

**Massachusetts Education Reform
Review Commission**

**AN EARLY EXAMINATION
OF THE MASSACHUSETTS
CHARTER SCHOOL INITIATIVE**

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Contents

Executive Summary	i
Introduction	1
Charter School Theory	1
Charter School Legislation	1
Charter School Oversight	3
Research Questions	3
Methodology	4
Research Scope	4
Data Collection Strategies	5
Findings: Elements of School Choice	8
Finding #1: Differences between charter schools and district schools	8
Finding #2: Demographic variances between charter and district enrollments	14
Findings: Impacts on School Districts	18
Finding #3: Budgetary consequences	19
Finding #4: Programmatic responses	21
Finding #5: Obstacles to replication	23
Opportunities for Follow-up	24
Facilitating replication	24
Areas for further research	25
Conclusion	27
Appendices	
A. Research Population	
B. Site Visit Protocol	
C. Charter School and District Surveys	

Executive Summary

Background

Charter schools are independent, publicly funded schools that operate under the auspices of an educational contract called a charter. In Massachusetts these charters are granted by the Board of Education, thus establishing a direct relationship between the school and the state – effectively bypassing the traditional district structure. In their charters, schools lay out plans for improving student performance and pledge specific educational outcomes. In exchange they receive exemptions from many of the requirements placed on other public schools. Proponents of charter schools argue that freedom from many of the regulations that have constrained district schools will allow charter schools more operational freedom and provide students and their families with additional educational options. Furthermore, they reason, the reality of competition from charter schools will spur district schools to improve their educational programs and become more responsive to the interests of students and their families.

In Massachusetts, provisions for charter schools were made as part of the Education Reform Act of 1993 and the first cohort of schools opened in September of 1995. By the 1998-99 school year, Massachusetts had 34 operating charter schools serving nearly 10,000 students. The Massachusetts Charter School Law outlines seven purposes for establishing charter schools:

1. to stimulate the development of innovative programs within public education;
2. to provide opportunities for innovative learning and assessments;
3. to provide parents and students with greater options in choosing schools within and outside their school districts;
4. to provide teachers with a vehicle for establishing schools with alternative, innovative methods of educational instruction and school structure and management;
5. to encourage performance-based educational programs;
6. to hold teachers and school administrators accountable for students' educational outcomes; and
7. to provide models for replication in other public schools.

Primary Research Questions

This study used a broad-based survey, a targeted set of site visits and interviews as well as information available from the state Department of Education to address the following research questions:

- Is the Charter School Initiative presenting parents and students with significant educational choices? How are charter school practices and/or offerings distinct from those of district schools? Who is taking advantage of those choices and are they satisfied?

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- Is the Charter School Initiative affecting district schools? What kinds of effects are occurring and how extensive are they? Is there any evidence suggesting that district schools may be changing practices and/or offerings in response to charter schools?

Findings: Elements of School Choice

Finding #1: When it comes to educational practice and program there are some significant differences between charters and districts schools. However, the most notable differences revolve around the fact that these are smaller schools.

Inherent in charter school theory is the idea that charter schools will not merely be located in a different building and run by different individuals, but that they will actually be providing educational opportunities that students and families cannot access in their district schools. The research uncovered some notable differences. In other cases, it was precisely the lack of difference that stood out.

- On average, charter schools are smaller than district schools, particularly at the middle and high school levels.
- The differences most commonly identified by students and parents relate to school environment and culture and are often considered benefits of small schools.
- Charter schools provide more learning time during the academic year than district schools.
- The significant programmatic differences appear in programs for the youngest students. In particular, more charter schools offer foreign language instruction at the elementary school level and full-day kindergarten programs.
- Charter school teachers have lower levels of education, less teaching experience, and are less likely to be certified to teach in Massachusetts.
- Curricular or instructional practices commonly found in charter schools can also be commonly found in district schools.
- There are no significant differences in curriculum framework alignment between charters and districts that responded to the survey.
- Average class size does not systematically differ between district and charter schools that responded to the survey.

Finding #2: On the whole, there are important demographic variances between the student bodies in charter schools and their sending districts.

In particular, charter schools serve fewer students identified as Limited English Proficient (LEP), fewer students qualifying for free or reduced price lunch, and fewer students with formal Individualized Education plans. There is no significant difference in minority enrollment between charters and sending districts.

Findings: Impacts on School Districts

Another key concept of charter school theory is to stimulate competition for students and thereby spark improvement in all public schools.

Finding #3: Although many districts are losing students and financial resources to charter schools, to date there is no evidence of a large-scale competitive response.

It appears that the relatively small numbers of students enrolled in charter schools, as well as state reimbursement provisions, limit the financial impact on most districts. In fiscal year 1999 the resources directed to Massachusetts charter schools amounted to \$66 million – \$42 million from 209 sending districts and \$24 million from the state. The districts' \$42 million amounts to only 0.75% of combined net school spending for those districts. To some extent the state reimbursements have lessened the overall budgetary impact, but even if they were eliminated the total burden on districts would only have risen to 1.2% of combined net school spending.

On an individual basis, the budgetary impact for most sending districts was similarly marginal. After reimbursement, only 12% of the districts lost more than 1% of their net school spending. Without reimbursement this percentage would have risen to 31%, but the majority of districts would still have lost less than 1% of their net school spending. The districts that benefited most from the reimbursement sent significantly more students to charter schools in FY99 than FY98.

To date there is no conclusive evidence on the magnitude of budgetary impact necessary to stimulate competitive responses in sending districts. A recent report released by the Pioneer Institute suggests that districts losing more than 4% of their operating budgets to charter schools are the most likely to respond to the competitive pressure. Four districts currently lose more than 4% of their net school spending to charter schools. Three others are approaching this threshold and may very well reach it in the 1999-2000 school year.

An additional factor that may be dampening the competitive response is uncertainty over the amount of money actually being lost to charter schools. It appears that the complexity of the charter financing process creates substantial confusion in this area for district administrators. Thus, budgetary impacts are currently a weak signal of market concerns.

Finding #4: Although some districts are making changes that resemble the offerings of nearby charter schools, we did not find widespread evidence of replication of charter school practices.

The limited evidence is anecdotal. In most cases it is difficult to prove that district changes were direct responses to charters and not merely independent school improvement efforts. However, it does appear that some districts are making programmatic changes that resemble the offerings of nearby charter schools, including offering full day kindergarten, enhancing their arts programs, adding more project-based learning, and adopting some specific instructional approaches.

There is some perception that Boston's pilot schools are a direct response to passage of the state's charter school legislation. If indeed this is the case, it would be the only example of charter schools stimulating whole school reform efforts in Massachusetts, if not the entire nation. However, once again the causal relationship is not clear, especially since some have indicated that the pilot school idea was generated and agreed upon several years before the charter school legislation was introduced.

Finding #5: There are many obstacles to district replication of charter ideas and practices.

Lack of good information and a mechanism for facilitating exchange stand in the way of meaningful replication initiatives. District personnel have a hard time identifying differences that they would be interested in replicating. If experience to date is any indication it seems clear

that large scale or widespread replication will not occur spontaneously. Some entity must play an active role in facilitating interaction among charter schools and districts.

Expecting district schools to simply replicate practices that work in charter schools does not acknowledge the traditional context in which they operate. Charter schools have been exempted from many of the requirements and relieved of much of the bureaucracy faced by school districts precisely in order to provide them with the flexibility to respond quickly to new ideas. In contrast, district schools operate within a multi-layered administrative structure. In one sense, the major innovation being tested by the charter school initiative is the effectiveness of eliminating the district structure and allowing true school-based management to take its place. It may not be reasonable to expect district schools to adopt and implement specific charter practices if they are not granted the same exemptions.

Opportunities for Follow-Up

As a first step the Department of Education should institutionalize a mechanism for identifying promising charter school practices, facilitating information exchange, and providing technical assistance to districts interested in replicating charter practices in their schools.

While charter schools should certainly be expected to cooperate with replication efforts, they are really not equipped to spearhead the task. As for districts, most have proven reluctant so far to engage charter schools in constructive conversation about lessons they could learn from each other. It appears that the Department of Education is the most logical party to facilitate this effort. After all, the Charter School Initiative was essentially intended to create a network of state-sponsored education laboratories. It seems only fitting that the state education agency take the lead in identifying and sharing best practices.

There are also several opportunities for additional research related to charter schools.

Topic 1: How do charter schools wind up serving fewer “disadvantaged” students?

Topic 2: Are charter school constituents satisfied with their experiences?

Topic 3: What are the budgetary consequences of the charter school funding mechanism?

Topic 4: Are charter schools delivering improved educational outcomes for their students?

Topic 5: What can charter schools teach us about school governance and organization issues?

Topic 6: Are charter school networks a viable approach to meeting diverse educational needs?

Conclusion

It is too early to expect conclusive evidence as to whether or not charter schools are having a beneficial impact on the educational prospects of our children. The quality of education provided to children attending charter schools is only one of the important elements to be assessed down the road. The current statutory limitation on the number of children attending charter schools places additional importance on the objective of influencing the practices of district schools. Effective replication of charter practices will not occur spontaneously. Proactive measures must be taken to identify promising charter school practices, facilitate information exchange, and provide technical assistance to districts interested in replicating charter practices.

Introduction

Charter School Theory

Charter schools are independent, publicly funded schools that operate under the auspices of an educational contract called a charter. In Massachusetts these charters are granted by the Board of Education, thus establishing a direct relationship between the school and the state – effectively bypassing the traditional district structure in which other public schools operate. In their charters, schools lay out plans for improving student performance and pledge specific educational outcomes. In exchange they receive exemptions from many, but not all, of the requirements placed on other public schools. Charter schools are subject to periodic performance reviews and those that fail to deliver the promised educational outcomes face the possibility of having their charters revoked.

