vent sys	
Air Handling Systems - Admin	2	1	2003	2023			Inc w/ vent sys	
Terminal Units	3	3	2003	2023			Inc w/ vent sys	
Exhaust Systems - General	4	3	2003	2023			Inc w/ vent sys	
Exhaust Systems - Kitchen Hood	2	1	2003	2023	1	$ 5,212.50	$ 5,212.50	
Control Systems	3	3	2003	2023	138,250	$ 5.00	$ 691,250.00	Landis & Gyr (Siemens) DDC
Cold Rooms								None noted.
Indoor Air Quality								No issues noted.
Division 26 - Electrical								
General Electrical (Starters, VFD's, etc...)	2	3	2003	2023	138,250	$ 6.00	$ 829,500.00	
Electrical Service / Distribution	3	4	2003	2023	1	$150,000.00	$ 150,000.00	
Transformer					1	$ -	0	Utility company owned
Lighting - General	2	4	2003	2023	138,250	$ 6.00	$ 829,500.00	
Emergency Lighting	1	3	2003	2023	138,250	$ 1.50	$ 207,375.00	
Communication Systems	1	3	2003	2013	138,250	$ 2.00	$ 276,500.00	
Technology Systems	2	3	2003	2013	138,250	$ 2.00	$ 276,500.00	
Fire Alarm System	1	3	2003	2023	138,250	$ 2.50	$ 345,625.00	
Clock System	4	3	2003	2023	138,250	$ 1.00	$ 138,250.00	
Emergency Generator	1	3	2003	2023	1	$ 50,000.00	$ 50,000.00	