CENTER FOR SCHOOL REFORM

MEETING THE COMMONWEALTH'S DEMAND LIFTING THE CAP ON CHARTER PUBLIC SCHOOLS IN MASSACHUSETTS

by Katherine Apfelbaum and Ken Ardon





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EXECUTIVE SUMMARY

Charter public schools are one of the few public school choice options available in Massachusetts largely due to restrictions the state constitution imposes on public education spending. Charters outperform traditional public schools; statewide, charter school students gain an additional month and a half of learning in English and two and a half months in math compared to students in traditional public schools. In addition to their overall success, charters have also made significant strides towards closing the low-income achievement gap, reducing it to a mere two points on the 2013 Massachusetts Comprehensive Assessment System

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As Massachusetts nears the statewide cap on the number of charter schools, this progress in raising student achievement is threatened. The lack of

(MCAS).

legislative response to the approaching limit illustrates lawmakers' tepid commitment to expanding education reform.

The latest effort to raise the charter cap was initiated in January 2013 and as this paper goes to publication is still unresolved. This slow legislative response, even in the face of bumping up against the current cap, illustrates how diverging agendas prevent compromise and progress. The fate of even a compromise that would result in relatively small expansion limited to the commonwealth's lowest-performing districts is highly uncertain.

Research demonstrates that Massachusetts charter schools have a significant positive impact and that there is strong public support for expanding school choice. This paper focuses on the financial impact of lifting the cap on charter schools in the lowest-performing districts.

When students leave traditional public schools for charter public schools, both the tuition sent to the charter school and the reimbursement provided to the sending school district are set by a state formula. Providing seats for all the students currently on charter wait lists without exceeding the current spending cap would increase tuition by \$141 million, or a little less than 5 percent of net school spending for the affected districts. If this expansion took place relatively quickly, the commonwealth would reimburse local districts for 28 percent of the extra tuition payments during the first 10 years to allow districts time to adjust to reduced enrollment and funding.

Based on the state's previous experience, opening new charters could stimulate even greater increases in demand from parents and families. While it is impossible to predict the exact impact, raising the cap would provide tens of thousands of students with access to the high-quality education charter public schools provide.

Introduction

Charter schools are one of the only public school choice options available in Massachusetts. The commonwealth's constitution includes two amendments that limit the expenditure of public funds to "no other schools than those which are conducted according to law, under the order and superintendence of the authorities of the town or city in which the money is expended," making forms of school choice seen in other states, including school vouchers and education tax credits, difficult to implement.1 That said, as the highest-performing state in the country, Massachusetts has proven to be fertile ground for outstanding urban charter public schools. In 2013, low-income charter school students in Massachusetts fell less than two points shy of closing the 20-point achievement gap for math and English on the Massachusetts Comprehensive Assessment System (MCAS).²

Despite this record of success, legislation has limited charter school expansion to the commonwealth's lowest-performing school districts. As the number of open charter school seats approaches the legislative caps, their impact is also reaching its ceiling. Long charter school waiting lists and several public opinion polls attest to public support for the public school choice that charter schools provide.

Legislation proposed in January 2013 to lift the cap on charter schools in the lowest-performing school districts sat in the state Legislature's Joint Committee on Education for over a year, revealing the political tensions surrounding this issue. More than a year later, supported by House Education Chair Rep. Alice Peisch and Speaker Robert DeLeo, the Massachusetts House overwhelmingly approved the limited expansion in the lowest-performing districts. At publication time, the bill remains in the Senate Ways and Means Committee. The Senate chair of the education committee has proposed an alternative bill that makes charter school expansion conditional on fully funding the tuition reimbursement program each year, underscoring the divergence of opinion on the future of charter school reform.

Charter schools in Massachusetts, and particularly in Boston, have had unparalleled success in raising student achievement and closing the achievement gap. A Stanford University Center for Research on Education Outcomes (CREDO) report found that statewide, charter school students gain an additional month and a half of learning in English and two and a half months in math each year; in Boston, one year in a charter school is equivalent to two years of learning in a traditional public school.³ A Boston Foundation comparison of charter, pilot, and traditional public schools in Boston found statistically significant positive effects from charter middle and high schools. The study observed the largest impact to be in middle school math: one year of learning in a charter school had the effect of moving a student from the 50th to the 69th percentile, approximately halving the white-black achievement gap.4

In 2010, spurred by incentives linked to the federal Race to the Top initiative, the commonwealth passed *An Act Relative to the Achievement Gap*, which raised the limit on charter school tuition from 9 to 18 percent of district net school spending in the lowest-performing 10 percent of school districts and exempted schools started by "proven providers" from counting towards the overall state cap. There are currently 1,860 public schools in Massachusetts, just under 4 percent of which are commonwealth charter schools.⁵ The commonwealth is nearing this new limit, there is growing parental support for charters and they have strong records of success, yet political action to raise the cap remains uncertain.

Increasing the number of charter public schools in Massachusetts would have a clear and positive academic impact. This paper assesses the financial impact of expanding charter schools in areas where the spending cap would no longer apply under the pending legislation.

CHARTER SCHOOL LEGISLATION

THE BEGINNING OF CHARTERS IN MASSACHUSETTS

In an effort to improve achievement, stimulate competition, and diminish inequality within public education, the Massachusetts Education Reform Act of 1993 (MERA) mandated a new school financing system, statewide curriculum framework, regular assessments to measure progress against state standards, and exit exams for high school graduation.⁶ Parallel and complementary to these goals, MERA included a provision for 25 charter schools to increase public school choice by allowing these schools to be independent of local school committees. A charter school is a public school operated by any group or individual with public funding on the condition that it meets the performance standards and objectives to which it commits in the authorized charter; increased school autonomy and independence from many state regulations are balanced by increased accountability for performance.⁷

The secretary of education first held the authority to authorize charters, and in 1996 the Massachusetts Board of Elementary and Secondary Education (BESE) became the commonwealth's sole charter authorizing body. The board is also charged with determining whether current charter schools have been successful enough to retain their charter when it expires at the end of five years. This model ensures quality control over charter school approval and performance.

As the charter school movement developed, two types of schools emerged. Commonwealth charter schools, free from mandatory teacher union membership, are the model established in the 1993 legislation. Horace Mann charter schools were created in 1997. They are a traditional/charter hybrid and require approval from the local teacher's union and school committee. The Horace Mann charters do not enjoy the same fiscal autonomy, regulatory freedom, or record of success as commonwealth charters.⁸ Each respective type of charter school is capped by statute.

Two charter caps are currently in place. The first is a statewide limit of 120 charter schools: 72 commonwealth charter schools and 48 to Horace Mann schools. The second limits individual district spending on charters to 9 percent of overall spending, but allows districts ranked in the bottom 10 percent on MCAS performance to spend up to 18 percent. While both caps shape when and where charter schools may be

established, the state cap determines the firm end of progress and expansion for this form of school choice in Massachusetts. Since the first charter schools opened their doors in 1995, three pieces of legislation have altered these caps.

