



Report of the Georges Valley High School Future Options Task Force

To the MSAD 50 Board of Directors

November, 2005

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I. Findings, Vision, Recommendations

Major Findings

- 1) The Georges Valley High School (GVHS) Futures Task Force was set up in the fall of 2004. Its members include parents, teachers, students, and Board members from Thomaston, Cushing, and St. George. The Task Force met a dozen times; sponsored an enrollment study; listened to presentations by experts in high school education and architecture; visited 3 high-performing Maine high schools; held a community forum; reviewed national and state research; studied performance data; and listened to students and business people. In the process, the group traveled from a beginning point of many different perspectives, to a unanimous vote of approval (from the members present) for the recommendations that follow at its November 3, 2005 meeting.
- 2) Georges Valley High School enrollment is projected to decline to a level of around 250 students in the next ten years. The research we conducted (by visiting other high schools, consulting national literature, listening to experts) indicates that high schools need at least 400 students in order to provide a rich and varied academic program for optimal learning. One exception is in a community with a very large industrial and commercial property tax base.
- 3) The current educational program of GVHS appears to be in the mainstream of Maine high schools resulting in average performance. Task Force members see a number of areas where the school can improve its educational offerings in the near term, independent of any steps to upgrade or replace the current building.
- 4) While distance learning is currently underutilized at GVHS and other Maine high schools, Task Force members are not convinced that distance learning could completely fill in the gaps that would be created by a lower enrollment and fewer teachers at GVHS.
- 5) The existing GVHS building will need major physical upgrading in order to be suitable for another 25 years of use. The cost of such rehabilitation approaches the cost of building an entirely new high school. In addition, rehabilitation would not be nearly as effective as new construction from an educational standpoint, because today's high school buildings are designed differently in order to accommodate the new set of knowledge and skills students will need to be successful in the 21st century.
- 6) Under current state rules, neither a rehabilitation of GVHS, nor the construction of a new GVHS, appears to meet current state standards for financial assistance – because there will be fewer than 300 students while at the same time other options exist nearby with

which GVHS could consolidate. Therefore the costs of either would fall entirely on local taxpayers.

- 7) One way to enrich the learning experience for high school students, and to broaden their aspirations, is to co-locate the high school on a campus with other educational institutions. An effort underway in the midcoast area known as “Many Flags/One School” is seeking to create a new campus with the Midcoast School of Technology, the Kennebec County Community College, and several branches of the University of Maine. Task Force members are intrigued by the possibility of joining in this effort and co-locating a new GVHS – or consolidated high school of which GVHS is a part – with these additional educational institutions.

On the other hand, the complexity of such an endeavor, and the need for simultaneous funding and approval from multiple organizations^a, leaves some Task Force members worried that GVHS could waste years waiting for a big dream that might never happen.

- 8) The consolidation of GVHS with a neighboring high school offers several advantages:
 - a sufficient school size to support a diverse and rich academic program;
 - per-student cost-savings in the construction and operation of the new school;
 - the greater likelihood of being accepted into the campus-like setting as is being proposed above, because more School of Technology member municipalities would be participating in the high school;
 - the possibility – not assurance -- of state assistance for construction, because the minimum size threshold would be passed.

On the other hand, parents on the Task Force are concerned about the social compatibility of GVHS with neighboring schools; about whether small rural towns will get fair treatment; about the nature of the cost-sharing formula; about whether other districts share MSAD 50’s philosophy of education; and about a variety of other factors, including safety, driving distance, and so forth.

- 9) It is impossible to project property tax implications of the various options we studied, because it is impossible to predict future changes in school funding formulas and school construction grant terms. But in order to get an “order of magnitude” understanding of the property tax impacts of the various options, our consultant (Planning Decisions) made

^a The University System and Community College System would need approvals from their boards, and probably additional funding from the Governor and Legislature, for their buildings. The Midcoast School of Technology would require votes of approval from its board, from member school districts and municipalities, and would also need state aid for construction. All this would be in addition to the requirements that Georges Valley High School, and possibly a partner school district, obtain board approvals, municipal approvals, and state aid for the construction of a new high school.

calculations of what might have been the impact on owners of \$200,000 homes in Cushing, St. George, and Thomaston, had the option been implemented last year (and had enrollments projected for 2010 actually occurred last year).

The fiscal findings are these:

- The simple reduction of students would have resulted in an increased property tax assessment last year of about \$100 on a \$200,000 house in Thomaston, and an increase of about \$200 in Cushing (there is no difference in St. George);
- Had the school been rehabilitated according to its 2000 study by Lewis and Malm, local assessments would have been between \$200 and \$425 higher for a \$200,000 home in the 3 communities;
- Had a new school been built at local expense last year (for the smaller number of students), assessments on a \$200,000 house would have gone up in the range of \$250 to \$600, depending upon the cost of the project;
- Had a new school been built with state assistance, there would be no additional effect on Cushing or Thomaston (above that described above from the loss of students), and the owner of a \$200,000 home in St. George would see an increase in the \$200-\$250 range.

In sum, new construction or rehabilitation without state assistance will place a significant burden on area property tax payers.

Our vision

Many of us began our work twelve months ago with an overwhelming concern about losing our school, and a desire to hold on to what we have. After a year of study, our interest and perspective has shifted entirely, to that of embracing the future.

High school education is in an exciting time. There are new ways being developed to teach students to be self-directed learners, to involve them in the community, to connect them through technology to the wider world, to build their skills and self-confidence. Our high school is already moving in this direction, with its mission statement and goals, but we want to speed up the process in order to give the students of our three communities the very best high school education that can be offered and afforded by the its taxpayers.

We have found that this can be done, and in fact is being done today in other communities in Maine, without breaking the bank. However, it requires a “critical mass” of students and resources beyond what we have or are projected to have at Georges Valley; and it requires collaborative relationships with institutions of higher education that can best be developed when those institutions are nearby.

It is the good fortune of the parents and students of our three communities that, independently of our work, a group of business leaders in the midcoast region is actively trying to create the same kind of state-of-the-art learning environment. The campus being proposed by the “Many Flags/One School” coalition would create resources for our students that would be unparalleled in Maine, and rare in the entire country. Our students would arrive and be presented with an array of opportunities for technical courses, for advanced placement courses, for college courses, for meeting and learning from talented seniors and retirees. It would be a community center where people of all ages came for continuing education, for performances, for exhibits.

We are excited by the possibilities, and this is the vision that underlies the recommendations, which follow.

