FISCAL IMPACTS OF CHARTER SCHOOLS:

LESSONS FROM NEW YORK¹

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Abstract

Given the budgetary strain that school districts have been facing in recent years and the impetus to increase the number of charter schools, concerns about the fiscal impacts of charter schools are more salient than ever. However, very little research has addressed this issue. Using the city school districts of Albany and Buffalo in New York, this brief addresses this gap in the literature by demonstrating how fiscal impacts on local school districts can be estimated and offering a way to conceptualize fiscal impacts that is useful for framing charter school policy objectives. We find that charter schools have had negative fiscal impacts on these two school districts, and argue that there are two reasons for these impacts. First, operating two systems of public schools under separate governance arrangements can create excess costs. Second, charter school financing policies can distribute resources to or away from districts. We argue that charter schools and ensure that the burden of any unavoidable excess costs is equitably distributed across traditional public schools, charter schools, and the state. We offer concrete policy recommendations that may help to achieve these objectives.

INTRODUCTION

Charter schools have been a rapidly growing part of U.S. education for two decades, and the U.S. Department of Education's Race to the Top initiative is likely to spur continued growth. Since the birth of charter schools, concerns have been raised that they would drain resources from traditional public schools (Molnar, 1996; Arsen, Plank, & Sykes, 1999). Given the budgetary strain that school districts have been facing in recent years and the impetus to increase the number of charter schools, concerns about the fiscal impacts of charter schools are more salient than ever.

Charter school policy debates often mention potential negative fiscal impacts on local public schools, but relatively little research has focused on this issue. A search of the ERIC, EconLit and RePEc databases found just one peer review study that provides measures of the fiscal impact of charter schools.² This brief is intended to address this gap in the literature by demonstrating how fiscal impacts can be estimated and offering a way to conceptualize fiscal impacts that is useful for framing charter school policy objectives.

Charter school programs can have negative fiscal impacts on local school districts for two reasons. One reason is that operating two systems of public schools under separate governance arrangements can create excess costs. A second reason is that charter school financing policies can distribute resources to or away from districts. We argue that charter schools policies should seek to minimize any avoidable excess costs created by charter schools and ensure that the burden of any unavoidable excess costs is equitably distributed across traditional public schools, charter schools, and the state.

² Arsen and Ni (2012) find that higher levels of charter school enrollments in Michigan school districts are strongly associated with declining fund balances, and that revenues declined more rapidly than costs in districts losing students to charter schools. A few other reports prepared by research centers or advocacy organization have made arguments about likely fiscal impacts, but do not actually attempt to estimate those impacts, see for instance, Anderson, 2004 and Little *et al.*, 2003.

We begin by defining the concept of excess costs and identifying the types of costs incurred when charter schools enter a school district. Next, we identify the ways that charter school finance policies can redistribute revenues either to or away from local schools districts. Third, we summarize our attempts to estimate the fiscal impacts of charter schools on two local school districts in New York-the city school districts of Albany and Buffalo. Albany and Buffalo are interesting case studies because they have relatively large concentrations of charter school students, and they have, respectively, stagnant and shrinking enrollment bases. Thus, we would expect larger fiscal impacts of charter schools in these districts than most other places, such that these cases provide an indication of how large charter school fiscal impacts might be. Finally, we discuss how charter school financing policies can help to address negative fiscal impacts by creating incentives to minimize avoidable excess costs and promoting a fair distribution of the burden of the unavoidable excess costs that remain.

EXCESS COSTS GENERATED BY CHARTER SCHOOLS

Charter schools can increase educational costs either by causing an increase in revenues devoted to education or by causing a reduction in services. If the revenues devoted to education are increased, an additional burden is placed on taxpayers. The additional costs borne by taxpayers might be justified by increased educational benefits, but nonetheless can be conceptualized as additional costs. Reductions in services represent a burden borne primarily by students and their families. We refer to the burdens created for taxpayers and students as a result of charter schools as "excess costs."

Charter schools can generate excess costs for a number of reasons. First, charter schools can be expected to attract some number of students from private schools (Buddin, 2012; Toma, Zimmer, & Jones, 2006; Ludner, 2007). The additional resources that charter schools use to

educate these students are not necessarily new resources from the point of view of society. Nonetheless, transfers from private to charter schools do shift educational costs from the private schools and their parents to the public sector and taxpayers, and thus, create fiscal impacts for public education systems.

