

**Report For The
White Mountains Regional School District**

**Subject:
Assessment of
Educational Facility Needs
K-12**

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May 15, 2007

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I. Introduction

Purpose of Study

NHSAA is a private, non-profit organization founded in 1941 to provide support to the leadership of public education in NH, to offer high quality services to its members, and to support and promote public education in New Hampshire. As part of our ongoing service to schools, NHSAA periodically provides specialized services directly to individual public school districts in NH. It is our commitment that we will provide high quality work that meets all components of our agreed upon design, on time or ahead of schedule.

The White Mountains Regional School District (WMRSD) contracted with the New Hampshire School Administrators Association to complete an independent investigation and analysis of the demographic needs for the district's K-12 student population and to create an assessment of educational space needs for the White Mountains Regional Schools (the Dalton, Jefferson, Lancaster, Whitefield Schools and the White Mountains Regional High School). This report represents the final product of our work.

Scope of Work and Timeline

Scope of Work

NHSAA agreed to complete the study as defined and to submit fifteen (15) copies of the final report to the School Board through Superintendent Dr. Dean Cascadden, on or before May 15, 2007.

As part of our work, we analyzed demographic trends, assessed the district's general educational needs and the educational condition of the White Mountains Regional Schools which currently house Grades PK-12.

Timeline

The study as defined, began in May 2006, progressed with tours of the school throughout the fall and winter and concluded with the final analysis in May 2007, after receiving community and school board ideas and perceptions regarding present and future school needs during a public meeting with local leaders and citizens. Specific process dates and tasks are identified in later sections of this report. The final report was submitted to the Superintendent of Schools on May 15, 2007 and a public meeting was scheduled with the school board.

II. Consultants' Backgrounds

A. Lead Project Investigator and Contact: Dr. Mark V. Joyce

Education and Professional Experience:

Dr. Joyce earned his BA from Niagara University, along with a teaching certification and a Masters in Education specializing in Educational Administration from the University of New Hampshire. In 1986, Mark earned his Doctorate in Education (with highest distinction) from Boston College with a specialization in leadership, curriculum and instruction.

Mark has been a teacher of students in grades 7-12 and teaches at the graduate school level at Plymouth State University and the University of New Hampshire. In addition, he has served as a secondary and elementary school principal and an assistant superintendent of schools in New Hampshire. Mark has also served as a superintendent of schools in both New Hampshire and Maine. Dr. Joyce is currently the Executive Director of the New Hampshire School Administrators Association and a consultant to school districts and businesses throughout New England. Mark is a resident of Epping, New Hampshire.

B. Associate Project Investigator: Mr. Dennis Pope

Education and Professional Experience:

Mr. Pope retired in 2003 after serving fourteen (14) years as Superintendent of Schools in SAU#25 – Bedford, New Hampshire. Prior to his service to SAU#25, Mr. Pope held a wide variety of positions in education including: assistant superintendent of schools, middle school principal, elementary principal and teacher in New Hampshire school districts.

Mr. Pope received his BS from the Whittemore School of Business and his Masters and Certificate of Advanced Graduate Studies in Education from the University of New Hampshire. In addition to his service to school districts, Dennis has been a teacher at the graduate school level, participated in numerous NEASC accreditation teams, and represented New Hampshire in state-wide and regional educational leadership initiatives and organizations. Dennis is a resident of Concord, New Hampshire.

In addition to their extensive educational experience, the consultants have been directly involved in completing over 20 major construction projects totaling over two hundred million dollars (\$200,000,000) in construction costs. Furthermore, over the last nine years, NHSAA has completed more than twenty-seven (27) different educational facility studies for New Hampshire school districts.

The contents of this report represent the best professional judgment of the consultants, not necessarily the ideas of NHSAA or its members. Any questions about the report should be directed to Dr. Joyce. He can be contacted by calling the NHSAA office at 603-225-3230, faxing to 603-225-3225, (or e-mailing to mark@nhsaa.org). The NHSAA office is located at 46 Donovan Street, Suite 3, Concord, NH 03301.

III. Overview of the White Mountains Regional School District

The Communities

The White Mountains Regional School District includes the towns of: Carroll, Dalton, Jefferson, Lancaster and Whitefield. The five communities are clustered in the southwest corner of Coos County and along the northern edge of the White Mountains National Forest.

The Towns in the White Mountains Regional School District are marked by beautiful mountain side vistas, and varied and attractive community centers. The community is located along NH Routes 3, 2 and 302, and a short distance north of Interstate 93 connecting Concord to Littleton, NH.

The towns' 2005 population was estimated to be 8,277, by the NH Office of Energy and Planning; growing by 328 people or 4.1% since 1996. These five communities offer small rural community atmospheres marked by beautiful countryside, attractive town common areas and beautiful homes. The area's geographic location offers access to commuter routes (Interstate Rt. 93 and NH Rtes. 2, 3, and 302), access to modern conveniences and mountain and lake tourist destinations. In addition, the school district's communities are located 110 miles from our largest city Manchester, NH. These characteristics mark the communities that compose the White Mountains Regional School District as desirable locations to live, raise a family, enjoy nature, and commute to work.

The White Mountains Regional School District

The White Mountains Regional School District is a multi-town school district that includes the towns of Carroll, Dalton, Jefferson, Lancaster and Whitefield. The system maintains four elementary schools and one high school. The White Mountains Regional School District is governed by a seven-member school board, which operates under New Hampshire's statutes. The district's legislative body is the school district meeting of the White Mountains Regional School District.

The Superintendent of Schools Office (NH School Administrative Unit #36) provides the system administrative and leadership services for the White Mountains Regional School District. These services include a full range of leadership and administrative services including acting as the school district's executive officer, business operations and providing all central system leadership.

History of School Facility Studies

The consultants were presented with a variety of data about the school district from the Superintendent's Office, from the principals within the White Mountains Regional School District and from interviews with district administrators and employees. In addition, extensive materials were shared that were developed by the White Mountains Regional School District. These materials included floor plans, a program of study, a prior study (Center for Educational Field Services –1988), demographic data, capital improvement plan and descriptions of past and current uses.

It is in the context of the above materials that this study was commissioned with the goal of detailing the Grades PreK-12 educational program and facility needs for the White Mountains Regional School District.

IV. Process and Timeline

Process/Steps Completed

As part of our investigation we accomplished the following major activities:

1. Demographic Trend Analysis:

* We:

- Analyzed and interpreted enrollment projections that included a review of six (6) years of history for grades K-12, and a projection for the next ten (10) years for grades K-12.
- Investigated local conditions with town agents, as available.
- Developed three different enrollment projections: a simple cohort, a three-year weighted average and a five-year average.
- Analyzed data in comparison to historic data provided by the White Mountains Regional School District and its agents.
- Reviewed and shared results with White Mountains Regional town and school officials.

2. Review documents:

* We:

- Reviewed and analyzed local planning documents, state requirements and local educational materials that define policy and programs.

3. Program and Use Analysis:

* We:

- Toured White Mountains Regional Schools when students were in session.
- Conducted a complete review of written information including reports, prior studies and other significant artifacts.
- Conducted interviews with administrators, teachers, and staff as necessary, and provided opportunities for informal input.
- Created a detailed study of the current educational program expectations and requirements of White Mountains Regional School District, and analyzed how students are scheduled into the identified programs for grades K-12 in the White Mountains Regional School District.

4. Building/Room Utilization Analysis:

* We:

- Completed building/room utilization analysis for grades K-12 by creating a profile how existing space (buildings and land) is utilized in all five (5) of the district's schools and assessed educational efficiency with suggestions for improvement in the use of current facilities.

5. Visioning For the Future:

* We:

- Surveyed the White Mountains Regional School District’s staff members and the school principals to collect feedback and ideas about the educational programs and future facility needs.
- Held a public meeting to listen to the school board’s and citizens’ ideas regarding present and future program and facility needs of the school district.
- Compiled information gained and presented findings to the White Mountains Regional School Board for review and use as a planning tool.

6. Future Space Needs:

* Following steps 1-5, we:

- Developed a list of the number and type of rooms or spaces needed (if any) to accommodate projected enrollment and program needs for the district’s students in grades K-12.

7. Solution Evaluation:

* In light of the above, we:

- Investigated possible solutions to the identified needs and defined “feasible options/alternatives” for the White Mountains Regional School Board to consider in meeting the identified educational program needs.

The final report provides a clear statement of White Mountains Regional School District’s educational program and its projected needs for the next ten (10) years, as well as a projected vision of what the school’s program and services may be like over the next ten (10) years. Architectural assessments or designs are not provided as a component of this study.

Timeline

<u>Process Steps</u>	<u>Date of Completion</u>
a. Received authorization to proceed	May 12, 2006
b. Communicated with Central Office Staff Members <ul style="list-style-type: none">- defined and secured data for research- secured and reviewed enrollment and other data	May 16, 2006
c. Toured school buildings and grounds <ul style="list-style-type: none">- met with building principal- toured facility while students were present- analyzed use of all spaces- created detailed utilization analysis of building and site	Sept. 26-27, 2006
d. Reviewed prior facility and/or program studies	October 15, 2006
e. Analyzed enrollment data <ul style="list-style-type: none">- evaluated data- analyzed state and regional data- began to analyze impact of enrollment on program	October 16, 2006

- | | | |
|----|--|-------------------|
| f. | Met with local leaders | October 17, 2006 |
| | <ul style="list-style-type: none"> - held a public meeting called by the School Board - gathered perceptions of White Mountains Regional School District's needs - brainstormed and prioritized future needs | |
| g. | Defined program needs | November 28, 2006 |
| | <ul style="list-style-type: none"> - considered enrollment projections, state standards, future priorities and good educational practice in developing educational specifications - outlined possible solutions/alternatives | |
| h. | Make an oral "interim report" | February 12, 2007 |
| i. | Compared desired program to existing facility and site | April 15, 2007 |
| | <ul style="list-style-type: none"> - determined future needs | |
| j. | Created statement of findings and draft report | April 20, 2007 |
| | <ul style="list-style-type: none"> - detailed feasible options/alternatives and list strengths and weaknesses of each | |
| k. | Shared final report | May 15, 2007 |
| | <ul style="list-style-type: none"> - submitted final report to the Superintendent of Schools and scheduled school board meeting to review final report | |

Overview of Process

The White Mountains Regional School District was initially toured on the dates noted above and additional brief visits and discussions were necessary to clarify specific information. The initial visit was scheduled when students and teachers were present so that the school could be observed under operational conditions. Extensive discussions were held with the principals of the district's five schools and other staff members, as requested or possible.

For each school, the consultants reviewed a variety of written materials and documents including floor plans, time schedules, room utilization data, and program of study. A facility data form was used as a guide for collecting and recording needed information. Class size data and building utilization data were prepared, examined and analyzed.

During the process of the study, the consultants created enrollment projections and analyzed local and regional demographic conditions. From projections dated November 15, 2006 (See Appendix A) and information provided by state and local officials, it appeared that the five-year average method offered the best guideline in helping to forecast future conditions for the White Mountains Regional School District.

Once the data was collected and analyzed and enrollment projections became available, the consultants began the task of formulating alternative for addressing facility needs and recommendations. They drew upon their prior experience as school administrators and consultants as one element in their recommendation-making process. It was also important to take into account local traditions and practices, goals and needs articulated by administrators, faculty, school board members and citizens, and certain externally generated guidelines and

standards. Key examples of the latter are the newly revised New Hampshire Department of Education's Manual for Planning and Construction of School Buildings and Minimum Standards for Public School Approval.

The consultants also conferred on occasion with the Superintendent of Schools, other school administrators and White Mountains Regional Town Officials. These contacts enabled the investigators to obtain information, seek clarification, and better understand the background shaping current conditions.

The consultants express their gratitude to the administrators, faculty, staff, school board members, citizens, and town officials who met with them to share information, impressions and future visions. People within the White Mountains Regional School District are sincerely interested in improving educational opportunities for children and youth.

V. Demographic Data and Enrollment Projections

Overview

An analysis of the educational program and facility needs of the White Mountains Regional School District requires an examination of the student enrollment potential for the community. In part this involves a review of relevant demographic data, as well as, developing student enrollment projections.

New Hampshire's student enrollments on average have generally been stable over the last five years from 2000-01 school year through 2004-05, growing to 229,588, an increase of 469 students. Some of this growth was a function of increased population (fueled by in-migration) and a generally healthy economy, particularly in southern NH. The home mortgage interest rates have remained relatively low, the inflation rate modest, and the Consumer Price Index has ranged between 1.5% and 2.3% from March of 1997 through 2003. The stock market was generally strong in the 90's, and rebounded and stabilized during 2003 through 2006. As the national economy stabilizes and adjusts to sharply rising fuel costs, it is expected that New Hampshire will respond with positive growth, particularly in higher wage jobs. These jobs signal the continued growth of the service sector, requiring education and training.

The State of New Hampshire's overall population has grown significantly over the past 40 years, with the state growing an average of 14,000 people per year. This trend is expected to continue with the New Hampshire Office of Energy and Planning (NHOEP) forecasting a growth of nearly 10% from 2000 to 2010. While this growth has been high, it has not been uniform for all NH communities. Clearly, communities in the south central and southeastern counties have seen significantly higher growth with some northern and western counties witnessing a decline. While regions that border Massachusetts have experienced historic growth, there is also a trend for expanded development for communities that border our cities and major thoroughfares. Communities in our northern and western regions have shown a trend towards a slightly declining population and a loss of school enrollment.

These facts are likely to continue to impact the population growth in the towns that comprise the White Mountains Regional School District signaling a slight decline in the school age population. This assertion is supported by an analysis of the NH Office of Energy and Planning's projections for future growth of the community. According to their projections, White Mountains Regional School District's overall population is expected to decrease to 7,930 people in 2015, a slight decrease of 347 (or 4.19%) below the estimated 2005 population of 8,277.

If we were to accept this projection and apply a conservative measure of the K-12 student enrollment as a percentage of the town's population as 15% (See Table 1), it would project a student enrollment in 2015 of 1,190, a decrease of 205 students over the October 1, 2006 enrollments.

TABLE 1 Comparison of White Mountains Regional School District Enrollment and Overall Population

Year	School Enrollment K-12	Towns' Population (NHOEP)	Student Enrollment K-12 as a % of the Towns' Population
1996	1,456	7,949	18.3
1997	1,439	7,959	18.0
1998	1,431	7,967	17.9
1999	1,416	8,016	17.6
2000	1,448	7,914	18.2
2001	1,420	8,007	17.7
2002	1,459	8,104	18.0
2003	1,402	8,211	17.0
2004	1,456	8,277	17.5
2005	1,389	8,277	16.7
2006	1,395		

The school district's K-12 student enrollment has been variable over the last eleven (11) years (1996-2006) with a net decrease of 61 students (4.2%). During the same eleven-year period, the towns' population grew by 328 (4.1%). The percent of the population that was of school age in grades K-12 ranged from a high of 18.3% in 1996, to a low of 16.7 % in 2005. It is important to note that an increase in a community's total population does not always lead to a corresponding increase in student enrollment. In particular, this is true when certain other demographic and growth characteristics of the community appear to cause a lowering of student enrollment.

TABLE 2 Percentage of Population Age 20-34 Compared to Overall Population

Town	Number of Population Age 20 -34	Town 2000 Population	% of Total Population Age 20-34
Carroll	91	663	13.7
Dalton	143	927	15.4
Jefferson	152	1,006	15.1
Lancaster	515	3,280	15.7
Whitefield	298	2,038	14.6
Total	1,199	7,914	15.2
State of NH			18.6

Table 2, identifies the percent of the population within each community that is between the ages 20-34 (generally considered to be the child bearing years) according to the 2000 census. The data appears to be slightly variable with a low of 13.7% in Carroll and a high of 15.7% in

Lancaster. The average of 15.15% appears to signal a population that is slightly older when compared to the state average of 18.6%, and perhaps signals that the birth to grade one relationship may decline in the near term.

TABLE 3 Average Number of People Age 6-17 per household 2000 Census

Town	No. Per Household Age 6-17
Carroll	.35
Dalton	.41
Jefferson	.39
Lancaster	.45
Whitefield	.43
State of NH	.28

The data in Table 3 describes the number of the people per household that are between the ages 6 to 17 within the communities that compose the White Mountains Regional School District. Generally the communities cluster in the high 30 and low 40 % range. The rates in five of the communities are slightly higher than the state average of 28%. When considering Tables 2 and 3 together, it would appear to support the idea that when students finish high school, they move to other parts of New Hampshire or the region.

TABLE 4 Comparison of 2000 Population Density

Town	Persons per Square Mile of Land Area	Land Area in Square Miles
Carroll	14.4	50.3
Dalton	35.5	27.5
Jefferson	20.7	50.1
Lancaster	66.5	50.2
Whitefield	58.5	34.3

Table 4 includes a listing of the persons per square mile of land area within the communities. The rates of the communities that compose the WMRSD are generally high showing ample open land for possible development. While in some regions of the state there is an increasing demand for development and housing that has not been the case for those regions of the state that are located in the northern and western parts of NH. Planners and economist suggest that remote locations (e.g. long commutes), combined with the lack of employment options contribute to this condition.