Recommendations

- 1) We strongly support the idea of co-locating a new high school on a campus with other educational institutions, as is presented in the “Many Flags/One School” concept, and therefore recommend that the MSAD 50 Board of Directors send official representatives to join in the discussions with the Many Flags/One School effort to see if the concept can be realistically developed within a reasonable period of time. We believe that a setting in which Georges Valley High School students can take technical classes and college courses to supplement and broaden their learning has both educational and social advantages.
- 2) Second, we believe that, inside or outside such a campus setting, Georges Valley High School students would benefit from a broader array of courses and extracurricular activities if another high school joined GVHS as a partner in the construction of a new building, and local taxpayers would benefit from possible state aid in constructing such a consolidated high school. Therefore we recommend that the MSAD 50 Board of Directors meet with the boards of other midcoast districts to see whether there is interest in the possibility of collaborating on a new high school, and whether the appropriate conditions are present for a successful collaboration..
An appropriate partner for GVHS would have to be of modest size, share a common educational philosophy, prepare incoming students in a comparable way, be close enough that transportation would not be an issue, and be compatible in numerous other ways. We do not know whether such a partner exists, and we felt it was beyond our charge to engage in such discussions with other districts. However, having concluded from our research that a high school in the 400 to 900 range offers the most educational possibilities for students, and that the state might help fund the construction of such a high school, we believe that such discussions are worthwhile to pursue.
- 3) If, by January of 2007, there is no reasonable progress towards these efforts at collaboration, we recommend that the MSAD 50 Board of Directors proceed to hire its own architect and

begin the planning process for building its own independent high school building at local expense. We are strongly in favor of the campus concept. We also think the idea of partnership with another district holds promise. That is why we recommend exploring both options. But it is possible that the campus concept will not come to fruition, and it is possible that a compatible neighboring district cannot be found. In that case, MSAD 50 is left with the options of rehabilitating its current school, or building a new local high school, at local taxpayer expense. Our preliminary research indicates that new construction would be more cost-effective. Therefore, we recommend that, in the event that insufficient progress is made in collaborative arrangements in the coming year, the MSAD 50 Board of Directors proceed to begin the planning process for acting on its own.

- 4) Finally, while all of these Board efforts are going forward, we recommend an intensive effort at the high school itself to implement the new teaching philosophies and methods. Through visits to new schools, presentations by educators, and the reading of state and national educational studies, the Task Force has become aware of the new kinds of teaching methods and models used in state-of-the-art high schools. The teachers and students of GVHS have already endorsed these principles as set forth in the GVHS mission statement and as presented in the GVHS –Gates Foundation video which we watched. We are very excited about these teaching methods, and would like to see GVHS adopt them as quickly as possible. There is no need to wait until a new building arrives to implement such ideas; in fact, the experts we spoke to said that new buildings work best when teachers and students believe in and practice the new pedagogies already. Therefore we urge the Board and administration to pursue such reforms with the assistance of the Mitchell Institute, Gates Foundation, and other resources.

II. Purpose

In the fall of 2004, the School Board of Maine School Administrative District 50 set up a Georges Valley Future Options Task Force to make recommendations on the future for high school education in the district. Members included parents, teachers, students, and board members from Thomaston, Cushing, and St. George. Members of the Task Force include:

Chair: David Emery

Members: Sue Cerridwen
Ray Doubleday
Mariellen Eaton
John Frye
Susan Harper
Aimee Sanfilippo
Kim Simmons
John Webster
Bethany Yovino

Former members: Sue Ferra
Ricque Finucane
Thora Maltais
Stephen Ranney

Support: Judy Harvey
John Spear,
Frank O'Hara and Tabitha Plaisted, Planning Decisions, Inc.
Stephen Spring, Mitchell Institute

Over its year of existence, the Task Force has met 12 times; held one public forum in the spring of 2005; visited three high schools; evaluated an enrollment study; read a number of relevant reports and studies about high school educational options; and listened to presentations from various experts.

The Task Force adopted the mission statement on the following page to guide it in its work.

The mission of the Georges Valley Future Options Task Force is to:

- *Advise the School Board on the best type and scale of facilities for high school education over the long term (10 to 20 years).*
- *Provide such advice in furtherance of the goal of providing educational quality in a cost-effective way.*
- *Consider, in making its recommendations, probable future enrollment; changes in future high school curriculum and teaching methods necessitated by community goals, "best practice" thinking, new technologies, and federal and state mandates; the condition and suitability of the current facility; and the potential for collaborations with neighboring school districts and other possible partners.*

III. Two Problems

MMSAD 50 towns face two problems in looking at the future of high school education in the area:

1. Will there continue to be sufficient enrollment to support a first-class high school education in the district?
2. Will the current building remain suitable for supporting future educational needs?

1) Declining enrollment

According to a Planning Decisions, Inc., study prepared in January of 2005, high school enrollment at Georges Valley High School is projected to decline from 339 in 2004-5 to 247 by 2010-11 -- or by more than 25%.

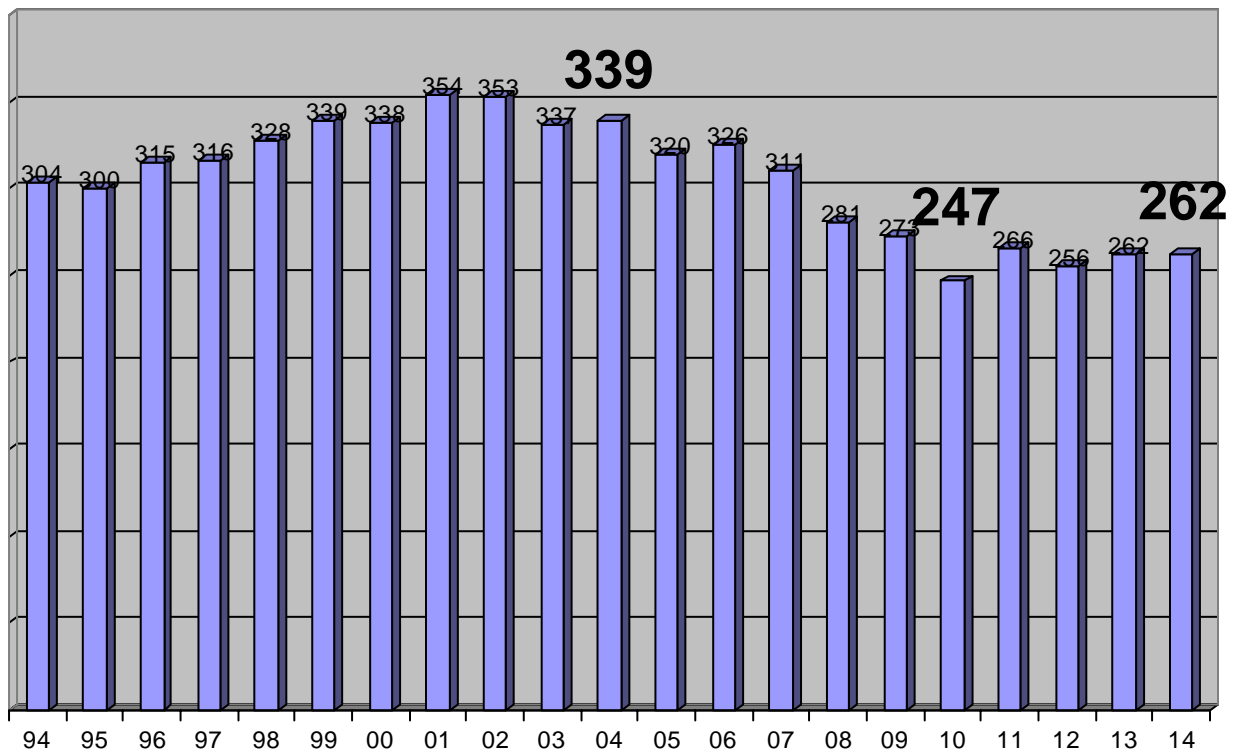
Table 1: Projected High School Enrollment, MSAD 50

