

## **Report on Regionalization**

### **DRAFT 2009\_04\_09**

The purpose of this report is to present the complexities, opportunities and challenges of regionalization. It is not designed to argue for or against regionalization for Maynard. Rather, the purpose of this report is to provide current research to the citizens of Maynard so that we may have a thoughtful discussion of regionalization.

The information is divided into two sections:

- What is regionalization and what kinds of regional agreements does Maynard have?
- What are the opportunities and challenges of further regionalization for Maynard?

#### **What is regionalization and what kinds of regional agreements does Maynard have?**

Regionalization (also known as consolidation) can occur at many levels in a school district. There is no one way to regionalize. Below are some common ways in which schools and districts consolidate.

- **Form service cooperatives**

*Definition:* Federal and state regulations require school districts to serve all students, regardless of their ability. To meet all of the educational needs in a school, neighboring districts form service cooperatives to provide cost-effective, specialized instruction to a small incident populations whose needs are not met by the standard curriculum. These arrangements pool resources such as staffing, classrooms and transportation for member district's students.

*Maynard:* Maynard Public Schools partnership in the Concord Area Special Education Cooperative (CASE) is an example of a service cooperative.

Through collaboration with other districts, CASE collaborative members are able to augment and supplement their special education programs, and share ideas and resources. Currently, CASE classrooms serve about 160 students in 17 classrooms throughout the participating districts.

The 13 towns, including Maynard, that participate in CASE are Acton, Acton-Boxborough, Carlisle, Concord, Concord-Carlisle Regional, Harvard, Lincoln, Lincoln-Sudbury Regional, Littleton, Nashoba Regional, and Sudbury.

- **Form administrative cooperatives**

*Definition:* Two or more districts can purchase supplies (paper, pens), fuel, food, and other items as a group to get a lower price.

*Maynard:* Maynard is a member of the Assabet Valley Collaborative, and participates in the committees for curriculum and purchasing.

Curriculum:

The Maynard Schools' Assistant Superintendent represents Maynard on the Curriculum Committee where the members share best practices and provide specialized professional development to small target groups at an economical price. For example, all third grade teachers in participating districts may attend a professional development seminar with a writing specialist – a kind of focus that member districts would not be able to provide on their own.

Purchasing:

The Maynard Schools' Business Advisor represents Maynard on the Cooperative Service Committee. The committee does commodity bidding for such items as office supplies, fuel, and athletic supplies. By offering bidders larger quantities the Collaborative obtains the most favorable pricing.

Additionally, membership in the Assabet Valley Collaborative provides an opportunity to share information, questions and best practices among members, and have joint informational meetings with some of the other collaborative committees.

Other participating school districts include: Assabet Valley Regional, Berlin/Boylston Region, Berlin, Boylston, Hudson, Marlborough, Nashoba Region, Northborough, Northborough/Southborough Region, Southborough, Shrewsbury, and Westborough.

- **Establish a vocational school**

*Definition:* All school districts are legally required to provide vocational education options to high school students. Because students who want a vocational education are commonly a small portion of the student population, all technical schools are regional schools; and member towns pay tuition for their students to attend.

*Maynard:* Maynard's vocational school is Assabet Valley Technical School.<sup>1</sup> Participating districts include: Berlin, Boylston, Clinton, Hudson, Marlborough, Maynard, Northborough, Shrewsbury, Southborough, Westborough and West Boylston.

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<sup>1</sup> The Assabet Valley Collaborative and Assabet Valley Technical School are legally distinct entities.

- **Establish a regional district**

*Definition:* Two or more school districts that were operating separately can come together under a single district office. Usually, one or more school buildings are closed. Students who were attending a school building that was closed are bussed to another town's schools.

Towns, like Maynard, that currently run their own school systems and are closest to Maynard are:

- Harvard (14 miles)
- Hudson (9.5 miles)<sup>2</sup>

Mapquest.com calculates that travel time from the town center of Maynard to the high school in Harvard is 22 minutes, and to the high school in Hudson is 24 minutes. These are the time it takes when traveling a direct route at the speed limit. Bus, however, travel an indirect route, often driving below the speed limit, and they stop frequently, conditions that lengthen the travel time.