Previous Charter Cap Legislation

In 1997, legislation doubled the state charter cap from 25 to 50 schools. This legislation also created Horace Mann charter schools, a reimbursement program for districts that lose students to charter schools (sending districts), and a second cap that limited spending on charter schools in any district to 9 percent of total expenditures. The cap raise designated 13 charters for Horace Mann charter schools and 37 for the original variety, now known as commonwealth charter schools.

To reduce what districts considered the financial impact of a larger charter population, the legislation offered a reimbursement scheme for sending districts. While the language can be misleading, charter school "tuition" payments are merely the redistribution of public funds to allow money to follow the student. Districts argue that the loss of a few children does not reduce costs, but leaves them with less money to provide the same services. No such reimbursements exist when students move out of a district or leave to attend a private school. Through the charter reimbursement program, sending districts would receive 100 percent of the "tuition payment" in the first year, 60 percent for the second and 40 percent in the third.11 Under the reimbursement scheme, taxpayers essentially pay twice because money goes to school districts for students they no longer educate.

The combination of charter school success and public demand caused the cap to be raised again in 2000. The legislation allowed for 72 commonwealth and 48 Horace Mann charter schools to operate, but kept the district spending cap at 9 percent. The cap went untouched for a decade until the Obama administration, led by Secretary of Education Arne Duncan, announced the \$4.3 billion Race to the Top initiative, an effort to incentivize a series of specific education reforms that included charter schools.¹²

The award selection process heavily favored applications with robust charter school systems. In 2010, *An Act Relative to the Achievement Gap* doubled the 1997 limit on district net school spending on charter schools from 9 percent to 18 percent for those districts that scored in the bottom 10 percent on MCAS but left the statewide cap intact. At the time, the commonwealth was already close to hitting the cap, making the legislation a short-term fix. Furthermore, it increased the reimbursement formula, so that sending districts would receive 100 percent in the first year, and 25 percent for the next five years.

As seen in Table 1, the number of commonwealth charter school applications spikes in the years immediately after the cap is raised, and then falls as the number of schools once again approaches the cap. A charter school market with room for growth fosters interest and competition among potential charter school operators. Since 1994, the approval rate for commonwealth charter school applications is highest after the cap is raised. This shows that application quality and interest increase when space is created for new charters.

The two years directly preceding increases in the cap mark the lowest rates of state approval.¹⁵ This could simply be a result of weak applications in these years, but it raises the question of whether, as the chance of success decreases and the number of available seats shrinks, fewer charter providers are willing to go through the rigorous and resource-intensive application process. A second possible explanation is that the authorizing body, the BESE, looks at applications with a more critical eye in those years to delay reaching the cap.

FUTURE LEGISLATION

The last time the cap was raised in 2010 created room for successful charter providers to reach more students. However, it left the statewide cap at 120 schools (72 commonwealth charters and 48 Horace Mann). Once the statewide cap is reached, districts' remaining spending capacity becomes irrelevant, and most districts will be deterred from tapping into this increased spending capacity. Table 2 illustrates the

number of seats remaining under the spending increase that will remain unfilled in all but five of the lowestperforming districts.

House Bill 4091, an *Act Relative to Improving Student Achievement*, which passed the House and as of the time of publication has been referred to the Senate Ways and Means Committee,¹⁷ lifts the cap for the lowest-performing 10 percent of districts¹⁸: "the board may approve an application for an establishment or expansion of a commonwealth charter school that has the effect of increasing the district's total charter tuition payments above 18 percent of the district's net school spending... and provided further that no public school district's total tuition payments to commonwealth charter schools shall exceed 23 per cent of said district's net school spending."¹⁹

It also changes the way underperforming public schools are treated. Of the districts in the lowest 20 percent statewide (known as level 3 and level 4 schools), those considered most likely to continue the downward trajectory towards chronically underperforming (level 5) can be labeled "challenge schools". Only 4 percent of all schools can carry this label at any given time. ²⁰ This designation allows for greater district autonomy in hiring and curriculum. The eligible underperforming school districts educate nearly 30 percent of the state's public school population and 70 percent of their children come from low-income households.

The slow movement of the bill, which was initially presented in January 2013 and surfaced from the education committee some 15 months later, stands in stark contrast to parents' sense of urgency and demand for dramatic education reform. This sentiment mirrors the demands of the Boston community, where education was indicated as the most important issue facing the city and 7 out of 10 residents expressed the desire for "major reforms" or a "complete overhaul" of Boston Public Schools in a poll conducted in April 2013.²¹

An alternative compromise proposal, set forth by Representative Russell Holmes and Senator Sonia Chang-Diaz, Senate chair of the Legislature's Joint Committee on Education, makes the opening of new

TABLE 1. CHANGES IN CHARTER SCHOOL CAPS 16

Application	Commo	o on Inwealth Inters	Operating Commonwealth	Final Commonwealth	Commonwealth Applications	Students in all	Charter School
Cycle Year	# of Schools	% District Spending	Charters	Charter Applications	Approved	Charters	Waiting List
1994				48	15		
1994-1995				36	7		
1995-96*	25		15	0	3	2,613	N/A
1996-97**	25		22	0	0	5,311	N/A
1997-98	37	9%	24	25	8	6,607	N/A
1998-99			32	9	5	9,828	N/A
1999-2000	37 72		37	0	0	12,440	N/A
2000-01			40	16	6	13,712	N/A
2001-02			40	9	5	14,381	N/A
2002-03			43	11	5	15,805	12,959
2003-04			46	5	2	17,869	13,153
2004-05		9%	51	5	1	20,259	14,709
2005-06			54	4	2	21,866	15,823
2006-07			54	4	1	23,500	16,004
2007-08	72		57	4	2	25,034	18,989
2008-09			57	3	1	26,384	21,312
2009-10			58	7	1	27,393	24,066
2010-11			58	20	13	28,422	26,708
2011-12		9%, 18%	63	5	3	30,595	35,942
2012-13		in lowest- performing	69	10	4	31,830	45,176
2013-14		districts	70	6	2	35,631	40,376***

charter schools conditional on the Legislature fully funding charter school reimbursements. In practice, charter school expansion pivots on legislative budget decisions.²² Boston Foundation President and CEO Paul Grogan said this conditional compromise "would allow lawmakers to stop the expansion of charters to plan a responsible course of multiyear growth by simply voting to underfund the reimbursement by a single dollar."23

CHARTER SCHOOL SUPPORT AND PERFORMANCE

PUBLIC SUPPORT AND DEMAND

Waitlists are a powerful indicator of public support. Currently, more than 40,000 students are on charter school waiting lists in Massachusetts, more than half of whom are in the lowest-performing districts.²⁶ In 2013-2014, there were 16,864 students on the waiting list in Boston alone.²⁷ While there have been accusations

^{*}The first charter schools opened in 1995 ** 1996-1997 Cap reached, no application cycle *** Waitlist based on 3/15/13 pre-enrollment report