	Thomaston	St. George	Cushing	TOTAL
2004-5 (<i>actual</i>)	154	118	73	339
2005-6	140	115	69	319
2006-7	132	114	80	327
2007-8	116	113	79	311
2008-9	102	97	76	281
2009-10	93	93	87	273
2010-11	82	79	85	247

This is expected to be the case even though housing units have been added at a rate of about 60 units a year during the last five years. Historically, most of the new housing has been occupied by older families or individuals, past child-bearing age. For the five year period from 2000-1 to 2004-5, first grade enrollment averaged 67 children. Of these, on average 64 had been born in the 3-town MSAD 50 region, and only 3 were due to in-migration -- even though hundreds of new housing units were added during this period.

Looking at earlier grade levels and moving them forward is the most accurate method for projecting high school enrollment in the next five years. With most classes in the elementary grades having between 60 and 70 students, and with little in-migration of young families occurring in the area, it can be anticipated that high school classes will run around the same level – hence a projection of around 240 students.

Figure 1: Historical and Projected GVHS enrollment



The Task Force is relying upon the general trends of this report proving true as a basis for the recommendations in the following pages. If in fact high school enrollments do not go down as predicted, it might significantly change the Task Force’s recommendations (note: at this point enrollments are actually below those which are projected).

2) An aging facility

Georges Valley High School was built in 1963, over forty years ago. The original 38,000 square foot building has had two additions. In 1987 a 7,000 square foot East Addition was built, housing two art rooms, the library, music room, and a classroom. In 1997, four classrooms were added in the 5,500 square foot West Addition.

The report of the Visiting Committee of the New England Association of Schools and Colleges in October, 2004, had this to say about the physical drawbacks of the building:

“Current space compromises teaching and learning. Social studies, science, and music teachers must ravel from room to room with supplies. The music teacher must roll her piano, podium, and white boards from the music wing to the gym via the main hallway for two separate classes. This takes valuable time away from teaching and also limits course offerings in two disciplines. The gym also seroes as the space for concerts, other classes, and school meetings. Moving equipment for each use of the gym means less time for student learning. In order to compensate for the art program’s limited space, the teacher instructs several different art classes in the same room at the same time. Because of limited classroom space, students are on a waiting list to enroll in the fine arts classes. The nurse’s office is too small and lacks privacy for more than one student. The media center is too small to serve the diverse media needs. Classroom supplies and equipment are stored at a distance from classrooms and, in many cases, at community members’ barns and teachers’ homes. Thus, classroom materials are not easily accessible to students and teachers, impacting teaching and learning. Equipment stored at the school is often in areas accessible to students, creating a hazardous safety situation. These space constraints impact instructional programs, sports, and musical productions...”

“Georges Valley High School, given its age, is well maintained and is in compliance with all local, state, and fire, health, and safety codes... Although... the school is not in full compliance with the federal (ADA) regulations regarding accessibility. Entry doors, several bathrooms, locker room showers, and the darkroom are but a few of the areas of inaccessibility for handicapped students, parents, and visitors. Inaccessibility is not only unlawful but denies students equal standing to an equitable education.” (pp. 70-72)

Most of these points have been made in prior studies. The most systematic recent study was done by the architecture firm of Lewis + Malm. The firm evaluated the building in 2000 and identified \$7 million in possible improvements. Some of the items in the report have been addressed in the interim, but as the Visiting Committee report shows, most of the larger issues still remain.

**Table 2: Facilities Planning Study for GVHS in June, 2000
by Lewis + Malm Architecture**

	Health/safety	Top priority	Other
	<ul style="list-style-type: none"> • Access improvements to meet Americans with Disabilities Act (ADA) requirements • Fire alarm • Ventilation • Asbestos tile replacement 	<ul style="list-style-type: none"> • Expand library • Add storage • Add computer repair room • Expand cafeteria • Add conference, admin space • Add auditorium • Expand art/ music rooms • Electrical upgrades • Heat/smoke alarms • Upgrade wiring • Upgrade heating • new lockers • new insulated windows, doors • exterior paving, drainage, landscaping 	<ul style="list-style-type: none"> • add classrooms • add science lab • Add offices • Add distance learning room • Add coach's offices/ storage • new lighting • new intercom • new wiring • new gym floor and bleachers • new window blinds • add athletic field • bus garage
Cost in 2000 \$	\$463,000	\$3,324,500	\$1,489,000
w/contingency	\$555,600	\$3,989,400	\$1,786,800
w/ soft costs	\$666,720	\$4,787,280	\$2,144,160
Total in 2006 \$	\$960,077	\$6,893,683	\$3,087,590

The total cost estimated in the 2000 study, after contingencies and soft costs were added in, was \$7.9 million in 2000 dollars. While there is no national inflation adjuster for school construction, FW Dodge estimates that school construction inflation has been 11% per year from 2003-2005. Assuming that it was half that rate the prior four years (coming out of recession), this would be a 44% increase in 6 years - and would put a price tag of \$11.4 million on this list today. It should be noted that recent architectural advancements in school design might lead to a different priority list today (see page 21 for remarks of architect Dan Cecil).

IV. Financial Considerations

1) Declining enrollment means declining annual state aid

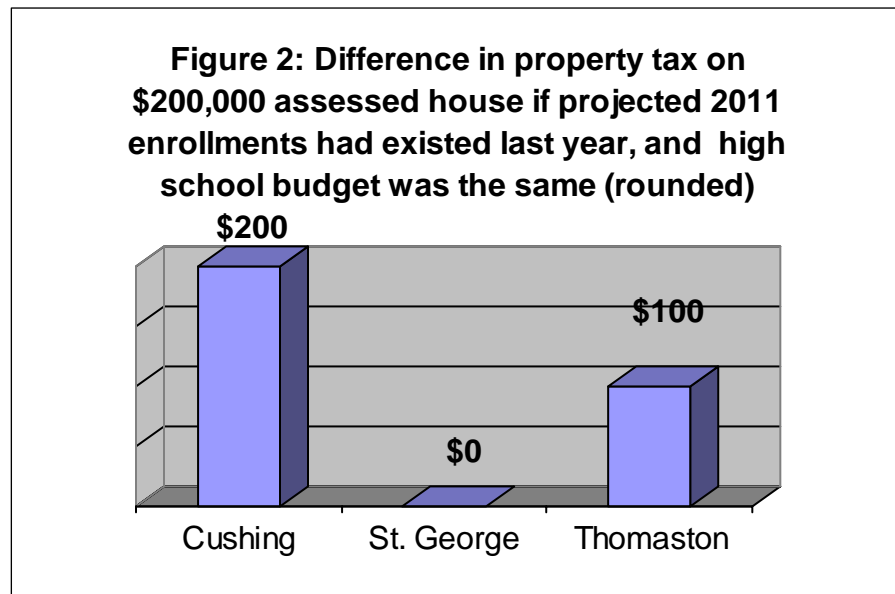
By way of background, the budget for Georges Valley High School and other secondary programs in 2005-6 is about \$2.4 million, or about 21% of the total MSAD 50 expenditures of \$11.3 million.