TABLE 5 Town of Carroll: Population and Births from 1995 – 2005

Year	Births (Bureau Vital Records)	Town's Population (NHOEP)	Births as a % of the Town's Population
1995	2	574	0.35
1996	6	584	1.02
1997	6	603	0.99
1998	7	625	1.12
1999	3	658	0.45
2000	7	663	1.05
2001	3	689	0.43
2002	4	686	0.58
2003	0	712	0.00
2004	9	725	1.24
2005	7	725	0.96

TABLE 6 Town of Dalton: Population and Births from 1995 – 2005

Year	Births (Bureau Vital Records)	Town's Population (NHOEP)	Births as a % of the Town's Population
1995	13	866	1.50
1996	7	875	0.80
1997	12	855	1.40
1998	11	854	1.28
1999	9	860	1.40
2000	8	927	0.86
2001	6	942	0.63
2002	7	972	0.72
2003	7	984	0.71
2004	12	985	1.21
2005	10	990	1.01

TABLE 7 Town of Jefferson: Population and Births from 1995 – 2005

Year	Births (Bureau Vital Records)	Town's Population (NHOEP)	Births as a % of the Town's Population
1995	13	1,004	1.29
1996	4	1,003	0.39
1997	8	1,007	0.79
1998	9	1,009	0.89
1999	9	1,010	0.89
2000	10	1,006	0.99
2001	7	1,014	0.69
2002	9	1,026	0.87
2003	5	1,038	0.48
2004	7	1,059	0.66
2005	7	1,059	0.66

TABLE 8 Town of Lancaster: Population and Births from 1995 – 2005

Year	Births (Bureau Vital Records)	Town's Population (NHOEP)	Births as a % of the Town's Population
1995	43	3,597	1.19
1996	36	3,531	1.01
1997	44	3,526	1.24
1998	41	3,509	1.16
1999	35	3,517	0.99
2000	49	3,280	1.49
2001	33	3,303	0.99
2002	30	3,354	0.89
2003	31	3,386	0.91
2004	38	3,399	1.11
2005	39	3,399	1.14

TABLE 9 Town of Whitefield: Population and Births from 1995 – 2005

Year	Births (Bureau Vital Records)	Town's Population (NHOEP)	Births as a % of the Town's Population
1995	20	1,950	1.02
1996	32	1,956	1.63
1997	28	1,966	1.42
1998	20	1,970	1.01
1999	23	1,971	1.16
2000	25	2,038	1.22
2001	25	2,059	1.21
2002	25	2,066	1.21
2003	22	2,091	1.05
2004	12	2,109	0.56
2005	18	2,109	0.85

**TABLE 10 Total for White Mountains Regional School District
Population and Births from 1995 – 2005**

Year	Births (Bureau Vital Records)	Towns' Population (NHOEP)	Births as a % of the Towns' Population
1995	91	7,901	1.15
1996	85	7,949	1.06
1997	98	7,959	1.23
1998	88	7,967	1.10
1999	79	8,016	0.98
2000	99	7,914	1.25
2001	74	8,007	0.92
2002	75	8,104	0.92
2003	65	8,211	0.79
2004	78	8,277	0.94
2005	81	8,277	0.97

While the individual town's births vary significantly, there is a general trend among all five communities towards a slight decline in births especially in the larger communities. As a whole (See table 10) the number of births in relation to the number of residents in the district has been variable but generally slightly declining since 1995. The number of births reached a high of 99 in 2000 and a low of 65 in 2003. The 65 births in 2003 also clearly show the lowest percentage due to the low number and the comparative rising population. It will be important to monitor the number of births to residents in order to identify any significant changes in this pattern. This issue is even more significant given the declining percentage of students in grades K-12 in relation to the overall growth of the population. When the above data points are considered, it would appear to forecast a declining K-12 student population for the foreseeable future.

Another feature illustrating the potential for student growth within the White Mountains Regional School District is the history of building permits issued. The following table depicts the number of building permits issued during the last fifteen years in White Mountains Regional School District as a whole. In Appendix G, a listing of each town's history is included. The number of new, single family housing has been growing modestly especially since 2000. It is the impression of various town officials within the White Mountains Regional School District that a significant number of the new homes being constructed are as second homes and some permitted have been associated with major hotel reconstruction.

TABLE 11 White Mountains Regional School District's Combined Building Permits 1991 – 2005

Year	Single Family	Multi-family	Manufactured	Total
1991	15	-1	5	19
1992	14	-8	17	23
1993	10	0	8	18
1994	15	29	10	54
1995	13	6	6	25
1996	23	8	8	39
1997	14	3	5	22
1998	14	13	6	33
1999	20	23	9	52
2000	31	15	6	52
2001	22	16	16	54
2002	61	10	6	77
2003	62	2	5	69
2004	55	2	13	70
2005	71	0	17	88
2006	41	1	7	49

It is estimated by one NH study that each residential new house, on average may add .45 school age students to the school enrollments (Thibeault, 2006). The NH Office of Energy and Planning estimates that based on the 2000 census data there is between .35 and .45 students (See Table 3 - ages 6-17) per household in the communities that comprise the White Mountains Regional. However, the fact that the school population has declined over the past few years while new homes have been constructed and the town's population has increased, would seem to indicate that the percent of school age children per household within the White Mountains Regional School District may be shrinking from the 2000 data point by NHOEP.

In interpreting the building trend data, it would appear that the rise in second-home multi-family housing, together with the expected replacement of property near the Mountains to be second homes, would support the idea that both the overall population and student enrollment will decline slightly.

Cohort Survival Enrollment Projections

Accurate enrollment forecasting is particularly important to school boards and administrators. Enrollment estimates have an obvious impact on the budget, facility planning, and future staffing needs.

Projecting student enrollments is a difficult task at best. The cohort survival method is generally the most reliable measure used as a short-range (one to five years) forecasting tool. It is based on the calculation of a series of survival rates that indicate the fraction of students in one grade, in a given year, who “survive” to the next grade in the next year. First grade enrollments are calculated independently on the basis of past (six year prior) birth data, i.e. the birth to first grade ratio is always the result of comparing grade one enrollments to the number of births six years prior. Projections are then made using a grade progression ratio multiplied by the enrollment for a previous grade in a prior year. Kindergarten estimates are based on the first grade projection for the next year divided by the kindergarten to first grade ratio. Thus, kindergarten projections are an inverse operation since they are based on the first grade estimate for the following year.

The basic idea behind this technique is that what has happened historically can be used to project trends for the future. It is important to note that the technique does not predict, but rather it is a process by which trends can be identified. It is good practice to keep this information updated on an annual basis and for the district to keep abreast of demographic and economic changes in the area, which could potentially affect the local school population and the resources needed to support it.

The enrollment projections contained in this report are presented in three formats. The first is a five-year average, which briefly defined, is an average of the grade-to-grade progressions over the past five-years (shown as 5 yr. average). The second format takes into account some of the trends of the most recent years as well as considering some of the historical trends. This procedure is identified as a three-year weighted average, in which greater weight is given to the most recent year and correspondingly less weight for those years further back in history (shown as 3 yr. weighted average). The third simply compares the last two years and uses that data as a basis for a projection (shown as 1 yr. cohort). The one-year cohort may fluctuate more because it is looking at only the last two years of data and it does not reflect the longer-term data. It is, though, a good means for spotting trends, which may indicate some change in the normal patterns experienced by the district. Some examples of this may be a major business opening or closing, significant housing changes, or changes in employment opportunities.

Information used to develop the survival percentages came from two sources: (1) to determine the projections for the first year of school (first grade), resident live births, as collected by the New Hampshire Bureau of Vital Statistics, are used to compare with the number of children who actually show up in first grade six years later and (2) the yearly October 1 enrollment data by grades as provided by the Superintendent of School’s Office to the NH Department of Education.

There are times when resident live birth data is not available for the more recent years from the New Hampshire Bureau of Vital Statistics. In such instances an average of the last available five years is applied. If this process is used it will be noted on page two of the projection summary.

The data does not include students classified as out-of-district special education, home schooled, or enrolled in a charter school. The reason for this is that these children are not reported in a particular grade grouping, nor is the figure apt to be a stable one. However, it is necessary to consider these children in any analysis of the need for space. One way to determine a potential number for the future is to calculate the percentage of these children as related to the

total number of students. If, for example, the resulting percentage was 10%, then for planning purposes the projected populations could be increased by that percentage to account for those so classified. Home study children would not be a part of this percentage. However, if at some point they do enter the public school system, then depending upon the numbers, some adjustments may be necessary. For reference purposes, these pupils for the 2006-2007 school year are reported in Appendix A on page 56.

Appendix A contains detailed, grade-by-grade enrollment projections for the White Mountains Regional School District. The data is presented in chart and graphic form. The charts include historic enrollment data, resident live births, and projections using the three methods described herein. Graphs include (1) line graphs depicting historical and projected trends; (2) bar graphs showing actual resident live births for the past ten years and estimated live births for 2005-2006; and (3) a comparison between the number of live births to kindergarten and first grade enrollments five and six years later.

Given the declining relationship between overall population and school age children, together with the decline in births, and increase in new second home dwellings, it would appear to indicate that the school population will continue to decline slightly over the next 5 to 10 years.

Summary

The cohort survival method relies on historical birth and enrollment data to calculate the various grade progression ratios. It is a common method used by demographers to estimate future school enrollments. It has proven to be accurate in most situations; however, it is a historical approach and assumes that all conditions will remain substantially unchanged. There is, however, no built-in consideration for an extraneous factor's impact, such as new industry, a significant change in economic conditions or a significant change in land availability or use. Grade by grade projections require counts for each grade and therefore, any out-of-district special education, home schooled or charter school students have not been included.

Over the past six years, the White Mountains Regional School District's K-5 student population has declined by 55 students (8.9%), the K-8 by 45 students (4.8%), and the K-12 by 25 students (1.8%) and our enrollment projections along with economic and social indicators would appear to signal continued pressure for the district's student population to decline by 249 students (17.9%) over the next 10 years (October 2006 – 2016). The school district's enrollments in grades K-12 decreased by 31 students (2.1%) from the 2001-2002 to 2005-2006 school year, while the community's population continued to grow modestly by 270 people (3.7%). However, the NHOEP predicts that in the future the population will decline.

Based on an examination of the cohort models, the number of births, the history of building permits and the population change, it is our belief that enrollments projected by the five-year average model are the most reliable and that the district should adopt the model as the "reasonable" basis for assessing future student populations and facility needs. The five-year average model shows the K-12 student enrollment continuing to decline slightly within the next five to ten years (See Table 12).

TABLE 12 Projected Enrollments 2007–2016 Using Five-Year Average

School Year	Grades K-5 Projections	Grades K-8 Projections	Total K-12 Projections
2007-08	518	860	1,356
2008-09	489	838	1,326
2009-10	490	810	1,287
2010-11	474	788	1,260
2011-12	473	766	1,243
2012-13	475	768	1,226
2013-14	474	743	1,197
2014-15	478	743	1,167
2015-16	486	746	1,146
2016-17	480	748	1,146

*Complete data set included in Appendix A

The confidence level of any enrollment projection drops as we extend further into the future and as birth data becomes projected information. As a result, it is recommended that the district continue its practice of revising projections annually based on the most current information.

VI. Description of Schools in the White Mountains Regional School District

At the onset of this section of the report, it is important to note that White Mountains Regional School District has a practice of “open enrollment” for resident students in grades K-8. As a result, although schools are located in four different communities, the attendance in each school is not determined by the town of residence, but rather by other factors that will be addressed in each school’s description and by changing school district needs.

A. Dalton Elementary School

Introduction

Dalton Elementary School houses 12 Kindergarten students and 6 North Country Class program for a total school enrollment on October 1, 2006 of 18 students. In effect, this school is a “magnet school” for a special emotionally handicapped student program and an all day kindergarten class.

Program Description

The school day for the students at the Dalton School extends from 8:15 am to 2:15 pm. The school’s offerings include: a full-day kindergarten staffed by a teacher using an instructional program that follows the prescribed district curriculum, including the 3 tiered reading model. In addition, a special education program with two levels is housed in the building. One program is for students in grades 3-4 and the other for students in grades 5-8. A full compliment of teachers and support services are provided to the special programs.

The Facility and Site

The Dalton School is an older facility originally built in 1958 and has benefited from an addition in 1990. The district's maintenance department estimates the total square footage of the structure to be 8,748 square feet and the structure is located on 11.2 acres. Clearly, among the facility's greatest strengths is its prominent location within the community.

The facility's limitations are largely caused by the age of the facility and its small size. The building essentially has four classrooms, a small multi-purpose space and a number of small office areas. The storage areas for employees (e.g. classroom, general and custodial) are insufficient and the student locker storage is antiquated.

While the site of the school offers many advantages that are gained by its proximity to the center of the community, the site size is small and the fields, roadways and parking lot are under current heavy use.

Facility and Site Strengths

- School is located in the center of the community
- Three classrooms are of adequate size
- General condition of the building is clean and bright
- Facility offers a community resource

Facility and Site Limitations

- Poor air circulation in some areas and uneven heating throughout building; no uniform ventilation system
- Small multi-purpose areas with limited seating and many competing uses
- Insufficient number of classrooms and small work spaces for specialists to allow a full K-5 or K-8 program
- Lack of small group instruction spaces
- Certain office areas are undersized (e.g., guidance, main office)
- Outdated and/or limited number of bathrooms available for both student and staff use

Determining Functional Capacity of Dalton School

Class size guidelines, the scope of the educational program, and the size and type of the existing spaces are key factors in determining functional capacity at an existing school. It should be emphasized that capacity is not necessarily fixed and will likely change over a period of time due to a variety of program or policy changes. For example, a policy change affecting class size or the number of teams will either increase or lower capacity. Similarly, adding or reducing the number of regular classrooms through reallocation of space will have an upward or downward impact on capacity.

Beyond regular classrooms, in order to meet the leaning needs for a K-5 population the school needs spaces for programs such as art, music, physical education, special education, reading, library/media, technology education, consumer science, food preparation, and foreign languages, as well as, areas for a variety of support services. Included under support services are spaces for guidance, health services, administration, food services, and custodial support.

Dalton School currently has four (4) regular or core classrooms. These are the rooms that form the basis of analysis of the functional educational capacity for core subjects. Specialized rooms such as technology education, family and consumer science, art or music "receive" groups of students daily, under the Related Arts program, from the regular core-subject classrooms. At the present time, all classrooms are utilized on a daily basis. As previously stated, these rooms are used for one Kindergarten room and the remaining rooms are for a special education program that services the entire district.

TABLE 13 Dalton Elementary School Capacity

Grade Level	# of Rooms	Maximum Number of Students/Rooms	Mathematical Capacity
Kindergarten	1	20	20
Grades 1 - 5	3	25	75
Total	4		95

$$\text{Functional Capacity} = 90\% \text{ of } 95; \quad .90 \times 95 = 85$$

The 90 percent factor takes into account variables such as assigning fewer pupils to some classes, accommodating combination classes (e.g., 1-2), and to make allowances for assigning fewer students to undersized classrooms as is the case here. The school's overall capacity is 95 using the 90 percent factor it is 85 students.

TABLE 14 Inventory of Current Program Spaces at Dalton Elementary School

Function	Quantity	Comments
Classrooms	4	Three rooms appear to be about 800sf and one room is about 500sf.
Multi-purpose room/ Area	1	Small area used as gym, cafeteria, assembly and more
Library-Media Center	1	Small room off multi-purpose used for library, Guidance and more
Health Suite	1	Room across from main office is undersized at about 280sf
Admin Office-Gen Office and Reception	2	Next to main entrance divided into two small spaces principal, secretary and general reception
Staff bathrooms	1	Single station area also used for ADA accessibility
Student bathrooms	1 set	Restroom areas have 2 stations. Areas are in need of significant renovation of fixtures, windows and ventilation
Kitchen	1	Small area to meet school needs currently serves as a finishing kitchen for meals prepared offsite
Storage	Limited	All extra spaces are utilized. There appears to be an insufficient number and the size of existing storage areas for school and custodial supplies is too small
Boiler Room	1	

Note: The inventory of current program space represents usage during the 2006 - 2007 school year.

B. Jefferson Elementary School

Introduction

Jefferson Elementary School houses students in grades PK-5 and the total school enrollment on October 1, 2006 was 94 students (68 in K-5 and 26 in PK). This school's enrollment is largely composed of students from Jefferson as well as Carroll/ Twin Mountains.