Bold indicates years cap lift legislation passed

TABLE 2. CURRENT STATUS OF LOWEST-PERFORMING DISTRICTS²⁴

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District	% Proficient or Better (2013 MCAS)	% Failing	Seats remaining under 18% cap ²⁵	Children on Waiting Lists
Adams-Cheshire	46	14	206	6
Athol-Royalston	44	21	370	2
Boston	45	23	885	16,864
Chelsea	41	24	193	395
Chicopee	55	14	1,335	101
Dennis-Yarmouth	55	15	531	132
Easthampton	55	13	269	51
Everett	52	18	883	544
Fall River	42	24	245	389
Fitchburg	46	23	778	7
Gardner	51	17	463	1
Greenfield	55	18	300	22
Hawlemont	40	26	20	0
Holyoke	32	34	158	386
Lawrence	40	26	685	1,942
Lowell	48	20	513	336
Lynn	46	21	1,771	677
Methuen	54	16	1,201	71
New Bedford	40	22	1,249	662
North Adams	50	18	200	0
Orange	46	16	142	2
Randolph	45	22	425	339
Salem	49	20	632	252
Southbridge	35	30	397	1
Spencer-E. Brookfield	55	14	384	7
Springfield	36	30	1,794	3,808
Wareham	53	15	524	69
Webster	42	26	350	11
Winchendon	45	19	233	0
Total 29 Communities			17,138	27,077
Statewide				40,376

that charter school supporters inflate these numbers by counting the same student on multiple school waiting lists, the BESE, at its March 25, 2014 meeting, amended the regulations by abolishing "rolling" waitlists, requiring "schools to keep waitlists for only the school year for which the student applies." With that change, the FY15 waitlist increased to 44,876 unique students.

Despite this demand, there is no room under the current cap for any new charter schools to open in Boston, so students must wait for individual seats to open up. Boston is only one of the urban communities that perform in the bottom 10 percent of Massachusetts school districts that would be affected by the new cap lift legislation. Of those districts affected, five have already hit the district cap, 10 have the capacity to open only one more school, and five have room for just two more.

Polls conducted in 2013 illustrate the immense parental support for charter schools. In a study of 10 Gateway Cities – old, industrial cities outside the Boston area - conducted by the MassINC Polling Group, 64 percent supported lifting the cap to increase the number of charter schools in their communities.²⁹ Parental and community interest and support is evident in the 10 Gateway Cities polled, there are 22 charter schools educating 10,000 students, with 11,000 more students on waiting lists. "The academic track record of existing Gateway charters is exceptional, but the enrollment caps are preventing parents from

choosing where to send their children to school," said Massachusetts Charter Public School Executive Director Marc Kenen.³⁰

In Boston, 73 percent of parents support the charter school movement, with female African Americans overwhelmingly in favor. In a 2013 Education Reform Now poll, three times as many participants indicated that they would prefer to send their child to a charter school than a Boston public school (BPS). Seven out of 10 participants called for "major reforms" and a "complete overhaul" of BPS and 76 percent of participants of color echoed these remarks. Only one in five parents with children under 18 would prefer to send their child to BPS rather than to a charter school. Forty percent of parents had considered moving out of Boston in order to enroll their child in a better public school system.³¹

Recently elected Boston Mayor Marty Walsh even served as a founding board member of Dorchester's Neighborhood House Charter School, signaling another form of popular support.

CHARTER SCHOOL PERFORMANCE

Sustaining the interest of high-quality charter providers is essential to the commonwealth's recent progress in closing the achievement gap and improving student performance. A Stanford CREDO analysis published in August 2013 tracks charter school performance from 2009 to 2013 in 27 states that educate 95 percent of the charter school student population. Nationally, enrollment in a charter school is worth eight additional days of learning. In Massachusetts, the state in which charter students exhibited the most achievement growth, charter school enrollment translates into 36 days of additional learning in reading and 65 additional days in math on the fourth grade National Assessment of Educational Progress (NAEP).32 The study observed that charter school students experience significant improvements after being enrolled for two or more years of enrollment and the rate of improvement increases with every year they remain enrolled. This shows the sustained, positive impact of charter schools.

The charter schools operating within districts that score in the bottom 10 percent on MCAS not only outperform their traditional public school counterparts, they take children from low-performing sending districts and produce results competitive with some of the most affluent and highest-achieving districts in the best-performing state in the nation.³³ Boston charter schools are closing the achievement gap at the fastest pace in the country, much less the state. Students in these schools are learning at twice the rate of their traditional public school peers in both reading and math.³⁴

The state accountability system places schools in levels 1 to 5, 1 being the highest quality, based on student performance on MCAS tests. A level 1 designation indicates the school is making sufficient progress towards closing the achievement gap. Level 3 constitutes the bottom 20 percent of schools; levels 4 and 5 are subsets of level 3. Level 5 indicates a school is in receivership. Four schools are in receivership in the 2013-2014 school year, none of which are charter schools.

Due to the significant difference between placement in the bottom 20 percent and failing to show signs of improvement, Table 3 excludes level 5. As shown in Table 3, 71 percent of Boston's commonwealth charter schools are in the Level 1 classification as of the end of the 2012-2013 school year, compared with only 21 percent of district and Horace Mann charter schools. The ranking system can be deceptive, as levels 4 and 5 are the "chronically underperforming" subsets within level 3; only the bottom 4 percent of schools will be placed in levels 4 and 5.35 Level 5 is a "chronically underperforming school"... not showing signs of substantial improvement over time."36 A better understanding of this ranking system allows one to read Table 1 differently: 67 and 63 percent of Boston and Gateway district and Horace Mann charter schools are performing in the bottom 20 percent of the state, whereas only 7 and 17 percent of the commonwealth charter schools in Boston and Gateway Cities are in the bottom 20 percent. This shows that not only is the difference between public charter and traditional public school performance striking, the gap is significantly

larger when the lens shifts from the state level to urban areas.

A report released in October 2013 by the Massachusetts Institute of Technology's School Effectiveness and Inequality Initiative (SEII) found that each year, charter school student gains are 12 percentage points higher in math and six percentage points higher in English language arts in middle school, and 10 percentage points higher in both subjects in high schools, with the largest gains in all areas observed in minority groups. For Boston charter high school students, the number of students reaching the advanced level in math was 18 percentage points higher, for English language arts it was 12 points.