Of the total budget, after small special funds are removed (such as balance forward, capital, other), 19% is covered by state subsidies, and 81% by local assessments.

Having fewer students attend GVHS means GVHS receives a lower state subsidy. Many factors enter into the state subsidy calculation, but to give an idea of the order of magnitude difference fewer students would make, Planning Decisions has estimated what the state reimbursement might have been this past year if the high school had 91 fewer students (the projected level for GVHS in 2010). At the lower level, the estimated state contribution to the District would have been \$337,000 less than is currently the case (\$1.66 million instead of \$2.00 million).

Because the distribution of students among the three towns is projected to change as well – with Cushing actually gaining students (see Table 1) – the distribution of the increased cost would fall disproportionately to the owners of homes in Cushing (note that St. George taxes would be level).

Alternatively, to hold the school budget at the same level would require a reduction of approximately 5 to 10 administrators, teachers, and/or support staff.



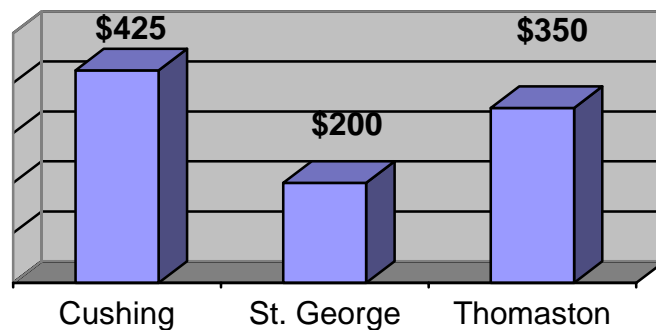
2) The state won't provide aid for high school construction or rehabilitation for a school with fewer than 300 students

Because schools are so expensive to rehabilitate and build, Maine State Government has a program to assist communities with the task called the "Major Capital Improvement Program." Applications are open to get on the funding list every few years. The next window of opportunity is in June of 2006.

MSAD 50 submitted an application for funding for the capital improvements identified above in 2001. The proposed GVHS project ranked 50th out of 92 applications – well below the level needed to be competitive in order to receive funds. An analysis conducted for the District in November 2003 ("Long-Term Budget Planning Discussion Paper") concluded that "... it is clear that GVHS, with its small size and declining enrollment, is very unlikely to secure state funding for the proposed addition/renovation."

MSAD 50 towns are permitted to fund the rehabilitation with local money. An \$11 million rehabilitation project – as roughly estimated by Lewis and Malm -- funded with a 15 year loan at 2.9% through the Maine Bond Bank, would cost, on average, \$1,050,000 per year in interest and principal in today's dollars. This would translate into an additional increase in local property taxes of over \$350 for a \$200,000 house in Cushing or Thomaston for a rehab of the High School.

Figure 3: Difference in property tax on \$200,000 assessed house if projected 2011 enrollments had existed last year, and \$11 million rehab program financed locally

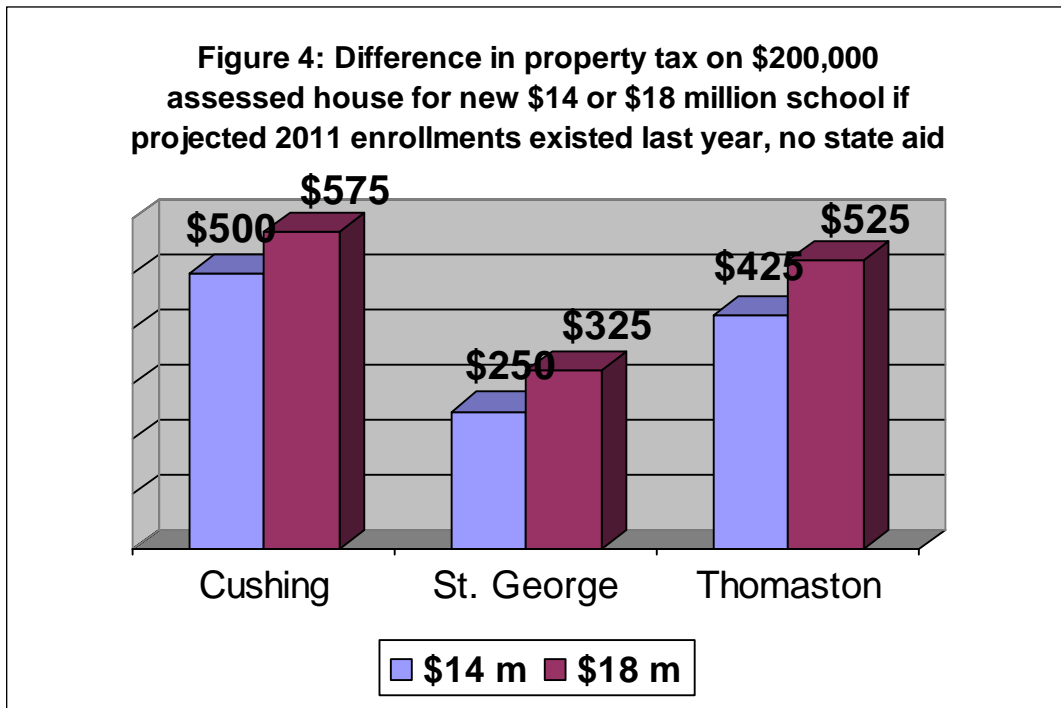


3) Similarly, with new construction, the state will only assist in financing a high school project that has more than 300 students.