Second, charter schools might cause more personnel resources to be used to educate a given number of students. In our case studies of Buffalo and Albany, district officials indicated that it is difficult to reduce the number of teachers when enrollment losses are spread across a large number of schools and grades. For instance, if five students are the most any particular grade in a school loses to charter schools, it might not be possible to reduce the number of classroom teachers in the district.³ In this case, the additional teachers hired by charter schools would not be offset by reductions in the number of district teachers. More generally, uncertainty about charter school enrollments can make it difficult for districts to project enrollments and to maintain targeted class sizes and student teacher ratios. If districts are apprehensive about exceeding class size targets, then they will tend to err on the side of smaller classes. While class size reductions may be beneficial to students, the benefits generated might not be sufficient to offset the costs to taxpayers or the reductions in other areas of the school budget required to finance the reduced class-sizes.

Third, charter school entry into a district typically increases the number of school buildings used to serve students, increasing facility and related maintenance costs. Closing a school in a district is a politically contentious undertaking and is typically not feasible until enrollment losses are sufficiently large in particular grade ranges and are expected to persist. Another factor that limits a district's ability to close schools is the need to maintain excess

³ Officials in Buffalo pointed to a study of enrollment patterns in seven charter schools that indicated those schools drew students from 61 different schools and that the typical school lost only 5 students.

physical capacity in case charter schools close and enrollments suddenly increase. In 1999, the year when the first charter school opened in Albany, the Albany City School District served 10,380 students in 17 schools. As of 2009-10, public resources supported 24 schools (15 district and 9 charter schools) that served 10,568 students.

Finally, in many states, districts are required to provide several services for charter school students including transportation, special education evaluation services, and health services. The costs of these services might be higher as a result of charter schools because the services have to be delivered to students spread across a larger number of schools and locations. For instance, the district may need to establish additional bus routes to transport students to charter schools. In addition, administering charter school payments, coordinating special education service, and addressing other coordination issues with charter schools places increased demands on district offices. For example, the Chief Financial Officer for Buffalo Public Schools indicated that one of her staff members works full time on charter school payment issues.

These are all excess costs created by the introduction of charter schools, and many of them result from coordination difficulties associated with separately operating two systems of publicly-funded schools. It might be possible to reduce some of these costs through improved planning by the district or improved coordination between the district and charter schools. In principle, then, one may distinguish avoidable excess cost from unavoidable excess costs.⁴

IMPACTS OF CHARTER SCHOOL FINANCE POLICIES

The size of the excess costs generated by charter schools is an important question, as these costs need to be weighed against any benefits of charter schools in comprehensive policy

⁴ We do not assume that the education sector operates with perfect efficiency here. If we did, then costs would be defined as the minimum resources required to provide a given level of services and only the unavoidable excess costs would properly be called "costs."

assessments. The fiscal impacts of charter schools on local school districts, however, depend not only on the size of these excess costs but also on the distribution of revenues to and away from school districts that result from charter school financing policies, which vary considerably across states (Goldhaber et al., 2005; Ni & Arsen, 2010).

To understand how charter school policies distribute revenues, it is useful to distinguish two basic approaches to charter school financing. One approach is for the state to make per pupil payments directly to the charter school without any involvement of local school districts. Under this approach, district residents who enroll in charter schools would typically not be included in enrollment counts for purposes of determining most state aid awards. Thus, charter school payments are at least in part financed by reductions in state aid payments to districts, and the primary effect of charter schools on school districts is reduced state aid receipts. The second approach is for local school districts to make payments to charter schools for each resident student that enrolls in a charter school. Under this approach the charter school students that reside in the district would typically continue to be included in district enrollment counts, and thus, charter school enrollments would not reduce state aid awards to the district. The primary fiscal impacts on charter schools are the payments they are required to make to charter schools.

When charter school payments are made directly by the state, fiscal impacts will depend on how much a district depends on state aid. In districts that receive only small amounts of aid, charters will be likely to shed costs at least as great as revenue losses resulting from charter school enrollments. In this case, the burden of any excess costs generated by charter schools will be split between the state and charter schools, and the split will depend on the size of charter school payments. In districts that rely heavily on state aid payments, the fiscal impacts of charter

schools will be more negative, and the students and taxpayers in these districts may bear some of the burden of the excess costs generated by charter schools.

In places where charter school payments are made by districts, fiscal impacts will naturally depend on the size of the payments made to charter schools. If per pupil charter school payments are low relative to per pupil spending in a district, negative fiscal impacts will be minimized and much of the cost of additional resource usage caused by charter schools will be borne by charter school students in the form of reduced services. Alternatively, high charter school reimbursement rates will increase negative fiscal impacts and force much of the excess cost created by charter schools onto local public school students and taxpayers.

The effect of transfers from private schools into charter schools will also depend on the school finance regime. Where the state makes charter school payments directly, transfers from private schools will have no direct effect on district budgets, although they will place increased burdens on the state. Where districts make charter school payments, the effects are more complicated. The enrollment of private school students will increase the payments that districts need to make to charter schools, but will also increase the count of public school students who reside in the district and thereby, increase state aid awards to the district. The net effect on the district will depend on the relative sizes of its per pupil aid awards and charter school payments.