In 2013, low-income students of all racial backgrounds enrolled in Massachusetts charter schools virtually closed the commonwealth's 20-point low-income achievement gap; they outscored their low-income peers by 17.7 points in English language arts and 18.6 points in math on MCAS. Compared to sending districts, the academic achievement of urban charter public schools is even more striking. In Boston, all six charter high schools ranked among the top-10 non-exam high

schools in the city, eight charter middle schools were in the top-10 non-exam schools, and overall, charter school students scored higher in MCAS proficiency by 23 points in English language arts, 27 points in math, and 33 points in science compared with their BPS peers.³⁹

Charter public schools have been a vital part of the revitalization in the city of Lawrence, where the schools are currently in receivership. The charter networks Community Day and Lawrence Family Development ranked first and second in the district for every grade in math and English language arts, outperforming the district average in proficiency scores by 38 percentage points in English, 41 percentage points in math, and 41 percentage points in science.⁴⁰

Furthermore, the charter movement is being strengthened by more effective new schools. Newly opened charter schools have student bodies that are more demographically similar to their sending districts. In Boston, charters serve a student population that is 8 percent English language learners (compared with 31 percent in BPS), 14 percent special needs (compared with 19 percent in BPS), and almost identical in terms

TABLE 3. STATEWIDE COMPARISON OF SCHOOL PERFORMANCE BASED ON 2012- 2013 RESULTS⁴²

	Number and Percentage of Schools in Level 1	Number and Percentage of Schools in Levels 3 or 4
Statewide		
Commonwealth Charter Schools	61% (33/54)	7% (4/54)
District Schools and Horace Mann	30% (467/1560)	21% (334/1560)
Boston		
Commonwealth Charter Schools	71% (10 of 14)	7% (1 of 14)
District Schools and HMCS	21% (22 of 104)	67% (70 of 104)
Gateway Cities		
Commonwealth Charter Schools	61% (11 of 18)	17% (3 of 18)
District Schools and HMCS	16% (42 of 263)	63% (166 of 263)

of low-income and high-needs students. The six newest charter schools educate a student population comprised of 25 percent English language learners. Despite claims by charter school critics that charters "cherry pick" their students, charter schools are minimizing these differences and producing high achievement with very similar demographics. Given these similarities, many new Boston charters scored above the state average in the 2013 MCAS. These results occurred in schools that opened or expanded after the 2010 legislation that doubled the percentage of school spending on charter schools in the lowest-performing 10 percent of districts. 41

CHARTER SCHOOL FUNDING

CHARTER SCHOOL FUNDING AND THE IMPACT OF EXPANDED ENROLLMENT

Charter schools are not funded in the same way as traditional public schools. When a student leaves a district school to attend a charter school, the dollars follow the student. The student's home district effectively pays the charter school "tuition" to fund the child's education. At the same time, the sending district may receive temporary state reimbursement for some or all of the cost of the tuition. Funding is governed primarily by Chapter 71 of Massachusetts General Laws (MGL), which sets out the formula for calculating charter school tuition and how the tuition burden is shared between the local district and the commonwealth.

CHARTER SCHOOL TUITION

MGL Chapter 71 states that "Tuition amounts for each sending district shall be calculated ... to reflect, as much as practicable, the actual per-pupil spending amount that would be expended in the district if the students attended the district schools." The per-pupil tuition is based primarily on the district's net school spending (NSS) per pupil, with some adjustments. The adjustments include:

- 1) Removing spending on out-of-district special education placements
- 2) Removing retired teachers' health insurance (in districts where NSS includes this amount)

- 3) An adjustment for whether students are in elementary, middle, or high school
- 4) An increase for students categorized as English language learners or low-income
- 5) Adding in a facilities payment (\$893 per pupil in FY14)

The rationale for the first two adjustments (removing out-of-district special education costs and retired teachers' health insurance costs) is that charter schools do not face these expenses. The next two adjustments (grade level and English proficiency) reflect differences in the foundation budget for different groups of students that are meant to account for the higher costs of educating some students. For example, the foundation budget is approximately 5 percent higher for elementary students than it is for middle school students and an additional 15 percent higher for high school students.

The last factor, the facilities payment, is included because districts' net school spending does not include the cost of building schools. In regular school districts, the municipalities pay for school construction and the state covers a portion of the cost through the Massachusetts School Building Authority (MSBA). Charter schools are ineligible for MSBA financing, and for the most part they lease space. The commonwealth pays the facilities portion of tuition.

Charter school tuition is significantly lower than overall per-pupil spending, but in general the districts that spend more on their local schools are required to pay higher tuition to charter schools. Because tuition is based on local spending and not on the cost to operate a charter school, districts that send students to the same charter school pay different tuition.

The tuition rate is first estimated in the summer and applied to the projected enrollment, with charter schools receiving their first quarterly payment at the end of September. Over the following months, both the tuition calculation and enrollment are updated, and payments during the remainder of the year reflect the updated figures.

The average charter school tuition in FY2014 was \$12,660 per student, or \$11,771 excluding facilities payments. There was also huge variation among sending districts. Among districts sending more than 10 students to charter schools, tuition ranged from \$9,500 in Haverhill to \$26,400 in Cambridge. The primary reason tuition varies so much is that sending school district spending varies tremendously. Haverhill's net school spending in 2013 was roughly \$10,000 per student, while in Cambridge it was more than \$25,000.

These tuition payments are simply the transfer of the district per-pupil allocation from one public school to another; thus, charter schools have virtually no impact on spending per-pupil district spending. The expense arises out of the reimbursement structure, whereby district schools received funding to educate students whose parents chose to enroll them in another school.

The reimbursement formula can be illustrated with a numerical example.⁴⁵ Table 4 illustrates how charter school enrollment causing an initial \$100,000 increase in tuition would affect reimbursement. When enrollment first increases and tuition goes up, the 100 percent reimbursement formula shifts the burden away from the district. Initially the district serves fewer students, but there is no net cost to the district so on a

per-pupil basis, district spending would increase. For the next five years the district receives 25 percent of the initial increase, as well as any additional increase in tuition. As enrollment stabilizes and annual tuition increases level off, reimbursements drop and the district assumes a larger share of the cost. If charter enrollment were to increase again, as illustrated in year eight, the reimbursement would similarly increase.

This hypothetical example arguably overstates the financial impact of charter schools on local districts. While tuition and the reimbursement represent the direct costs and subsidies, the state school aid formula ("Chapter 70") also provides aid to districts. The interaction between state aid, tuition, and the reimbursement formula is quite complex and depends on several factors. The impact is discussed in detail in "Follow the Money: Charter School and District Funding in Massachusetts," published by Pioneer Institute. 46

RECENT SHORTFALLS IN REIMBURSEMENT FUNDING

The 2010 legislation reduces the amount of reimbursement in years two and three following a tuition increase but extends reimbursement for a longer period. However in both FY13 and FY14, the commonwealth did not fully fund tuition reimbursement. Last year the initial shortfall was

TABLE 4	. EXAMPLE OF	TUITION REIMBUR	SEMENT FORMULA
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				Reimbursement Tiers					0:-1	% of
Year	Tuition	Increase	100	25	25	25	25	25	Aid	Tuition Offset
1	100,000	100,000	100,000	-	-	-	-	-	100,000	100%
2	105,000	5,000	5,000	25,000	-	-	-	-	30,000	29%
3	111,000	6,000	6,000	1,250	25,000	-	-	-	32,250	29%
4	115,000	4,000	4,000	1,500	1,250	25,000	-	-	31,750	28%
5	118,000	3,000	3,000	1,000	1,500	1,250	25,000	-	31,750	27%
6	121,000	3,000	3,000	750	1,000	1,500	1,250	25,000	32,500	27%
7	122,000	1,000	1,000	750	750	1,000	1,500	1,250	6,250	5%
8	222,000	100,000	100,000	250	750	750	1,000	1,500	104,250	47%
9	227,000	5,000	5,000	25,000	250	750	750	1,000	32,750	14%
10	233,000	6,000	6,000	1,250	25,000	250	750	750	34,000	15%

approximately \$10 million, although a supplemental appropriation filled most of the gap. In 2014, DESE projected that total tuition would be approximately \$405 million, and that the reimbursement for this tuition would be 25 percent of the total or \$103 million. The FY14 state budget provided \$75 million, \$28 million short of the statutory requirement. The state fully funded the facilities reimbursement, but only 62 percent of the per-pupil tuition reimbursement. In response, the Legislature approved a supplemental budget fully funding reimbursements. But, this supplement is a one-time boost, leaving future charter school reimbursement funding in question.