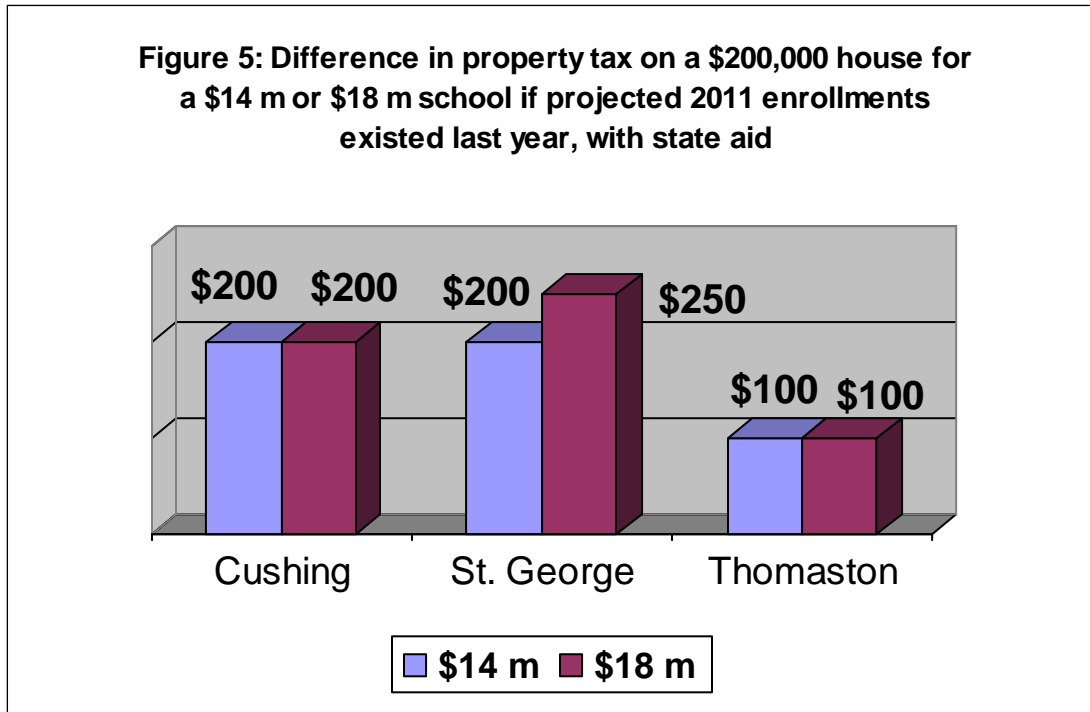
The alternative to rehabilitation is new construction. Making two estimates - one based on New England data on costs/square foot and square feet/students from the February, 2005 issue of School Planning and Management Magazine, and the other taken from data provided by the Maine Department of Education and FW Dodge reports, Planning Decisions estimates that a new school for 300 students would cost in the \$12.5 million to \$15 million range. Commission members felt that the actual construction costs would be higher, so the range was increased from \$14 million to \$18million.

When it comes to state aid, the same principles apply as for rehabilitation - no schools with under 300 students will be funded.

Looking back on the hypothetical example, if a new \$14 million high school had been built last year, and there were 250 or so students enrolled, the taxes on a \$200,000 home would have gone up from \$250 to \$500 if the school had been financed entirely with local money; but it would have increased only between \$100 to \$200 if state aid had been available. For an \$18 million high school, funded totally at local expense, taxes would rise by \$325-\$575 for the \$200,000 home.



Conversely, if state aid was available, the property tax impact on a \$200,000 home would be none in Cushing or Thomaston (the increase in Figure 5 below is totally due to the reduced students, which is the same effect as is shown in Figure 2). However, property taxes would increase by \$200 to \$250 for a \$200,000 home in St. George, because under the state formulas, St. George is not yet at the maximum tax effort.



Summary points

The figures above are not “projections.” No one can say what the state funding formula will look like in five years, or how MSAD 50 will do relative to other school districts. But by looking at what might have been different if these changes had been in effect last year provides an “order of magnitude” statement of the potential the property tax impact of different alternatives. What the exercise shows is that:

- Thomaston and Cushing taxpayers will be under some financial pressure in coming years even if nothing is done to the building, due to changes in enrollment patterns

- There is not a huge difference in cost between a major rehabilitation of GVHS and building a new high school
- If either option is pursued without state aid, the increase in local taxes could be significant
- If there is state aid to help build a new school, there is no added cost to taxpayers in Thomaston and Cushing (beyond the impacts already present from the reduced enrollment), and only a modest added cost to taxpayers in St. George.

V. The Context of Changing High School Education

The bar for high school education performance is rising, and new teaching methods are being developed to meet those new standards. This section briefly discusses these changes, and their implications for the future of GVHS.

1) Where GVHS High School students stand on state and national tests

Superintendent Judy Harvey provided the Task Force with available student achievement data on GVHS graduates at its meeting on January 10, 2005. Here are key points from that summary:

- Georges Valley High graduates attending the University of Maine feel well-prepared for college-level coursework (75%) and have higher mean grades than other Maine high school graduates at the University in English, math, foreign languages, social studies, and physical sciences (lower in biological sciences);
- But GVHS graduates at the University tend to have less confidence than other Maine high school graduates in their career choices;
- Only 41% of GVHS seniors took the SAT test in 2002-3, compared to 70% statewide; of those who did take the test, GVHS students scored close to state and national averages in verbal, and below state and national averages in math (480 GVHS, 501 state, 519 national).
- More GVHS students took advanced placement exams (10%) than state (6%) or national (7%) averages, but they scored lower than state or national averages (52% of GVHS test-takers getting a 3,4, or 5, compared to 62% of Maine test-takers and 60% nationally).
- GVHS juniors score close to state averages in tests on reading, math, and writing in the Maine Educational Assessment – still, almost 40% of math students did not meet state standards.
- GVHS has a similar high school graduation rate to the state average (86% in 2002, compared to state at 87%); but fewer GVHS graduates plan to go to post-secondary school (66% compared to 69%), and fewer actually carry through on their plans (51% compared to state average of 55%).

In short, the student performance data puts GVHS in most cases around the middle of high schools in the state, but with a lower than average performance on science and math (at UMaine, SAT, MEA), and slightly lower in post-secondary attendance.

2) Comments of the Visiting Committee in 2004

The Visiting Committee to Georges Valley High School, referred to earlier, consisted of 14 educators from around Maine who spent 4 days at the school. Their visit was preceded by an 18-month “self-study” process in which GVHS teachers and students evaluated their own performance along scales provided in the process. The Committee found many examples of strong individual performance, but noted that more work needed to be done to implement systematic improvements school-wide. Here is a sample of their observations from the “Overview of Findings” section (pp. 4-6):

- *“Curriculum guides are available for all disciplines. Most guides are aligned to the school’s expectations for student learning, and some guides are also aligned to the standards of the Maine Learning Results, but this is not done in a standardized and consistent manner.”*
- *“Review of student work indicates the need to emphasize depth over breadth in all levels and to examine the issues of academic rigor and equity of academic programming for all students.”*
- *“While a number of teachers at Georges Valley High School are employing a wide variety of instructional strategies... many others use traditional teacher-centered methods.”*
- *“A number of teachers are using a wide variety of assessment tools to measure student progress in individual areas... However, such practice is not universal as no formal plan is in place school-wide to collect, analyze, and employ student assessment data to review and revise curriculum and instructional practices.”*

3) Brainstorm perceptions of Task Force members

The Task Force made a “brainstorming” list of perceptions that they and other community members had about the current Georges Valley High School. These are not “scientific” observations, but rather impressions. As such, they present a picture of the kinds of things people appreciate about GVHS, and the things they would like to see improved (see Table 3 below).