- **Enter an existing regional district:**

*Definition:* A town that had been operating its own district may join an existing regional district. Usually, one or more schools buildings are closed and students are bussed to another town.

Maynard is surrounded by regional schools: Nashoba, Concord-Carlisle, Acton-Boxborough, and Lincoln-Sudbury.

In the 1990's, Maynard unsuccessfully attempted to regionalize grades 9-12 with Acton-Boxborough High School. In 2007-2008, the School Committee made inquiries about joining Lincoln-Sudbury, Concord-Carlisle, Acton-Boxborough and Nashoba Regional. Those inquiries were not fruitful. (<http://www.maynardschools.org/reports.html>, cf. Regionalization.)

*Bussing:* Entering a regional district means that students spend more time on busses. To begin understanding what that means in terms of student experience, we researched surrounding districts HS bus schedules:

- Nashoba
  - First HS pick up: 6:55 am
  - Drop off at HS: 7:40 am
  - Bus leaves HS: 2:20 pm
  - Last HS drop off: 3:00 pm

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<sup>2</sup> Miles estimated by entering Main St., Maynard and either the Hudson or Harvard high school address into Mapquest.com.

- Acton-Boxborough
  - First HS pick up: 6:43 am
  - Drop off at HS: 7:00 am
  - Bus leaves HS: 2:25 pm
  - Last HS drop off: 2:50 pm

The longest time that area regional high school students spend the bus is between 40 and 45 minutes. Maynard students commonly spend 20 minutes now on their buses. That would increase by the amount of time needed to go from Maynard to (whichever) regional high school.

Maynard currently serves its students and reduces expenses through participation in three regional arrangements: Concord Area Special Education Collaborative (CASE), the Assabet Valley Collaborative, and Assabet Valley Technical School. The collaboration represented by these three regional organizations is one way for small school districts to insure that they are fiscally efficient. In fact, Driscoll and her colleagues (2007, 5) suggest that collaboration among neighboring districts may yield greater economy of scale than full consolidation.

As Maynard considers the opportunities and challenges of further regionalization, it is worth outlining the ways in which regional districts can be structured. Some common structures that we see in the towns surrounding Maynard are:

- **Complete regionalization**  
Towns combine grades K through 12 and administer the combined district through a single regional district office. The Nashoba Regional District of Stow, Lancaster and Bolton is a good example of this kind of regional agreement.
- **High school only regionalization**  
Two or more towns combine the high school only and administer the school through a regional office. For example, Lincoln and Sudbury maintain separate schools and administrations for grades K-8. Lincoln-Sudbury has a regional 9-12 high school, and each town has its own school district for grades K-8. There are three superintendents, one for each district, between the two towns.
- **Superintendency Union**  
In this arrangement, Town A and Town B maintain separate school systems and budgets, but the two systems are administered through a single district office. There is one superintendent (and administrative office) that runs the schools in both Town A and Town B. This arrangement is currently being considered by Sudbury for grades K-8 (see Guilfoil 2009) and would mean that Sudbury's K-8 district would be included in the Lincoln-Sudbury regional district, eliminating one superintendent and central office.

All of these relationships are contractual. Partnering towns sign legal contracts that specify responsibilities: tax assessment formulas, methods to address future capital needs, voting rights and representation on the school committee, and expenses to enter the relationship, and penalties for exiting. Voters *in each town* must approve the agreement at Town Meeting. (Some Maynard

residents will recall that in the early '90s Maynard voters approved and Acton rejected regionalization. There are often similar town differences on budgets and bonds.)

Typically, representation on the school committee is apportioned based upon the percentage of students that each town sends to the regional school district. Often items such as budgets, overrides, and capital expenditures must be approved by the voters in each town at Town Meeting. In multiple town districts, budgets may be approved by a simple majority of voters. The regionalization agreement will specify how budgets, bonds, etc. are passed and other such governance issues.