Finally, state financing programs can serve to disperse the costs created by charter schools to taxpayers statewide. For instance, New York State provides districts with increasing charter school enrollments transitional aid meant to reduce any negative fiscal impacts on the district. The state also provides limited start-up and facility grants to charter schools, essentially passing some of the costs of excess facility capacity onto taxpayers statewide.

ESTIMATING FISCAL IMPACTS IN BUFFALO AND ALBANY

Buffalo and Albany are interesting case studies because they have a high concentration of charter schools. Approximately 20 percent of public school students in Albany and 17 percent in Buffalo attend charter schools. These market shares, respectively, rank 10th and 15th highest among districts nationwide (NAPCS 2011). Also, the school-aged population in Albany has been stagnant for the last decade and the school-aged population in Buffalo has been falling for at least two decades. Transfers to charter schools thus result in shrinking enrollments in these districts rather than merely slower enrollment growth.⁵ Finally, state law in New York requires districts to pay charter schools an amount equal to per pupil operating expenditures for each resident student who enrolls in a charter school. Due to each of these factors, fiscal impacts of charter schools are likely to be larger in Buffalo and Albany than in most other locations.

A straightforward way to estimate the fiscal impacts of charter schools is to compare the change in district revenues net of charter school payments to the expenditure reductions that the districts are able to make as a result of charter school enrollments. The changes in both revenues and expenditures depend on the impacts that charter schools have on district enrollments. So we begin by presenting estimates of enrollment impacts. Next, we estimate the changes in revenue and expenditures generated by these enrollment decreases. In presenting each of these analyses, we first identify the data sources used, describe the challenges to generating impacts estimates and how we addressed them, and then summarize the results of our analysis.

⁵ Teske, *et al.* (2000) argue that in areas with rising total enrollment, districts avoid any fiscal pain associated with charter school enrollments because they are able to maintain enrollment levels despite declining market share. See also RPI, 2001 which finds that districts with declining enrollment reported that charter schools had a negative impact on their budget, while in districts with increasing enrollment trends, administrators were more likely to report no fiscal impacts.

Enrollment Impacts

Data on district enrollments were drawn from the New York State Education Department's (NYSED) School Report Cards, and counts of district residents attending charter schools were provide to us by the NYSED Office of State Aid. As shown in Figure 1, between 1999 and 2009, K-12 enrollment has decreased 19.4 percent in Albany and 26.7 percent in Buffalo. The enrollment of students in district schools plus the charter schools located in the Albany has remained roughly flat over the last 10 years. Nonetheless, the district saw significant declines in enrollments, especially between 2002 and 2008 as charter schools in the district were expanding. In Buffalo, enrollment declines had already begun during the 1990s, prior to charter schools, but have accelerated over the last decade, particularly between 2002 and 2005.

During 2009-10, 2,054 students residing in Albany attended charter schools, approximately 20 percent of public school enrollment. In Buffalo, 6,557 resident students attended charter schools in 2009-2010, which is approximately 17 percent of public school enrollment.⁶ Smaller percentages of limited English proficient students from these districts are enrolled in charter schools, and charter schools in Albany enroll few students with disabilities (see first column, Scenario 1, in Table 1), which limits the ability of districts to reduce spending on bilingual, English as Second Language, and special education services.

Charter school enrollments among resident students are upper bound estimates of the numbers of students districts have lost to charter schools. Some of the students who reside in a district and attend charter schools might have chosen to attend private schools or might have moved out of the district if charter school options were not available. To address the uncertainty

⁶ These figures represent counts of district residents attending charter schools that were provide to us by the New York State Education department. These counts are different than the count of students enrolled in charter school located in the district because student can, and sometimes do, cross district lines to attend charter school. Because district payments to charter schools are based on counts of resident students attending charter schools, regardless of where the charter schools are located, the figures reported here are more relevant for estimating fiscal impacts.

regarding how many charter school students would have attended district schools in the absence of charters, we developed estimates of fiscal impacts under three scenarios. Under Scenario 1, we assume that all charter school students would have attended district schools if charter school options were not available. Under Scenario 2, we assume that in the absence of charter schools, charter school students would have enrolled in private schools at the same rates as resident students with a similar poverty, English language proficiency, and disability profile. Rates of private school attendance for each district (by poverty status, English language background, and disability status) were obtained using data from the 2000 U.S. Census. Under Scenario 3, we assume that charter school students would have enrolled in private schools or left the district at twice the rate that other resident students enroll in private schools. The estimated impacts on district enrollments under each scenario are presented in Table 1.