Table 3: GVHS strengths and weaknesses

Positive	Negative
<ul style="list-style-type: none"> ○ Good student-teacher ratio ○ Opportunities for participation in extracurricular activities ○ Availability of computer technology ○ Feeling of community within school, and in the towns ○ Safe ○ Everyone knows everyone ○ Good adult contact and relationships with students ○ Good community involvement - merchant sponsorships ○ Perception that there is less substance abuse than at other schools ○ No gangs ○ No graffiti ○ Physical plant is well-maintained ○ Low drop-out rate ○ Lot of mixing, fewer cliques, less social stratification of larger schools ○ Grounds adequate for expansion ○ 3 schools at 1 site ○ Successful programs with Tech school ○ Parents know where kids are, who they're with ○ Stable faculty ○ Many faculty went to GVHS - had a positive experience, feel loyal ○ Trekkers add real world experiences for students 	<ul style="list-style-type: none"> ○ Expensive student-teacher ratio ○ No auditorium ○ Poor landscaping ○ Parking lot is not paved, feels "sterile" ○ Limited diversity of student population ○ Library space inadequate (and location should be central in the school) ○ Limited course offerings ○ Low participation in some classes ○ Flagging student motivation ○ Staff turnover in sciences ○ Lack music, storage space ○ School is "invisible" to adults once children graduate ○ Needs more activity to draw community in (e.g., performances) ○ Gym is overscheduled, too small ○ No adult ed ○ Substance abuse problem exists (and sometimes parents are cause) ○ Age of physical plant ○ Small staff - less teamwork, less of an incubator for new ideas ○ Guidance department good at crises, not as good at college and career counseling ○ Low college attendance rate ○ Miss broad horizon of larger high school ○ Isolated ○ Not enough personal learning for "middle" students ○ Community is stretched to support high school in terms of money and volunteers ○ Doesn't function as community center ○ Hard to recruit teachers ○ Problem in chemistry/physics ○ Not enough variety of teaching styles - no option if student doesn't learn well from 1 teacher in a small department ○ Students need more "real world" experiences

4) Goals of students and teachers

A mission for the Georges Valley High School was created in 2001 by a committee of students, parents, teachers, the principal, and a school board member. The faculty approved the statement that same year. It reads:

The mission of Georges Valley High School, in partnership with home and community, is:

- *To create an environment of intellectual curiosity and creativity through a full slate of courses, services and activities.*
- *To strive to empower each student to realize their highest learning potential.*
- *To promote individual dignity and self-worth while preparing each student to contribute to a dynamic global community.*
- *To encourage each student to solve problems individually and cooperatively in the school, community and workplace.*

A recent exercise in preparing a Gates Foundation grant gave teachers and students a chance to describe their vision for how this might be achieved. The medium they chose was a video written, filmed, and enacted by students. The Task Force watched the video at its January meeting. Key concepts in the video included:

- individual learning plans;
- split school days (half on campus, half on projects on or off campus);
- involving students in (for credit) volunteer/intern/work assignments at community resources (UMaine at Thomaston, local businesses, social service agencies, TV/radio stations);
- eliminating tracking – integrating vocational programs into the overall curriculum;
- everyone with a laptop,
- CD portfolios,
- digital camera, projector and “smart boards” in every classroom;
- use community people as teachers – apply the Senior College model to high school education;
- have “school within a school,” writing labs;
- create local businesses (such as aquaculture), grow food for cafeteria;
- increase teacher professional development.

5) Educational reform ideas in Maine

The concepts set forth in the student video are in line with the kind of high school reforms envisioned in Maine and the nation. Nationally, the key reference book for reform is Breaking Ranks II: Strategies for Leading High School Reform, 2004, National Association of Secondary School Principals. Here in Maine, a reform agenda is implied by the State of Maine Learning Results (1997), and described in detail in a report entitled Promising Futures: A Call to Improve Learning for Maine's Secondary Schools (1998). Both of the latter are publications of the Maine Department of Education.

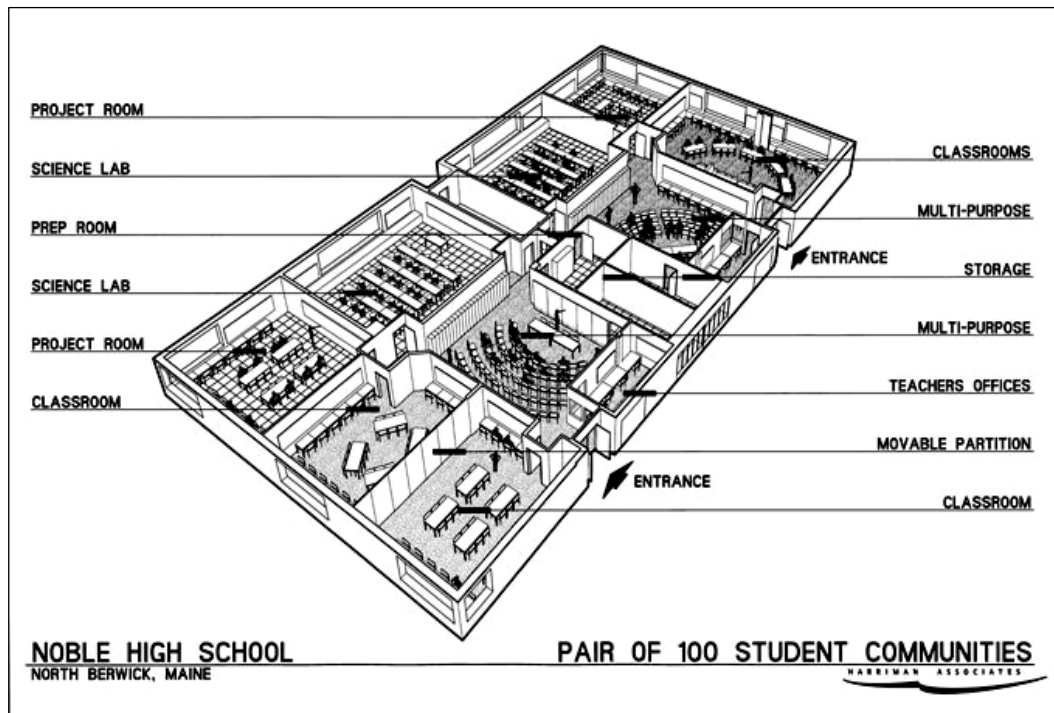
Duke Albanese, the State Commissioner of Education when both of these reports were published, and Dick Durost, the Director of the Maine Principals Association, came to GVHS on May 3rd at the invitation of the Task Force, and spoke to a public audience assembled in the gym. Both emphasized that high school size was not the essential determinant of educational quality, but the nature of the teaching. Other ideas they emphasized included:

- rigorous high standards for all students, not just the high performers
- real-world experiences at businesses and in community
- closer integration of technical education with general high school education
- exposure to classes in university and community college settings
- different settings for learning – large group, small group, individual
- use of technology to empower students to control own education

6) Implications of new educational theories for organizing space

In October Dan Cecil, an award-winning school architect from Harriman Associates, presented a power point show on the implications of new methods of teaching for school buildings. The new technologies of education, and the new approaches to learning, require more of a mix of spaces than was true in the 1960s – small rooms for conferences, large rooms for presentations, flexible classrooms, etc. The long central corridor with equal size classrooms on each side model is not well-adapted to this kind of pedagogy. Below is a section of the award-winning Noble High School in North Berwick that provides an example of the different kinds of learning spaces used there.