### **What are the opportunities and challenges if we pursue further regionalization?**

The trend in America education for the last 100 years has been towards greater consolidation (Coulson 2007, 3; Antonucci 1999, 1). In fact, from 1930 to 1970 consolidation has reduced by 90% the number of school districts (McArdle 2009). The trend has been continuing with major pushes for consolidation in Maine, Vermont, and Michigan to name a few. Governor Patrick has also made consolidation a top priority as a way to save money (McArdle 2009) and the Massachusetts School Building Authority (MSBA) requires Maynard study regionalization as one possible option to address the Maynard High School facilities issue.

Perhaps the greatest incentive to regionalize is the possibility of saving money. Two areas of potential cost savings that are most pressing for Maynard to consider are (1) reducing administrative and per-pupil expenditures and (2) providing adequate facilities for the high school students at an economical price. In addition to saving money, Maynard also needs to consider the impact of regionalization on the students. Therefore, the third section shares the current research on the student experience and success.

For decades, educators have believed that regionalization saves money and provides students with expanded opportunities in both curriculum and sports. Simply put, bigger is thought to be bigger and cheaper. In last ten to fifteen years, educational researches have begun to question these assumptions. Out of this inquiry has arisen a body of data that clearly challenges the simplistic notion that bigger is better and cheaper. The research suggests small schools have proven to be both economically efficient and effective along almost every measure.

The following research section challenges the simplistic notion that “bigger is cheaper and better” while also asking how further regionalization can help us simultaneously economize and deliver the high quality teaching and learning that our community deserves.

#### *(1) Do regional school districts reduce administrative and per-pupil expenditures?*

The research on this question is mixed. Below is research that finds small districts are more cost-effective, with lower administrative and per-pupil expenses. Other research finds the exact opposite: larger districts are more cost-effective. One observation that is generally not disputed is that there are diseconomies of scale at either end of the size spectrum. Excessively small

districts<sup>3</sup> are expensive to operate (McArdle 2009, Coulson 2007). Reilly notes that “as enrollment rises, per-pupil costs decrease quickly at first and then gradually flatten out” (2004, no page number).

However, some studies have noted that the largest schools experience a diseconomy of scale as administrative and support expenses increase. Antonucci (2007) argues that larger schools suffer from “mission creep,” where the original objective of education is supported by activities that have lost their connection to the original goal. He found that the average U.S. school district spends about 62% of its budget on instruction (teacher salaries and benefits, textbooks and supplies for the classroom), while large districts spend closer to 50% of their budget (Antonucci 1999). Larger districts allocate more money to bussing, guidance counselors, food staff, etc.

Duncombe and Yinger’s (2005) research in New York State found that larger districts did yield an economy of scale. They found that doubling enrollment in a 300 pupil district lowered administrative expenses by 38%; doubling enrollment in a 1,500 pupil district reduced bureaucratic expenses by 9%. However, these savings were reduced by five percentage points by increased capital expenses. That yields a potential 4% savings for districts roughly the size of Maynard.

So if very small schools and districts are expensive and very large ones result in “mission creep,” then there is a sweet spot regarding economies of scale. A 2007 study conducted by the Mackinac Center for Public Policy sought to empirically determine the most cost-effective size for school districts in Michigan (Coulson). He determined that the optimal size for school districts in Michigan is 2,911 students (Coulson 2007, 18). While he argues that districts of about 500 or fewer students can yield cost savings by consolidating, as district size grows, cost savings diminish. Coulson’s rough figures estimate that Michigan would yield approximately \$31 million by consolidating small districts and about \$363 million by breaking up large districts (Coulson 2007 18-19). It’s also interesting to note that small districts may not be located next to other small districts, making this kind of consolidation unlikely in many instances.<sup>4</sup>

However, in a study of Massachusetts school districts, Driscoll and her colleagues (2007) found that “[s]tand-alone small districts spent less per pupil than regional academic districts” (p 7). In fact, the regional school districts per-pupil cost was “\$1,420 more than the stand-alone town districts and \$930 more than the state” (Driscoll 2007, 23).