Proponents of charter schools argue that charter schools are key to our nation's educational reform efforts. At its simplest distillation their argument can be presented as three interrelated components. First, freedom from many of the regulations that have constrained district schools will allow charter schools to operate in ways that will better serve their students. Second, as schools of choice charter schools provide students and their families with additional educational options. Third, the reality of competition from charter schools will spur district schools to improve their educational programs and become more responsive to the interests of students and their families.

Others see charter schools as yet another attack on traditional public education. They argue that even *if* they improve educational outcomes for their students, charter schools create a parallel schooling system that separates students with more engaged families (the choosers) from those with less engaged families (the non-choosers). In this view, choosers are considered more educationally advantaged and thus, charter schools are often accused of drawing away students who are better prepared to learn. Furthermore, because charter schools redirect public funding, there is considerable concern that the students who remain in district schools will be further disadvantaged by a lack of resources. Critics also contend that the exemptions granted to charter schools create an uneven playing field upon which district schools cannot realistically be expected to compete. From this perspective many feel that the experiment will be of limited value because charter schools operate under such different conditions than other public schools.

Charter School Legislation

Minnesota enacted the nation's first charter school legislation in 1991. By 1999, charter school legislation had been passed in 36 states, the District of Columbia, and Puerto Rico and 32 of those states actually had schools in operation¹. In Massachusetts, provisions for charter schools were made as part of the Education Reform Act of 1993 and the first cohort of schools opened in September of 1995. By the 1998-99 school year, Massachusetts had 34 operating charter schools serving nearly 10,000 students. Currently the number of charter schools is statutorily limited to 50, which can enroll no more than two percent of the state's total public school enrollment. However, there are ongoing efforts to lift or increase this limit, which is commonly referred to as the cap.

¹ Information from the US Charter Schools website. October 18, 1999. (<http://www.uscharterschools.org>)

The Massachusetts Charter School Law outlines seven purposes for establishing charter schools.

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7. to provide models for replication in other public schools.

There are two types of charters in Massachusetts – Commonwealth charter schools and Horace Mann charters. Both establish schools that operate independently of their local school committees under charters granted by the state board of education for a period of five years. The local school committee and the local bargaining agent must also approve Horace Mann charters. Typically, Commonwealth charters are granted to new schools and Horace Mann charters to district schools converting to charters. However, the actual language of the law does not make such a distinction.

In Massachusetts, private and parochial schools cannot become charter schools. Non-profit organizations, certified teachers, or groups of parents may apply for charters. For-profit businesses may not directly apply, but charter school boards of directors may contract with any of the for-profit companies that provide educational programs and/or management services.

Commonwealth charter school teachers are not covered by the local union or district collective bargaining agreement and need not be certified teachers. Horace Mann charter school teachers must be certified and remain part of the local union, but may negotiate separately on provisions other than salary, benefits, and seniority.

Charter schools may limit their enrollment to certain grade levels, but must be open to all students within those grade levels provided that space is available². If the number of applicants to a given charter school exceeds the number of spaces available, the charter school must conduct a lottery. There are generally enrollment preferences for students living in the city or town in which the school is located and for siblings of students currently enrolled in that school. Charter school students may voluntarily withdraw at any time and enroll in their local public school. Charter school students are subject to the same testing requirements and are expected to meet the same performance standards as all other public school students.

² The one exception to this provision is that charter schools need not accept special education students who require a substantially separate placement, typically those students with a special education prototype higher than 502.4.

Horace Mann and Commonwealth charter schools are funded somewhat differently. Each Horace Mann charter school is funded through a direct budget allocation from the school committee that approved its charter. This allocation cannot be any less than the school would receive under the district's standard budgetary process. Commonwealth charter schools are essentially funded through a per-pupil transfer from the districts that their students would have otherwise attended³. If a student's sending district spends below its foundation budget, the charter school receives the average cost per student in that district. If a student's sending district spends above its foundation budget, the charter school receives the lesser of: a) the average cost per student in the sending district or b) the average cost per student in the host district (the district in which the charter school is located). Districts do receive additional state funds to offset their losses to charter schools. This program will be explained in more detail later in this report.

Charter School Oversight

The Massachusetts Department of Education manages charter school oversight and accountability on behalf of the Board of Education. In addition to filing all of the standard reports required of public schools in Massachusetts, each charter school must submit an annual report and an annual independent audit. The Department of Education also conducts annual site visits to each charter school and manages the charter renewal process, the first round of which is currently underway. Both the site visits and the first round of renewal focus on the following three questions: 1) Is the school's academic program a success? 2) Is the school a viable organization? 3) Has the school been faithful to the terms of its charter? The Department of Education's Charter School Office has also commissioned a number of special studies and reports including an analysis of the tuition formula, a review of innovation in charter schools, and a study of special education in charter schools.

The current study is the result of legislation⁴ that charged the Massachusetts Education Reform Review Commission (MERRC)⁵ with completing an independent evaluation of the Commonwealth's Charter School Initiative by December 1999.

Research Questions

A comprehensive evaluation of the Charter School Initiative would have to address a tremendously broad set of research questions. Members of the Commission recognized that the financial resources available to support this research would unavoidably limit the scope of inquiry they could request. After several discussions the Commission settled on the following questions:

³ Actually Commonwealth charter schools receive their funding from the state, which then deducts the appropriate amount from the state aid allocation of each sending district.

⁴ 1997 Amendments to the Education Reform Act

⁵ MERRC was created in 1993 by the Massachusetts Legislature to monitor implementation of the Education Reform Act.

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- Is the Charter School Initiative presenting parents and students with significant educational choices? How are charter school practices and/or offerings distinct from those of district schools? Who is taking advantage of those choices and are they satisfied?
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The Commission made an explicit decision to forgo an examination of charter school results as might be measured by student performance indicators such as the Massachusetts Comprehensive Assessment System (MCAS). Although there was some sense that the study's audience would expect to see analysis on this topic, it was outweighed by the members' concern that it would be far too early to fairly judge the Charter School Initiative on academic outcomes.

Methodology

In May of 1998, the University of Massachusetts Donahue Institute, through its Research and Evaluation Group, began providing the Commission with focused assistance in selecting research questions and appropriate research approaches for the evaluation of the Charter School Initiative. To this end, the study team conducted a review of the recent studies on charter schools in Massachusetts, surveyed the "state-of-the-art" of charter school evaluation at the national level and within individual states, and interviewed key stakeholders with regard to their interests, needs and priorities for charter school research.

After completing the review, the study team presented potential research questions and approaches for conducting the study to the Commission and facilitated a discussion around the relative merits of each. Following that meeting, the team presented three options for moving forward. In order to strike the appropriate balance between breadth and depth of information, the Commission endorsed a methodology that included both a broad-based survey and a targeted set of site-visits and interviews. Members also indicated that they were most strongly interested in research questions addressing the Charter School Initiative as a vehicle for educational choice and the impact of the initiative on district schools.

At its October meeting the Commission unanimously approved the study team's proposed research design. The following pages describe the research methodology as it played out over that period of time.

Research Scope

Recognizing the need to limit the scope of the study to match its resources, the Commission chose to focus on the 24 charter schools that had begun operation by the fall of 1997 as well as their sending school districts. All of the charter schools in this study operate under Commonwealth charters. In most instances the group of districts studied was limited to those sending at least five students to a charter school during the 1998-99 academic year. 101 such districts were identified using data provided by the Department of Education. (See Appendix A for a complete list of the charters and districts described above.)

The Commission asked us to focus our report on the Charter School Initiative as a whole, rather than findings about individual charter schools and their sending districts. Consequently, this report comments broadly on the nature of the choices presented by charter schools and evidence of their impact on local districts. It does not offer specific case studies of individual charter schools and their sending districts.

Data Collection Strategies

The findings of this report are drawn from several data sources. Original data collection was conducted through site visits, interviews, and surveys. Data made available by the Massachusetts Department of Education, particularly enrollment and financial data, were also valuable sources. Information from previously completed studies of Massachusetts charter schools was also an important supplementary source.

Site Visits

Charter school site visits were conducted at eight charter schools between the months of January and March. Given the diversity of charter schools it was not possible to select a truly “representative” group for site visits, however schools were selected to represent a variety of cohorts (defined by first year of operation), sizes, community types, regions and grade-levels. Schools were randomly selected from within each cohort so that we would visit five schools founded in 1995, two founded in 1996, and one founded in 1997. This yielded a site-visit sample that somewhat under-represented urban schools. One substitution was made to improve the sample⁶ in this regard. The result was a sample that reasonably approximated the characteristics of all Massachusetts charter schools as defined by the chosen parameters.

In mid-November, MERRC Chairman Paul Reville sent each charter school director a letter introducing the study and requesting participation in the site-visit phase. The letters were followed by phone calls from the study team to secure their cooperation and schedule the visits. Each charter school director was asked to assign someone to work on scheduling and coordinating the visit. One charter school failed to respond despite several weeks of phone calls and faxes. That school did finally decline to participate, and was replaced without any substantial effect on the sample. Table 1 lists each charter school visited along with its relevant sampling characteristics.