Figure 6: Classroom layout of Noble High School



7) Summary of implications

The previous section described the financial challenges of preserving the status quo. This section describes why the status quo will not be good enough for the future. The challenge MSAD 50 faces is not only to keep the good things GVHS now has, but also to continually upgrade educational performance for tomorrow's students.

VI. The Question of “Critical Mass”

In the spring Task Force members visited three different high-performing high schools to see whether there were lessons for MSAD 50. The three schools included:

- A high school that integrates technical education into the day-to-day curriculum (Oxford Hills);
- A consolidated high school along the Midcoast (Camden);
- A high school with enrollment close to 250 (Monmouth Academy)

A particular interest of the Task Force was the question of “critical mass.” How many students were needed to support a curriculum that offered choice and variety? On the other hand, how many were “too many” and left some students feeling lost?

The Task Force heard reports on the schools in March, and also reviewed national research. Here is what we found.

1) School visits

Monmouth Academy gets excellent academic results with low administrative overhead, and only 240 students. Faculty eat with students, fill in for each other when trainings arise, and are close to students. However, because of the small size the curriculum has few electives and AP courses. Scheduling is a jigsaw puzzle. Some students who want to take both band and physics are shut out of one or the other because of scheduling issues that result from not being able to offer enough sections of each subject area. Students end up being tracked, even though that is not the intent. Top kids tend to take a specific menu of courses which tend to be offered only once in the schedule. The principal felt that 400 students was an ideal number to provide the breadth of programming needed; he also felt that Poland High School is an interesting model. The Task Force drew these lessons from the Monmouth example:

- a family-oriented setting is important (like St. George also)
- team-teaching is key for communication among teachers
- perhaps “depth” could be found externally
- the fewer the towns, the more people feel local control

Oxford Hills Comprehensive School is a very large school – 1300 students – but with an impressive integration of vocational learning, lots of extracurriculars, and also a team structure designed to give students a “home” in a smaller group within the school.

Before the tech school and high school were combined there were 230 students enrolled in tech classes; now, with classrooms side by side, over 500 take tech classes. Students are organized into “teams” of 80, and are taught by 4 faculty who work closely together to integrate curriculum. Once students have completed the 10th grade, a number of pathways are available for them. There is a college bound group, 40-50 AP students, and many paths through the vocational school. The school feels that it serves all of its students well because of the greater choice available in junior and senior years.

The school offers a wide variety of extra-curricular activities, a total of 21 clubs, academic teams and other student groups were listed on the web site. The school also has between 13-14 interscholastic athletic programs to choose from. There is considerable presence of the community within the school. A single example is a branch of the Norway Savings Bank, supervised by a bank employee, and staffed by students.

Next door to Oxford Hills High School is the Western Maine University and College Center. The Center opened in 2004, and includes a branch of the University of Maine, the Community College System, and the Western Maine Community Action Career Center. Thus students have opportunities to take higher education courses as well.

Lessons from Oxford were:

- choice for students is good
- tech school participation is key to its success
- mixing tech kids into the classrooms helps provide total integration
- humanistic design – students at the heart – makes even a large school feel small
- team structure also creates small school experience

Camden Hills Comprehensive High School is a school of 724 students from Hope, Lincolnville, Appleton, Rockport, and Camden. It is a recent merger along the Midcoast, so the social aftereffects of consolidation are still fresh. They include the fact that small towns feel left out, that the location of the school is key to how much people identify with it, and that you must consciously provide a new identity for the new institution. The school has a comprehensive academic program, and good college placements. Observations from the Task Force on the Camden experience included:

- socio-economic range can be an issue in a consolidation if two communities have different backgrounds
- Camden does not use the team structures of Oxford Hills, and that may contribute to a feeling of being “lost” for some students
- dress and behavior expectations are important

Table 4: Comparative data from high schools, FY 2003/4

	GVHS	Monmouth	Oxford	Camden
HS students	347	259	1,243	1,285
Cost/student	\$9,086	\$7,651	\$7,480	\$9,811
% State aid	18%	50%	42%	10%

In summary, the three schools gave mixed answers on the question of “critical mass.” Two of the principals – one from a school of 240, the other from a school of 725 -- supported a size of about 500 in a high school as providing a balance between size and curriculum. But the Oxford Hills example demonstrated that a even a very large school could maintain great academic choice and diversity without losing a small school feel and intimacy – so long as a team teaching and classroom organization promoted such feeling.

2) National research

The Committee reviewed several studies regarding the relationship between school size and school performance. One study reports that, generally, the most effective size for a high school is 600-900 Students.^b Students in smaller schools or considerably large schools [over 2100] tend to learn less. Consistently large schools were found to impact low SES [socio-economic status] students more negatively than other groups of students.

One study on high school size in rural schools in Maine^c reports the following trends:

1. There is no relationship between school size and student achievement measured by the Maine Educational Assessment tests (MEAs).
2. High school graduation rates tend to increase as school size decreases. The highest rates of graduation were in schools with less than 300 students, and in schools with 600 to 750 students.

^b Valerie E. Lee, University of Michigan and Julia B. Smith Western Michigan University [Lee 1997]

^c Does high School Size Matter for Rural Schools and Students? Veronica A Gardner; Center for Educational Policy, Applied Research and Evaluation, University of Southern Maine- Paper presented at the annual conference of the New England Educational Research Organization, Portsmouth NH April 2001.