On the other hand, the Massachusetts Executive Office of Education finds the opposite. They estimate that regionalizing districts with fewer than 1,500 pupils may yield small districts close to \$150,000 on bureaucratic expenses (Readiness Finance Commission 2008, 6). They also have

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<sup>3</sup> There is no standard definition of “small” or “large” when it comes to schools. McArdle (2009) refers to small schools as having 500 or fewer students. Others define small schools as 400 or 474 and fewer (see Reilly 2004). The Massachusetts Readiness Finance Commission (2008) does not specify “large” or “small” districts, but focuses on the potential cost savings by consolidating districts that enroll 1,500 or fewer pupils. With approximately 1,340 students, Maynard is generally considered a small district.

<sup>4</sup> In Coulson’s analysis, break ups and consolidations are not the optimum method for saving money in Michigan. Rather, he argues that the best way to save money is to inject market forces (such as competition and parent choice) into the system (2007, 2).

findings in opposition to Antonucci's (1999), citing that the 134 Massachusetts school districts with 1,500 or fewer students spend just over 36% of their budgets on bureaucratic expenses while districts with student populations between 1,501 and 5,000 spend (on average) 34.5% (2008, 6).

One cost of regionalization that often remains hidden until late in the process is personnel expenses. When two or more districts come together, the newly formed regional district must conform to MGL 150E that mandates that personnel do not suffer any loss of benefits. Therefore, the newly created regional district is required to adopt the pay scale and benefits of the most generous teacher contract. Thus, state and national trends indicate that some towns see an increase in school personnel expenses. Another expense that would almost certainly increase (and this is especially true for regional districts with a large geographic area) is bussing.

The process of consolidating school districts is complex, and so it is impossible to pin-point exactly what Maynard would save or spend by consolidating one or more of its schools. What is safe to say in light of the above data is that cost savings are not guaranteed through full scale school consolidation.

*(2) Will regionalization allow Maynard to address the facilities issues at the High School without a significant capital expenditure?*

That depends on what district Maynard regionalizes with and the size and condition of their schools. Maynard's high school population (grades 9-12, as of October 2008) is 327. Whatever school would absorb Maynard's students would need the space for an additional 327 students.

If a district has recently constructed a new high school and has outstanding debt, Maynard would be asked to absorb some of that debt as a condition of entering the district. For example, Lincoln-Sudbury built a new high school in 2004 for approximately \$72 million. If Maynard were to join the LS regional district, Maynard would be asked to take a portion of that bond. Additionally, the LS high school may not be big enough to accommodate an additional 327 students and another wing may need to be added. It is likely that the Lincoln and Sudbury tax payers would ask Maynard to pay a significant portion of those construction costs. How the capital costs are divided among the participating towns is often negotiated when the consolidated district is formed or a new town enters.

If we regionalize with a district that has a deteriorating facility and we need to build a new school in partnership with the newly formed regional district, the newly built school may be more expensive than just building for Maynard's students. For example, Concord-Carlisle's high school was built in 1959-60 and the communities are actively pursuing extensive refurbishing or building new. Like Maynard, Concord and Carlisle must make significant short- and long-term capital investments in the high school in order to maintain accreditation through NEASC. They are also working with the MSBA and commissioning a feasibility study (Ball 2009). If Maynard joined the Concord-Carlisle Regional District, we would share that bond with the other two communities.

One might be tempted to argue that even if Maynard needed to participate in the construction or renovation of a newly formed regional high school that a larger school would be cheaper to build. This does not necessarily hold true, according to Craig Howley's findings that "show that the smaller half of these 9-12 schools (planned to enroll from 138 to 600 students) were, on average, no more expensive *per student* to build than the larger half (planned to enroll 601-999 students) and were less costly per square foot (\$96 vs. \$110, significant at  $p < .01$ )" (2008, 17). It may, however, be true that the overall cost to Maynard would be lower if we shared that bill with two or three other towns.

At this point of our exploration, it is very hard to tell how much resolving the facilities issues at the High School will cost Maynard. Regionalization may or may not reduce some of those capital costs. What does seem reasonably certain is that regionalization will not eliminate those capital costs.

### *(3) Do larger, regional districts perform better than small districts?*

Although I found reference to a handful of studies showing that larger schools outperformed smaller ones, the preponderance of evidence strongly suggests that smaller schools outperform larger schools along almost every measure.