Table 1. Site visit charter schools

Charter School	Location	Cohort	Region	KOC	Size	Type
Atlantis	Fall River	95	Southeast	Urban	Medium	Elem-Mid
Cape Cod Lighthouse	Orleans	95	Southeast	Rural	Small	Elem-Mid
Francis W. Parker	Fort Devens	95	Central	Suburban	Medium	Elem-Mid
Lowell Middlesex Academy	Lowell	95	Northeast	Urban	Small	HS
SABIS International	Springfield	95	Western	Urban	Large	Elem-Mid
Pioneer Valley Performing Arts	Hadley	96	Western	Rural	Small	HS
Seven Hills	Worcester	96	Central	Urban	Medium	Elem-Mid
Lynn Community Charter School	Lynn	97	Metro	Urban	Small	Elem

Most site visits took place over two consecutive days⁷. This provided more opportunities for informal observation and follow-up during the visit. It also structured data collection

⁶ Originally Chelmsford Alliance Public Charter School was chosen (1996/Northeast/Suburban/Small/Elem-Mid), but replaced with Seven Hills Charter School.

⁷ In one instance the second day had to be rescheduled due to a snow day. In two other cases the schools felt that they could not accommodate two-day visits so longer single-day visits were scheduled.

opportunities in smaller, more digestible segments, and thus facilitated better research. Members of the Commission were invited to participate and a few attended all or part of a site visit.

Charter schools were given considerable flexibility in setting the visit schedule, including the option to schedule components before or after regular school hours. They were asked to include a brief orientation and tour, an interview with the director, as well as several focus groups – one for students (grade 6 and up), one for parents, and another for teachers. The site visit protocol in Appendix B provides a list of questions for each focus group and the director’s interview.

Each charter school was asked to recruit approximately ten individuals representing diverse backgrounds and experiences for each focus group. While this was an imperfect process, it seemed most feasible given the practical difficulties of recruiting random groups. Furthermore, the study team did not have the resources to meet with those who had chosen to leave charter schools. The study team recognizes that the information obtained through these sessions may represent the most favorable perspectives on charter schools and have been careful not to overstep the limitations of this methodological necessity.

Interviews

As mentioned previously, each charter school site visit included an interview with the director. The main objective of this interview was to provide information that would be useful in development of an effective survey instrument in the next phase of the evaluation. For the same reason, the study team also attempted to schedule interviews with the superintendents, school committee chairs, and school council members from each site visit charter’s host district⁸, but were not as successful. MERRC Chairman Paul Reville sent each superintendent a letter introducing the study and requesting participation in the site-visit phase. The study team followed-up via telephone. Several superintendents failed to respond or declined to cooperate. Five districts agreed to cooperate at some level. They were Nauset, Lowell, Springfield, Hadley, and Worcester. The study team was able to interview all five superintendents and school committee members from three of those districts.

Surveys

In late June, confidential surveys were distributed to the directors of all 24 charter schools founded by 1997. A similar companion survey was also mailed to the 101 superintendents of districts that sent at least five students to charter schools in the 1998-99 academic year. Both groups were asked to complete and return the survey by July 15th. Reminder postcards were mailed shortly after the first deadline. By the end of July a low response rate and phone calls from some charter schools and districts indicated that summer vacation schedules had made it difficult for some schools or districts to meet the deadline. The study team made follow-up phone calls and faxed additional copies of the surveys to a targeted group of non-respondents⁹ including all charter schools, host districts, and districts that sent at least 25 students to charter schools in the 1998-99 academic year. These non-respondents were asked to complete and return the survey by the 13th of August. Copies of the surveys are included in Appendix C.

⁸ A “host district” is the district within which the charter school is physically located. All of the host districts have students attending the hosted charter school.

⁹ The surveys were not coded, but all surveys were identified by postmark. This information was used for tracking purposes only.

Of the 24 charter schools surveyed 18 responded for a response rate of 75%. Based on survey responses, the sample of respondents offered a very good representation of the target population. Table 2 profiles charter survey respondents against the target population. None of the differences presented are statistically significant.

Table 2. Charter survey respondent profile

<i>Response rate = 75%</i>		Respondents (n=18)	Target Population (n=24)
Cohort	1995	56%	58%
	1996	33%	29%
	1997	11%	13%
School Size	Small (<25)	39%	54%
	Medium	33%	25%
	Large (>500)	28%	21%
Grade Levels	Elementary	67%	58%
	Middle School	56%	50%
	High School	44%	50%
Kind of Community	Large Urban	38%	42%
	Small Urban	22%	17%
	Suburban	22%	21%
	Rural	17%	21%

Of the 101 district superintendents surveyed 46 responded for a response rate of 46%. The low response rate was not surprising since surveys were mailed to districts that sent as few as five students to a charter school. As the study team expected, the response rate increased substantially when looking at districts that sent more students to charter schools. Among the 30 districts that sent 40 or more students to charters, the response rate reached 70% – fairly comparable to the return on the charter school survey. Furthermore, based on survey responses, the sample is a good representation of the entire target population of 101 districts. Table 3 profiles district survey respondents against the target population. Again, none of the differences are statistically significant.

Table 3. District survey respondent profile

<i>Response rate = 46%</i>		Respondents (n=46)	Target Population (n=101)
Host districts		26%	24%
District Size	Small (<2000)	13%	27%
	Medium	33%	32%
	Large (>4000)	54%	42%

Kind of Community	Large Urban	7%	6%
	Small Urban	24%	19%
	Suburban	57%	46%
	Rural	13%	30%

Findings in this report that refer to the survey have been tested for statistical significance using the chi-square test statistic at the 5% level (probability < 0.05). In other words, findings are considered to be statistically significant if there is less than a 5% chance that such a finding could be the result of sampling error rather than actual differences between the surveyed populations being compared. However, given the small number of respondents, there is still some degree of uncertainty in the data and these results should not be considered definitive.

Findings: Elements of School Choice

As stated earlier, one of the reasons for charter schools established in the Massachusetts Charter School law is “to provide parents and students with greater options in choosing schools within and outside their school districts.” After four years with charter schools in operation, members of the Commission thought it important to better understand whether or not the state’s charter school initiative was meeting that objective. Thus, they asked the team to explore whether the Charter School Initiative is presenting parents and students with significant educational choices?

Finding #1: When it comes to educational practice and program there are some significant differences between charter and district schools. However, the most notable differences revolve around the fact that these are smaller schools.

Inherent in charter school theory is the idea that charter schools will not merely be located in a different building and run by different individuals, but that they will actually be providing educational opportunities that students and families cannot access in their district schools. Using a survey charter school directors and district superintendents were questioned about curriculum, instruction, assessment, and the instructional staff in their schools. The research uncovered some notable differences. In other cases it was precisely the lack of difference that stood out.

On average, charter schools are smaller than district schools, particularly at the middle and high school levels.

During site visits to charter schools many people indicated that they chose charter schools because they were smaller than the schools in their school districts. Analysis of data from the Massachusetts Department of Education confirms this perception. During the 1998-99 academic year the average charter school served 307 students. In contrast, the average school size for our sample of 101 sending districts was 517 students.

This initial comparison is somewhat distorted since charter schools more frequently serve elementary students and district secondary schools are generally larger than elementary schools.

Comparisons of charter and district school sizes by school type¹⁰ (elementary, middle school, and high school) further support the conclusion that charter schools are smaller than district schools. The data also show that the disparity grows somewhat at the middle school level and even more at the high school level.

Table 4. Average school size – charters vs. sending districts

School type	Charters	Districts
All Charter Schools	307 students	517 students
Elementary School	291	395
Middle School	172	674
High School	160	924

Comparisons between each charter school and similar schools from its main sending districts further strengthen the finding that charter schools offer the alternative of a smaller school. In several instances the district elementary school was smaller than the charter school, but in all these cases the charter school was serving students beyond the elementary school level.

The differences most commonly identified by students and parents relate to school environment and culture and are often considered benefits of small schools.

In recent years educational research has generally shown that smaller schools help promote learning among their students. A survey of small school research conducted by Kathleen Cotton¹¹ cited the following benefits of small schools – improved attitudes about school, strong sense of belonging among students, and social bonding between teachers and students. Cotton also noted that small schools have higher attendance rates, lower dropout rates, and fewer problems with student behavior and discipline. Other researchers note that small schools offer students more personalized learning environments and have more success in establishing supportive relationships with families.

The study team’s discussions with parents and students echoed many of the research findings described above. They reported that many previously disaffected students have become re-energized about school and are excited about learning. Students who felt they didn’t fit in at their previous school say they feel very much at home at their charter school. Both parents and students perceive that charter school teachers and administrators know their students better and make a concerted effort to communicate with families on a regular basis, not only when problems arise. Parents also noted that students in the charter school are better behaved than district students and when discipline issues arise they are handled more effectively. Furthermore, many charter school parents are anxious to become involved in their children’s education and most feel more welcome in the charter school environment than they had in the local district.

Thus it appears that many of the most palpable benefits of charter schools stem, at least in part, from their structure as smaller learning environments.

¹⁰ Schools were categorized as in the Massachusetts Department of Education school and district profiles. Thus, K-8 schools were grouped with elementary schools and 7-12 schools with high schools. Charters including elementary through high school grades were included in the overall average but not the breakdown by school type.

¹¹ *Affective and Social Benefits of Small-Scale Schooling*. ERIC Digest. December 1996. This report is a summary of research related to small schools.

Among survey respondents, charter schools provide more learning time during the academic year than district schools.