Fiscal Impacts

Charter school enrollments affect net district revenues in New York State in three ways. First, districts are required to make payments to charter schools for each resident charter school student. Second, awards from Title I, Part A, the largest single federal aid program, are determined based on district enrollments excluding charter school students. Thus, when Title I students who otherwise would attend district schools choose to enroll in charter school, the federal aid received by the district is reduced. Third, other state and federal aid programs base awards on counts of resident pupils in the district, including charter school students. Charter school students who are drawn from private schools or who would otherwise have moved out of the district generate additional aid that the district would not have received in the absence of charter schools.

Data on revenues and charter school payments used in our analysis were drawn from Annual Financial Reports (ST-3 files) collected by the NYSED. The second rows of each panel of Table 2 display our estimates of revenue losses. We estimate that the Albany City School District lost between \$23.6 and \$26.1 million (between 11.4 and 12.5 percent of total revenues) during 2009-10 as a result of charter schools, and the Buffalo Public Schools lost between \$57.3 and \$76.8 million (between 7.5 and 9.9 percent of total revenues). The range of estimates is wider for Buffalo because it relies more heavily on state aid than Albany, and thus, variation in assumptions about how many charter school students would have attended district schools has a larger effect on state aid awards for Buffalo.

The key question for determining fiscal impacts is whether enrollment reductions allow a district to achieve expenditure reductions commensurate with revenue reductions. To address this question we used detailed reports of expenditures by function to divide district spending into fixed components that cannot be adjusted in response to charter enrollments, and step or variable costs, which can be adjusted. Next, for each variable or step cost we identified key cost drivers, either the number of students or number of teachers, which allowed us to compute per unit cost figures. Finally, we used estimates of enrollment changes together with per unit cost figures to estimate how much expenditures could be reduced. Data on expenditures by function were drawn from the ST-3 files and counts of teachers were drawn from the Personnel Master File maintained by the NYSED.

For these purposes, fixed costs include spending for services that districts have to provide for resident students, regardless of whether they attend district or charter schools. In New York, these services include textbooks, computer hardware and software, pupil transportation, pre-K services, and health services. Also included among fixed expenditures is spending that is

difficult to reduce when enrollments decrease, at least in the short-run. These include expenditures for general support functions, principals, capital expenditures, debt service, special schools, community services, and retiree health care benefits. The remaining expenditure items we count as variable costs, including spending on instructional supervision other than principals, teachers, pupil services other than health, employee preparation programs, and occupational education. For Albany, 66.3 percent of the expenditures are counted here as variable, and for Buffalo, 54.6 percent. The Appendix provides details on our categorization of various types of expenditures and our corresponding calculations of cost savings permitted by enrollment losses.

The third rows of each panel of Table 2 report our estimates of cost savings. We estimate that charter school enrollments allowed the Albany City School District to reduce expenditures by between \$15.0 and \$19.1 million, which is between 7.8 and 8.7 percent of the expenditures that would have been required in the absence of charter schools. For the Buffalo Public Schools, we estimate that charter school enrollments allowed expenditure reductions between \$36.7 and \$52.6 million, which is between 5.1 percent and 7.2 percent of total expenditures.

The estimated revenues lost due to charter schools by the Albany City School District exceed the estimated reduction in expenditure needs by between \$7.0 and \$8.5 million, depending on how many charter school students would have otherwise attended district schools. These imply negative impacts between \$976 and \$1,070 per pupil enrolled in district schools. For the Buffalo Public Schools we estimate negative fiscal impacts between \$20.6 and \$24.2 million, or between \$633 and \$744 per pupil in district schools. In Albany, negative fiscal impacts increase as the number of charter school students drawn from the private sector increases because the additional state aid those students generate does not offset the additional payments to charter schools. In Buffalo, however, per pupil state aid amounts are much higher than in

Albany, and additional students drawn from private schools reduce estimated fiscal impacts in Buffalo.

The sixth row of each panel of Table 2 lists the transition aid that New York State provided to the districts to reduce the fiscal burden of their charter school payments. We discuss this transition aid in more detail in the next section. In Albany, this aid amounted to \$711 dollars per pupil and offset between 65 and 88 percent of the estimated negative impact. For Buffalo, transition aid amounted to \$132 per pupil and offset 19 to 22 percent of the estimated impact.

The negative fiscal impacts in Albany and Buffalo suggest that these districts have either had to find ways to reduce costs that our analysis treats as fixed or to decrease service levels as a result of charter school enrollments. As charter school enrollments level off and transition aid is correspondingly reduced, these cuts in fixed costs and service levels will need to become larger.