Program Description

The school day for students in grades Pre-K-8 at Jefferson School extends from 7:50 am to 2:40 pm. The Pre-K program operates on a half-day cycle with attendance for two days per week each, for students aged 3 and 4. Enrollment is primarily open to any resident of Jefferson and Carroll. The Kindergarten program is a half-day full week program, with two sections in place, for the 2006-07 school year.

Students are grouped heterogeneously and generally receive instruction in all core subjects in their self-contained classrooms. The curriculum is guided by a comprehensive district curriculum and teacher created "curriculum maps," which define the expectations for all grades at all levels. The continuum of supplemental services available to students, on a part-time/shared basis, also include: a school nurse, guidance and counseling services, a school psychologist, occupational therapy and speech services. The school district uses a "Three Tiered" reading structure and utilizes instructionally useful assessments to guide the teaching and learning process.

In addition, students have access (1 Day per week) to a related arts/enrichment program, which includes instruction and services from shared staff in: music, art, physical education, guidance, library and technology.

The Facility and Site

The Jefferson Elementary School is an older facility originally built in 1959 and has benefited from an addition in 1990. The maintenance department estimates the total square footage of the structure to be 13,190sf. located on a 27-acre site. Clearly, among the facility's greatest strengths is its location within the community.

The facility's limitations are largely caused by the age of the facility and its relative small size. The building essentially has six classrooms, a very small multi-purpose space, a small library, a small classroom used for all itinerant staff and a number of small office areas. The storage areas for employees (e.g. classroom, general and custodial) are insufficient and the student locker/storage is very limited.

While the school's site offers many advantages because its proximity to the center of the community and its beautiful location, the structure has some significant weaknesses.

Facility and Site Strengths

- Six classrooms
- General condition of the building is clean and bright
- Small school environment
- Facility is a community resource

Facility and Site Limitations

- Poor air circulation in some areas and uneven heating throughout building; no uniform ventilation system
- Small multi-purpose areas with limited seating and many competing uses court too small for use by students and community
- Insufficient number of classrooms and small work spaces for specialists to allow a full K-5 or K-8 program
- Lack of small group instruction spaces
- Certain office areas are undersized and poorly located for building security (e.g., guidance, main office)
- Space for library is too small and is used for technology as well
- Inadequate system for vehicle traffic (e.g. drop-offs and pick up)
- Playground is dated

Determining Functional Capacity of Jefferson School

Class size guidelines, the scope of the educational program, and the size and type of the existing spaces are key factors in determining functional capacity at an existing school. It should be emphasized that capacity is not necessarily fixed and will likely change over a period of time due to a variety of program or policy changes. For example, a policy change affecting class size or the number of teams will either increase or lower capacity. Similarly, adding or reducing the number of regular classrooms through reallocation of space will have an upward or downward impact on capacity.

Beyond regular classrooms, the school needs spaces for programs such as art, music, physical education, special education, reading, library/media, and food preparation, as well as areas for a variety of support services. Included under support services are spaces for guidance, health services, administration, food services, and custodial support.

The Jefferson Elementary School currently has six (6) regular or core classrooms. These are the rooms that form the basis of analysis of the functional educational capacity for core subjects. At the present time, all classrooms are utilized on a daily basis. There is limited and shared spaces for all itinerant staff and services.

TABLE 15 Jefferson Elementary School Capacity

Grade Level	# of Rooms	Maximum Number of Students/Rooms	Mathematical Capacity
Pre Kindergarten	1	20	20
Kindergarten	1	20	20
Grades 1 - 5	4	25	100
Total	6		140

$$\text{Functional Capacity} = 90\% \text{ of } 140; \quad .90 \times 140 = 126$$

The 90 percent factor takes into account variables such as assigning fewer pupils to some classes, accommodating combination classes (e.g., 1-2), and to make allowances for assigning fewer students to undersized classrooms as is the case here. The school's overall capacity is 140 using the 90 percent factor it is 126 students.

TABLE 16 Inventory of Current Program Spaces at Jefferson Elementary School

Function	Quantity	Comments
Classrooms	6	All six rooms appear to be about 900sf
Multi-purpose room/ Area	1	Small area located in center of structure used as gym, cafeteria, assembly and more
Library-Media Center	1	Small room off used for library, Technology/computer lab and more
Health Suite	1	Room next to main office is undersized
Admin Office-Gen Office & Reception	2	Next to main entrance and in the rear of building, very small spaces for principal, secretary and general reception
Staff bathrooms	1	Single station area also used for ADA accessibility
Student bathrooms	1 set	Restroom areas have 2 stations. Areas are in need of significant renovation of fixtures, windows and ventilation
Kitchen	1	Small area to meet school needs
Storage	Limited	All extra spaces are utilized. There appears to be an insufficient number and the size of existing storage areas for school and custodial supplies is too small
Boiler Room	1	

Note: The inventory of current program space represents usage during the 2006 - 2007 school year.

C. Lancaster School

Introduction

The Lancaster School houses students in grades PK-8 and the total school enrollment on October 1, 2006 was 498 students (464 in K-8 and 34 in PK). This school's enrollment is primarily composed of students from Lancaster, as well as students in grades 1-8 from Dalton and 6-8 from Jefferson.

Program Description

The school day for students in grades Pre-K-8 at Lancaster School extends from 7:50 am to 2:40 pm. The Pre-K program operates on a half-day cycle with attendance for two days per week each, for students aged 3 and 4. Enrollment is primarily open to any resident of Lancaster and Dalton. The Kindergarten program is a half-day full week program, with two sections in place, for the 2006-07 school year.

Students in grades 1-5 are grouped heterogeneously and generally receive instruction in all core subjects in their self-contained classrooms. The curriculum is guided by a comprehensive

district curriculum and teacher created “curriculum maps,” which define the expectations for all grades at all levels. The continuum of supplemental services available to students, on a near full-time basis, also include: a school nurse, guidance and counseling services, a school psychologist, occupational therapy and speech services. The school district uses a “Three Tiered” reading structure and utilizes instructionally useful assessments to guide the teaching and learning process.

In addition, students have access to a related arts/ enrichment program including instruction and services from staff in: music, art, physical education, guidance, library and technology on a weekly basis for a 45-minute period.

Students in grades 6-8 are grouped heterogeneously and generally receive instruction in English/language arts, social studies, science, and math in a departmental structure rotating among teachers. In addition to the related arts courses noted above students in grades 6-8 receive instruction in Family and Consumer Sciences and access to a co-curricular activities program. In addition, 8th graders travel to Whitefield to receive Technology Education instruction.

The continuum of supplemental services available to all students also includes; a full array of special education support services, Title 1, a school nurse, guidance and counseling services, a school psychologist, occupational therapy and speech services.

The Facility and Site

Within the WMRSB, the Lancaster School is the newest school having been built in 1995. The school department estimates the total square footage of the structure to be 74,400sf, located on a site that is about 54 acres. Clearly, among the facility's greatest strengths is the modern design of the structure and its accessible location within the community.

The facility's strengths are numerous and center on its fairly recent construction, modern design, and large site. Its limitations center on a few building security issues, lack of Technology Education space and the fact that the building is currently being fully utilized.

Facility and Site Strengths

- School is located close to the center of the community and is a significant community resource
- Classrooms are large and generally well illuminated
- Certain design features are quite unique and add to the buildings usefulness (e.g. large lobby area, separate gym and cafeteria, large site, and generally separate areas for grade levels)
- Art room has separate kiln room
- General condition of the building is clean and bright

Facility and Site Limitations

- Lack of appropriate space for Technology Education – Industrial Arts program
- Insufficient number of classrooms and small work spaces for specialists
- Lack of teachers’ work room
- Some concern with vehicle access areas for student drop offs and pickups

Determining Functional Capacity of Lancaster Elementary School

Class size guidelines, the scope of the educational program, and the size and type of the existing spaces are key factors in determining functional capacity at an existing school. It should be emphasized that capacity is not necessarily fixed and will likely change over a period of time due to a variety of program or policy changes. For example, a policy change affecting class size or the number of teams will either increase or lower capacity. Similarly, adding or reducing the number of regular classrooms through reallocation of space will have an upward or downward impact on capacity.

Beyond regular classrooms, the school needs spaces for programs such as art, music, physical education, special education, reading, library/media, technology education, consumer science, food preparation, and foreign languages, as well as areas for a variety of support services. Included under support services are spaces for guidance, health services, administration, food services, and custodial support.

The Lancaster Elementary School currently has twenty-seven (27) regular or core classrooms. These are the rooms that form the basis of analysis of the functional educational capacity for core subjects. At the present time, all classrooms are utilized on a daily basis. There are additional spaces for special subjects areas.

TABLE 17 Lancaster Elementary School Capacity

Grade Level	# of Rooms	Maximum Number of Students/Rooms	Mathematical Capacity
Pre Kindergarten	1	20	20 or 40 (½ day)
Kindergarten	1	20	20 or 40 (½ day)
Grades 1-5	15	25	375
Grades 6-8	10	25	250
Total	27		665

$$\text{Functional Capacity} = 90\% \text{ of } 665; .90 \times 665 = 598$$

The 90 percent factor takes into account variables such as assigning fewer pupils to some classes, accommodating combination classes (e.g., 1-2), and to make allowances for assigning fewer students to undersized classrooms as is the case here. The school's overall capacity is 665 using the 90 percent factor it is 598 students.

TABLE 18 Inventory of Current Program Spaces at the Lancaster Elementary School

Function	Quantity	Comments
Preschool classroom	1	Room 53 about 1,600sf
Kindergarten	1	Room 46 about 1,600sf
Grades 1-5 Classrooms	15	Rooms 57, 58, 59, 63-65,37,40,41,45,74,75,81-83
Grades 6-8 Classrooms including Science Labs	10	Rooms 85-87, 94,95,31,25,26,30,101
Art Room	1	Room 21 (1,300sf) attached storage and kiln room
Computer Room	1 shared	Shared space in the Library

Gym/Phys Education Area	1	Room 133 with attached stage, and two locker rooms.
Library-Media Center	1	Room 19 is a large area with 1,512sf, good resources and two storage and work areas (336sf). Additional computers are available in space.
Music Rooms Choral and Instrumental	3	Three areas are used for music, including the stage area rm.132, plus two nearby rooms 111 + Instrumental storage.
SPED-Resource Room	4	Rooms 67,64,72,89 plus space near office
Family and Consumer Science	1	Room 96
Occupational Therapy, Physical Therapy, Testing, Psychologist	3	Near 64,72, 15
Speech	2	Room 38
Guidance Office	2	Room 13, 16
Wilson Reading	1	Room 100
Health Suite	1	Room 93
Admin Office-Gen Office & Reception	4	Next to main entrance divided into three spaces principal, secretary and general reception, plus an assistant principal's office. Rooms 9,8,6
Staff bathrooms	2	Single station areas
Student bathrooms	3 sets	Restroom areas have 4 stations and in all areas.
Conference Room	1	Room 6
Cafeteria	1	Room 131 Large adequate area of about to serve population with access to stage which is used for music classes
Kitchen	1	Ample area to meet school needs
Storage	Various	All extra spaces are utilized. There appears to be an insufficient number and the size of existing storage areas for school and custodial supplies is too small
Boiler Room	1	

Note: The inventory of current program space represents usage during the 2006 - 2007 school year.

D. Whitefield School

Introduction

The Whitefield School houses students in grades K-8 and the total school enrollment on October 1, 2006 was 340 students. Students attending the Whitefield school are primarily from Whitefield, Dalton and Carroll.

Program Description

The school day for students in grades K-8 at the Whitefield School extends from 7:50 am to 2:40 pm. The Kindergarten program is a half-day full week program, with two sections in place, for the 2006-07 school year.

Students in grades 1-4 are grouped heterogeneously and generally receive instruction in all core subjects in their self-contained classrooms with the exception of grade four students changing teachers for science and social studies. In grades five and six, students travel to

different teachers for instruction in language arts, science, social studies, and math, and each teacher teaches a reading class.

The curriculum is guided by a comprehensive district curriculum and teacher created “curriculum maps,” which define the expectations for all grades at all levels. The continuum of supplemental services available to students, on a near full-time basis, also include: a school nurse, guidance and counseling services, a school psychologist, occupational therapy and speech services. The school district uses a “Three Tiered” reading structure and utilizes instructionally useful assessments to guide the teaching and learning process.

In addition, students have access to a related arts/ enrichment program including instruction and services from staff in: music, art, physical education, guidance, library and technology on a weekly basis for a 40 or 47 minute period.

Students in grades 7-8 are grouped heterogeneously and generally receive instruction in English/language arts, social studies, science, and math in a departmental structure rotating among teachers. In addition to the related arts courses noted above, students in grades 7-8 receive instruction in Family and Consumer Sciences and Technology Education and access to a co-curricular activities program.

The continuum of supplemental services available to all students also includes; a full array of special education support services, Title 1, a school nurse, guidance and counseling services, a school psychologist, occupational therapy and speech services.

The Facility and Site

The Whitefield Elementary School is the second newest school built in 1992. The school department estimates the total square footage of the structure to be 52,200 s.f., located on a site that is about 40 acres. Clearly, among the facility's greatest strengths is the modern design of the structure and its central location within the community and beautiful views from its site.

The facility's strengths are numerous and center on it fairly recent construction, and modern design. Its limitations center on a few building infrastructure issues, lack of separate space for cafeteria and gymnasium and the fact that the building is currently being fully utilized.

Facility and Site Strengths

- School is located in the center of the community and is a significant community resource
- Classrooms are large and generally well illuminated
- Certain design features are quite unique and add to the buildings usefulness (e.g. lighting, two floor structure allows for separate areas for grade levels)
- General condition of the building is clean and bright

Facility and Site Limitations

- Lack of appropriate separate spaces for cafeteria and gym
- Lack of appropriate music area
- Playground location is located away from the school
- Insufficient number of classrooms and small work spaces for specialists
- Uneven heating and ventilation system

Determining Functional Capacity of the Whitefield Elementary School

Class size guidelines, the scope of the educational program, and the size and type of the existing spaces are key factors in determining functional capacity at an existing school. It should be emphasized that capacity is not necessarily fixed and will likely change over a period of time due to a variety of program or policy changes. For example, a policy change affecting class size or the number of teams will either increase or lower capacity. Similarly, adding or reducing the number of regular classrooms through reallocation of space will have an upward or downward impact on capacity.

Beyond regular classrooms, the school needs spaces for programs such as art, music, physical education, special education, reading, library/media, technology education, consumer science, food preparation, and foreign languages, as well as areas for a variety of support services. Included under support services are spaces for guidance, health services, administration, food services, and custodial support.

The Whitefield Elementary School currently has sixteen (16) regular or core classrooms. These are the rooms that form the basis of analysis of the functional educational capacity for core subjects. At the present time, all classrooms are utilized on a daily basis. There are additional spaces for special subjects areas.

TABLE 19 Whitefield Elementary School Capacity

Grade Level	# of Rooms	Maximum Number of Students/Rooms	Mathematical Capacity
Kindergarten	1	20	20 (40 -½ day)
Grades 1 - 5	10	25	250
Grades 6-8	6	25	125
Total	16		395

$$\text{Functional Capacity} = 90\% \text{ of } 395; \quad .90 \times 395 = 355$$

The 90 percent factor takes into account variables such as assigning fewer pupils to some classes, accommodating combination classes (e.g., 1-2), and to make allowances for assigning fewer students to undersized classrooms as is the case here. The school's overall capacity is 395 using the 90 percent factor it is 395 students.

Class size guidelines, the scope of the educational program, and the size and type of the existing spaces are key factors in determining functional capacity at an existing school. It should be emphasized that capacity is not necessarily fixed and will likely change over a period of time due to a variety of program or policy changes. For example, a policy change affecting class size or the number of teams will either increase or lower capacity. Similarly, adding or reducing the number of regular classrooms through reallocation of space will have an upward or downward impact on capacity.

Beyond regular classrooms, the school needs spaces for programs such as art, music, physical education, special education, reading, library/media, technology education, consumer science, food preparation, and foreign languages, as well as areas for a variety of support services. Included under support services are spaces for guidance, health services, administration, food services, and custodial support.