The surveys asked about student learning time in two ways. First both charter school directors and district superintendents were asked how many instructional days they offered in the 1998-99 school year. They were also asked to indicate how many hours of structured learning time they provided their students. Separate responses were requested for elementary, middle school, and high school students. The study team adopted the state’s definition of structured learning time – the “time during which students are engaged in regularly scheduled instruction, learning activities, or learning assessments within the curriculum for study of the core subjects.”¹²

The simplest way to look at this data is to compare the mean responses for charters and districts. Although these comparisons show differences most succinctly the data distribution does not allow for testing whether those differences are statistically significant. Therefore the study team categorized responses based on whether or not they exceeded the state minimum requirements. This allowed further statistical tests and yielded the following observations:

- More charters exceed the 180 day minimum school year
- More charters exceed 900 hours of structured learning time for elementary students
- More charters exceed 990 hours of structured learning time for middle school students
- There is not a significant difference at the high school level

In addition to learning time during the academic year both charters and districts were asked whether they sponsored academically-oriented summer programs for their students. Although more than half of the charter schools responded that they do offer such programs, the proportion of districts offering them is significantly higher.

Table 5. Student learning time comparisons – survey respondents only

		Charter Schools	Districts
Length of School Year (Instructional Days)	exceed 180 day min mean days	*61% 186.3	*17% 180.6
Elementary School Structured Learning Time	exceed 180 day min. mean hours	*82% 1092.1	*60% 946.3
Middle School Structured Learning Time	exceed 180 day min. mean hours	*71% 1109.9	*33% 992.2
High School Structured Learning Time	exceed 180 day min. mean hours	13% 1119.1	13% 1001.8
Academically-oriented summer program		*67%	*89%

¹² Department of Education Memorandum (9/20/95). <http://www.doe.mass.edu/doedocs/news/cm921954.html>

* statistically significant difference note: means cannot be tested for statistical significance

Among survey respondents, the significant programmatic differences appear in programs for the youngest students. In particular more charter schools offer foreign language instruction at the elementary school level and full-day kindergarten programs. None of the charters reported that they provide early childhood education or preschool programs.

The survey asked respondents to list the foreign languages they offer and for each to indicate the grade levels at which they provide instruction. There were some differences in the languages offered, but our most striking observation centered on foreign language instruction at the elementary school level. Among survey respondents, every single charter school that serves elementary students offers them instruction in foreign language. In contrast only one-third of the districts that responded offer foreign language instruction to their elementary school students. By the middle school grades this difference disappears.

Survey respondents were also asked to comment on other aspects of their programs such as whether they offer full-day kindergarten or early childhood education/preschool programs. Among respondents every charter school kindergarten program was offered for a full day. Only half of the districts indicated that their kindergarten programs were full-day. In contrast, none of the charter schools responded that they offer an early childhood education/preschool program. Nearly all of the districts (96%) reported that they do offer such programs.

Charter school teachers have lower levels of education, less teaching experience, and are less likely to be certified to teach in Massachusetts.

Keeping in mind the importance of a school's teachers in defining its character survey respondents were asked to profile the educational background, teaching experience, and certification status of their instructional staff. The observations presented here are not meant to imply a value judgement on any particular faculty profile. They are simply intended as a description of yet another element of choice that charter schools offer to students and their families.

The data revealed that most charter school instructional staff had completed a bachelors degree and had three to ten years of teaching experience. In contrast, most district teachers had completed a masters degree and had more than eleven years of teaching experience. Nearly all district teachers were certified in Massachusetts compared to slightly more than one-quarter of the charter school staff.

Table 6. Instructional staff profile – survey respondents only

	Charter Schools	Districts
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Highest Educational Attainment	HS/Associates Degree	4.5%	3.9%
		*52.8%	*29.7%
	Bachelor's Degree	*40.6%	*58.6%
	Master's Degree	*2.0%	*7.8%
	CAGS/Doctorate		
Teaching Experience	Less than 3 years	*30.8%	*14.3%
	3 to 10 years	*51.8%	*19.8%
	11 to 20 years	*13.3%	*24.0%
	More than 20 years	*4.1%	*41.9%
Certified Massachusetts Teachers		*28.5%	*96.5%

* statistically significant difference

Curricular or instructional practices commonly found in charter schools can also be commonly found in district schools.

The survey offered a list of curricular and instructional practices and asked respondents to indicate which are widely used in their schools. Results were compared in three ways. First the study team looked for statistically significant differences in the percentage of reports for each individual practice. Significant differences appeared for only two practices – mainstreaming students and using lessons addressing multiple learning styles – both were cases where the given practice was more frequently reported by districts than by charter schools.

However, the difference related to mainstreaming may be somewhat misleading. None of the six charter schools that indicated that mainstreaming was not a common practice in their schools serve students with special education prototypes higher than 502.2. Prototypes reflect the amount of time a student is taken out of the regular education classroom for special education services. By definition, students with 502.1 and 502.2 prototypes receive most, if not all, of their education in regular classrooms. The researchers suspect that these charter school directors define mainstreaming as the inclusion of higher prototype students (those that would generally need more separate placement) into regular classrooms. Thus, in their minds, this practice would not apply to them. In hindsight, the responses might have been more meaningful had the survey asked whether they mainstream students at or above a specific prototype (perhaps 502.3).

Table 7. Comparison of curricular/instructional practice – survey responses only

Practice	Charters	Districts
Thematic/interdisciplinary instruction	83%	96%
Basic skills approach	67%	74%
Character education	56%	48%
Mainstreaming students	*67%	*98%
Multi-age grouping	44%	39%
Individualized learning	61%	72%
Cooperative learning	83%	93%
Lessons addressing multiple learning styles	*56%	*83%
Experiential learning	56%	59%

Project-based learning	67%	85%
Team teaching	83%	89%

* statistically significant difference

Responses were also examined for possible trends in the way that certain practices were combined, but found no discernible patterns among charters and districts let alone systematic differences between them. Finally, the study team set aside the significantly different practices (mainstreaming and multiple styles) and created separate rank-ordered lists for charters and districts. The result was more than similarity, but an exact match between the two lists.

Table 8. Rank-order of curricular/instructional practice – survey responses only

Rank	Charters	Districts
1	Thematic/Interdisciplinary (83%)	Thematic/Interdisciplinary (96%)
2	Cooperative learning (83%)	Cooperative learning (93%)
3	Team teaching (83%)	Team teaching (89%)
4	Project-based learning (67%)	Project-based learning (85%)
5	Basic skills approach (67%)	Basic skills approach (74%)
6	Individualized learning (61%)	Individualized learning (72%)
7	Experiential learning (56%)	Experiential learning (59%)
8	Character education (56%)	Character education (48%)
9	Multi-age grouping (44%)	Multi-age grouping (39%)

There are no significant differences in curriculum framework alignment between charters and districts that responded to the survey.

Survey respondents were asked to characterize the extent to which their curriculum is aligned with each of the state curriculum frameworks. 61% of the charter school directors reported that their school is fully aligned with more than half of the curriculum frameworks as did 51% of district superintendents. Although there is some difference in these figures it is not statistically significant. Analysis of curriculum framework alignment on a subject-by-subject basis also failed to surface any statistically significant differences.

Table 9. Curriculum framework alignment – survey respondents only

	Charter Schools	Districts

Arts	Fully aligned	33%	29%
	Alignment in process	50%	67%
English Language Arts	Fully aligned	78%	71%
	Alignment in process	17%	29%
Health	Fully aligned	22%	38%
	Alignment in process	56%	58%
History and Social Sciences	Fully aligned	50%	36%
	Alignment in process	39%	62%
Mathematics	Fully aligned	78%	73%
	Alignment in process	17%	27%
Science and Technology	Fully aligned	56%	67%
	Alignment in process	39%	33%
World Languages	Fully aligned	33%	29%
	Alignment in process	56%	64%

Average class size does not systematically differ between district and charter schools that responded to the survey.

The simplest way to look at this question is to compare mean class sizes for charter schools and districts. At the elementary school level the mean class size for charter schools is 22 compared to 21.4 for districts. At the middle school level the average class size for charter schools is 22 compared to 23 for districts. And finally, at the high school level the mean average class size for charter schools was 19.4 compared to 22 for districts.

While the figures look close enough, the data distribution would not allow the study team to test whether these differences were statistically significant. Therefore, class size categories were created that would allow for further tests. For this purpose the study team defined small classes as those with fewer than 22 students and large classes as those with more than 27 students.¹³ None of the differences were found to be statistically significant.

Table 10. Average class size comparisons by grade level – survey respondents only

	Charter Schools	Districts
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¹³ These categories are based on standards set by Tennessee’s 1985 Project STAR experiment which defined a “regular” class as one with 22-26 students.

Elementary	Small (fewer than 22)	50%	50%
	Large (more than 27)	17%	3%
Middle School	Small	36%	18%
	Large	14%	8%
High School	Small	63%	53%
	Large	13%	13%

Unfortunately, the study did not collect data on the number of adults present in school classrooms throughout the day. The study team did learn that several of the charter schools have two adults (either two teachers or one teacher with an aide) permanently assigned to each of their classrooms. Although the class sizes may not be small this does offer more opportunity to give students the kind of individualized attention they could receive in smaller classroom settings. The study team does not have comparative information about district schools.

Finding #2: On the whole, there are important demographic variances between the student bodies in charter schools and their sending districts. In particular, charter schools serve fewer students identified as Limited English Proficient (LEP), fewer students qualifying for free or reduced price lunch, and fewer students with formal Individualized Education Plans.

Method of Analysis

The study team chose to profile charter school enrollment based on four factors – race/ethnicity, limited English proficiency (LEP), eligibility for free or reduced price lunch, and special education classifications. Data for each of these factors is readily available from the Massachusetts Department of Education for charter schools and districts alike.

Others have presented findings on these factors, especially race/ethnicity. However, most have done so by comparing the statewide charter enrollments to the statewide district enrollments. While such methodology is quite simple it does not account for the locations of charter schools or the extent to which they draw students from different kinds of districts.