Additional Considerations

In the long run, the primary way that a district can reduce costs that our analysis treats as fixed is by closing schools. Closing a school permits immediate reductions in expenditures on energy, maintenance, and janitorial staff. In addition, closing a school allows a district to reduce the number of principals and clerical staff, and facilitates achieving the teaching and staff reductions that our analysis already assumes can be achieved in response to enrollment losses. In the case of Albany, which is an independent school district which owns its school buildings, the district can also benefit financially by leasing or selling a closed facility. In the case of a fiscally dependent school district like Buffalo, where facilities are owned by the city rather than the district, it is not clear whether the district would benefit from leasing or selling closed schools.

Examination of excess capacities indicates that Albany may have room to close two elementary schools in addition to the one middle school that it has already closed as a result of

charter school enrollments. In 2009-10, Albany spent on average \$821,263 per school for plant operations and maintenance.⁷ In addition, average salary and benefits for a principal in 2009-10 was \$145,932, which suggests closing a school could save the district between \$900,000 and \$1 million per year.⁸ If so, charter school enrollments would allow the district to reduce expenditures by between \$2.7 and \$3.0 million in addition to the expenditure reductions summarized in Table 2. Put another way, closing schools would allow the district to offset between 32 and 43 percent of the negative fiscal impact estimated in Table 2.

In Buffalo, the district has closed a number of schools over the last decade. We estimate that charter school enrollments have allowed the district to close 7 or 8 more schools than it otherwise could have. In 2009-2010, the Buffalo City School District spent on average \$1,063,517 per school for plant operations and maintenance.⁹ In addition, average annual salary and benefits for a principal in the Buffalo City school district is \$128,346. This suggests that a school closure could reduce the costs we have treated as fixed in our analysis by between \$1 and \$1.2 million. Thus, closing 7 or 8 schools may have saved the district between \$7 and \$9.6 million, and may have reduced the negative fiscal impacts that we estimated for Buffalo by between 29 and 44 percent.

While school closures can help districts reduce fiscal impacts, it is also important to note that our estimates of fiscal impacts are not estimates of how much the Albany and Buffalo districts *have been able* to reduce expenditures as a result of charter school enrollments. Rather,

⁷ This figure was calculated by multiplying plant operating and maintenance salary expenditures (see Table A1) by 1.283 to account for the costs of benefits and adding the plant operation and maintenance non-personnel expenditures and then dividing by 15 schools.

⁸ District officials in Albany indicated that the recent closure of a middle school in the district created an estimated \$750,000 per year in savings, after netting out costs of approximately \$150,000 per year associated with maintaining the school as a vacant building. We were also told that the district is in the process of finalizing sale of the building, which will eliminate the costs of "mothballing" the building plus generate fiscal benefits from the sale.

⁹ This figure was calculated by taking plant operating and maintenance salary expenditures from Table A2 by 1.331 to account for the costs of benefits and adding the plant operation and maintenance non-personnel and then dividing by 58 schools.

we have estimated expenditure reductions that *may be possible* without sacrificing the levels of service that districts provide. Actual reductions do not necessarily match possible reductions.

For instance, our analysis assumes that districts maintain constant student/staff ratios as enrollment declines. Between the 2001-02 and 2008-09 school years, enrollment in the Albany City School District fell by almost 18 percent, but the district made few staffing changes. As a result, student/teacher ratios decreased from 12.4 in 2001-02 to 10.6 in 2008-09. Ratios of students to other types of staff also were substantially lower in 2008-09 than in 2001-02. Buffalo saw the largest drops in enrollment during the 2002 to 2006, during which time enrollment declined by an average a more than 5 percent per year. During this period, the district was able to cut staff, and as a result maintained similar staffing ratios each year during this period.

The experiences in Albany and Buffalo indicate that over some period of time, staffing can be adjusted in response to enrollment declines. They also suggest that Albany was slower than Buffalo to adjust staffing in response to charter school enrollments. There are three possible reasons why Buffalo was able to respond more quickly than Albany. First, Buffalo underwent enrollment declines during the 1990s, so district officials there may have gained experience managing enrollment reductions sooner than officials in Albany. Second, enrollment declines were larger in Buffalo than in Albany, so Buffalo may have reached thresholds that made staff reductions easier and more urgent earlier than in Albany. Third, Buffalo was closing schools beginning earlier in the decade, and closing schools facilitates staff reductions. Albany did not close any schools until 2008-09, after which it began to make staff reductions.

POLICY IMPLICATIONS

Our case studies suggest that charter schools can have negative fiscal impacts on school districts. Even assuming districts are able to make staffing reductions commensurate with

enrollment losses, we estimate negative fiscal impacts ranging from \$883 to \$1,070 per pupil in Albany and \$633 to \$744 per pupil in Buffalo. In the long run, districts may be able to reduce some of the expenditures that our analysis treats as fixed, and this would mitigate some of the negative fiscal impact. At the same time, however, there are several factors that make it difficult to achieve expenditure reductions immediately in response to enrollment losses, and thus, in the short run, the negative impacts of charter schools might be larger than our estimates indicate.