TABLE 20 Inventory of Current Program Spaces at the Whitefield Elementary School

Function	Quantity	Comments
Kindergarten	1	Room 46 about 1,300sf
Grades 1-5 Classrooms	10	Rooms 36, 40, 42, 44, 29, 32, 35, 116, 110, 120
Grades 6-8 Classrooms including Science Lab	6	Rooms 121-124, 128, 117
Art Room	1	Room 21 (1,300sf) limited storage and kiln in room
Computer Room	1	Shared space in the Library
Gym/Phys Education Area and Cafeteria	1	With attached stage and two storage areas
Library-Media Center	1	Room is a large with good resources, two storage and work areas and shared as computer lab
Music Room	0	The stage area plus two nearby rooms are used for music
SPED-Resource Rooms, Speech testing, student support, OT, Title 1	Multiple	Rooms surrounding area of Room 136
Family and Consumer Science	1	Room 125
Technology Ed	1	Room 143 also has ground level access
Title 1 Area for grades 1-5	0	Located in hallway of ground floor
Guidance Office	1	Room 23
Health Suite	1	Room 28
Admin Office - Gen Office and Reception	3	Next to main entrance divided into three spaces principal, secretary and general reception, plus an assistant principal's office. Rooms 18,19, 21
Staff bathrooms	2	Single station areas
Student bathrooms	3 sets	Restrooms have 4 stations
Conference Room	0	
Kitchen	1	Area next to multipurpose room
Storage	Various	All extra spaces are utilized. There appears to be an insufficient number and the size of existing storage areas for school and custodial supplies is too small
Boiler Room	1	

Note: The inventory of current program space represents usage during the 2006 - 2007 school year.

E. White Mountains Regional High School

Introduction

White Mountains Regional High School is a medium size high school that offers a comprehensive curriculum including Career and Technical Education and enrolls students in grades 9 – 12 from the towns of Carroll/Twin Mountains, Dalton, Jefferson, Lancaster, and Whitefield. As of October 1, 2006, the high school's enrollment totaled five hundred five (505) students, which included twenty-eight (28) tuition students from towns in Vermont and from other New Hampshire school districts such as Gorham, Randolph, Littleton, Berlin, etc.

White Mountains Regional High School's enrollment has increased slightly during the last six years from four hundred eighty-five (485) in 2001, to five hundred five (505) in 2006. This year's enrollment is twenty (20) students more than it was six years ago. The yearly enrollment data for the past six years shows some variability with a two-year decrease followed by a steady three-year increase with no significant peaks or valleys from year to year. However, although enrollment has grown from 485 to 505, or 4.1 percent, the anticipated September 2007 projected enrollment is 496, a slight decline of 9 students or 1.8 percent. A continued decline is anticipated next five to ten years.

Program Description

White Mountains Regional High School offers a wide range of instructional programs and the curriculum is designed to meet the needs of a student population with diverse interests, skills, academic backgrounds and aspirations. The school's 2006–2007 Program of Studies lists 152 courses, which includes six courses offered at Littleton High School's Career and Technical Programs.

White Mountains Regional High School students as well as those from sending districts have the opportunity to take advantage of the school's comprehensive course offerings such as career and technology education, honors, advanced placement and project running start. Additionally, students may expand their program options by taking career and technology courses through Littleton High School's Career and Technical Programs. Locally, White Mountains High School offers fourteen (14) courses under the heading of Agriculture courses. Of special note is the Project Running Start (PRS) Program sponsored by the New Hampshire Community Technical College (NHCTC) system, which allows students who successfully complete designated PRS courses to be eligible to earn college course credit. PRS credits are accepted at any of the NHCTC campuses as well as the University of New Hampshire.

Students graduating from White Mountains Regional High School in June 2007 must earn a minimum of 20 credits, 22 credits in June 2008, 24 credits in June 2009, and 26 credits in June 2010. It is instructive to note that New Hampshire's public high schools are required by the New Hampshire Department of Education to have students acquire a minimum of twenty (20) credits for graduation. With few exceptions, students are required to carry a minimum of seven credits per academic year. As a result, given the eight periods per day schedule utilized by the White Mountains Regional High School, a graduate can readily earn 28 credits over four years.

Minimum credit requirements by subject area are: English - 4; mathematics - 3 (at least one course must include algebra); science - 2 (one earth science and one biology); social studies - 3; health education - 0.5; arts education - 0.5; physical education - 1; plus six elective credits. Additionally, starting with the Class of 2008, the following courses will be required for

graduation: Intro to Career and Computers - 0.5; Information and Communication Technologies (ICT) - 0.5 as well as an increase in the number of required elective courses from seven in 2008 to eleven in 2010.

White Mountains Regional High School provides for the education of students with special needs, as well as for those who are academically able and sufficiently motivated to pursue college-level and AP courses. The special education staff provides teaching and/or tutoring in the content areas, support services in classrooms, and directed study halls to assist students with special needs in developing appropriate study habits and learning skills. The special education department's staff consists of five teachers, para-educators as needed and required by law, a student assistance coordinator, and other specialists as needed, such as a physical therapist or speech therapist. Approximately seventy-nine students or (16) percent of the students at White Mountains Regional High School receive services from the special education department.

Students in grades 11-12 may elect to enroll in the Future Educators Academy, which allows them to explore the art of teaching through classroom-based lessons and school-to-career activities. High school seniors are provided the opportunity to practice the art of teaching under supervised observation. Students may elect to receive three (3) college credits at the NHCTC by providing evidence of meeting the course and colleges standards. The Mountain View Academy is another unique program that is offered for students in grades 11-12 and it introduces juniors and seniors to careers in management focusing on the hospitality industry. Through a partnership with the Mountain View Grand Resort, students are exposed to on-the-job training, projects, job shadowing, internships and employment opportunities.

The programs at White Mountains Regional High School extend well beyond the formal course offerings. Numerous student support services are available and include the guidance department, Section 504 rehabilitation services, Title I, a school social worker, a student assistance coordinator and a full-time nurse. The guidance department has three counselors, one of whom performs the duties of a crisis counselor, support staff and a person who oversees and coordinates the Student Assistance Program (SAP). SAP is open to all students in grades 9-12 who demonstrate at risk behaviors and who have a generalized difficulty with the school environment. Additionally, students are trained to offer personal assistance, conflict resolution, and tutoring services to other students.

White Mountains Regional High School supports numerous athletic programs and other co-curricular activities for its students. A variety of varsity and junior varsity athletic teams are available during each of the three sports seasons – fall, winter, and spring. Co-curricular activities include, but are not limited to student council, various clubs, National Honor Society, drama, chorus, yearbook, and academic teams.

One method for analyzing the educational program and ultimately its impact on space requirements and on staff is to examine course enrollment totals by program. Given White Mountains Regional High School's multiple scheduling patterns and different course credit values, it is necessary to convert data to a common measure such as "semester equivalent". To illustrate, a semester-length course enrolling 24 students has one-half the impact on space and staffing than a comparable full year-length course also enrolling 24 students. Table 21 lists by program areas weighted enrollments in semester equivalents. It also divides each equivalent by the school's enrollment as of October 1, 2006 (505 students) and each equivalent by the total number of semester equivalents (4,028) to provide a summary of relative impact by program area.

The 7.98 total reflected in the third column is sufficiently close to the theoretical total of 8.0, which should be derived if all students are accounted for every period and if the October 1 enrollment matches the enrollment on the master file date. The slight difference may be the result of a few special education students not being scheduled during all eight periods and the school's practice of allowing seniors to arrive late and/or leave early.

TABLE 21 Enrollment Totals by Program Areas for White Mountains Regional High School, Expressed in Semester Equivalents for the 2006-2007 School Year

Department/Program Area	Weighted enrollment in Semester Equiv. (a)	Per Student (/505)(b)	% of Overall Total (d)
English	514	1.02	12.8%
World Language	223	0.44	5.5
Math	488	0.97	12.1
Social Studies	519	1.03	12.9
Science	423	0.84	10.5
Art	87	0.17	2.2
Business Education	226	0.45	5.6
Computer Tech	36	0.07	0.9
Family & Consumer Science	62	0.12	1.5
Intro to Comp/Career	35	0.07	0.9
JROTC	66	0.13	1.6
Music	75	0.15	1.9
Phys. Education/Health	280	0.55	7.0
Career/Technical Education (CTE)	483	0.96	11.9
Special Education	61	0.12	1.5
Miscellaneous (c)	450	0.89	11.2
Totals	4,028	7.98	100.0%

Notes to Table:

(a) Weighted enrollments in semester equivalents are derived as follows: semester course totals x 1.0 and yearly course totals x 2.0, etc.

(b) Totals include students from sending districts

(c) Miscellaneous includes free blocks, community service, and attendance at Littleton High School's Voc-Tech program

(d) % of Overall Total - e.g. English $514 / 4,028 = 12.8\%$

The Facility and Site

The current White Mountains Regional High School facility was opened in 1966, is a one-story structure, and has a total area of 109,085 square feet. The high school is located in Whitefield, NH off of Route 3 on Regional Drive. The school's site size of 391+ acres is extensive and a real asset to the school and district. The high school's total acreage is unique when measured against NH minimum standards for high school sites (15 contiguous acres of "buildable" land plus one additional acre for each 100 students or fraction thereof).

The outdoor facilities are inadequate for a high school competing at the Class M and Division III levels. There are challenges in scheduling the school's boy's and girl's varsity and JV soccer and girl's varsity and JV field hockey teams on the athletic fields built for softball and baseball. There are no practice fields and this compounds the problem of trying to maintain the quality of the game fields and trying to schedule games and practice sessions for the six teams that compete in the fall. Additionally, the school's fields are used by the community, which places added demands on field scheduling and maintenance. The fact that the high school has a track and field team but no track or appropriate facilities on which to practice or compete has been found by the staff to be a serious limitation.

Although positive features about the facility are cited below and the high school facility is generally well maintained, the overall facility is in need of upgrading as defined and outlined in the school district's Five-Year Capital/Facilities Plan and in this study. Summer maintenance and repair projects plus the ongoing custodial and housekeeping efforts help to keep the facility's appearance acceptable despite its age and heavy usage. However, there are limitations and long-term issues, which need to be addressed. Various areas of the high school need to be upgraded, heating, ventilation and air conditioning (HVAC) issues resolved, ADA compliance completed, and more bathrooms, storage space, and appropriately sized classrooms provided.

Facility and Site Strengths

- Gymnasium is good size and separate from the cafeteria
- Large auditorium
- Career Tech Education Center (Agriculture) program and outdoor facilities/learning opportunities with its unique learning opportunities like logging, maple sugar operation, horses, etc
- Library/media area is sufficiently large
- General condition of the building is clean
- Site is easily accessible and extensive (391+ acres)

Facility and Site Limitations

- Many general purpose classrooms (750sf) do not meet minimum requirements (800sf)
- The limited number, age and location of bathrooms available for both student and staff use
- Lack of appropriate conference rooms to seat twelve people comfortably (e.g., guidance and administration)
- Insufficient number of athletic fields for games and practice sessions
- Lack of small work and private meeting spaces for teachers, specialists/department heads
- Some areas are not readily ADA accessible (e.g., locker rooms)
- Some spaces (interior offices, rooms) without windows, natural light and proper ventilation
- HVAC system --poor uneven heating/ventilation
- Locker room areas are undersized/inadequate for number of programs
- Limited storage throughout the school (e.g., athletic, music, physical education, etc)
- Science lab/classrooms (1,200sf) should be able to accommodate up to 20 students but are limited by the number of lab stations

It is important to note that the high school is used extensively beyond the regular school day for co-curricular programs and for other community activities.

Determining Functional Capacity of White Mountains Regional High School

Many factors influence the facility and site needs White Mountains Regional High School. Among the most important are projected school enrollments, enrollments by department/program areas, operational issues including class size, requirements for support program spaces, traditions and community expectations, allowance for extensive community use of the school and site, and cooperative arrangements for providing specialized educational programs. The latter assumes that WMRHS students will continue to have access to a number of career and tech programs at Littleton High School and that students will also be able to access CTE center course at WMRHS. A school the size of WMRHS would be extremely hard pressed to offer on its own many of the programs available at Littleton High School. However, WMRHS can and has expanded its enrollment in its career and technology course offerings.

Projecting the number of classrooms needed by academic departments is based in large part on average class size practices, projected departmental enrollments, and a classroom utilization factor. In Table 22 below we have computed enrollments for each department as a percentage of total school enrollment, as well as determining an average class size for each department. These calculations, when combined with a projected overall school enrollment, will yield the number of class sections needed by each department. A classroom utilization factor of 85 percent was then applied because generally high schools are considered “fully scheduled” at an 80-85 percent classroom utilization rate. Employing an 85 percent room utilization rate provides an allowance for some rooms being available for use as study halls, as well as a buffer against the realities of scheduling in a 500-student high school where period-by-period class section needs often cannot be equally balanced. It should also permit many teachers to have access to their primary room assignment during their planning period.

Projected classroom needs are predicated on a maximum short-term enrollment of 500 students (See Appendix A). Based on our projections, we do not envision enrollments exceeding 500 during the next five to ten years. Certain core areas – e.g., library-media center, gymnasium and cafeteria area – are allocated sufficient space to accommodate enrollments of up to 500. Although the core areas are sufficient, the gymnasium’s locker rooms are small and there is a need for additional outside athletic facilities such as practice fields and a track.

Table 22 illustrates classroom needs for fifteen departments/subject areas. Four of these subject areas – English, world languages, mathematics, and social studies – use regular classrooms, which are largely interchangeable. While room features such as furniture and bulletin/white boards may differ somewhat, rooms can be reassigned should enrollment patterns shift significantly. This potential realignment ensures maximum flexibility. Conversely, science rooms are typically larger, have unique furniture and equipment and a variety of added features, which makes them less interchangeable.

Classroom or teaching stations needed by other departments are generally quite specialized and therefore more difficult to reassign from one department to another. While the 85 percent utilization rate will be used as a guideline in determining needed teaching spaces, anticipated period-by-period use may fall well below 85 percent for some spaces, while other spaces may be utilized at or near 100 percent. For example, a sufficiently spacious and well-designed music area is clearly needed even if period-by-period utilization rate is under the 85 percent. Conversely, it is possible that the business education and computer departments may occasionally be constrained with an allocation of three rooms equipped with computers and related equipment. However, if necessary, a course such as business and personal law can be taught in a general classroom.

TABLE 22 Projected Number of Classrooms/Teaching Stations Needed Based on an Enrollment of 500 Students

Department/Subject	Projected Average Class Size (using current #s)	Projected Enrollment as % of Total Enrolled*	Projected Enrollment @ 500 Maximum Enrollment	# of Sections Needed	Sections/8 = 100% Use	Divided by .85 = # of Rooms Needed	Current # of Rooms	Projected # of Rooms Needed
English	18	102%	510	28	3.5	4.2	5	-0.8
Mathematics	17	97%	485	29	3.6	4.2	4	0.2
Social Studies	18	103%	515	29	3.6	4.2	5	-0.8
World Languages	16	44%	220	14	1.7	2.0	2	0.0
	Number of Regular Classrooms Needed (12.4 / .85)				=	14.6	16	-1.4
Science	16	84%	420	26	3.3	3.9	4	-0.1
Art	14	17%	85	6	0.8	0.9	1	-0.1
Business	17	45%	225	13	1.7	1.9	2	-0.1
Computer Tech	7	7%	35	5	0.6	0.7	1	-0.3
Family & Cons Science	14	12%	60	4	0.5	0.6	1	-0.4
Intro to Comp/Career**	30	7%	35	1	0.1	0.2	0	0.2
JROTC***	20	13%	65	3	0.4	0.5	1	-0.5
Music	15	15%	75	5	0.6	0.7	1	-0.3
Physical Ed/Health****	18	55%	275	15	1.9	2.2	3***	-0.8
Career/Tech Education	15	96%	480	32	4.0	4.7	6	-1.3
Special Education	Variable	12%	60	Space needs approached differently				
Total								-5.0

*Enrollments as a percent of total school enrollments would be higher in several instances if it were not for the fact that several students receive their basic instruction in some subjects through the special education department.

**ICC uses the FCS room (#129)

***JROTC has program needs beyond the normal class time such as leadership lab and other administrative duties and these make the room unavailable

****PE/Health includes the gym, health (#128) and weight training (#127) classrooms

Although Table 22 shows that mathematically WMRHS has five extra classrooms, a closer examination reveals that all but one department has only a fraction of a room available given each departments' average class size. However, it should be noted that White Mountains Regional High School's average class size tends to be somewhat low when compared to other NH high schools of its size. Therefore, some observers may accurately suggest that merely adding more students to each section would increase the school's capacity and the number of available rooms. We would agree with this observation but a word of caution is necessary. Some of the rooms at WMRHS are small (750sf) and thus cannot support class sizes of more than twenty-three; additionally, the science classrooms/labs should be able to accommodate twenty students given their size of twelve hundred (1200) square feet but are limited to 19 students given the number of teaching stations.

Beyond the classroom and teaching stations, which are required, WMRHS has other essential needs, such as appropriately sized and designed instructional and support spaces. These include:

- Small group instruction areas
- Conference and meeting rooms
- Faculty and staff work area(s)
- Support spaces related to physical education and athletics
- Health suite/nurse's area
- Guidance area
- Administration area
- General storage

Another way of assessing available space and potential school capacity is to determine square footage per student. For high schools, not including space in regional career and tech centers, a limit of 160 square feet per student is required by the NH Department of Education. White Mountains Regional High School has 109,085 total square feet, which includes 26,482 square feet for its career and technical center. If we use the 160 square foot per student guideline, WMRHS has a projected capacity of about 516 students $((109,085 - 26,482) \div 160 = 516)$.