In an attempt to remedy this shortcoming, the study team constructed expected enrollment profiles for each charter school and by adding them, determined the expected statewide charter enrollment profile. These expected enrollment profiles are based on the following hypothesis – if district X has 25% minority enrollment and sends 100 students to charter school A then 25 of the students it sends to the charter school should be minority students. The following example illustrates the modeling process:

In 1998-99 Charter School A drew its students from Districts X, Y, and Z. Simply comparing the enrollment profiles of the Charter School and its host district (District X) would be simple, but fairly misleading since the three districts have very different enrollment profiles. Looking at race/ethnicity illustrates this point well. When Charter School A was compared to its host district there was no significant difference in the percentage of minority students enrolled. However, Districts Y and Z combined send Charter School A nearly 40% of its enrollment. District Y has a minority enrollment of 55% and District Z has a minority enrollment of 32%. In contrast, only 5% of the students in District X, the host district, are minority students. The study team took these

factors into account (see table 11) and determined that 21% (36 out of 171) of the students in Charter School A should be members of a racial or ethnic minority group. The actual minority enrollment of Charter School A is only 3% – a statistically significant difference. This led to the observation that Charter School A serves fewer minority students than its sending districts.

Table 11. Example: Charter School A Expected Enrollment Profile (Race/Ethnicity)

Sending District	% minority enrollment	Actual # of students sent to Charter School A	Expected # of minority students sent to CS A
District X (host)	4.6%	99	4.55
District Y	54.7%	37	20.23
District Z	31.6%	35	11.05
TOTAL	--	171	35.83

There is not a significant difference between minority student enrollment in charter schools and their sending districts.

A recent paper released by the Pioneer Institute for Public Policy Research states that “it has been well documented that charter schools are serving a disproportionate number of minority students.”¹⁴ Such a result is gained by comparing the percentage of minority students enrolled in charter schools statewide (~50%) with the percentage of minority students enrolled in district schools statewide (~20%).

However, charter schools draw their student populations from only about half of the state’s school districts and many more from some of those districts than others. Although the statewide comparisons provide some useful information about where charter schools locate, they are potentially misleading when judging the relative diversity of district and charter school enrollments. For that reason the study team adopted the approach of modeling the expected enrollment as described above.

To accurately reflect the population of their sending districts, charter schools as a whole would need a minority student population of 49%¹⁵. Statewide charter schools serve a population that is 57% minority. Although this is a larger percentage than expected, the difference is not statistically significant.

Examining the minority student enrollment of each charter school, six charter schools serve significantly fewer and four serve significantly more minority students than would be expected if they accurately reflected the population of their sending districts.

¹⁴ *Competition in Education: A 1999 Update of School Choice in Massachusetts.* (p. 14)

¹⁵ For the purpose of this analysis minority students are defined as those who are classified by the Massachusetts Department of Education as African American, Asian, Hispanic, or Native American

Table 12. Actual vs. Expected Percentage of Minority Students – significant differences only

Charter School	Actual	Expected
Marblehead Community	2.7%	19.8%
Neighborhood House	69.0%	84.4%
Community Day	74.8%	85.7%
SABIS International	63.1%	73.5%
Chelmsford Public	6.5%	15.6%
Atlantis	12.4%	16.2%
Seven Hills	49.4%	45.2%
Lawrence Family Development	96.9%	82.8%
North Star Academy	99.3%	73.5%
Benjamin Banneker	97.6%	58.8%

Charter schools serve substantially fewer students identified as Limited English Proficient.

To accurately reflect the population of their sending districts, charter schools as a whole would need a LEP population of 10.5%. Statewide, fewer than 1% of charter school students are identified as Limited English Proficient – a statistically significant as well as substantial difference.

Examining the LEP enrollment of each charter school, six show no significant difference between actual and expected LEP enrollment. Eighteen charter schools, including all of the urban schools, serve significantly fewer LEP students than would be expected. Ten of those schools serve no LEP students. None of the charter schools serve more than their expected number of LEP students.

Table 13. Actual vs. Expected Percentage of LEP Students – significant differences only

Charter School	Actual	Expected
All Charters	0.7%	10.5%
Boston Renaissance	0.0%	21.7%
City on a Hill	0.0%	21.7%
Neighborhood House	0.0%	21.7%
Academy of the Pacific Rim	0.0%	21.4%
Community Day	7.8%	28.5%
Lowell Middlesex Academy	0.0%	13.8%
North Star Academy	0.0%	11.5%
Benjamin Banneker	0.4%	11.6%
SABIS International	0.6%	11.5%
Somerville International	1.6%	12.5%
Marblehead Community	0.0%	7.6%
Lynn Community	6.6%	13.6%
Atlantis	0.0%	4.0%
Lawrence Family Development	0.6%	4.0%
Chelmsford Public	0.0%	3.0%
Benjamin Franklin Classical	0.0%	2.1%
Pioneer Valley Performing Arts	0.0%	2.1%
Seven Hills	0.5%	0.7%

Charter schools serve fewer low-income students than their sending districts.

The study team used student eligibility for free or reduced price lunch as a proxy for identifying the population of low-income students served by charter schools and their sending districts. This is not a perfect indicator of a school or district's economic profile,¹⁶ but it is a standard measure reported by the state and analyzed by researchers.¹⁷

Statewide, 40% of charter school students are low-income, compared to an expected proportion of 50% – a statistically significant difference. Examining the low-income enrollment of each charter school, 15 serve significantly fewer low-income students than expected. Only three charter schools serve more low-income students than expected.

Table 14. Actual vs. Expected Percentage of Low Income Students – significant differences only

Charter School	Actual	Expected
All Charters	39.8%	50.2%
City on a Hill	25.8%	71.4%
Somerville International	29.2%	59.9%
Academy of the Pacific Rim	40.7%	70.3%
SABIS International	49.0%	71.1%
North Star Academy	49.0%	71.1%
Boston Renaissance	50.2%	71.4%
Neighborhood House	52.1%	71.4%
Marblehead Community	8.5%	21.4%
Hilltown Cooperative	13.8%	25.2%
South Shore	8.2%	19.1%
Chelmsford Public	6.0%	13.3%
Francis W. Parker	0.0%	6.5%
Cape Cod Lighthouse	3.1%	9.6%
Seven Hills	46.4%	50.2%
Benjamin Franklin Classical	1.6%	4.2%
Lawrence Family Development	89.2%	72.8%
Benjamin Banneker	69.2%	46.0%
Boston University Residential	67.6%	37.6%

Overall, charters serve fewer special education students, particularly those with 502.3 or 502.4 program prototypes.

¹⁶ It is commonly held that many qualifying families are too proud to take advantage of the school lunch program and are missed by this measure.

¹⁷ Others have suggested that data from the Department of Transitional Assistance would be a better indicator, but with the current limits on benefits it seems likely that this information would miss too many low-income students.

The study team used the same modeling technique to determine the percentage of special education students that a charter school would need to serve to accurately reflect the population of its sending district(s). The severity of a special education student's needs is routinely described by a special education program prototype. Students with program prototypes 502.1 and 502.2 receive most of their education in the regular classroom. Students with program prototypes 502.3 and 502.4 generally receive a larger proportion of their education outside of the regular classroom. Students with program profiles higher than 502.4 do not typically participate in regular classrooms. As mentioned in the introduction, charter schools are not required to serve students with prototypes above 502.4, therefore the comparative analysis presented here has been limited to the students that charters are required to serve.

The model indicates that charter schools would need to have enrollment profiles where 9% of the students had 502.1 or 502.2 prototypes and 7% had 502.3 or 502.4 prototypes. In actuality, there is no significant difference in the actual and expected number of 502.1/502.2 students. However, only 1% of charter school students are identified as prototype 502.3 or 502.4 – a statistically significant difference from the expectation.

One charter school (BU Residential) serves more students with moderate needs than expected, including three students with 502.5 profiles and the actual special education enrollments profiles of two charter schools (Neighborhood House and Martha's Vineyard) are not significantly different from their expected profiles. However, these three schools are clearly the exception to the rule. Ten charter schools serve significantly fewer special education students – regardless of prototype. Another ten serve the expected number of special education students, but fewer with 502.3 or 502.4 program prototypes. One of these schools (Parker) does serve one student with a 502.7 profile. North Star Academy serves its expected number of special education students, but the breakdown by program prototype was not available on the standard October 1, 1998 report.

Table 15. Actual vs. Expected Percentage of Special Education Students – significant differences only

Charter School	All SPED (502.1-502.4)		Moderate SPED Need (502.3-502.4)	
	Actual	Expected	Actual	Expected
All Charters ^a	10.2%	16.0%	1.3%	7.1%
Academy of the Pacific Rim	9.3%	19.3%	3.3%	12.1%
Benjamin Banneker	8.0%	20.6%	0.0%	5.9%
Boston Renaissance	5.9%	19.3%	0.2%	12.3%
City on a Hill	9.7%	19.3%	1.6%	12.3%
Community Day	0.0%	9.9%	0.0%	4.9%
Lawrence Family Development	2.8%	10.0%	0.0%	4.9%
Lowell Middlesex Academy	0.0%	12.4%	0.0%	4.1%
Lynn Community Charter School	7.1%	15.6%	2.5%	8.3%
SABIS International	13.2%	17.1%	5.9%	8.5%
Somerville International	6.6%	17.4%	0.2%	7.4%
Atlantis			0.0%	8.0%
Benjamin Franklin Classical			0.0%	2.6%
<i>Boston University Residential</i>			19.3%	5.9%
Cape Cod Lighthouse			0.0%	2.6%
Chelmsford Public			0.0%	2.9%
Francis W. Parker			0.0%	2.9%
Hilltown Cooperative			0.0%	4.5%
Marblehead Community			0.0%	4.4%
Pioneer Valley Performing Arts			0.0%	5.2%
Seven Hills			0.7%	5.4%
South Shore			2.9%	3.7%

North Star Academy		not available	8.5%
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a) "All Charters" percentages exclude North Star Academy – complete data not available

Findings: Impact on School Districts

Another key concept of charter school theory (and most school choice theories) is to stimulate competition for students and thereby spark improvement in all public schools. It is probably too early to expect conclusive evidence about whether Massachusetts charter schools are stimulating competition and/or sparking change in district schools. Yet, the Commission thought it important to understand how the Charter School Initiative is affecting district schools.