Operating separate systems of public schools in the same area creates excess costs. Revenues diverted from school districts to charter schools exceed the costs that charter school enrollments allow districts to shed, and thereby cause districts to bear part of the burden of the excess costs charter schools generate. This analysis suggests two objectives for policies to address charter school fiscal impacts. The first objective is to reduce the avoidable excess costs that operating separate school systems create. The second objective is to ensure that the burden of these costs is divided in a sensible manner between the districts and their students and taxpayers, the charter schools and their students, and the state and its taxpayers. In the remainder of this brief we discuss policies that can help promote these objectives.

Policies to Promote Coordination between Districts and Charter Schools

Many of the excess costs created when charter schools enter an area arise because of difficulty coordinating service delivery across separate systems of schools, resulting in duplication of services and failure to realize potential economies of scale. Several measures can help encourage stronger coordination.

 Constrain the timing of charter school enrollments to facilitate budget planning. States should consider requiring charter schools to have earlier, binding admissions deadlines. Students should not be allowed to enter a charter school during the upcoming school year unless they: (i) had declared that intention by the deadline, or (ii) are replacing other

students from their district that had declared by the deadline but later transferred back to a district school. Charter schools would have to send their preliminary rosters of each district's resident-students with signed declarations shortly after the deadline. Such requirements would significantly reduce uncertainty regarding district enrollments and thus facilitate timely adjustment of staffing levels.

- 2. Create incentives for districts and charter schools to share facilities. Charter schools frequently close, which creates incentives for districts to maintain excess capacity as a hedge against possible enrollment increases. Districts might be better positioned to close schools if they could retain flexibility to reopen those schools should the need arise. One way to reduce excess capacity while retaining flexibility is to lease excess space to charter schools. States offering aid to charter schools to help them finance facilities could create incentives for facility sharing by providing more favorable aid to charters that lease space from public school districts. Favorable aid terms for charter schools that lease from district schools can be justified because the charter schools would be assuming some risk by leasing rather than purchasing facilities. The ability to reduce expenditures and/or receive lease payments may provide districts sufficient incentives to share excess space with charter schools. If these incentives are insufficient, then the state might consider requiring districts with excess capacity to offer space to charter schools.
- 3. *Encourage districts to use existing intra-district choice programs to facilitate staffing adjustments.* Like many urban districts, both Albany and Buffalo offer intra-district school choice. Such choice programs provide an opportunity to ensure that schools achieve class-size targets. The number of teachers allocated to each school should be coordinated with enrollment decisions to ensure that class sizes do not deviate from established targets. For instance, assuming a class size target of 20 students, a school with a historical enrollment of 40 kindergarten students per year should be allocated a third kindergarten teacher unless demonstrated demand is sufficient to ensure enrollment as high as 60. Such a policy might require leaving classrooms vacant in some buildings and redeploying them for other purposes, and it may also mean fewer students get their

first choice of school. However, such a policy can help ensure the district is able to make staffing reductions commensurate with enrollment losses.

Policies to Promote Equity without Sacrificing Efficiency

In pursuing the objective of dividing the burden of excess costs sensibly, two considerations are relevant. One, incentives to reduce avoidable excess costs need to be maintained. For instance, it may not be optimal to shift the burden of all negative fiscal impacts from the districts to the state, because districts would no longer face pressure to make long run expenditure reductions in response to reduced enrollments. Two, districts should not be required to bear the burden of excess costs that they cannot do anything to address. These burdens put undue pressure on services in these districts. Several measures can help achieve these objectives.

4. Link districts' charter school payments to estimates of costs that the district can reduce in response to enrollment losses. Currently in New York, several types of district expenditures affect the size of the payments made to charter schools even though these expenditures represent fixed costs to the district. For example, current retiree health care expenditures are not affected by charter school enrollments and they are costs that charter schools typically avoid. In 2009-10, the Buffalo City School District spent approximately \$1,658 per pupil and the Albany City School District spent approximately \$1,064 per pupil for current retiree health benefits. Removing these expenditures from the computation of charter school payments would substantially relieve much of the fiscal impact of charter schools on districts. Since districts can do little to control these costs, and charter schools do not typically have similar costs, this adjustment would serve to distribute cost burdens more fairly across the sectors. If payment amounts linked to the marginal costs that districts can shed when students transfer to charter schools are insufficient to support charter school operations, then the state can consider providing additional aid to charter schools. Charter school policies are established by states to promote statewide education goals, suggesting that taxpayers statewide should share the burden of any excess costs such policies generate.