TABLE 23 Inventory of Current Program Spaces at the White Mountains Regional High School

Type/Function	Quantity	Comments
Regular Classroom – English (5), Math (4), Social Studies (5), World Language (2)	16	Rooms 100, 101, 102, 103, 136, 104, 105, 107, 108, 109, 110, 111, 112, 115, 113, 114 Many are only 750sf
Science Lab/Classrooms	4	Rooms 119, 120, 122, 123
App. Tech. (Voc. Agriculture)	5	Rooms 203, 205, 206, 207, 208a
Art	1	Room 124
Bus. Education	2	Rooms 116, 117
Computer Tech	1	Room 121
Culinary Arts	2	Rooms 200, 201
Family & Consumer Science	1	Room 129
Industrial Technology (IA)	1	Room 202
JROTC	1	Room 118
Music/Theatre	2	Music Room (302), Auditorium (301)
Physical Education/Health	3	Gymnasium (304), Health (128), Weight Room (127)
Special Education	2	Life skills (209), Resource Room (210)
Nurse	1	Room across from the main office, undersized and shared with social worker

Media Hall	1	Room106 – hold wireless setup
Library-Media Center	1	Room 300, contains 2 offices, the NH Room and the Title I room
Various Office and Reception Areas	9	Principal, Asst. Principal, Voc. Director, SPED/Voc Ed Office – 208b, STEP, Guidance (3), SRO
Other – Spaces not used as classrooms	-	Faculty Room, Conference Room, Cafeteria – 303, Behavior Support/In School Suspension Room, Custodial Work Room

Note: The inventory of current program space represents usage during the 2006-2007 school year.

VII. Future Facility Needs

A. Assumptions That Guide Development of Findings and Recommendations

The following assumptions were used in analyzing facilities and in projecting future program space needs:

1. Student enrollments will approximate the projected number of students using a five-year average method. (See Appendix A)
2. Although curriculum changes will occur and technology will undoubtedly be used more extensively, major shifts (e.g. adding or deleting major programs) are not anticipated.
3. No significant changes are planned by the School District in the length of the school day or the school year.
4. Class size guidelines will be those noted in the previous section.
5. The schools will continue to serve as a valuable community resource and will be used extensively by community groups during non-school hours.
6. The school district will maintain its practice of open enrollment; that is, allowing parents to send their children to any of the elementary schools within the district.

Our purpose in outlining these assumptions is merely to identify conditions and practices which impact facility and space needs. We do not advance these as judgments about what necessarily should be. A few of these assumptions may be changed over a period of years through policy and operational decisions made by officials of the White Mountains Regional School District.

Consideration for the Future of White Mountains Regional School District

As part of this study, the investigators considered potential future needs and trends for education in general in developing needs and recommendations for the White Mountains Regional School District. While the authors do not profess to have a secret “window into the future,” we did give careful attention to the concept future needs and trends in our overall report.

In particular, we addressed this expectation in discussing issues of potential growth and change in enrollment trend in the demographic section and gave special consideration to certain necessary structural attributes in the “General Features and Requirements Section IX” of this report. Additionally, the following observations are offered for consideration in designing a school for the distant future. At a minimum, a school district that wants to meet the needs of its community for the next ten years will have to build school facilities that are Community Friendly, Technology Smart, Flexible and Adaptable, and Open to Potential Change.

1. Be Community Friendly

As most New Hampshire, and in fact, communities nationally realize, we are now dealing with the effects of an aging population. With the advent of the graying of the Baby Boom generation, we not only have a diminishing natural political constituency (fewer parents as voters); we are experiencing increased competition for public resources by the other governmental services (community senior centers, health costs, etc) that are designed to meet the needs of this ever increasing segment of the population.

In response, schools and all public service agencies must reach out by transforming and extending its programs and services to directly engage and serve this non-traditional group. Programs like senior centers in the schools, offering free or reduced fee access to unique services like computer education, adult learning, enrichment programs and access to expensive or rare equipment would be beneficial. The benefits would likely include a much stronger connection between the school and its community.

2. Be Technology Smart

The growth and impact of new technologies on all aspects of society has been amazing and all indications suggest that these effects will continue and expand. Just as technologies have changed all forms of work and leisure activities, the field of education is no exception. We can easily see that it has not only impacted the delivery system (e.g. one-on-one learning, research techniques, writing, etc.), it has also impacted the amount of knowledge. Futurists now tell us that the amount of “known information = knowledge” is now doubling in less than every eight months. Astounding!

The impact of this apparently unstoppable change will be profound on the field of education causing in part potentially drastic changes in the delivery system of learning. Students and parents will expect an ever-increasing use of the current and emerging technologies in the day-to-day delivery of instruction. As examples, they will expect greater use of the web, wireless access, use and access of data in all forms in the learning and evaluation process and progress reporting in almost real time.

As schools build for the future, at a minimum, they must include allowances for all of the known technologies (e.g. wireless, computer labs, technical service and storage areas, cable and fiber optic pathways, and more) plus build in flexibility to allow for the inexpensive integration of new inventions (e.g. open conduits, flexible spaces, access to overhead transit areas and more.).

3. Be Flexible and Adaptable

Over the last fifty years, public education has seen many changes (see item 4 below) and the physical structure of schools has not always been friendly to the new additions and/or changes. Schools built in the 1950's were built to educate larger class sizes of relatively pre-selected students and designed to deliver a similar education to all students. In the 1970's, schools were built to suit a new philosophy of open education (e.g. schools with out walls) and since the 1990's, we have struggled to find small group instructional spaces to meet the demand of a more specialized educational program for all students.

In addition, improvements in utility systems, safety knowledge, changed governmental standards and technologies have caused a major overhaul of school buildings to accommodate a variety of new rules, laws and practices. These include the allowances for TV cables, internet access, new telephone and communications systems, sprinklers, energy efficient heating and cooling systems, HVAC systems, handicap accessibility and more. In addition, dangerous substances needed to be removed or encapsulated within building (e.g. asbestos, construction chemicals, insulations and more).

If there is a lesson from our past, it may be that we must build in flexibility and adaptability into any new structure. Since these buildings are among the largest public investments in most communities, it is essential that they be built with an eye towards being able to serve yet to be known purposes. Architects and engineers are increasingly aware of this need and have developed techniques and strategies that allow for the need. As examples, they encourage the creation of flexible multi-use spaces (e.g. a few rooms with portable walls), avoid overly specialized areas (e.g. rooms with fixed furniture or fixtures), allow for easily accessible overhead areas, construct new first floors that are built to handle a second floor addition later and more.

There is no question that the future will pose new challenges for education and school structures must be built in a way that allows for the economical transformation of space and inclusion of all foreseen changes. It is clearly more economical to build this capacity during a time of construction or alteration than it is to alter after the fact. In many ways the old adage of "penny wise and pound foolish" applies to new public construction. The need to create a careful plan is perhaps the greatest lesson learned.

4. Be Open to Change in the Scope and/or Purpose of Education

Educational historians have noted a significant change in the scope and purposes of education throughout history. As an example of this changing role we can consider that the percent of students who entered kindergarten together and reasonably expected to graduate together roughly mirrors the decade markers of the 20th Century. In the 1950's only about 50% of the students graduated together...leaving school for a variety of reasons often accepted by society (e.g. work, war, to raise a family and more). In the 1960's about 60% of the students graduated, in the 80's, about 80% and on. Beginning at about the turn of this century, we justifiably now expect that ALL children will be in school through at least graduation.

The inclusion of all students in public education has, by action, significantly changed schools. Public educational institutions must now be equipped to meet the learning needs of all children. These include the children who want to be in school and those that do not, the disabled (physically, emotionally and mentally), as well as, the highly able and the medically fragile and the physically strong. We need only look at the impact of federal laws like "No Child left

Behind” (NCLB) or the Individuals with Disability Act” (IDEA) or state initiatives like “Follow the Child” as evidence of this changed expectation. While these laws and society’s expectations have changed the needs for space and facilities in our schools and are addressed in this report, we need to consider the next potential changes on the horizon.

While there will no doubt be many unexpected new responsibilities for public education in response to the needs of society, it is clear that there appears to be an emerging movement towards greater individual choice in the education system. There is clear evidence when one considers the increase in the number of families that choose to home educate children, and the increasing pressure to allow for open choice for parents among schools. This movement towards an individualized or personalized education for each child is supported by recent changes in the State of New Hampshire’s new School Approval Standards, as well as, in some aspects of the federal NCLB Act. This movement also gains some momentum from the advances in technology (see Item 2) which now allows (and no doubt will expand) remote access to school programs and services from home or in fact anywhere.

As it becomes easier to access a traditional school program and services in non-traditional ways, schools will need to change their policies, practices and delivery system to meet the corresponding demand from citizens and taxpayers. These changes may offer additional support to the prior three items noted above and at a minimum require educators and policy makers to be vigilant in assessing public interest and needs, and more than ever remain open to reevaluating and changing past practices.

Summary of Facility Needs at White Mountains Regional School District

The need for new and/or expanded facilities can be determined by comparing existing facilities with the facilities that will be needed at selected future dates. By determining potential discrepancies, school officials can then choose one or more solutions to close the gap between what will be needed and what is currently available.

In general, educational facility needs may be caused by a wide variety of reasons. These needs may be organized into four major categories: capacity, structural/compliance, program crowding and future considerations.

Capacity issues relate to those needs caused by the building's ability to house those students (known and projected) in appropriate spaces/classrooms. (Is there enough appropriate space for the students within the building?). **Structural and compliance** needs often relate largely to the age of the structure and its systems. (Is the building safe and does it meet current standards/codes/guidelines?). **Program crowding** issues center on whether or not there are appropriate spaces for programs currently offered (or expected to be offered) within either the prescribed or required educational program. **Consideration of future** needs as addressed in the prior section of this report. Within the White Mountains Regional School District there are clear needs for new and remodeled educational spaces caused by the last three of these reasons.

B. Elementary Schools - Findings and Recommendations

In brief, within the White Mountains Regional School District the facility needs are complex. In the grades K-5 and the K-8 facilities the needs center on both structural/compliance and district policy issues. All four of the school buildings have some minor, and in a few cases serious needs for renovations and/or alterations of existing space. These findings are based on the observations of the consultants and the feedback from staff.

The following table shows the total functional educational capacity of the current K-8 school facilities and compares that capacity to the October 2006 student enrollment.

TABLE 24 Summary of PK-8 Functional Educational Capacity in Relation to 2006 Enrollment

School	2006 Enrollment	Functional Educational Capacity	Difference
Dalton	18	85	+67
Jefferson	94	126	+32
Lancaster	498	598	+100
Whitefield	340	355	+15
Total	950	1,164	+214

Currently, the school district is fortunate to have an excess of capacity for grades K-8. If we were to project the future capacity needs using the conservative K-8 projections for 2007-08 to 2016-17 (See Table 12) and if we anticipate 60 preschool students, we would show a potential over capacity of 244 to 356.

TABLE 25 Summary of K-8 Renovations and Space Needs

School	Renovations	Additional Space	Sq. Ft.
Jefferson	• HVAC concerns	*Larger multi-purpose room	1,000
		*Classrooms - add 3 new classrooms	2,700
	• Vehicle access	Small work spaces, convert 500sf	0
		• Play ground	Transform library/technology room into office and conference room
Lancaster	• Vehicle access	Add Technology Education room	1,500
		Add teacher work room	450
		Add small group work space	450
Whitefield	• HVAC concerns	*Add cafeteria separate from gym	1,500
		*Add music room	1,200
		Add small group work spaces	450
		Projected net space needs	9,250
		Net space does not include corridors, lobbies, stairwells, etc. Add 25% for estimate of gross space. (9,250sf x .25)	2,312
		Total projected elementary program space needs	11,562

*Note: The asterisks denote the new spaces that would still be necessary in addition to those gained by reallocating existing rooms. The 3 new classrooms would be used as an art room, a regular classroom and a library.

It is important to emphasize as shown in Table 25 that even though the district's K-8 schools have excess functional capacity, they are in need of renovations and infrastructure upgrades in order to provide appropriate space for existing and possibly future programs. These include the HAVC systems, teachers' work areas, appropriate space for technology education, vehicle access, and possible more as may determined by your architects and engineers. It is recommended that as part of any chosen solution a licensed architectural and engineering firm

update the district's Five Year Capital/Facilities Plan. It will help to prepare the district for the new requirement of developing a comprehensive written building maintenance plan as part of the NH Department of Education's school building aid application process.

C. High School - Findings and Recommendations

Many factors influence the future facility needs at White Mountains Regional High School. Among the most important are projected school enrollments, enrollments by department/program area, class size averages, graduation requirements, scheduling practices, extent to which students are expected to be scheduled for classes during the four-year period, requirements for support program spaces, allowance for community use of the school and site, and extent to which the school functions as a vocational education/applied technology center for its students, as well as for students from sending districts.

In looking ahead through the next decade, it appears that White Mountains Regional High School's enrollment has peaked at around 505 students as of October 1, 2006 and will decline over the next 10 years by approximately 107 students (21%). However, because of the slow decline from five hundred and five (505) in October 2006 to three hundred ninety-eight (398) in 2016, we stated previously the school's capacity must support five hundred students.

This provides a helpful baseline for our projections of needed space, although we recognize that variables such as changes in graduation requirements, shifts in student interests, and new curriculum initiatives will result in some program areas decreasing faster or slower than the overall declining rate. The approach used herein can be modified so as to respond to any significant shifts from the norm.

Our use of a room utilization factor of 85 percent is predicated on three factors: (1) the realities of scheduling a high school where period-by-period class section needs can rarely be perfectly balanced; (2) allowing some flexibility for new program initiatives; and (3) providing some margin for modest reductions in average class size should such reductions become necessary. We recognize that our 85 percent room utilization rate is at the high end of the 80 – 85 per cent rate most commonly used; however, it is a guideline that has proved to be realistic in other studies of New Hampshire high schools.

It was noted in Table 22 on page 33 for example, that during future school years, English classes would require the equivalent of 28 semester length time periods. If the enrollments in English classes were to be 102 percent of 500, the time periods needed for them would be about 28 (i.e. $510 \div 18$). In turn, 28 time periods require 3.5 rooms if we were to assume 100 percent utilization ($28 \div 8 = 3.5$) or a more realistic 5 rooms if we were to assume a room utilization factor of 85 percent. ($3.5 \div 0.85$ when rounded to the next whole number.)

In Table 22 we applied the expected enrollments by department and the 85% room utilization rate to calculate future facility needs. The results indicate that the school has a small amount of excess capacity given its class size averages and a utilization factor of 85%. Adding the fractions of excess room by department provides five (5) additional classrooms: one point four (1.4) for English, mathematics, social studies, and world (international) languages, point one (.1) for science, art and business, etc.

We must highlight that a minus 8 or 1 (-0.8 or -0.1) in the right hand column of Table 22 does not necessarily mean that excess classroom space exists. While it indicates that enrollment alone may dictate excess space, there may still be a valid need based on programmatic

considerations. For example, technology education should be particularly sensitive to emerging business and industrial trends. Some of these future needs may be met through realignment of existing space, but others may be dependent on providing more space.

Based on our findings and analysis, we offer the following summary of space needs and recommendations for the White Mountains Regional High School:

1. Refurbish/update limited number of bathrooms available for both student and staff use and add additional as required to be in compliance with state standards.
2. Update and complete the district's Five-Year Capital/Facilities Plan.
3. Expand the space available to the special education program to include small group instructional facilities, a conference room, an area for testing, appropriate office space for special education staff such as speech, OT/PT, etc. and storage area with locked, fire proof files for record storage.
4. Add two or more small group instructional rooms (not SPED).
5. Provide added space for teachers' work area and meeting room.
6. Expand high school athletics and physical education facilities – add a track, practice game fields, storage, relocate weight room, enlarge locker/team rooms and offices.
7. Provide appropriate space for guidance and administrative services.
8. Increase kitchen area to accommodate up to 175 students per lunch period.
9. Address heat, ventilation and air quality (HVAC) issues, especially in rooms without access to outside air and light.
10. Provide parking to accommodate 100% of the staff and 75% of the students in grades 11 and 12 and review lighting and safety concerns regarding the school site and entrance.

We must emphasize that our recommendations are predicated on there being no major programmatic shifts. If programmatic priorities change, then some accompanying changes should occur in terms of specific space needs. We also note that future shifts in career opportunities may require some realignment of career and technical education programs.