Overview of the charter school funding mechanism

The mechanics of charter school funding are rather complex and although the end results are highly relevant to this inquiry, the intricacies are not. To provide context, it is summarized here in fairly simplistic terms. Basically, for each student it enrolls the charter school receives a sum roughly equal to the average per pupil expenditure in that student's sending district. This amount is appropriated to the charter school by the state Department of Education, which in turn subtracts the same amount from the sending district's state aid. Those interested in more detail should consult the Massachusetts Charter School Law and Regulations¹⁸ and A Review of the Charter School Tuition Rate Formula¹⁹. Under current law, several provisions reimburse districts for all or part of the money lost to charter schools.²⁰

A number of the district superintendents interviewed criticized the charter school funding formula for failing to differentiate between elementary, middle, and high school students. This is important because it typically costs more to educate a high school student. Therefore, when districts send elementary school students to a charter school they lose more than it costs them to educate that child and, presumably, the charter school gains more than the actual cost to educate that child. Conversely, charter schools serving students at the high school level actually receive less money than the district actually spends to educate that child. To some extent this economic reality may explain the disproportionately small number of charter schools serving students in the upper grades. These superintendents made similar arguments about the formula's failure to make allowances for the Special Education program prototypes of students served by charter schools as well as the number of Limited English Proficient students.

Another point of contention is whether or not charter schools divert resources from district schools. Most charter school advocates argue that they do not divert resources. Their rationale is that when a district school sends a student (and his per-pupil expenditure) to a charter school the district is also relieved of the cost of educating that student. Yet, superintendents point out that, even if the formula were to account for cost differences associated with educating various "types" of students (i.e., elementary, secondary, LEP, or special education), there would not be a one-for-one correlation between funding lost to a charter school and budgetary savings for a district. For example, the budgetary loss of 10 students may be equivalent to a teacher's salary, but unless all ten students are in the same school and the same grade it is unlikely that the district will be able to eliminate a class and save the amount of that teacher's salary. There are also

¹⁸ <http://www.doe.mass.edu/cs.www/charterregs.html>

¹⁹ Conducted by KPMG Peat Marwick and available from the Mass. Department of Education Charter School Office

²⁰ For more information on reimbursements refer to http://www.doe.mass.edu/schoolfinance/old/charter_tuition.html

other fixed costs associated with administration and physical plant that could not be reduced unless an unrealistically large number of students chose to attend charter schools. However, a key element of charter school theory is that budgetary consequences are a stimulant for competitive response. Putting this theory into practice requires that school districts lose more money than they save when a student chooses a charter school. Crafting a funding mechanism that superintendents would consider fair in this regard clearly runs counter to this premise.

Finding #3: Although many districts are losing students and financial resources to charter schools, to date there is no evidence of any large-scale competitive response.

It appears that the relatively small numbers of students enrolled in charter schools, as well as state reimbursement provisions, limit the financial impact on most districts.

When charter schools first began operating in fiscal year 1996 nearly \$16 million was directed to them – \$2 million from sending districts and \$15 million from the state in the form of various budgetary reimbursements to those districts. By fiscal year 1999 the resources directed to charter schools had grown to \$66 million – \$42 million from 209 sending districts and \$24 million from the state. Although the share taken on by districts has increased by about 50 percentage points, it amounts to only 0.75% of combined net school spending (NSS) for those districts. To some extent the state reimbursements have lessened the overall budgetary impact, but even if they were eliminated the total burden on districts would only have risen to 1.2% of combined net school spending for those districts. Table 16 shows the financial impact for all sending districts combined and each district sending more than 2% of its FY99 enrollment to charter schools.

Table 16. FY99 Budgetary Impact on Sending Districts – with or without reimbursement

District	Charter Enrollment	Net district expenditure	% of NSS	Total expenditure ^(a)	% of NSS
All Sending	--	\$41,859,107	0.75%	\$66,006,744	1.18%
Hull	10.74%	\$929,429	8.71%	\$1,079,830	10.12%
Nauset	7.82%	\$1,069,969	8.03%	\$1,139,754	8.55%
Malden	6.08%	\$185,108	0.47%	\$2,316,599	5.84%
Somerville	6.01%	\$2,579,945	4.79%	\$3,068,722	5.69%
Plainville	5.35%	\$36,672	0.95%	\$191,032	4.97%
Lawrence	4.94%	\$3,158,589	3.46%	\$3,973,443	4.35%
Up Island	4.91%	\$236,498	5.73%	\$437,764	10.62%
Franklin	4.25%	\$995,808	3.28%	\$1,289,448	4.25%
Foxborough	3.99%	\$125,265	0.67%	\$752,999	4.03%
Worcester	3.92%	\$4,204,729	2.36%	\$7,024,346	3.94%
Fall River	3.82%	\$2,385,619	2.80%	\$3,123,747	3.66%
Springfield	3.66%	\$5,128,225	2.74%	\$6,514,412	3.48%
Truro	3.60%	\$65,464	2.60%	\$74,994	2.98%
Marblehead	3.49%	\$624,552	3.13%	\$692,550	3.47%
Medford	3.20%	\$294,768	0.73%	\$1,146,540	2.85%
Northampton	2.86%	\$319,604	1.61%	\$472,592	2.39%
Groton Dunstable	2.86%	\$318,485	2.27%	\$403,397	2.87%
Boston	2.71%	\$11,228,344	2.08%	\$14,569,909	2.70%

Millbury	2.50%	\$0	0.00%	\$246,200	2.39%
Mansfield	2.42%	\$0	0.00%	\$522,297	2.30%
Chelmsford	2.35%	\$765,792	0.22%	\$771,891	0.23%
Cambridge	2.31%	\$1,147,379	1.25%	\$1,950,892	2.12%
Chesterfield Goshen	2.25%	\$7,523	0.72%	\$14,110	1.35%
Littleton	2.20%	\$152,975	1.84%	\$162,235	1.95%
Harvard	2.11%	\$140,184	1.98%	\$140,184	1.98%

(a) Combined district and state spending – equivalent to budgetary impact without state reimbursement programs.

On an individual basis, the budgetary impact for most sending districts was similarly marginal. After reimbursement, only 12% of the districts lost more than 1% of their net school spending. Without reimbursement this percentage would have risen to 31%, but the majority of districts would still have lost less than 1% of their net school spending. The districts that benefited most from the reimbursement sent significantly more students to charter schools in FY99 than they did in FY98. This is a result of a new provision that provides districts with one year of full reimbursement for any charter school enrollment increase.²¹

Several districts are facing larger budgetary impacts that may eventually stimulate more competitive responses.

To date there is no conclusive evidence on the magnitude of budgetary impact necessary to stimulate competitive responses in sending districts. A recent report released by the Pioneer Institute suggests that reliable trend analysis will require three to five years of financial data on district losses. However, working from findings regarding interdistrict choice, the report does hypothesize that districts losing more than 4% of their operating budgets to charter schools are the most likely to begin responding.²²

Table 16 (above) shows four districts (Hull, Somerville, Nauset, and Up Island) that currently lose more than 4% of their net school spending to charter schools. Three others (Lawrence, Franklin, and Marblehead) are approaching this threshold and may very well reach it in the 1999-2000 school year. Currently, there is limited anecdotal data regarding district responses to charter schools, but it does not as yet show any clear correlation with such significant budgetary impacts. This is an area that warrants further investigation in the years to come.

The complexity of the charter financing process creates substantial confusion for district administrators.

An additional factor that might be dampening the competitive response is uncertainty over the amount of money actually being lost to charter schools. It appears that the complexity of the budgetary process results in a very weak market signal to district administrators. This became apparent in relation to the district survey, which asked superintendents to report their net budgetary losses to charter schools beginning in FY96. Many simply failed to complete that question of the survey. A subsequent conversation with staff from the Department of Education Office of School Finance revealed that many districts did not have the information in their own records and were calling School Finance to find out.

²¹ For more information on reimbursements refer to http://www.doe.mass.edu/schoolfinance/old/charter_tuition.html

²² Competition in Education: A 1999 Update of School Choice in Massachusetts. September 1999.

Finding #4: Although some districts are making changes that resemble the offerings of nearby charter schools, we did not find widespread evidence of replication of charter school practices.

The surveys, focus groups, and interviews all probed for information about programmatic changes in districts that could be attributable to lessons learned from and/or pressure exerted by the local charter school(s). The limited evidence gathered is purely anecdotal and in most cases it is difficult to prove that district changes were direct responses to charters and not merely independent school improvement efforts. However it does appear that some districts are making programmatic changes that resemble the offerings of nearby charter schools.