3. A student's desire to go on to postsecondary education is not related to their high school's size (there is no data on actual performance).
4. Schools with more than 600 students are more likely to offer advanced science and math courses. However, these benefit only a minority of students (between 2% and 18%).
5. Students in medium to large schools (more than 450) spend more time on sports and hobbies than students in smaller schools.
6. School size does not appear to be related to the hiring or retaining of teachers with more advanced education, although smaller schools had more favorable teacher student ratios [1:14 compared to 1:17].
7. As school size decreases, parental involvement increases.
8. Students in small schools may have closer connections to the community than students in larger schools, as indicated by their time spent on community service and volunteer work.
9. There is no change in academic performance based in size of school, except that students from lower socio-economic groups tend to perform better and are retained at higher rates in smaller schools

3) Cost savings from consolidated schools - Maine research

One other factor on "critical mass" is expenses. Recently, the Maine Department of Education sponsored a study entitled "An Analysis of Construction of Small Schools vs. Larger Schools." <http://www.maine.gov/education/const/c002.doc>

The study consists of examples of projects by Maine architects. While no high school project was studied, the findings from other school projects were consistent. For example, Dan Cecil of Harriman Architects compared the costs of two elementary schools for a Litchfield, New Hampshire school district as opposed to one. The two schools would have Pre-K to grade 5 (1,000 students overall). Under the two school scenario, one school would have Pre-K to grade 3 (600 students), and the other grades 4 and 5 (400 students). The study found that a consolidated school had these financial advantages over two schools:

- A reduction of 23,000 square feet (15% less space)
- Construction cost savings of \$3.4 million
- Annual operations savings of \$42,000 a year in oil power, water , sewer, gas, data phone, trash pickup, snow removal -- \$1.7 million over 40 years
- \$117,000 less per year in personnel costs -- \$4.7 million over 40 years

The total savings per student in the first year of the consolidated school approach was \$3,479 per student.

VII. Many Flags/One School for the Midcoast

While the GVHS Task Force has been meeting, there are developments in the Midcoast area that are relevant to considering future options.

First, the Midcoast School of Technology (MCST) has been actively looking for space to expand. They were close to purchasing a building along the waterfront in Rockland, but that deal fell through. So they are actively looking for space in the region.

One avenue MCST is now pursuing involves meeting with a group of business people and educators in the midcoast area to pursue an idea called "Many Flags/One School." The concept is to bring together into one physical location the programs, degrees, students, faculty, staff, classrooms, labs, technology infrastructure and administrative functions for the following institutions that provide vocational/technical training, associate degrees, baccalaureate degrees and graduate degrees: Midcoast School of Technology (MCST); Kennebec Valley Community College (KVCC); University of Maine Orono - Hutchison Center (UMO-H); University College at Thomaston (UCT); and possibly, a branch of the boatbuilding program from Washington County Community College(WCCC).

Talks have been underway among these partners for nearly a year. Representatives of the group came to a meeting of our Task Force to present their ideas, and invited MSAD 50 to join into the discussion. They are open to, and enthusiastic about, considering, as part of this campus, a high school presence. Accordingly their policy statement includes this section:

"Coordination with Regional School District & Regional High School efforts:

- *The Many Flags/One School concept recognizes the importance of coordinating its "vision" with the possibility of Regional High School efforts that may occur in the Midcoast in the future.*
- *It is essential that High School student have easy and early access to higher education.*
- *To promote that integrated approach, Many Flags/One School will coordinate their programs and physical space development plans with the local Midcoast School Districts to ensure that the best possible, non-duplicative programs and facilities are conceived and realized."*

This effort offers the opportunity for MSAD 50 to provide an educational experience to its students similar to the Oxford Hills model, except in a more intensive way. The Many Flags model anticipates a closer integration of the different educational institutions, with sharing of administration, counseling, and support services – as well as the cafeteria and auditorium. This would take what is being done in Oxford to a whole new level.

VIII. Alternatives under consideration

Following the visits and the public meeting, last spring the Task Force identified the following four models for the future of GVHS:

1. Stay local and independent, and “pump up” the academic program. This option retains the local independent high school, with fewer students, and “pumps up” the quality of programming. This option involves improving the high school facilities, making maximum use of distance learning technologies to expand program offerings - because there will be fewer teachers.
2. Join a new “campus” with voc ed and higher education facilities. Create a new high school “campus” that co-locates with the vocational school and alternative school and University and Community College facilities. This is a “community center” model, with an auditorium for community events, opportunities for retirees to volunteer and take courses. It would be in use year-round, 7 days a week. This is a “think big” alternative. Because the campus would serve multiple uses and constituencies, funding for the new buildings could be shared among several sources as well.
3. Join a new campus like that above, but in this case build a consolidated high school in collaboration with a neighboring school district. This is identical to the one above, except that in this case MSAD 50 would partner with another district’s high school to create a new consolidated high school.
4. Give students a choice of neighboring high schools. Eliminate the high school and pay tuition for local students to attend their choice of area high schools. Committee members made it clear that this was not their first choice - it would potentially isolate students, lose a sense of community. There are also questions about the capacities of neighboring schools. Nevertheless, they felt that this was an option worth studying.

IX. Criteria for evaluating alternatives

At its January meeting, the Task Force brainstormed a list of criteria that defined success for a future high school arrangement. The Task Force used these tests to examine the possible benefits of each of the four alternatives.

Education

- What is best for students
- Will make students competitive for future education, jobs
- An improved quality of education
- Education competitive with the nation and world
- Integrated into the community, uses local resources
- Flexible and diverse – multiple learning styles
- What’s best for each individual kid
- Quality curriculum and teaching staff
- Don’t lose kids, staff, who are here now
- Ease of transition from K-8
- Creates “critical mass” to sustain quality education

Technical/administrative

- Whether we can meet needs within budget
- Funds available to cover initial costs
- phase-in implementation plan
- flexible implementation plan
 - with different possibilities, “escape clauses”
- clear vision and commitment to achieve
- minimizes driving around
- flexible space

Environment/atmosphere

- Safe, supportive and secure environment
- maintain sense of community
- discourages drugs and substance abuse – minimizes exposure
- personal feeling
- compatible communities to partner with

Process

- Data driven analysis
- Based on research into consolidation, pitfalls from other experience

- Student involvement
- feasible, reasonable, attainable, political
- ability to generate community support
- ability to generate staff, teacher support
- “large consensus” – not necessarily unanimous

In October the Task Force scored each of the alternatives under consideration using these criteria.

In general, Task Force members ranked the “campus” alternatives (2 and 3) the highest in terms of educational values. The Task Force scored community values higher on the two options that didn’t involve a consolidation (1 and 2).

The idea of closing Georges Valley High School and tuitioning students to other schools (alternative 4) scored low on virtually every category.

By multiplying the “importance” score times the “effectiveness” scores, it is possible to identify the highest-ranking choice. In this case, the ranking would be:

- A new Georges Valley High School on a campus with other institutions;
- A new consolidated high school on a campus with other institutions
- An upgraded Georges Valley High School in its present building
- Tuitioning MSAD 50 students to other high schools

The Task Force did not consider this scoring process to be definitive, but rather to be an exercise in clarification. Two things emerged from the analysis for the group:

1. The idea of tuitioning students elsewhere is unacceptable and deserves no further consideration.
2. The idea of new construction is more appealing than rehabilitating the existing building.

This exercise was the prelude to developing the recommendations, which are contained in the first section of this report.