TABLE 26 High School Projected Square Footage – Space Needs

Program Space	Sq. Ft.
Physical Education / Athletics	1,000
Special education – small group rooms – 2 @ 500 s.f. = 1,000 s.f.; Conference Room and Testing @ 300 s.f.; Office @ 400 s.f.	1,700
Small group instructional rooms (not SPED)	800
Cafeteria, staff dining and kitchen Area	800
Faculty/staff work area	900
Guidance - 2 ofc @ 180 = 360sf; Records storage – 300sf; Conf. Rm. – 300sf	960
Projected net space needs	6,160
Net space does not include corridors, lobbies, stairwells, student lockers, and restrooms. Add 25% for estimate of gross space. (6,160sf x .25)	1,540
Total projected high school program space needs	7,700

It should be noted and emphasized that the realities of dealing with an existing structure often require adjustments and compromises. Although it appears that some appropriate program space can be achieved within the existing building, an architect will need to analyze various design options to determine the best solution(s) in achieving desired program space.

Additionally, an architect and engineer can assist the district in determining the costs of athletic fields, a track and parking facilities. These costs can vary greatly and will depend on the topography of the land, the proximity of materials, such as gravel and the choices that must be made regarding materials to be used. For example, costs can range from \$80,000 to \$350,000 for a track depending on the type of synthetic surface that is used and the same is true for the composition of athletic fields (grass vs. an artificial surface).

D. Summary of Findings and Recommendations

In brief, the needs of the White Mountains Regional School District center on the need for creation of more appropriate instructional spaces and support facilities as well as renovations to building systems and infrastructure. In projecting into the future, it would be prudent to plan on a potential enrollment of 1300 students in grades K-12.

A unique challenge to this analysis is caused by the district’s open enrollment policy in grades K-8 and its variable and slowly declining enrollments. The current structures vary in design, location, and educational scope. Although the number of spaces may be sufficient many are simply too small and/or in needs of upgrading/refurbishing.

It is our judgment that the school district should develop a comprehensive plan to address the needs identified in this report. Some of the potential solutions are complex because of the reasons noted earlier (e.g. likely decreasing enrollment, an open enrollment policy in grades K-8 and outdated structures) and require the expert assistance of your chosen architects and engineers. While this report is a logical and required first step in the process (analyzing your demographic and programmatic needs and proposing possible alternatives), the next step will provide a visual presentation of feasible solutions and accurate cost estimates.

We noted in earlier sections and emphasize again that the building systems (e.g. heating and ventilation, technology connectivity, etc) and infrastructure (e.g. parking areas, locker rooms, etc.) in various schools are in clear need of upgrades as part of the district's renovation plan and/or as part of the district's Five-Year Capital/Facilities Plan.

VIII. Alternatives for Addressing Facility Needs

The following are five alternatives that emerge as possible solutions to the identified educational and program needs facing grades K-12 in the White Mountains Regional School District.

Alternative 1.

K – 8 renovations and additions – remove, alter, and add to existing buildings and renovate spaces and systems as appropriate.

Alternative 2A.

K – 8 renovations with increase in class size.

Alternative 2B.

K – 8 renovations with increase in class size and closing the Dalton Elementary School.

Alternative 3.

High School renovations - add to existing building and renovate spaces as appropriate.

Alternative 4.

High School renovations, increased class size, and consolidated and/or reduced program offerings.

Alternative 5.

Adopt a year-round school calendar for the White Mountains Regional School District.

Alternative 1.

K – 8 renovations and additions – remove, alter, and add to existing buildings and renovate spaces and systems as appropriate.

Alternative 1 has 5 essential elements:

- Secure architectural and engineering services to design new additions and renovations as defined in Table 25
- Secure voter approval of bonding of the project
- Implement complete building project
- Plan transition of property and students and arrange for temporary reassignment of spaces (e.g. portable classrooms, etc.) as may be required.
- Implement plan

This alternative represents a basic recommendation designed to accommodate the anticipated enrollment for grades K - 8 in the next ten (10) years and to perform necessary renovations.

Advantages (+)	Disadvantages (-)
<ul style="list-style-type: none">• Provides needed classrooms to accommodate projected enrollment and existing programs for the next ten (10) years• Preserves the elementary buildings as a useful community resource and landmark• Creates new and more accessible community resources• Provides needed and instructionally appropriate special instructional spaces for next 10 years (technical arts, art, music, special education etc.)• Allows instruction to occur in appropriate and productive learning environments• Keeps all school buildings open.	<ul style="list-style-type: none">• Alternative 1 - projected costs are \$913,398 (11,562sf x \$79) and should be affirmed by the architectural and engineering firms using the needs identified in this report• Renovation and construction on an occupied buildings will require careful planning in order to minimize disruption to the educational process• There will be difficulty in convincing the community of the need given the declining student population• Transitions during construction period will be disruptive to the normal learning environment• There may be a need to arrange for portable classrooms to be placed on the site while demolition and construction of new space occurs• The site at Whitefield will likely require a waiver from NHDOE

Alternative 2A.

K – 8 renovations with increase in class size

Alternative 2A has four essential elements:

- Increase class sizes and reduce FTE’s of specialized staff as necessary
- Reassign current classrooms to meet the needs identified in Table 25
- Reduce two class divisions from grades 1-5 and one division from grades 6-8 at Lancaster Elementary School and create two multi-age grouped classrooms (e.g. 2/3, 4/5 and MS level)
- Reduce one class division from grades 1-5 at the Whitefield Elementary School and create one multi-age grouped classrooms (e.g. 2/3 or 4/5)

Advantages (+)	Disadvantages (-)
<ul style="list-style-type: none"> • Reduces demand for classrooms and demand on specialty rooms by 3 class divisions in Lancaster and by 1 in Whitefield • Reduces staff by at least 3 FTE’s (4 classroom teachers eliminated and add 1 new Tech Ed teacher at LES) with considerable annual savings in salary and benefits • Keeps options open for permanent additions in the future at the elementary schools if enrollments grow and/or program offerings expand • Least expensive alternative 	<ul style="list-style-type: none"> • Alternative 2A - projected costs for asterisked space in Table 25 are \$632,000 (8,000sf x \$79) and should be affirmed by the architectural and engineering firms using the needs identified in this report • Increased class size, while still lower than state guidelines may adversely effect the learning opportunities for students • Makes it more difficult to arrange common planning time for grade level instructors • Will cause operational disruption to current program of study

Alternative 2B.

K – 8 renovations with increase in class size and closing the Dalton Elementary School

Alternative 2B has six essential elements:

- Close the Dalton Elementary School as an educational facility
- Increase class size per Alternative 2A
- Reduce two class divisions from grades 1-5 and one division from grades 6-8 at LES
- Reduce one class division from grades 1-5 at the Whitefield Elementary School
- Reassign current classrooms to meet the needs identified in Table 25
- Reassign Kindergarten students at Dalton to Whitefield and/or another school
- Eliminate the one full day kindergarten

Advantages (+)	Disadvantages (-)
<ul style="list-style-type: none"> • Reduces demand for classrooms and demand on specialty rooms by 3 class divisions in Lancaster and by 1 in Whitefield • Improves the efficient use of itinerant staff and services as a result of consolidating programs • Reduces staff by at least 3 FTE’s (4 – 1 new Tech Ed teacher at LES) with considerable annual savings • Keeps options open for permanent additions in the future at the elementary schools if enrollments grow and/or program offerings expand • Saves operational costs for Dalton School and offers options for future use of the facility • Least expensive alternative 	<ul style="list-style-type: none"> • Alternative 2A - projected costs for asterisked space in Table 25 are \$632,000 (8,000sf x \$79) and should be affirmed by the architectural and engineering firms using the needs identified in this report • Loss of a school district facility in the community of Dalton • Increased class size, while still lower than state guidelines may adversely effect the learning opportunities for students • Makes it more difficult to arrange common planning time for grade level instructors • Will cause operational disruption to current program of study • Loss of space for the North Country class program • Loss of option to have high need students in an all day Kindergarten

Alternative 3.

High School renovations – remove, alter, add to existing building and renovate spaces as appropriate

Alternative 3 has seven essential elements:

- See Table 26 for program space needs and add 7,700 s.f. to WMRHS and add track and expand outdoor athletic fields
- Coordinate high school needs with those required for the Regional Career and Technical Center renovation application process
- Secure architectural and engineering services to design new/renovated structure
- Renovate the existing high school space to meet the program requirements and the unique needs of the student populations
- Complete maintenance and repair needs identified earlier in this study
- Secure voter approval of bonding of the project
- Implement high school renovation project

This alternative represents a basic recommendation designed to accommodate the anticipated enrollment for grades 9-12 in the next ten (10) years and to perform necessary renovations.

Advantages (+)	Disadvantages (-)
<ul style="list-style-type: none"> • Provides a long-term solution based on projected needs • Provides needed classrooms to accommodate projected enrollment and existing programs for the next ten (10) years • Does not compromise intended instructional program • Creates new and more accessible community resources • Allows instruction to occur in appropriate and productive learning environments • Adds improved and appropriate facilities for the special education program and allows the district to meet new mandated requirements and/or offer more cost efficient alternatives • Provides needed space for food service, guidance, administrative services • Addresses ADA and state code requirements • Addresses need to add and upgrade athletic fields, a track, and parking facilities 	<ul style="list-style-type: none"> • Alternative 1 - projected costs are \$708,400 (7,700sf x \$92) and should be affirmed by the architectural and engineering firms using the needs identified in this report. These costs do not include the costs associated with the upgrade of the Career and Tech Center, nor are the costs for the athletic fields, a track, and parking facilities. As stated earlier, these costs can vary greatly and will depend on the topography of the land, the proximity of materials, such as gravel and the choices that must be made regarding materials to be used. For example, costs can range from \$80,000 to \$350,000 for a track depending on the type of synthetic surface installed and the same is true for the composition of athletic fields (grass vs. artificial) • Renovation and construction on an occupied building will require careful planning in order to minimize disruption to the educational process • There will be difficulty in convincing the community of the need given the declining student population • Transitions during construction period may be disruptive to the normal learning environment • There may be a need to arrange for portable classrooms to be placed on the site while demolition and construction of new space occurs

Alternative 4.

High School renovations with increase class size and consolidation/reduction of program offerings

Alternative 4 has eight essential elements:

- Increase class sizes and reduce FTE's of staff as necessary
- Increase class size and decrease program offerings by establishing a policy requiring a minimum enrollment of 10 students per regular education class (see Appendix G)
- Coordinate high school needs with those required for the Regional Career Technical Center renovation application process
- Secure architectural and engineering services to design new/renovated structure
- Renovate the existing high school space to meet the program requirements and the unique needs of the student populations
- Complete maintenance and repair needs identified earlier in this study
- Secure voter approval of bonding of the project
- Implement high school renovation project

This alternative represents a basic recommendation designed to accommodate the anticipated enrollment for grades 9-12 in the next ten (10) years and would require serious policy (educational and staffing considerations).

Advantages (+)	Disadvantages (-)
<ul style="list-style-type: none">• Reduces demand for classrooms and demand on specialty rooms, thereby increasing the building's capacity• Can reduce staff by between 3 to 6 FTE's with considerable annual savings in operating costs• Keeps options open for permanent additions in the future at the White Mountain Regional High School if enrollments grow and/or program offerings expand• Least expensive alternative	<ul style="list-style-type: none">• A loss of courses may adversely effect the learning opportunities for students in certain programs, especially electives and specialty courses such as voc-ed, the arts and computer education• May negatively impact and/or limit the district's planned increase in graduation credits from 20 in 2007 to 26 in 2010• Makes it more difficult to schedule students into courses of their choice, especially in the arts, computers, voc-ed• Will cause operational disruption to current program of study• Filling part-time positions could be a real challenge

Alternative 5.

Adopt a year round school calendar for the WMRSD

This alternative provides the community an opportunity to consider implementing a year-round education schedule. There are no schools in New Hampshire that are currently using a year-round schedule primarily to solve space needs.

In order for this solution to be valuable to the White Mountains Regional School District, it must create new or open space within the existing school facility. Traditionally, this is achieved by requiring approximately 25% to 33% of the student and staff population to be out of school and school buildings for about 60 days during the standard school year.

Advantages (+)	Disadvantages (-)
<ul style="list-style-type: none">• Solves needs on a short-term basis• Lower capital costs, at least for the short term, over building more permanent space• Increases school capacity up to 33%• Provides for more continuous learning	<ul style="list-style-type: none">• Requires negotiations with staff regarding working conditions and pay/benefits impact• Impacts the community with up to 33% of students not in school at any one time• Cost impact to renovate buildings and install air conditioning

Note: The following is information from the National Association of Year-Round Education (NAYRE).

Year-round education centers on reorganizing the school year to provide more continuous learning by breaking up the long summer vacation into shorter, more frequent vacations throughout the year. It does not eliminate the summer vacation, but reduces it and redistributes it as vacation or intersession time during the school year. Students attending a year-round school go to the same classes and receive the same instruction as students on a traditional calendar. The year-round calendar is organized into instructional periods and vacation weeks that are more evenly balanced across 12 months than the traditional school calendar. The balanced calendar minimizes the learning loss that occurs during a typical three-month summer vacation.

Implementing Year-Round Education means revising the traditional nine-month agrarian calendar into a year-round calendar that allows for continuous education with a shorter summer vacation and more frequent breaks during the periods of instruction. Advocates of year-round education believe that the restructuring provides better learning conditions for students and better working conditions for teachers.

Throughout history the year-round calendar has taken many forms, all designed to take advantage of, or adapt to various community conditions. In general, there are two basic forms of year-round calendars: **Single Track** and **Multi-track**.

Single Track provides a balanced calendar for a more continuous period of instruction. Students and all school personnel follow the same instructional and vacation schedule. Single-track does not reduce class size, nor does it allow a school to accommodate more students. The long summer vacation is shortened with additional vacation days distributed throughout the school year into periods called "intersessions". Intersessions allow time for remediation and enrichment throughout the school year. The most common types of single-track calendars are 45-15, 60-20 and 90-30.

Multi-Track is used primarily to alleviate overcrowding, although it also incorporates the educational values of single-track YRE, including intersessions. It was designed specifically for schools with a shortage of classroom space. Multi-track is used to avoid double sessions, building new schools and temporary structures. It not only saves on capital construction costs, but on the ongoing costs that are part of operating a new school.

Multi-track divides students and teachers into groups or tracks of approximately the same size. Each track is assigned its own schedule. Teachers and students assigned to a particular track follow the same schedule and are in school and on vacation at the same time. Multi-track creates a "school-within-a-school" concept. Example: implementing a four-track year-round calendar extends the capacity of a school by 33%. A school with the capacity of 750 students can accommodate 1,000 students, as only three tracks of 250 would be in school at the same time; there would always be one track on vacation or intersession every day of the school year. A five-track model (60-15) allows for a 25% gain in capacity.

In order to successfully implement a year-round school schedule at least three important criteria must be met.

1. The community, particularly parents, must support the concept and be willing to adjust to the changed schedule and its accompanying impacts on the community as a whole.
2. The district must be able to negotiate, arrange and employ the staff members necessary to provide the program during non-traditional calendar dates.
3. The school district must provide sufficient resources to cover the costs associated with building alterations (e.g., air conditioning), staff pay and other related costs. In particular, the school building would need to be substantially renovated (e.g., air conditioned) to be suitable for instruction year round.

The needs identified in the White Mountain Regional School District largely exist at the present time and will be stabilized by future enrollments. As the result of considering the needs of the school program and the high cost of renovations, the consultants conclude that a year-round multi-track schedule does not appear to be an appropriate or cost-efficient solution at this time. Additionally, the level of staff and community support to drastically alter the current school schedule for all students must be assessed and shared.

A year-round schedule can be, however, a very useful schedule format to achieve a lengthened school year for instructional purposes. The "extended year" program allows more time for student and faculty work and learning, but does not solve existing space needs. To learn more about year-round education, you are encouraged to visit the National Association for Year-Round Education web site at <http://www.NAYRE.org>.

IX. General Features and Requirements

In addition to specific requirements outlined earlier in this report, there are a number of general features and requirements not unique to this project that should be highlighted. Some of these suggestions are already in place at White Mountains Regional School District and should merely be extended to include new additions or incorporated as part of a new school. Although restrictions inherent in the existing building may make it impractical to comply fully with a few of these features, we believe each should be carefully considered in any new construction or significant renovation work.

1. High-energy conservation standards should be achieved.
2. Additions should be designed so as to give high priority to creating a comfortable and healthy learning environment.
3. Additions should meet high safety standards and conform to contemporary barrier-free design codes in order to provide full access for handicapped persons.
4. School security should be enhanced through a combination of carefully planned design features, use of equipment such as TV monitors, and appropriate school operational practices. Priority should be given to monitoring access to and movement within the building.
5. Color and graphics should be used extensively to help create a bright, cheerful atmosphere.
6. Internal communications features should be extended to serve all areas.
7. A master clock should be operational throughout the building.
8. All classrooms should have access to natural light if at all possible
9. Ample storage space, both within and outside classroom areas, must be provided to allow for an efficient management of public resources.
10. Several corridor display cases should be provided to accommodate the display of student projects.
11. Ample staff and student lavatory facilities must be available.
12. To the extent possible, the design of any new spaces, when combined with the existing facility, should allow for reasonable separation between age groups and location of learning teams.
13. At the middle school level, individual student lockers should be available in numbers consistent with projected student enrollments.
14. Bus loading/unloading areas with an “overhang” should be provided to protect students during inclement weather.