CHARTER SCHOOL FINANCIAL IMPACT

CURRENT FINANCIAL IMPACT OF CHARTER SCHOOLS ON SELECTED URBAN DISTRICTS

Approximately 35,000 students attend charter schools in Massachusetts. As stated previously, the total tuition payments are approximately \$405 million, and tuition reimbursement in FY14 totaled \$75 million - less than two percent of total state spending on education.

As noted earlier, Chapter 71 limits the number of charter schools and students in three ways. There is a statewide cap on the number of charter schools – 120 total including 48 Horace Mann charters. There is also a cap on tuition payments from any individual district. The tuition cap is set at 9 percent of net school spending for most districts, but the 2010 reform raised the limit to 18 percent in the lowest- performing districts. Finally, no new charters can be opened in communities with populations below 30,000. Any of the caps can limit enrollment; for example, even if a district is not near the 9 or 18 percent cap, the overall cap on charter schools could prevent new charters from opening.

Table 5 lists the 17 lowest-performing urban districts in Massachusetts that are subject to the 18 percent cap. They serve 210,000 students, or about 22 percent of all state public school students. Charter schools are already concentrated in these districts – while

the districts enroll 22 percent of state public school students, 57 percent of all charter students in the state come from these districts. Overall the districts send 8.4 percent of their students to charter schools (compared to 3.4 percent of students statewide), with a low of 0.5 percent in Methuen and a high of 12 percent in Boston. Charter enrollment among students from these districts has also been growing rapidly – it has almost doubled since 2005 – but none of them has reached the recently raised statutory cap. The pending legislation would allow these districts to serve the maximum number of students under the spending limit.

Because these districts send so many students to charter schools, charters already have a heavy impact on their finances. DESE projects that their 2014 charter tuition would be more than \$214 million

TABLE 5. SUMMARY DATA FOR LOW PERFORMING URBAN DISTRICTS

District	FY05 Charter Enrollment	FY14 Charter Enrollment	Change in Enrollment	% of Students at Charters
Boston	4,434	7,645	3,211	12.3%
Chelsea	80	446	366	7.0%
Chicopee	20	133	113	1.7%
Everett	276	482	206	7.0%
Fall River	658	761	103	6.3%
Fitchburg	177	181	4	3.1%
Gardner	15	17	2	0.6%
Greenfield	58	114	56	5.3%
Holyoke	15	734	719	11.1%
Lawrence	833	1,265	432	8.3%
Lowell	735	1,197	462	7.4%
Lynn	108	895	787	6.0%
Methuen	7	40	33	0.5%
New Bedford	2	694	692	4.7%
North Adams	37	80	43	4.8%
Salem	122	324	202	6.6%
Springfield	1,582	2,623	1,041	9.2%
TOTAL	9,159	17,631	8,472	8.4%

(including facilities tuition which is fully reimbursed by the state). As Table 6 shows, the total reimbursement due varies from 14 percent in Haverhill to 39 percent in Lowell (where enrollment and tuition have been growing rapidly in the past few years). Overall, these districts should receive reimbursement of \$62 million or 27 percent of total tuition, almost the same as the 25 percent figure for the entire state.

TABLE 6. TUITION AND REIMBURSEMENT, FY14

District	FY14 Charter Tuition	Reimbursement Due, \$	Reimbursement Due, %
Boston	108,661,809	31,385,689	29%
Chelsea	5,506,894	1,968,855	36%
Chicopee	1,497,817	375,359	25%
Everett	5,548,927	979,246	18%
Fall River	8,354,254	1,459,177	17%
Fitchburg	2,169,034	348,578	16%
Gardner	185,179	42,420	23%
Greenfield	1,397,197	213,684	15%
Holyoke	9,497,028	2,641,073	28%
Lawrence	15,955,246	3,320,601	21%
Lowell	14,718,773	5,723,117	39%
Lynn	10,802,722	4,115,511	38%
Methuen	467,741	83,975	18%
New Bedford	8,247,358	1,974,522	24%
North Adams	1,105,600	197,929	18%
Salem	4,025,744	1,023,823	25%
Springfield	30,139,019	6,635,654	22%
TOTAL	228,280,342	62,489,213	27%

FINANCIAL IMPACT OF INCREASED CHARTER SCHOOL ENROLLMENT

The financial impact of increased charter school enrollment on local districts and the commonwealth depends on several factors. One determinant is the way the current cap would be raised. Because Massachusetts has three separate caps – the number and location of

charter schools as well as the limit on tuition payments from any district – different attempts to raise the caps could have different impacts. Regardless of how the caps were weakened or eliminated, the financial impact of increased enrollment would depend primarily on where new charter schools open and from which districts new charter students come. Neither of these factors can be predicted with certainty.

As Table 7 illustrates, the districts listed previously already have room for enrollment to grow under current law – i.e. their tuition is less than the 18 percent limit. However, the statewide charter cap on charter schools could still be limiting enrollment growth in these districts if there are no seats available for students in existing charter schools. Some of these districts also have significant waitlists to attend the charters already operating. If new charter schools opened in these districts, enrollment would presumably grow relatively quickly. Other districts have small or nonexistent waiting lists. Those districts have less pent-up demand for spots, implying that raising the cap may have less immediate impact on charter school enrollment.

COVERING THE WAITLIST WITHOUT EXCEEDING THE 18% CAP

One way to explore the impact of raising the cap is to ask what would happen in these urban districts if enough new schools opened - or existing ones expanded - to satisfy the demand indicated by the waiting list, up to a maximum of the existing 18 percent cap. In other words, this indicates the impact of relaxing the statewide cap on the number of charter schools but not changing the existing cap on districts. In some districts relaxing the statewide cap would not be necessary because existing charter schools could accommodate the increased enrollment.