The MASS Small and Rural School District Task Force conducted a study published in 2008 (Linda Driscoll is the primary author) that investigated student learning outcomes in small school districts. Their study of small schools in Massachusetts showed that compared to the average rate of Massachusetts districts small districts had:

- 6.5% better graduation rate
- 2.5% lower dropout rate
- 2.1% higher attendance rate
- 3.7% more students enrolling in college after graduation

Similar results for Massachusetts schools are cited by *The Commonwealth Review*:

"Of the twenty school districts with the highest graduation rates in the state, eight have fewer than 1,500 pupils. Nine school districts with fewer than 1,500 hundred students finished with MCAS scores in reading that placed in the top twenty statewide. Twelves (sic) schools with fewer than 1,500 finished in the top twenty for Math and eight finished in the top twenty in science. These numbers would seemingly suggest that small schools are capable of delivering high quality education to there students" (*The Commonwealth Review*, January 26, 2009).

Furthermore, students at a socio-economic disadvantage achieve higher in smaller schools. In fact, Howley and Howley (2004, 2) found that "the smallest national decile of size maximizes the achievement of the poorest quartile of students." In other words, the smallest schools benefited the poorest students most. They also found that smaller school size is also highly

correlated with higher academic success for all but the highest socio-economic students (2004, 26).

Driscoll and her colleagues reason that small schools perform better along these measures because students are known by the teachers and administrators, engaged in sports and extra-curricular activities, and they feel respected and appreciated (Driscoll 2008, 12). Students also receive more individualized attention, and the schools are more responsive to diverse learning needs (Nathan and Thao 2007, 13). Smaller schools also invite greater parent and community involvement, improve instructional quality, and greater accountability (*Are Small Schools Better?* 2001). This atmosphere keeps students in school and invested in performing well. There for one reason small schools perform well is precisely because they are small.

However, there is also some evidence that larger schools yield superior academic results. In her summary of educational research, Reilly (2004) cites a handful of studies that demonstrate a positive relationship between a larger school size and academic performance. One study she cites finds that students from larger schools in California perform better on the Scholastic Aptitude Test (SAT). Another study shows that larger schools have better performance in math, even after controlling for gender, parental education, and other variables that contribute to academic performance. And still other studies found no correlation between school size and performance.

One more consequence of regionalization is important for Maynard to consider: the costs and benefits of having our school in our town. Maynard has a very strong sense of community, and bussing our students to another town for their education may negatively affect that tight fabric of community, as well as be detrimental to our housing values and tax base. Driscoll (2008, 19) points out the value of schools to communities by noting:

- Average housing prices are higher in communities with schools
- School closing erode a community's tax base, reducing the fiscal capacity of that community
- Communities with schools see greater population growth
- Communities with schools have more professional, managerial and executive workers with higher incomes

The Vermont Legislative Research Shop (no date) cited a 1998 study by Brasington<sup>5</sup> that found that school consolidation reduced the average housing price by \$400, thereby eroding the tax base.

## **Conclusion**

Regardless of how one interprets the data on regionalization, the prospect of regionalization for Maynard is a political reality. The MSBA has required Maynard study the process while also

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<sup>5</sup> This study, however, is missing from the Vermont Legislative Research Shop's bibliography. I will try to track the study down, but all I have is the last name and the date.

exploring the feasibility of resolving the facilities issues at the high school through renovation or building. Additionally, Governor Patrick supports reducing the number of school districts in Massachusetts as a means of cost savings. The Readiness Finance Committee Final Report (2009) strongly endorses reducing the number of Massachusetts school district as a long term strategy, and pursuing more administrative consolidation in the short term.

These are unusually challenging financial times for our nation and that only heightens our responsibility to the citizens of our communities to deliver our services in the most cost-effective and efficient manner. Partnering with our neighboring communities may help us dedicate a greater percentage of our budget directly to teaching and learning and may enhance the opportunities available to our children. This needs to be balanced against the value of retaining our schools in our town, and the myriad benefits of small schools. To serve Maynard and our children, we need to be vigilant that regionalization is the right choice for us.

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