5. Provide transitional aid to districts experiencing large growth in charter schools. New York's transitional aid program reimburses the districts for a portion of their charter school payments that are attributable to recent increases in charter school enrollment. The award amounts are computed as 80 percent of the payments attributed to increased charter school enrollment during the last year, 60 percent of payments attributed to increased charter school enrollment during the last year, 60 percent of payments attributed to increased in charter school enrollments two years earlier, and 20 percent of the payments attributed to increases in charter school enrollments three years earlier. Above we discussed reasons why districts might have difficulty achieving staff reductions commensurate with enrollment losses in the short term. This aid program is well-designed to provide relief to districts who are experiencing rapid increases in charter school enrollments stabilize, it does not undermine incentives for districts to adjust spending in the longer run.

SUMMARY

Our analysis suggests that charter schools can create negative fiscal impacts on school districts, particularly in districts with rapid growth in charter schools and declining or stagnant enrollment bases. If districts are able to reduce costs that are fixed in the short run by closing schools and taking other measures, they might be able to avoid long-run reductions in service quality. However, achieving expenditures reductions commensurate with enrollment and revenue losses is difficult in the short run for a number of reasons. The primary reason why charter schools impose negative fiscal impacts is that running two systems of schools in parallel creates excess costs. Policies should be designed to minimize any avoidable excess costs that are created by the introduction of charter schools, and to ensure that districts, their taxpayers, and the charter schools themselves do not bear an undue portion of the excess costs. As discussed above, there are a number of steps state policy makers can take to promote these policy goals.

REFERENCES

Anderson, Amy Berk. 2004. Charter schools in Washington State: A financial drain or gain? Seattle, WA: Center for Reform of Public Education.

Arsen, David and Yongmei Ni. 2012. The effects of charter school competition on school district resource allocation. *Educational Administration Quarterly*, 48(1): 3-38.

Arsen, David, David Plank, and Gary Sykes. 1999. School choice policies in Michigan: The rules matter. Lansing, MI: Michigan State University.

Buddin, Richard. 2012. The impact of charter schools on public and private school enrollments. Washington, DC: Cato Institute.

Goldhaber, Dan, Kacey Guin, Jeffrey Henig, Frederick Hess, & Janet Weiss. 2005. How school choice affects students who do not choose. In J. Betts & T. Loveless (Eds.), *Getting choice right: Ensuring equity and efficiency in education policy* (pp. 101-129). Washington, DC: Brookings Institution.

Little, David, Gregory Roberts, Diane Ward, Alison B. Bianchi, and Mary Metheny. 2003. Charter schools: investment in innovation or folly? Latham, NY: New York State School Boards Association.

Ludner, Mattew. 2007. "The impact of charter schools on Catholic schools: A comparison of programs in Arizona and Michigan. Catholic Education: A Journal of Inquiry and Practice, 11(1): 102-114.

Molnar, Alex. 1996. Charter schools: The smiling face of disinvestment. *Educational Leadership* 54(2): 9-15.

National Alliance of Public Charter Schools (NAPCS). 2011. A growing movement: America's largest charter school communities. Washington, DC: author.

Ni, Yongmei and David Arsen. 2010. The competitive effect of charter schools on public school districts. In C. Lubienski & P. Weitzel (Eds.), The charter school experiment: Expectations, evidence, and implications (pp. 93-120). Cambridge, MA: Harvard Education Press.

RPP International. 2001. Challenge and opportunity: The impact of charter schools on school districts. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Teske, Paul, Mark Schneider, Jack Buckley, and Sara Clark. 2000. Does charter school competition improve traditional public schools. New York, NY: Manhattan Institute for Policy Research.

Toma, Eugenia, Ron Zimmer, and John T. Jones, "Beyond achievement: enrollment consequences of charter schools in Michigan," Advances in Applied Microeconomics 14 (2006): 241–55.





Albany

Buffalo



Source: National Center for Education Statistics Common Core of Data and New York State School Report Cards-Accountability and Overview Reports.

	Albany					
	Scenario 1		Scenario 2		Scenario 3	
	#	% of public % of public # enrollment # enrollment		% of public enrollment	#	% of public enrollment
Total ¹	2054	20.5	1837	18.7	1620	16.9
Free Lunch Eligible ²	1655	29.2	1524	27.5	1392	25.7
Limited English Proficient ²	50	9.1	39	7.2	28	5.3
Students with Disabilities ²	89	6.1	80	5.5	71	4.9

Table 1: Resident Students Enrolled in Charter Schools, 2009-10

	Buffalo					
	Scenario 1		Scenario 2		Scenario 3	
		% of public	oublic % of public			% of public
	#	enrollment	#	enrollment	#	enrollment
Total ¹	6557	16.7	5832	15.2	5107	13.5
Free Lunch Eligible ²	4011	14.9	3829	14.3	3647	13.7
Limited English Proficient ²	107	3.4	98	3.1	90	2.8
Students with Disabilities ²	855	12.2	808	11.6	760	11.0

1. Total enrollment figures were provided by NYSED Office of State Aid

2. Figures in these rows are estimates. Estimates were computed by obtaining the percentage of students enrolled in each category in charter schools located in the district from the School Report Cards and then multiplying that percentage by the total count of resident students enrolled in charters.