In surveys and interviews district superintendents were asked whether or not they had made programmatic changes as a consequence of the nearby charter school(s) and, if they had, to describe those changes. Only seven districts responded that they had made any such changes. They reported the following:

- *Implementation of full day kindergarten programs* – one district and four charter schools indicated that parental interest in full day kindergarten programs at nearby charter schools had prompted districts to introduce this option.
- *Enhanced offerings in the arts* – two districts reported that they had enhanced their arts programs (one in performing arts and the other in fine arts). One charter school was aware of changes in arts program in at least three districts.
- *Addition of more project-based learning* – two districts indicated that they had added more project-based instruction at the middle school level.
- *Introduction of a formal transition program for new middle school students* – one district believes that the prospect of moving from small elementary schools to a large middle school is one of the main issues driving students to the much smaller charter school and has implemented a formal transition program designed to make the move less daunting.

Charter school directors were also asked if they were aware of any programmatic changes in the local district(s) as a consequence of their school. In addition to those cited above their responses included the following examples, which have not been independently confirmed:

- *Adoption of charter instructional approaches* – two charters indicate that local districts have adopted their instructional approaches. One cites district implementation of the *Success for All* reading program. The other observed the local schools change their Transitional Bilingual Education program to a dual language program with co-teachers.
- *Increased acceptance of parent involvement* and demands for informational meetings.
- *Additional attention to character education.*
- *More interest in (non-academic) community-based activities.*
- *Interest in the charter's internal assessment tool* – although the district has yet to take action, on charter school reports that members of its staff have met with district representatives who are interested in adopting parts of its internal assessment tool designed to monitor student progress against the curriculum frameworks.

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- *Joint professional development* – two charters indicate that they are actively discussing the prospect of jointly conducting professional development programs with local districts.

This study team is not the only one to have difficulty pinpointing discrete, replicable differences in practice between charter and district schools, *Innovation in Massachusetts Charter Schools*, a 1998 report authored by Rosenblum Brigham Associates on behalf of the Massachusetts Department of Education offered similar conclusions. They report that the superintendents and principals they interviewed

“spoke extensively of innovations in their districts and schools. These included descriptions of interdisciplinary curricula, alternative assessments, active learning, multiple intelligences, block scheduling, NAS designs, and a potpourri of other innovations in current reform literature . . . not often mentioned were features such as extended day, performance-based compensation, and other elements that would be proscribed by collective bargaining agreements with teaching unions. Also not mentioned were parent contracts, although these non-enforceable agreements have been tried in some public schools, and individual learning plans for all students, which are thought to be unworkable in larger schools. But clearly there are many innovative school districts across the state.”²³

There is some perception that Boston’s pilot schools are a direct response to passage of the state’s charter school legislation. Several researchers specializing in charter schools have made this case. Eric Rofes reports that “the passage of charter legislation clearly spurred the Boston Public Schools and the Boston Teachers Union to create that city’s ‘pilot school’ program.”²⁴ Interestingly, this example is also cited in the Rosenblum/Brigham study. However, the following text in their report would seem to call the cause and effect relationship into question.

“There is substantial agreement that these reform-oriented schools were created with union endorsement as a response to the emerging charter school movement in Massachusetts. Although the idea was generated and agreed upon several years earlier, the first pilot schools opened the same year as the first charter schools in Massachusetts.”²⁵ (emphasis added)

If indeed Boston Pilot Schools are a response to the charter school legislation it would be the only example of charter schools stimulating other whole school reform efforts in Massachusetts, if not the entire nation. However, once again the causal relationship is not clear to outside observers and has not been confirmed by district sources.

Finding #5: There are many obstacles to district replication of charter ideas and practices.

²³ *Innovation in Massachusetts Charter Schools* (pp. 14-15)

²⁴ *How are Districts Responding to Charter Laws and Charter Schools?* (p. 10) Policy Analysis for California Education, April 1998. For other citations see Joe Nathan’s 1996 book *Charter Schools: Creating Hope and Opportunity for American Education* (pp. 85-87) or The Hudson Institute’s 1997 report *Charter Schools in Action Final Report: Part V. The Educational Impact of Charter Schools* (p. 9).

²⁵ *Innovation in Massachusetts Charter Schools* (Page 20)

Lack of good information and a mechanism for facilitating exchange stand in the way of meaningful replication initiatives.

Few districts see charter schools as laboratories with the potential to offer them important insights into new and innovative educational practice. District personnel have a hard time identifying differences that they would be interested in replicating. Instead they view the very existence of charters as a criticism of their own schools and educational programs. Most district personnel with whom the study team spoke feel that they are trying hard to improve education for their students and are making some progress. They feel under-appreciated and unjustly maligned by all of the attention focused on charter schools, especially when it is not clear to them what charters do differently or better than schools in the district. The following quotes typify responses received from district superintendents both in person and on paper.

- “[I] don’t really have a handle on what they do, what makes them different. [It’s] hard to grasp what a charter school could do differently except function on a financial shoestring.”
- “[The local charter school] has yet to show me a *raison d’etre*. There seem to be no practices or curriculum innovations shared with my district.”
- “The local charter school isn’t doing anything we aren’t doing.”

The problem is exacerbated by the absence of any institutional mechanism for facilitating information exchange. Several of the charter school directors interviewed indicated that they had made efforts to reach out, but had been met with disinterest at the local district. More often charter school directors indicated that they are far too busy dealing with the day to day issues involved in running a school – particularly a new school – to be undertaking additional activity related to outreach. In a few instances staff from individual school districts have begun to engage with local charter schools. Sometimes district staff are just going through the motions to please school committees and/or upper level administrators. In other cases the efforts are well-intentioned but limited by other demands on their time and energy.

In any event, if experience to date is any indication it seems clear that large scale or widespread replication will not occur spontaneously. Some entity must play an active role in facilitating interaction between charter schools and districts.

Expecting district schools to simply replicate practices that work in charter schools does not acknowledge the traditional context in which they operate.

First of all, as schools of choice, charter schools have the ability to define a coherent educational philosophy and/or approach and attract small groups of students with an interest in that philosophy or approach. As a result they tend to serve students with more common needs and interests. District schools, on the other hand, serve larger communities defined primarily by geography. Their students are likely to have a much more diverse range of needs and interests. They have a mandate to serve all students, not just those with an interest in a particular educational approach. Thus, it is harder for district schools to identify and implement discrete practices that will serve all of their students well.

Furthermore, and perhaps more importantly, charter schools are more flexible than district schools by design. They have been exempted from many of the requirements and relieved of much of the bureaucracy faced by school districts precisely in order to provide them with the flexibility to respond quickly to new ideas as well as parent and student demands. In contrast, district schools operate within a multi-layered administrative structure. The main forces in this structure are the political process represented by the school committee and the bargaining process represented by the teachers union. Both of these forces are deliberately designed to be conservative – to arrive at any change through a slow, deliberate process of compromise.

In one sense the major innovation being tested by the charter school initiative is the effectiveness of eliminating the district structure and allowing true school-based management to take its place. Results of our survey further bear this out. Most charter school directors reported that the exemptions granted to them are important in running their schools – especially, the flexibility to hire and fire staff, budgetary control, freedom from district policies and procedures, and the absence of collective bargaining agreements. It may not be reasonable to expect district schools to adopt and implement specific charter practices if they are not granted the same exemptions.

Opportunities for Follow-Up

As a first step in addressing some of the issues raised in this report the Department of Education should institutionalize a mechanism for identifying promising charter school practices, facilitating information exchange, and providing technical assistance to districts interested in replicating charter practices in their schools.

As stated earlier, the study team does not believe that large scale or widespread replication of charter school practices will occur spontaneously – it must be facilitated. Some have expressed the view that the responsibility for sharing promising practices and encouraging replication should fall on the charter schools. While charter schools should certainly be expected to cooperate with replication efforts, they are really not equipped to spearhead the task. Most have their hands full managing the operations of their own schools and they are not funded for this additional activity. As for districts, most have proven reluctant so far to engage charter schools in constructive conversation about lessons they could learn from each other.

It appears that the Department of Education is the most logical party to facilitate this effort. After all, the Charter School Initiative was essentially intended to create a network of state-sponsored education laboratories. It seems only fitting that the state education agency take the lead in identifying and sharing best practices. In fact, the charter school law states that “The Commissioner shall facilitate the dissemination of successful innovative programs of charter schools and provide technical assistance for other school districts to replicate such programs.”²⁶ However, the study team is unaware of any such initiative occurring at the Department of Education at this time.

The process of designing this mechanism should be led by the Department, but include both charter and district personnel who have been involved in information exchange and/or replication

²⁶ General Laws Chapter 69, Section 89S

efforts as well as those who have not. It should also examine how, if at all, other states facilitate similar activities.

If such proactive measures are not taken, many districts will avoid examining charter school practices until they face large-scale budget consequences, an eventuality bound to negatively impact the educational experiences of the students who remain in those districts.

There are also many opportunities for additional research related to charter schools.

Like other areas of education reform, the Commonwealth has made considerable investments (\$66 million in FY99) in charter schools, but allocated relatively little to evaluating their impact. As a result, policymakers are left to debate policy issues related to charter schools based merely on their individual philosophical perspective and/or political interests – not on objectively researched findings.

The study team recognizes that both financial resources and the relatively young status of the Charter School Initiative at the time the research was conducted have limited the scope of this report. If responsible decisions about charter school policy are to be made additional investigation on topics such as those listed below will be critical.

Topic 1: How do charter schools wind up serving fewer “disadvantaged” students?