Table 7 illustrates the total change in tuition if the cap on schools were relaxed enough so that each of the districts was able to send more students to charter schools up to the existing limit of 18 percent or to satisfy their waitlist, whichever figure is lower. The middle column of the table shows the difference between current charter enrollment and enrollment

TABLE 7. IMPACT OF ENROLLMENT GROWTH TO 18 PERCENT OR WAITLIST

District	FY14 Charter Enrollment	Enrollment Below 18% Cap	Waitlist	Impact on Tuition of Filling Waitlist (up to 18%)
Boston	7,645	3,608	16,864	52,028,990
Chelsea	446	738	395	4,546,966
Chicopee	133	1,390	101	1,043,615
Everett	482	938	544	5,755,125
Fall River	761	1,465	389	3,881,053
Fitchburg	181	805	7	77,084
Gardner	17	459	1	9,969
Greenfield	114	304	22	237,138
Holyoke	734	507	386	4,353,148
Lawrence	1,265	1,346	1,942	16,313,179
Lowell	1,197	1,474	336	3,770,972
Lynn	895	1,943	677	7,492,069
Methuen	40	1,222	71	737,885
New Bedford	694	1,679	662	7,023,201
North Adams	80	181	0	0
Salem	324	678	252	3,070,817
Springfield	2,623	3,090	3,808	32,038,123
TOTAL	17,631	21,828	26,457	140,538,899

at the 18 percent cap, while the 4th column shows the waitlist. In Boston satisfying the waitlist would push enrollment up to the cap, so the last column indicates the additional tuition of expansion up to the cap. Meanwhile Chicopee currently sends 133 students to charter schools. However, there are only 101 students on the waiting list in Chicopee so there is not enough demand to fill an expansion to the 18 percent limit. For Chicopee the last column of the table indicates the extra tuition if those 101 students were allowed to attend charter schools.

The eventual impact on tuition of satisfying the waitlist in these districts (without exceeding the 18 percent cap) would be \$141 million. While this is a substantial amount of money, there are different ways to put it into context and understand what it represents. Total net school spending in these districts is over \$2.5 billion,

meaning that the additional tuition is approximately 5 percent of net school spending (actual spending is greater than net school spending, so the percentage would be slightly smaller). Looked at another way, the \$141 million would be a 62 percent increase over existing tuition payments of \$230 million per year.

The \$141 million in tuition represents the long-term impact of a very large increase in charter school enrollment –almost 12,000 students. This impact would be partially and temporarily offset by increased reimbursement. The reimbursement would depend on the timing of the expansion. For example, if the expansion were spread over five years, a \$5 million tuition increase (similar to the impact in Chelsea) would have the impact illustrated below in Table 8. For a \$1 million annual tuition increase for five consecutive years, the net annual cost begins at zero

and then grows by \$0.75 million per year for five years, after which growth slows. Because the reimbursement lasts for five years, the full cost would not be felt at the district until six years after enrollment stopped growing – in this example that occurs 11 years in the future. Over 10 years, the state would cover 28 percent of the total cost of tuition payments.

As Table 8 illustrates, the impact of an increase in tuition on local districts is delayed by the reimbursement formula. This means that the \$141 million increase discussed above would be spread over many years. If enrollment growth were spread over more than five years, which is extremely likely with such a large expansion, the impact on local budgets would be further delayed. In other words, while the long-term impact would be about 5 percent of school spending, it would probably be phased in slowly.

The reimbursement included in Table 8 also illustrates the delayed impact of expanded charter school enrollment on the state budget. If the enrollment growth in Table 7 were spread over five years, the state would provide \$317 million in total reimbursements over 10 years (an average of \$32 million more per year),

TABLE 8. NET IMPACT OF \$5 MILLION INCREASE IN TUITION OVER 5 YEARS⁴⁷

Year	Tuition	Reimbursement	Net Cost
1	1,000,000	1,000,000	0
2	2,000,000	1,250,000	750,000
3	3,000,000	1,500,000	1,500,000
4	4,000,000	1,750,000	2,250,000
5	5,000,000	2,000,000	3,000,000
6	5,000,000	1,250,000	3,750,000
7	5,000,000	1,000,000	4,000,000
8	5,000,000	750,000	4,250,000
9	5,000,000	500,000	4,500,000
10	5,000,000	250,000	4,750,000
11	5,000,000	0	5,000,000

enough to cover 28 percent of the total cost. To put these numbers in perspective, Chapter 46 currently calls for \$103 million in annual reimbursement payments.

Because Table 7 focused on satisfying the waitlist, the biggest impact of expanding charter school enrollment would be in districts with a large waitlist. For example, Springfield has almost 4,000 students on waiting lists and room for 3,090 under the 18 percent cap, so the potential increase in tuition is very large. On the other hand, districts with short waitlists would not see a large tuition increase under this scenario – Gardner has a waitlist of just one student.

Raising Enrollment to the 18 percent Cap

The waitlist probably understates the potential expansion if caps were relaxed because demand for charter schools grows over time. In 2002, 46 charter schools served 16,000 students, and 13,000 students were on waitlists. Ten years later there were 81 charter schools serving 35,000 students, but the waitlist has grown to more than 40,000. The creation of new charter schools would probably stimulate additional demand, either because the new charter schools are in convenient locations or because the new schools generate interest. If demand continues to grow, the net impact in many districts would be greater than indicated in Table 7.

Table 9 shows the impact on tuition of raising enrollment all the way to the 18 percent cap regardless of whether the current waiting list indicates demand for that many seats. The impact in some districts is the same as that shown in Table 7 – this happens if the current waitlist would be enough to push a district up to 18 percent. In the districts with shorter waiting lists, assuming there is enough demand, expanding enrollment up to the 18 percent cap would lead to much larger impacts. The overall tuition increase is roughly \$250 million or 10 percent of net school spending, as charter enrollment expands by 22,000.

The ultimate impact of rising charter school enrollment is probably somewhere between the figures in Table 7 and Table 9. Some districts would see increases in

TABLE 9. IMPACT OF ENROLLMENT GROWTH TO CAP OF 18 PERCENT

District	Increase in Tuition, \$	Increase in Tuition, % of NSS
Boston	50,378,199.53	6.4%
Chelsea	8,494,984	11.9%
Chicopee	14,367,746	16.2%
Everett	9,918,694	12.7%
Fall River	14,614,808	11.6%
Fitchburg	8,865,953	15.6%
Gardner	4,578,417	18.9%
Greenfield	3,280,102	15.1%
Holyoke	5,722,674	7.2%
Lawrence	15,468,181	9.8%
Lowell	16,547,450	11.0%
Lynn	21,497,200	13.0%
Methuen	12,699,002	17.4%
New Bedford	17,810,031	12.6%
North Adams	2,232,190	12.8%
Salem	8,266,428	14.8%
Springfield	32,693,478	9.7%
TOTAL	247,435,537	10.1%

demand that would fill seats, while others would not. Local districts would pay between \$140 million and \$250 million in additional tuition annually. In the initial years the state would reimburse a large portion of the increase; as explained above the reimbursement formula would spread the impact over many years. Raising the cap in these districts would allow tens of thousands of students to access the high-quality education charter schools provide.