15. Adequate electrical outlets should be available to accommodate simultaneous operations of computers, video and audio recorders, overhead projectors, aquariums, etc.
16. Acoustics should be improved through providing carpeting in most general classrooms or by finding an appropriate alternate solution.
17. An ample number of bulletin boards, marker boards, and chalkboards should be provided.
18. Corridor doors or gates should be provided to limit traffic from areas of the building, which may be regularly used for after-school or evening activities.
19. Room darkening fixtures should be available to facilitate use of audiovisual materials.
20. Furniture acquired for the new rooms, as well as any replacement furniture, should be durable, flexible, and appropriately sized for intended use.
21. Added telephones should be supplied at appropriate locations to facilitate confidential discussions within the building and to promote more contacts between school personnel and parents.
22. The electrical system must be able to support a wide array of equipment and activities, which will be vital to the delivery of education in the 21st century including preplanned open conduit to accept wiring or cables for new inventions..
23. The technology system should allow for the full access of internet through wireless technology.

X. Closing Comments

After carefully considering the information gained throughout our research and from our tours, the Consultants would like to share the following general findings, summary observations and suggested next steps:

1. All employees and citizens we met in our meetings were cooperative, full of ideas and deeply committed to making the White Mountains Regional School District a high quality public school. We would like to extend our special appreciation to SAU#36 staff, Superintendent Dean Cascadden, Principals Beth Morris, Sherry Gregory, Patricia McLean, Ellen Turcotte, and Ryan Early, all school employees, municipal officials and citizens of the White Mountains Regional School District for their careful preparation of materials and generous allowance of time.
2. The buildings and grounds of White Mountains Regional School District were clean and reflected a high regard for district resources by employees and students.
3. Suggested Next Steps:

This study is but one step in preparing for what could be an important comprehensive solution for the White Mountains Regional School District. We offer for your consideration a few ideas about follow-up steps that may be pursued.

- a. Continue to up date demographic data points and enrollment projections annually to verify accuracy of projections and determine future need.
 - b. Decide what additional information you may need to choose the appropriate solution for your communities (e.g. secure adequate resources to develop more detailed cost estimates of alternatives 1 – 4 and assess viability of options from an architectural and engineering viewpoint). Please keep in mind *that both additional space* and renovations are needed. Appendix E contains an article by Paul Abramson titled “Get the Most From Your Architect”. This article outlines the relationship of this study to the overall solution of your facility needs.
 - c. Plan and implement a community education program designed to educate the broad community about the schools needs.
 - d. Develop a written maintenance plan. It must be noted that when applying for School Building Aid school districts are now required by state law to submit a written maintenance plan and Form A24M which includes an analysis of the project’s impact on the district’s maintenance program and a statement of assurance signed by the school board chair that the district intends to maintain new equipment according to the manufacturer’s instructions. A sample maintenance plan is available from the Department of Education and on their website at www.ed.state.nh.us/buildingaid.
 - e. Establish a procedure to apply for funding through the utility company’s energy efficiency programs and submit a copy of the application as part of the School Building Aid process.
 - f. Plan for the fact that in addition to the new or altered spaces identified above, the school is in need of renovations and infrastructure upgrades. These include the HAVC systems, technology connectivity, and more. It is recommended that the Five-Year Capital/Facilities Plan, be reviewed and updated consistent with the recommendations in this report and with the assistances of a licensed architectural and engineering firm.
4. Based on the results of the initial steps taken in item 3 above, it is recommended that the White Mountains Regional School District develop an appropriate solution(s) to address the schools’ needs identified in prior sections of this report. Due to the nature of these needs, it is recommended that the district take appropriate steps and seek approval at a School District Meeting as soon as is feasibly possible.

In closing, the consultants look forward to attending an upcoming meeting of the White Mountains Regional School Board to answer questions and discuss all aspects of this report.

XI. Summary Notation of Research Sources

1. New Hampshire School Administrator's Association – Enrollment Study, November 2006.
2. New Hampshire Office of Energy and Planning – Reports on the Towns of the White Mountains Regional School District.
3. Manual for Planning and Construction of School Buildings, NHSDOE.
4. Minimum Standards for Public School Approval, NHSDOE.
5. Various documents and internal reports from the WMRSD.
6. Interviews with town and school district official.

Appendix A
Enrollment Projections

Pages 55 – 64

Appendix B

Copy of Feedback Instrument

Pages 65 – 66

To: White Mountains Regional School District Faculty and Staff
From: Mark Joyce and Dennis Pope, Consultants
Subject: Assessment of Educational Facility Needs
Date: September 26, 2006

We have been selected to complete an assessment of educational facility needs for the White Mountains Regional School District. Our study includes developing enrollment projections, studying the existing educational program, examining the current utilization of classrooms and other spaces, providing an educational assessment of current facilities, envisioning future educational needs, and, as needed, making recommendations for added and/or reconfigured facilities.

We completed the initial tours of White Mountains Regional School District during September and additional tours of school facilities will occur over the next few weeks. Although we have already met some members of the faculty and staff and hope to meet several more during future visits, we also want to provide an opportunity for short written comments. Kindly respond briefly to the three questions, which follow. Question one is related to your school's overall needs, the second question is linked to your specific program area or grade level, and the third is an open-ended question about emerging needs.

1. As you assess your current school facility (building and site), what do you believe are its overall strengths and limitations?

a.) Strengths:

b.) Limitations or areas in need of change:

2. As you look more specifically at the facilities available to your program area or grade level, what do you see as strengths and limitations?

a.) Strengths:

b.) Limitations:

3. What do you envision as emerging facility needs over the next decade?

School: _____
Name (optional): _____

PLEASE RETURN TO YOUR PRINCIPAL BY: _____

Appendix C

**White Mountains Regional School District
Staff Survey Results**

Pages 67 – 79

**The Dalton School
Survey Summary**

Based on 7 responses received as of October 16, 2006

Strengths, Limitations and Emerging Facility Needs as Reported Through the Underhill
School Faculty and Staff Responses to the Survey

Question 1(a) – As you assess your school facility (building and site), what do you believe are its overall *strengths*?

Strengths	# of References
Plenty of classroom space, spacious rooms	2
Lots of space – inside and outside of the building	1
Large playground – a nice big play area	3
Structure is in fair working condition and meets the physical needs of the students and staff	1
Lots of room for growth	1
Bathroom across from classroom, big windows, two exits near classrooms	1

Questions 1(b) - As you assess your school facility (building and site), what do you believe are its overall *limitations*?

Limitations or Areas in Need of Change	# of References
More space/rooms	1
Building is old and drafty, in need of repairs. Needs to be modernized	1
Building either too hot or too cold	3
Phone and computer ports in additional areas would be helpful	1
Building is located in a remote area with little access to any public businesses or social stimulation	1
Playground needs updated equipment	1

Question 2(a) – As you look more specifically at the facilities available to your program area or grade level, what do you see as *strengths*?

Strengths	# of References
Teacher resource room	1
Access to the district resources ie furniture	1
Bright	1
Library	1

Questions 2(b) - As you look more specifically at the facilities available to your program area or grade level, what do you see as *limitations*?

Limitations	# of References
Services and funds...miss out on programs or activities that the other schools have	1
Need more storage/file cabinet space	1
Location – as a school I think sometimes we are forgotten by other schools in the district	1
Large spaces are (can be) difficult for emotionally challenged students. Limited access to public	1
Don't always get recognized in the district. Don't feel that you get the support that's in the bigger schools.	1

Question #3 – What do you envision as *emerging facility needs* over the next decade?

Emerging Needs	# of References
New floors, plumbing needs (shower would be great)	1
Envision growth and our building becoming more modern with time, brought more to the 20 th century and used by more students and staff	2
Faster computer network/internet access	1
More space for special ed, OT and other related services	1

Jefferson Elementary School Survey Summary

Based on 9 responses received as of October 16, 2006

Strengths, Limitations and Emerging Facility Needs as Reported Through the Hooksett Memorial School Faculty and Staff Responses to the Survey

Question 1(a) – As you assess your school facility (building and site), what do you believe are its overall *strengths*?

Strengths	# of References
Large rooms, size of classrooms, spacious rooms	4
Well-maintained, clean atmosphere – well kept and cared for,	3
Easy to navigate, playground area	1
Location – off main road and easy to find, lots of windows – natural light in classrooms, hill at playground to separate upper/lower	1
Lots of outside space	1
Attractive setting, nice grounds	1

Questions 1(b) - As you assess your school facility (building and site), what do you believe are its overall *limitations*?

Limitations or Areas in Need of Change	# of References
Physical building size/space: Adequate space for storage, related services - speech, OT, guidance, for evaluators, for meetings, for art, music, band, for regulation size gym/recreation area and teachers' room	11
Multipurpose room/space for music, art, school productions, etc	2
Safety – classrooms cannot be locked from the inside and the speech room cannot be locked from the inside or outside	3
Not enough offices or classrooms	1
Need bigger parking lot with an adequate emergency lane	3
Bigger library with music and band in their own room	1
Updated playground equipment	2
Limitation for future expansion	1

Question 2(a) – As you look more specifically at the facilities available to your program area or grade level, what do you see as *strengths*?

Strengths	# of References
Large classroom	2
Own bathroom, well-maintained	1
Natural lighting	2
Computers and TV/VCRs in the classrooms	3
Outside area for scientific exploration	1
Site size – land to expand to accommodate departmental needs and services	1
Emergency exits	1
Small room available for speech services, materials, confidential files and records	1

Questions 2(b) - As you look more specifically at the facilities available to your program area or grade level, what do you see as *limitations*?

Limitations	# of References
Speech room is not available 100% of the time	1
Limited electrical outlets	1
Storage/closet space	1
Control of heat in the winter and room gets very hot in the fall, spring and summer	2
White boards, smart boards	2

Inadequate space for SPED services, testing and related services. No meeting space	1
Library used for art, music, band	1
Media – computer/student ratio	2

Question #3 – What do you envision as *emerging facility needs* over the next decade?

Emerging Needs	# of References
Updated gym and larger kitchen	1
More space classrooms, etc	3
More parking	2
More computer access for students and other forms of interactive classrooms such as smart boards, projectors, etc.	3
An addition to provide separate gym, 3 classrooms to accommodate grades 6-8 with the joining of two communities, additional sports and general supplies storage, space for SPED programs and staff planning/teacher room	2
Have PK – 8 school	1
Handicap accessibility from all emergency exits	1
An expanded or new facility with the population of Jefferson expanding	1
Keep the school’s “small” school but progressive atmosphere and perhaps a middle school built to create/free up space in the newer schools	1

Lancaster School Survey Summary

Based on 19 responses received as of October 16, 2006

Strengths, Limitations and Emerging Facility Needs as Reported Through the Middle School Faculty and Staff Responses to the Survey

Question 1(a) – As you assess your school facility (building and site), what do you believe are its overall *strengths*?

Strengths	# of References
K-8 school: good size cafeteria, gym, stage, library	3
Classroom size	3
Natural light in classrooms, lots of windows, bright and sunny	2
Running water in classrooms, newness of buildings	1
Location, age, condition	4
Athletic/playing fields	4

Stage in cafeteria	1
Spread out, building is kept up/maintained nicely – tile structure, etc, acoustics, school is clean, safe, spacious	5
Beautiful building, site, views	5
Gym and cafeteria are separate, one floor facility	3
Library is central to all grades, having grades K-3, 5-6, 7-8 together is good, office is located near front of the building and the counters being lowered are more accessible to all grade levels	1
Certain classrooms have a movable wall to allow for a larger space	1
Good floor plan and use of spaces	1
Computer technology in classrooms, science laboratory	1

Questions 1(b) - As you assess your school facility (building and site), what do you believe are its overall *limitations*?

Limitations or Areas in Need of Change	# of References
Location of office is not in view of entry way, security	3
Need more classrooms and areas/rooms for specialists, meetings, etc	15
Need teachers' lounge and more faculty restrooms,	10
Locker rooms are too small	1
Lockers in hallway create congestion, narrow hallways	9
Need a larger parking area (with lights) and speed bumps to slow traffic	5
Classrooms need new carpeting	1
Computer lab and need more computers in the classrooms	3
Inconsistent heat	1
Flooding issues in lower playground/field areas and need more playground area	2

Question 2(a) – As you look more specifically at the facilities available to your program area or grade level, what do you see as *strengths*?

Strengths	# of References
I have the room I need but live in fear of the closet being seized to house a specialist	1
Classrooms are a nice size/ space	3
Extremely grateful for the amount of space provided for nursing services	1
Life skills paraprofessionals have no place to go when not in classrooms	1
I have my own room for TI services	1
Large room, great greenhouse window, lots of storage	1

It's wonderful to have a small office to meet with individuals and/or small groups	1
Music room again	1
The movable wall, windows, size of room, rugs in rooms and cabinets	1
Grade 3 + 4 rooms are fairly close together	1
Science lab and sink area	2
Light, clean, well-maintained and storage for student belonging	1

Questions 2(b) - As you look more specifically at the facilities available to your program area or grade level, what do you see as *limitations*?

Limitations	# of References
Technology for lower grades	1
Not enough restrooms for grades PreK-2	1
Heating system hard to regulate	1
Need more electrical outlets and storage	4
Grade levels should be group together and need a school-wide clock	2
More room - share office space and instructional space	1
Door locks do not operate from inside classroom	1
Noisy air exchanger in my room, blowers too loud	2
Lesson room - small, no windows, poor air quality, hot/stuffy, lights bother	1
No ventilation, no windows open, gets very warm	1
Life skills room has no bathroom or sink	1
No shower in nurse's office for students with hygiene issues, no windows for outside air, no window in door so that door may be closed for safety and confidentiality	1

Question #3 - Emerging Facility Needs Over the Next Decade

Emerging Needs	# of References
A mental/physical health center, teachers' room, meeting rooms, new copy machine/room	1
Additional space – teaching, small rooms	13
New regional middle school or new K-8 or expanding this building	1
More parking space	5
Purchase field/ building lot in front of school	2
All day kindergarten, tech ed	2
Expansion, perhaps a separate middle and primary school, expanded technology – wireless, more digital whiteboards	1

Windows for classrooms without natural lighting, cork strips to walls to hang student work	1
Second floor for middle school, full day K and PreK	1
Preschool playground, another preschool	1

**Whitefield School
Survey Summary**

Based on 8 responses received as of October 16, 2006

Strengths, Limitations and Emerging Facility Needs as Reported Through the Middle School Faculty and Staff Responses to the Survey

Question 1(a) – As you assess your school facility (building and site), what do you believe are its overall *strengths*?

Strengths	# of References
Compact – fits nicely into hillside, two floors keeps us closer together	1
Views, size of land	5
Good classroom size, great drop off area for students	1
New facility with bright classrooms, big windows and good lighting	2
Primary classrooms have individual bathrooms and are on the first floor for safe/quick exit	1
Beautiful building	2
Office space is adequate, clean and well-kept, nature trail	1

Questions 1(b) – As you assess your school facility (building and site), what do you believe are its overall *limitations*?

Limitations or Areas in Need of Change	# of References
Parking too limited	6
Playground – not enough time to go to the lower playground, too far from the school	4
Cafeteria	1
More space/classrooms – private area, classrooms for reading/writing/special ed specialists, conference and small rooms	5
Separate gym and lunchroom/auditorium	3
More storage	1
Air circulation is inadequate – some rooms are very hot, others cold	1

Question 2(a) – As you look more specifically at the facilities available **to your program** area or grade level, what do you see as *strengths*?

Strengths	# of References
Student support center	1
Nice large room and windows, good access to the outside	1
Great kindergarten classroom, bathroom in room, quick and safe exit for drills	1
Beautiful classroom with shelves, sink and bathroom	1
Good size classroom	1
Nice, large music room	1
Large classrooms, much storage space	1
Sinks, counters, clean – good lay-out, windows – ventilation, natural sun, thermostat	1

Questions 2(b) – As you look more specifically at the facilities available **to your program** area or grade level, what do you see as *limitations*?

Limitations	# of References
Very cold	2
Work area, kiln room, storage	1
No bathrooms for upper middle school wing	1
Need more storage	1
Need a preschool and 2 Kindergarten classrooms	1
Other 4 th grade classroom is upstairs and classrooms are crowded	1
Need additional electrical outlets, need more classrooms	1
SSC needs air circulation	1

Question #3 – What do you envision as *emerging facility needs* over the next decade?