Our findings indicate that overall charter schools serve significantly fewer limited English proficient, economically disadvantaged, and special education students than their sending districts. Yet, understanding why this has happened was beyond the scope of this research. Since charter school enrollments are determined by lottery one would presume that these students are applying at a lower rate than others. Are charter school outreach efforts not reaching them? Do they receive important services in district schools that would not be available to them in charter schools? To what extent is lack of transportation a barrier? Are charter schools, as some would assert, counseling these students not to apply or driving them away after they are enrolled?

Topic 2: Are charter school constituents satisfied with their experiences?

The students, parents, and teachers with whom the study team spoke during charter school site visits were generally very satisfied with their experiences. Unfortunately resources were not available to fully investigate the question of constituent satisfaction. A more thorough study of this issue should gather data from those who have chosen to leave charter schools as well as those who remain. It should provide comparisons between the levels of constituent satisfaction in charter and district schools and show which factors most strongly contribute to satisfaction and/or dissatisfaction.

Topic 3: What are the budgetary consequences of the charter school funding mechanism?

As the state’s charter school enrollment grows and district eligibility for reimbursement declines the financial impact of the charter school initiative is bound to grow. What budgetary tradeoffs will districts be making as a result? At what point will they feel the need to aggressively respond to the threat posed by growing charter school enrollment? How if at all do the specifics of the funding mechanism influence charter school choices

of where to locate and what grade levels to serve? Finally, how well does the funding mechanism serve the budgetary needs of charter schools and the students in them?

Topic 4: Are charter schools delivering improved educational outcomes for their students?

As noted earlier in this report, the Commission avoided research questions related to student outcomes for fear that it was too early to fairly judge charter schools in this manner. However, if we are ever to judge the effectiveness of our investments in charter schools, such research will need to be undertaken at some future date. The important question will not be whether charter schools are educating their students well, but whether they are superior in educational performance to district schools. It will also be important to understand to what extent particular factors (i.e., school size, time in learning) are responsible for that performance. Such a study will require the researcher to track students for several years and include an appropriate control group, such as students on charter school waiting lists.

Topic 5: What can charter schools teach us about school governance and organization issues?

Charter schools are granted many exemptions from the constraints placed upon district schools. In what ways has their freedom yielded innovations in school administration, governance, and/or organization? What are the pros and cons of these exemptions – particularly eliminating district-level administration and operating in a non-union environment?

Topic 6: Are charter school networks a viable approach to meeting diverse educational needs?

To date charter schools have been viewed as individual providers. Each is expected to serve the spectrum of needs presented by children in the surrounding communities. This is not consistent with our expectations of districts, which must serve the diverse needs of their communities, but not necessarily within each individual school. Would it be more reasonable and efficient for nearby charter schools to establish networks to collectively address the spectrum of needs in their communities? How might such networks be structured and governed?

Conclusion

In the grand scheme of Massachusetts' public education charter schools are an extremely young initiative. Thus, it is too early to expect conclusive evidence as to whether or not they are having a beneficial impact on the educational prospects of our children. That said, this study does reveal some important differences between charter and district schools. First and foremost, charter schools tend to be smaller than their district counterparts. This is especially important given the research showing that smaller schools help promote learning among their students. Among the benefits that have been cited in the research are improved attitudes about school, a strong sense of belonging among students, fewer problems with student behavior, and more success in establishing supportive relationships with families. Comments offered in the study team's discussions with parents and students echoed these findings. Beyond school size and environment, the data show that, compared to district schools, more charter schools offer an extended school year and/or exceed the minimum required hours of structured learning time for their grade levels. Finally, when it comes to serving the youngest students, there are significant

programmatic differences between charters and districts. In particular, more charter schools offer full-day kindergarten programs and foreign language instruction at the elementary level.

Yet, the experience of children attending charter schools is only one of the important elements to be assessed down the road. The current statutory limitation on the number of children attending charter schools as well as this report's finding that charters serve fewer educationally disadvantaged children than district schools suggest additional importance for influencing the practices of district schools. Some districts are making changes – such as implementing full-day kindergarten programs, enhancing their offerings in the arts, and adding more project-based learning – that resemble the offerings of nearby charter schools. However, there is not yet widespread evidence of district replication of charter school practices.

District personnel have a hard time identifying differences that they would be interested in replicating and few see charter schools as laboratories with the potential to offer them important insights into new and innovative education practice. It is unlikely that effective replication of charter practices will occur spontaneously. **The Department of Education must take proactive steps to identify promising charter school practices, facilitate information exchange, and provide technical assistance to districts interested in replicating charter practices.**

Meanwhile, district schools operate in contexts, which may stand in the way of meaningful replication initiatives. As schools of choice, charter schools have the ability to define a coherent educational philosophy and/or approach. District schools serve larger communities defined primarily by geography. Therefore, their students are likely to have a much more diverse range of needs and interests than students in a given charter school making it harder for district schools to identify and implement discrete practices that will serve all of their students well. Furthermore, charter schools have been relieved of much of the bureaucracy faced by school districts precisely in order to provide them with the flexibility to respond quickly to new ideas. In contrast, district schools operate within a multi-layered administrative structure designed to arrive at change through a slow, deliberate process of compromise. In one sense the major innovation being tested by the charter school initiative is the effectiveness of eliminating the district structure and allowing true school-based management to take its place. It may not be reasonable to expect district schools to adopt and implement specific charter school practices without similar freedoms.

However, limited financial resources and the relatively new status of the charter school initiative have thus far constrained the usefulness of much of the research conducted in this report and others. As this report suggests, a number of practical policy questions must be addressed if responsible decisions about the charter school initiative are to be made. Yet, regardless of how difficult these practical questions may be, the thorniest issue is whether policymakers and the public are interested in funding a network of educational laboratories or a full-fledged alternative educational delivery system. While the former might call for a smaller and more tightly monitored group of schools, the latter would require a large expansion in the number of charter schools as well as greater accessibility for students in communities across the state. The study team does not recommend either of these approaches over the other, but does recognize that reaching some agreement on this question would offer philosophical guidance for interpreting research findings and creating consistent policy solutions in the years to come.

Appendix A

Charter Schools Operating by Fall 1997

Charter School	Location	Cohort	Charter School	Location	Cohort
Atlantis	Fall River	95	SABIS International	Springfield	95
Benjamin Franklin Classical	Franklin	95	South Shore	Hull	95
Boston Renaissance	Boston	95	Benjamin Banneker	Cambridge	96
Cape Cod Lighthouse	Orleans	95	Chelmsford Public	Chelmsford	96
City on a Hill	Boston	95	Martha's Vineyard	West Tisbury	96
Community Day	Lawrence	95	North Star Academy	Springfield	96
Francis W. Parker	Fort Devens	95	Pioneer Valley Performing Arts	Hadley	96
Hilltown Cooperative	Haydenville	95	Seven Hills	Worcester	96
Lawrence Family Development	Lawrence	95	Somerville	Somerville	96
Lowell Middlesex Academy	Lowell	95	Academy of the Pacific Rim	Hyde Park	97
Marblehead Community	Marblehead	95	Boston University Residential	Granby	97
Neighborhood House	Boston	95	Lynn Community	Lynn	97

Districts sending at least 5 students to charter schools (1998-99)

District	FY99 FTE at Charters	District	FY99 FTE at Charters	District	FY99 FTE at Charters
Boston	1746.6	Norton	33.0	Quabbin	11.0
Worcester	1031.6	Auburn	32.8	Harwich	11.0
Springfield	984.2	Walpole	32.0	Greenfield	10.0
Lawrence	565.9	Chesterfield Goshen	32.0	Truro	10.0
Fall River	479.8	Amherst Pelham	30.9	Chelsea	10.0
Somerville	404.9	Stoughton	30.0	Randolph	10.0
Malden	342.6	Littleton	29.0	Belchertown	9.2
Lynn	234.8	Acton Boxborough	28.0	King Philip	9.1
Franklin	225.1	Frontier	27.0	Swampscott	9.0
Cambridge	180.0	Mohawk Trail	26.1	Leicester	9.0
Hull	175.9	Hingham	23.1	West Bridgewater	9.0
Medford	166.8	Scituate	23.0	Hadley	9.0
Plymouth	156.7	Revere	23.0	Norfolk	8.0
Nauset	140.0	Sharon	23.0	Hatfield	8.0
Chelmsford	130.0	Harvard	22.0	Fitchburg	8.0
Lowell	128.1	Lunenburg	21.0	Rockland	7.1
Upisland	124.0	Shrewsbury	20.0	Whitman Hanson	7.1
Foxborough	114.5	Norwood	20.0	Canton	7.0
Marblehead	99.0	Sandwich	18.0	Ayer	7.0
Barnstable	97.0	Nashoba	18.0	Avon	7.0
Mansfield	95.9	Oxford	18.0	Shirley	7.0
Northampton	86.0	Billerica	17.0	Westford	6.1
Groton Dunstable	68.0	Millis	17.0	Quincy	6.0
Everett	66.9	Marshfield	15.1	Arlington	6.0
North Attleborough	66.9	Grafton	15.0	Stoneham	6.0
Attleboro	59.9	Wrentham	14.0	Somerset	6.0
North Middlesex	58.0	Medway	13.0	Carver	6.0
Brockton	48.9	South Hadley	13.0	Chicopee	5.0
Melrose	47.0	Methuen	13.0	Wachusett	5.0
Millbury	45.8	Easthampton	12.9	Belmont	5.0

Weymouth	40.0	Gateway	12.9	Wakefield	5.0
Plainville	38.0	Cohasset	12.0	Hanover	5.0
Salem	35.0	Silver Lake	11.0	Gill Montague	5.0
Dennis Yarmouth	34.9	Easton	11.0		

Appendix B

Site Visit Protocol

Appendix C

Surveys