EXPANSION IN URBAN AREAS

The discussion above estimates the total long-term impact if charters opened in every urban district. However, the effect of a cap increase would likely be focused in urban areas that already have a strong group of charter schools and unmet demand for seats. While it is impossible to determine where new charter schools would be approved, we can examine a plausible scenario

TABLE 10. IMPACT ON TUITION PAYMENTS AND REIMBURSEMENT, BOSTON, LAWRENCE, AND SPRINGFIELD

SPRINGFIELD				
	FY15	FY20	FY25	
	Enrollment			
Boston	950	4,750	4,750	
Lawrence	220	1,100	1,100	
Springfield	430	2,150	2,150	
		Tuition		
Boston	13,500,000	74,700,000	82,500,000	
Lawrence	2,600,000	14,200,000	15,700,000	
Springfield	4,600,000	25,600,000	28,300,000	
	Reimbursement			
Boston	13,500,000	19,800,000	3,500,000	
Lawrence	2,600,000	3,800,000	700,000	
Springfield	4,600,000	6,800,000	1,200,000	
	Net Cost			
Boston	0	54,900,000	79,000,000	
Lawrence	0	10,400,000	15,000,000	
Springfield	0	18,800,000	27,100,000	

in which 20 new charter schools open in Boston, Lawrence and Springfield within five years after the cap is increased or lifted. Although raising or lifting the cap would most likely lead to new charter schools outside just these three cities, many new schools could be concentrated in these areas and they could feel the largest impact. This example therefore illustrates the portion of the potential impact of a larger cap increase that would be focused in these areas.

The three cities currently serve about 11,500 charter school students – more than half the students in the urban areas described above and almost one-third of all charter students statewide. At the same time, there are 22,600 students on waiting lists in these districts, representing more than half of all waitlisted students in Massachusetts. Opening 20 new charters in these cities would represent reasonable but rapid expansion – since 2000 an average of 2.5 new charter schools have opened each year, with a maximum of six new schools in any one year (Table 1).⁴⁸

Table 10 illustrates the impact of 20 new charter schools, each serving 400 students, opening in Boston, Lawrence, and Springfield in 2015. By 2020, this would lead to 4,750 new charter students in Boston, 1,100 in Lawrence, and 2,150 in Springfield, resulting in increases in tuition payments of \$14 million in Lawrence, \$28 million in Springfield, and \$75 million in Boston. Eight thousand new students would represent a 70 percent increase in the number of charter students in these districts, but the expansion would not satisfy the waitlist in any of them.

As the new schools open and grow, reimbursement temporarily shifts the cost to the commonwealth – 2015 costs would be fully reimbursed. But over time, local districts would assume a greater share of tuition costs. This example illustrates a large expansion in charter enrollment and therefore in tuition. However, despite increasing tuition payments, per-pupil spending in the sending districts would remain roughly the same because those districts would be educating fewer students. To put the tuition in perspective, the increase would represent about 7 percent of net school spending in each district.

Conclusion

Charter schools offer parents public school choice and they have had remarkable success at improving student achievement and bridging achievement gaps. However, caps on the number of Massachusetts charter schools currently limit this choice.

The charter school caps have been raised in the past, and pending legislation proposes to raise them again in low-performing districts. If this legislation were to pass, it seems likely that the number and quality of new charter applications would rise significantly. Ultimately, many new charter schools would be approved, leading thousands more students to enroll in them.

In some districts the shift would probably happen rapidly; long waitlists indicate pent-up charter school demand. In other districts current waitlists are short and new charters might be slower to open. However, based on the commonwealth's previous experience, opening new charters could stimulate even greater increases in demand from parents and families.

As students move to charter schools, hundreds of millions of dollars of local funding would follow them. The reimbursement formula would also lead to increased state funding and would give school districts several years to adjust to the higher tuition payments and lower enrollment. While discussions about charter schools often focus on the financial impact of increased enrollment, the most important consideration is that higher caps could provide almost 30,000 students the opportunity to transfer out of low-performing traditional public schools and attend some of the best charter schools in the country.

About the Authors

Katherine Apfelbaum is Pioneer's Peters Fellow in Education, and she is conducting the Institute's research initiatives on the financial impact of charter schools and school choice programs in Massachusetts. She earned a master's degree in comparative social policy at the University of Oxford in 2013, writing a thesis on the unintended segregation effects of priority education in Paris and New York City. Prior to that, she worked with the Foundation for Education Reform and Accountability in Albany, New York, on charter school and parent trigger research. She is a graduate of Trinity College, where she majored in education studies and minored in philosophy. In her free time, Kate coaches for the Boston University rowing team.

Ken Ardon received a Ph.D. in economics from the University of California at Santa Barbara in 1999, where he co-authored a book on school spending and student achievement. He taught economics at Pomona College before moving to Massachusetts, and from 2000 to 2004, Dr. Ardon worked for the Commonwealth of Massachusetts in the Executive Office of Administration and Finance. Since 2004, he has been an assistant professor of economics at Salem State University. Dr. Ardon is a member of Pioneer Institute's Center for School Reform Advisory Board.

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Endnotes

- 1. Constitution of the Commonwealth of Massachusetts Article 18, section 2
- 2. Massachusetts Charter Public School Association "Charter School Successes on 2013 MCAS" Press Release
- 3. Cremata, E. et al., "National Charter School Study 2013" Center for Research on Education Outcomes (Stanford University, Stanford, CA, 2013)

 Available from: http://grade.etenford.edu/decuments/NCSS%202013%20Fine1%20Dreft.pdf
 - Available from: http://credo.stanford.edu/documents/NCSS%202013%20Final%20Draft.pdf.
- 4. Adulkadiroglu, A. et al., "Informing the Debate: Comparing Boston's Charter, Pilot, and Traditional Schools." *The Boston Foundation* (January 2009.)
- 5. Massachusetts Department of Elementary and Secondary Education "General Information" Oct. 1, 2013 http://profiles.doe.mass.edu/profiles/general.aspx?topNavId=1&orgcode=00000000&orgtypecode=0&
- 6. Massachusetts General Laws, Chapter 71. See also: Massachusetts Department of Elementary and Secondary Education "Education Reform: First Annual Implementation Report," May 15, 1995. http://www.doe.mass.edu/edreform/1st_Imp/EXEC.SUMMARY.html.
- 7. Massachusetts Department of Elementary and Secondary Education "Profiles Help- About the Data: Organization Characteristics" http://profiles.doe.mass.edu/help/data.aspx?orgtype=public
- 8. Massachusetts Department of Elementary and Secondary Education "Profiles Help- About the Data: Organization Characteristics" http://profiles.doe.mass.edu/help/data.aspx?orgtype=public
- 9. Massachusetts Department of Elementary and Secondary Education, April 1, 1998, "Reimbursement of Charter School Tuition," See also: Massachusetts General Laws, Chapter 71, section 89.
- 10. Massachusetts General Laws, Chapter 71, section 89. See also: Zernike, Kate, "Panel backs adding of charter schools; Bill allows changes at existing schools," *The Boston Globe*, June 25, 1997.
- 11. Massachusetts General Laws, Chapter 71, section 89.
- 12. U.S. Department of Education Press Release June 8, 2009. "States Open to Charters Start Fast in Race to top. "States that do not have public charter laws or put artificial caps on the growth of charter schools will jeopardize their applications under the Race to the Top Fund," Secretary Duncan said. "To be clear, this administration is not looking to open unregulated and unaccountable schools. We want real autonomy for charters combined with a rigorous authorization process and high performance standards."
- 13. Massachusetts General Laws Chapter 12, section 1 https://malegislature.gov/Laws/SessionLaws/Acts/2010/Chapter12
- 14. Massachusetts Department of Elementary and Secondary Education "Understanding District Aid for Commonwealth Charter School Tuition" http://www.doe.mass.edu/charter/finance/tuition/Reimbursements.html Oct., 2013.
- 15. The Commonwealth of Massachusetts Department of Elementary and Secondary Education Massachusetts Charter Schools Fact Sheet. Last updated on 8/30/13.
- The Commonwealth of Massachusetts Department of Elementary and Secondary Education Massachusetts Charter Schools Fact Sheet. Last updated on 2/28/14