Emerging Needs	# of References
More Space/classrooms for Spec Ed, Title I and a new middle school	3
Three classes per grade	1
Expand space in building, playground closer, more parking	2
Two full time Kindergarten rooms, 1 big room for spec ed, Title I, reading specialist, equipped with sink and bathroom, fully equipped computer lab with teacher	1
Gym/cafeteria with own spaces	3
Build new playground	1
New gym, performance art/band room, foreign language center, a common room for each team in a central location	4

Updated/clean heating/ventilation system	3
Modern science classrooms and labs	1
Auditorium needs for large scale performances, assemblies, musical productions, class meetings	3
Handicapped medical procedures room	1
Updated, modern facility with adequate technological resources	2
A bigger building, major renovations to existing building or a new facility	2

**White Mountains Regional High School
Survey Summary**

Based on 25 responses received as of October 16, 2006

Strengths, Limitations and Emerging Facility Needs as Reported Through the Middle School Faculty and Staff Responses to the Survey

Question 1(a) – As you assess your school facility (building and site), what do you believe are its overall *strengths*?

Strengths	# of References
Great campus allows loads of space for voc-agriculture classes. Tons of resource	5
Excellent setting/location/views, room for additions and growth, available land (400+ acres of diverse ecosystem)	16
Vocational center/classes, hands on activities	5
First floor is great, well lit, always clean	1
Building layout is easy to understand and follow, user friendly for students, traffic pattern to/from class is smooth	4
Decent size/large classrooms, well lit, adequate parking	4
Administrative areas are attractive/inviting	1
All classes in same building	1
Large auditorium	1
Rural, big campus, nice grounds and sports fields, phones in room	1

Questions 1(b) – As you assess your school facility (building and site), what do you believe are its overall *limitations*?

Limitations or Areas in Need of Change	# of References
Air circulation/ventilation (especially in the interior of the building) in not great	5
More/update bathrooms	7

Utilization of acreage – no track, additional athletic fields	9
More space/classrooms – each teacher should have own space (larger than a small office) to plan and teach from, storage, weight training area is too small, administrative area and library are too small, need more office/meeting space, auditorium too small/needs to be refurbished, changing space for coaching staff and referees	19
Building is 28 years old and in need of updating	1
Classroom size and lighting, some rooms (science, interior offices) are without windows	5
Student locker too small and location (one on top of the other), lighting in parking lot	5
Handicap accessible everywhere?	1
Lack of electric outlets in rooms	2
Floors...old tile needs help, some walls are buckling in halls	1
Improve cafeteria size and ability to serve students in a timely manner, too small to accommodate 2 lunches	2
Roofing, improved interior cosmetics, ceiling tile replacement	1

Question 2(a) – As you look more specifically at the facilities available **to your program** area or grade level, what do you see as *strengths*?

Strengths	# of References
Good auditorium, each in my area teacher has own classroom	1
Department is clustered in one area, all rooms near one another	2
Overall, nice facility in science	1
Renovations have made the science rooms safer and our lighting is great	1
Very diverse space	1
Rooms are well lighted and easily heated and cooled if they have windows	1
Good facilities for Life Skills – kitchen, bathroom, laundry area and good natural lighting	1
Room size – configuration	1
Confidentiality and proximity to other student services	1
Large, well-lit rooms, easy communication between teacher in this department	1
Good size art room, full-size soccer field, kick wall	1
Building is in good shape for the year	1
Primary classroom size is adequate	2
Good location, easily accessible for students/staff by population served, clean	1
Large resource room allows for various work areas for students and teachers	1
We have room to house a good selection of books, both novel and texts	1
Good lab tables, plenty of storage in labs, all facets functioning, rooms are well lit	1

Options – indoors in the gym and weight room, outside we have great fields (soccer, field hockey, baseball and softball)...and cross country trails	1
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Questions 2(b) – As you look more specifically at the facilities available **to your program** area or grade level, what do you see as *limitations*?

Limitations	# of References
Carpet not a good idea in the labs. If flaming alcohol is dropped = bad, plus dissection juices wind up in the carpet. Science rooms are too small to comfortably accommodate 20+ students	1
No lockable storage space for textbooks	1
Program space designed for 8-10 students, now has an average of 16-20 students	1
Life skills special education room is a safety issue – too many students, objects, etc., need conference room and improved lighting and ventilation	1
No windows, interior office, all spaces should have “natural” light	2
Need more/better storage area for equipment/uniforms.	2
Need access to the gym facility throughout the day to conduct physical training and marching (field house would be ideal)	2
Need a gym facility for 20-25 students once a week	1
Need more classrooms – have one more teacher than we do classrooms	1
Need S/E classrooms – bathrooms, storage	1
Art room needs better light ventilation, soccer – one full field for 4 programs, track – no track facility	1
Lack of space to expand program and for retail operations	1
Need more electrical outlets – classrooms need to be able to offer mobility	3
Space – need two separate classrooms for Life Skills/ Sever and Profound programs, an issue in all departments, especially with the growth in special education, not enough properly sized rooms for everyone	5
Need ventilation in the foods lab – there is none, need updated wiring – still blow breakers when everything is on, more storage for materials, need more space	2
Need more bathrooms (especially in the north end of building)	1
Classrooms are small for 25+ students seated in anything but chair/desks, storage – nothing locks and not enough	1
Need a dedicated lab, rooms are packed...need better safety shower and eye wash as well as a renovated/ventilated chemical storeroom	2

Question #3 – What do you envision as *emerging facility needs* over the next decade?

Emerging Needs	# of References
More Space/classrooms for Spec Ed, dedicated conference rooms/areas, consolidated student health, counseling and other services, secured storage, school to accommodate student/program growth, student lounge area, larger cafeteria, science wing with outdoor access, gardens, classrooms, LCD projectors and smart boards in every classroom	15
An auditorium with balcony to accommodate whole student body assemblies	1
Outdoor Ed Center – pavilion, nature trails, fitness trail	1
Wireless/updated technology (technology enhanced classrooms)	7
Athletic facilities - track, fields, locker rooms, gym, field house	7
A school with ambient natural light in all areas	1
A fully integrated presentation space for media	1
Enlarged/upgraded electrical systems/capacity	2
Modern science classrooms and labs	2
School within a school may be needed with alternative programs being offered	1
Greater community use of facility	1
Upgraded/additional bathroom facilities	4
A bigger building, major renovations to existing building or a new facility	2
Parking space...creatively, proactively solving parking space problems	1
New plant, updated equipment	1

Notations:

1. Some responses related to curriculum or personnel were not recorded if they did not have a direct link to facilities. These were relatively few in number.
2. Since some staff may have been more prone to respond than others, we caution that some needs may have been more frequently articulated than others.

Appendix D

**White Mountains Regional School Board/Citizen Input
October 16, 2006**

Pages 80 – 82

School Board/Citizen Input

Strengths

- Active and knowledgeable faculty and community
- Two relatively new schools in Lancaster and Whitefield
- Five-year facilities and maintenance plan.
- Early intervention for students
- Well funded building and maintenance expenditures
- Facility in each town except Carroll / Twin Mountains
- Buildings don't follow fads in construction, are durable and flexible in design
- Simple buildings are easier to maintain
- Vocational Center on site at High School
- Expansive campuses (e.g. HS 400+ acres of land)
- Windows that open
- Connected to the land (space) (e.g. HS: land to forest)
- Acreage used in Educational program
- PBIS Program and High School Aspirations Program
- Pitched roofs on schools
- ROTC Program at High School
- Nice to have an Auditorium
- Community ski trails at HS
- Hotel-based study program
- "ED"ies Awards received by schools
- North Country Charter School and Special Class
- All day Kindergarten in 2 locations

Limitations

- Adequate funding for all needs
- Whitefield School has site limitations (e.g. small)
 - Limited bus routes (e.g. long bus routes 90 min.)
- WMR High School has energy challenges (ventilation, air, etc)
- Regional Vocational Programs should be more diverse
- Playground equipment inadequate at Jefferson School
- High School bathrooms are outdated
- Class size issues (e.g. some are too small, need to even out sizes in small schools and justifying the sizes)
- High school library very small
- Need for track and extra field at the high school
- Building entrances lack modern safety measures
- Lack of general academic rigor (e.g. few AP courses and some kids checking out)
 - Interesting issues related to transitions from K-8 to 9-12
- Equality of program K-12 vs. each school's unique identity and autonomy
- Parking issues, especially for community attending events
- Need for Vocational structure upgrade and eligibility of funds
- Lack of Tech Ed in Lancaster
- Lack of entrance security in Lancaster
- Whitefield gym / cafeteria combo limits uses
- Public access channel for cable
- Lack of universal high-speed Internet in community
- Transportation limits ability to use schools for the after school programs

- Transportation ratio in general
- Staffing limits don't allow for after school use of some facilities
- Big question related to state funding
- Question about the town of Carroll and Coop
- New trend of people living in the area (e.g. 2nd homes)
- Finances are limited to provide other co-curricular activities
- One gym at the high school
- Possible transition of use and zoning prohibitions
- Question of impact of transitory workers at major hotels
- Question of affordability of new housing development
- Localities have limited recreational facilities
- Under utilized acreage
- Need for Geography course in high school
- Need for additional Foreign Language courses

Future

- Track for district
- 2nd soccer field
- Facilities updated on outside
- Extra lighting outside
- More Pre-school and Kindergarten for all students
- Virtual curriculum and its impact on students
- Seamless curriculum from PK - 12+
- More summer experiences for students
- Discussion of a regional middle school (Is K-8 the way to go?)
- SAU headquarters? (e.g. office on high school property)
- Investigate combining SAU's
- Investigate school day being longer
- Investigate school calendar starting before Labor Day.
- Add Adult Ed classes to make for extended days
- Expand programs like Mt. View Academy to other disciplines.
- Vocational programs actually running a business (e.g. culinary program run a restaurant)
- Outsource the website to students
- Kids need to be involved more in elderly programming
- Expansion in Technology - how to propose?
- Expansion of what teachers need to be prepared for
- Impact of new minimum standards - opening up
- More involved in the running start
- Early childhood center
- State champion football team
- Alternative energy source
- Teach nutrition by showcasing vegetables at elementary school
- Centralize energy analysis (e.g. MS - energy: new options)
- Ensure all graduates have basic competencies
- Alternative view of high school experience (e.g. 3 years vs. 6 years)
- Improved community participation in schools
- Evolve student empowerment
- Run facilities with help of students
- Less isolation of high school from community
- Wider roadway into high school property

Appendix E

Get the Most From Your Architect

Pages 83 - 85

Get the Most From Your Architect, by Paul Abramson

(Reprinted from School Planning & Management magazine, August 2006 with permission of the author)

I sat in on an interview when a school board was deciding which architectural firm to hire. I was part of one architect's team. After making our presentation and responding to questions, we had an opportunity to ask some questions of our own. I was surprised by the responses. I asked about expectations for change in the student body. No demographic study had been made. I asked about school size, organization of the program and about how instruction might change in new facilities. None had been seriously considered.

Apparently, little planning had been done before the district began looking for an architect. The district felt it needed new facilities and it needed an architect to design them. But what was needed, for how long, at what grade level and for what program? Those questions had not been asked or answered.

Before you call

Before calling an architect, a school district should have its own educational long-range plan focused on the numbers of students to be served, the district's educational program and the way instruction will take place. Such a long-range plan may very well show that the district lacks facilities, but it need not identify the best way to get those facilities. That's the job of the architect.

Architects are designers of space, and the best of them do a terrific job of taking your program and translating it into facilities. But most are not demographers or educators. If you bring them in without having a plan in place, all they can do is fix or expand what already exists. It is up to the district to look ahead, to determine how it would like program to change and then to consider the facilities that might facilitate that change.

Long-range planning

A long-range educational plan can be developed "in-house" or with the aid of an educational planner, but whether the leadership comes from the district or a consultant, the planning should involve faculty, administrators, parents, students and interested members of the community, including leaders in the business, financial and public service industries.

A first major step should be to carry out a demographic study to determine the number of students you are likely to be serving over the next five or ten years. In stable districts, a simple "cohort survival" estimate will be sufficient. Cohort survival suggests that the grade-to-grade progression of students that has been occurring is likely to continue. If your district is changing (new housing is being planned, ethnicity is changing, a non-public school is opening or closing, employers are leaving, etc.) cohort survival may give a false reading. A more detailed study, taking into account economic, ethnic and other changes in and around a school district, ought to be considered.

Once you have an understanding of the numbers of students you are going to be serving, how are you going to serve them? Should the grades be reorganized? The decision to have specific grades in one school rather than another ought to be an educational decision, not based on available space.

How will technology be used, where and by whom? It's easy enough to say that technology ought to be available everywhere, but educators should determine what is needed where so that the architects can do more than just make it available. They can plan it for optimum use.

How will the program be organized? There is sufficient evidence that students do better in small learning groups. If you must have 800 students in an elementary school or 2,000 in a high school, do you want to consider ways in which they can be broken into smaller groups?

I think you also ought to think about the needs of your community beyond the schools and whether the schools can or should participate in them? Consider senior centers (they work very well adjacent to elementary schools and pre-school centers), libraries, health care, day care and job training. Does the area need them? Could they be part of a school complex? Would other governments help pay for them?

Those are just some of the questions that a district ought to be looking at in its own long-range planning. Then, when an educational plan is in place, call an architect and ask for help in examining the space you have and the space you may need. That's when they can do the best job for your district.

***Paul Abramson is president of Stanton Leggett & Associates (SLA).
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Appendix F

Detail of Building Permits

Pages 86 - 87

Appendix F

Detail of Building Permits

Year	Single Family						Multi-Family						Manufactured						Grand Total
	C	D	J	L	W	Total	C	D	J	L	W	Total	C	D	J	L	W	Total	
1991	7	0	1	0	7	15	0	0	0	-1	0	-1	1	0	3	1	0	5	19
1992	2	6	3	-1	4	14	0	0	-8	0	0	-8	0	+10	4	1	2	17	23
1993	1	0	3	6	0	10	0	0	0	0	0	0	1	2	2	1	2	8	18
1994	1	1	5	8	0	15	28	0	0	1	0	29	1	3	1	3	2	10	54
1995	5	2	0	5	1	13	6	0	0	0	0	6	1	3	0	1	1	6	25
1996	4	0	5	5	9	23	10	0	1	-3	0	8	1	2	2	2	1	8	39
1997	4	0	3	3	4	14	10	0	0	-7	0	3	1	2	0	0	2	5	22
1998	8	1	1	2	2	14	14	0	-1	0	0	13	2	2	1	-1	2	6	33
1999	11	-1	2	4	4	20	23	0	1	-1	0	23	2	5	1	1	0	9	52
2000	12	2	3	5	9	31	15	0	0	0	0	15	0	4	0	2	0	6	52
2001	0	2	3	10	7	22	7	0	0	9	0	16	6	2	1	4	3	16	54
2002	25	6	7	14	9	61	4	0	0	6	0	10	0	2	2	2	0	6	77
2003	15	1	17	18	11	62	2	0	0	0	0	2	0	2	0	0	3	5	69
2004	23	10	10	0	12	55	2	0	0	0	0	2	0	6	3	0	4	13	70
2005	32	8	8	16	7	71	0	0	0	0	0	0	0	4	1	3	9	17	88
2006	24	0	7	5	5	41	0	0	0	1	0	1	1	0	0	5	1	7	49

Appendix G

WMRHS Class Size Analysis

Pages 88 - 90

Class Size Analysis by Department

The following is a potential list of class reductions, which if implemented would result in students having to change course sections or select another course. It should be noted that scheduling of high school is difficult at best and given some courses may offer only one or two periods per day, there could be a serious impact on important programs and courses. For example, AP Language and Composition-11 and AP Literature and Composition-12 would be dropped if the class size of 10 were enacted.

<u>Department</u>	<u>Class Size</u>	<u>Course</u>
English	10	AP Literature and Comp-12
	10	AP Language and Comp-11
	10	World Literature
	10	Creative Writing
	6	American Literature
Math	10	Advanced Math Topics
	10	Geometry
	8	AP Calculus
	6	Algebra - Part 2
Science	10	Honors Earth Science
	10	Chemistry
	9	Honors Ecology
	7	Earth Science
	6	Life in a Bubble
Social Science	9	Heroes in American History
	9	AP US History
	5	Psychology
Foreign Language	10	French II
	9	French II
	6	Spanish IV
	4	French IV
Art	8	Art Exploration
	4	Art Exploration
Musical (chorus)	6	Music / American Theatre
	6	Midi Lab
	4	Midi Lab
Physical Education	10	Women's Weight Training
	9	Physical Education
Family and Consumer Science	7	Nutrition
	6	Adult Roles
Computers	7	Programming
	6	Fund of Web Design
	6	Fund of Web Design
	4	Cisco
	4	Cisco

Natural Resources	10 6	Recreation and Resources Natural Resources
Mechanics	10 6	Mechanical Technology II Mechanical Technology II
Animal Science	7	Introduction to Animal Science Pre-Vet