- 17. 188th General Court of the Commonwealth: Bill H.4108 An Act relative to improving student achievement https://malegislature.gov/Bills/188/House/H4108/History
- 18. Katzen, Bob, "House Sends Charter Bill to Senate" Sentinel and Enterprise, May 26, 2014.
- 19. Section 33, House bill no. 4108 https://malegislature.gov/Bills/BillHtml/136795?generalCourtId=11
- 20. Sect. 1(a) House bill no. 4108 https://malegislature.gov/Bills/BillHtml/136795?generalCourtId=11
- 21. Kerr, Liam, "Poll Finds Public Support for BPS reform, Charter Schools." The Bay State Banner, April 18, 2013.
- 22. Petroni, S. House Passes Supplementary Budget; Funds Chart School Reimbursement 7 May, 2014 http://framingham.patch.com/groups/politics-and-elections/p/house-passes-supplementary-budget-funds-charter-school-reimbursement-program
- 23. Vaznis, James "Proposal to End Charter Deadlock in Beacon Hill Raises Doubts" The Boston Globe, 22 Mar, 2014.
- 24. This paper calculates the cost and demand of charter schools based on the 2012-2013 achievement rankings and the 2012-2013 waitlists released by the Massachusetts DESE.
- 25. Calculated based on FY14 NSS and tuition data accessed on July 1, 2014 at http://www.doe.mass.edu/charter/enrollment/fy14NSScaps.xlsx.
- 26. This calculation adjusts for students who are on multiple lists. Therefore, this is not a count of waiting list spots, but rather the number of students on at least one waiting list. Massachusetts Department of Elementary and Secondary Education, "Massachusetts Charter Schools: Pre-Enrollment and Waitlist Data"

 http://www.doe.mass.edu/charter/enrollment/ Updated June 5, 2014.
- 27. Massachusetts Department of Elementary and Secondary Education, "Massachusetts Charter Schools: Pre-Enrollment and Waitlist Data" http://www.doe.mass.edu/charter/enrollment/ Updated June 5, 2014.
- 28. Massachusetts Department of Elementary and Secondary Education. "Updates for Charter Schools from ESE" http://www.doe.mass.edu/news/news.aspx?id=10190 28 April, 2014. "Education Laws and Regulations" 603 CMR 1.00 http://www.doe.mass.edu/lawsregs/603cmr1.html?section=all 1 April, 2014.
- 29. MCPSA, "New Poll Shows Strong Support to Lift Charter Caps in Gateway Cities." *Massachusetts Charter Public School Association* 2 May, 2013. Available from: http://www.masscharterschools.org/media/news/new-poll-shows-strong-support-lift-charter-caps-gateway-cities.
- 30. MCPSA, "New Poll Shows Strong Support to Lift Charter Caps in Gateway Cities." *Massachusetts Charter Public School Association* 2 May, 2013. Available from: http://www.masscharterschools.org/media/news/new-poll-shows-strong-support-lift-charter-caps-gateway-cities.
- 31. Kerr, Liam. "Poll Finds Public Support for BPS reform, Charter Schools." The Bay State Banner, April 18, 2013.
- 32. Cremata, E. et al. (2013) National Charter School Study 2013, Center for Research on Education Outcomes. Stanford University, Stanford, CA. Available from: http://credo.stanford.edu/documents/NCSS%202013%20Final%20Draft.pdf.
- 33. Massachusetts Department of Elementary and Secondary Education Press Release "Massachusetts 4th and 8th Graders Lead the Nation in Reading and Mathematics Performance for the Fifth Consecutive Time." http://www.doe.mass.edu/news/news.aspx?id=7846-11/7/13

- 34. Cremata, E. et al. (2013) National Charter School Study 2013, Center for Research on Education Outcomes. Stanford University, Stanford, CA. Available from: http://credo.stanford.edu/documents/NCSS%202013%20Final%20Draft.pdf.
- 35. Information on methodology for placing schools in levels taken from: Massachusetts Department of Elementary and Secondary Education, "Methodology for Identifying Level 3 Schools, Level 3 "Focus Schools", and Level 4 Schools." Last updated 10/2/2012. Available from: http://www.doe.mass.edu/apa/ayp/2012/L3-4Methodology.pdf
- 36. Massachusetts Department of Elementary and Secondary Education, "Frequently Asked Questions: Level 5 Schools." Last updated 10/30/13. Available from: http://www.doe.mass.edu/apa/sss/turnaround/level5/FAQ-Level5.html
- 37. Cohedes, et al. "Charter School Demand and Effectiveness: A Boston Update." Prepared for the Boston Foundation and NewSchools Venture Fund. October 2013

 Available at: http://seii.mit.edu/wp-content/uploads/2013/10/Charter-School-Demand-and-Effectiveness.pdf
- 38. Cohedes, et al. "Charter School Demand and Effectiveness: A Boston Update." Prepared for the Boston Foundation and NewSchools Venture Fund. October 2013

 Available at: http://seii.mit.edu/wp-content/uploads/2013/10/Charter-School-Demand-and-Effectiveness.pdf
- Massachusetts Charter Public School Association "Charter Public School Successes on 2013 MCAS" http://www.masscharterschools.org/academic-performance
- 40. Massachusetts Charter Public School Association "Charter Public School Successes on 2013 MCAS" http://www.masscharterschools.org/academic-performance
- 41. Vaznis, James "New Boston charter schools yield high MCAS scores" The Boston Globe, Sept. 22, 2013
- 42. Massachusetts Charter Public School Association 'Charter Public School Successes on 2013 MCAS" http://www.masscharterschools.org/academic-performance
- 43. MGL Chapter 71, section 89, paragraph nn, http://www.mass.gov/legis/laws/mgl/71-89.htm
- 44. For a complete explanation see http://www.doe.mass.edu/charter/finance/tuition/Reimbursements.html. Net School Spending excludes spending from grants or revolving funds, presumably because charter schools have access to those sources of funding on their own.
- 45. Adapted from example at http://www.doe.mass.edu/charter/finance/tuition/Reimbursements.html
- 46. http://pioneerinstitute.org/education/charter-school-and-district-funding-follow-the-money/
- 47. This table ignores inflation or increases in tuition due to increases in net school spending in the sending district.
- 48. The expansion discussed in this section could also be accommodated by enrolling more students at existing charter schools.
- 49. This table assumes 2% annual inflation. The effect of inflation on the tuition for the new students explains why the additional tuition continues to grow after 2020.