	Albany				
	Scenario 1	Scenario 2	Scenario 3		
Lost Enrollment	2054	1837	1620		
Lost Revenue	(26,138,249)	(24,864,664)	(23,573,995)		
Reduced Expenditure Need	19,093,955	17,080,297	15,033,683		
Net Fiscal Impact	(7,044,294)	(7,784,367)	(8,540,312)		
Net Fiscal Impact Per Pupil	(883)	(976)	(1,070)		
Transition Aid	6,179,250	6,179,250	6,179,250		
Transition Aid Per Pupil	711	711	711		

Table 2: Net Fiscal Impacts of Charter School Enrollments, 2009-10

Buffalo

	Scenario 1	Scenario 2	Scenario 3
Lost Enrollment	6557	5832	5107
Lost Revenue	(76,801,485)	(67,036,444)	(57,285,636)
Reduced Expenditure Need	52,552,238	43,227,065	36,659,765
Net Fiscal Impact	(24,249,247)	(23,809,379)	(20,625,871)
Net Fiscal Impact Per Pupil	(744)	(730)	(633)
Transition Aid	4,634,647	4,634,647	4,634,647
Transition Aid Per Pupil	132	132	132

Appendix: Calculations of Cost Savings due to Lost Enrollments in Albany and Buffalo School Districts

•	•				Cost Per
	Total	fixed	step/variable	Cost Driver	Unit
Administration					
General support – salaries	1,829,479	1,829,479	0		
General support - non-personnel	3,580,208	3,580,208	0		
Plant oper. & maintsalaries	4,952,447	4,952,447	0		
Plant oper. & maintnon-personnel	5,964,954	5,964,954	0		
Superv. & improvement - salaries	9,083,981	2,274,936	6,809,045	Teachers	9,004
Superv. & improvement - non-personnel	1,316,570	0	1,316,570	Teachers	1,741
Teachers & Instruction (Regular Ed)					
Kindergarten teacher salaries	2,652,857	0	2,652,857	K students	3,971
G1-G6 teachers salaries	20,173,902	0	20,173,902	G1-G6 stu.	5,616
G7-G12 teachers salaries	19,860,578	0	19,860,578	G7-G12 stu.	5,412
Bilingual/ESL teachers salaries	955,745	0	955,745	LEP stu.	1,904
Non-instructional salaries	3,381,555	0	3,381,555	All students	424
Non-personnel	5,076,845	0	5,076,845	All students	636
Special Education					
Salaries	17,259,348	0	17,259,348	Stu. w Disabil.	10,005
Non-personnel	2,792,079	0	2,792,079	Stu. w Disabil.	1,619
Pupil Services ¹		0	-		
Salaries	10,756,927	2,150,720	8,606,207	All students	1,348
Non-personnel	3,114,031	304,570	2,809,461	All students	381
Transportation					
Salaries	166,835	166,835	0		
Non-personnel	6,047,031	6,047,031	0		
Pre-K					
Salaries	1,311,506	1,311,506	0		
Non-personnel	1,065,089	1,065,089	0		
Other Expenditures ²					
Salaries	3,311,550	1,143,498	2,168,052	G7-G12 stu.	481
Non-personnel	853,660	407,949	445,711	G7-G12 stu.	121
Capital & debt service	16,027,764	16,027,764	0		
TOTAL	177,134,243	59,631,447	117,502,796		

 Table A1: Expenditures by Function in Albany City School District, 2009-10

Source: Authors computations based on 2009-10 ST-3 and PMF files.

1. Includes library/instructional technology and food services, which are not typically classified as pupil services.

2. Includes employment preparation, occupational education, special schools, community service, athletics, as well as capital and debt service.

Table A2: Expenditures by Function in Buffalo City School District, 2009-10

		Step/			Cost Per
_	Total	Fixed	Variable	Cost Driver	Unit
Administration					
General support – salaries	7,364,408	7,364,408	0		
General support - non-personnel	4,206,187	4,206,187	0		
Plant oper. & maintsalaries	16,487,821	16,487,821	0		
Plant oper. & maintnon-personnel	39,755,695	39,755,695	0		
Superv. & improvement - salaries	26,896,356	5,207,867	21,688,489	Teachers	6,972
Superv. & improvement - non-personnel	4,406,707	0	4,406,707	Teachers	1,416
Teachers & Instruction (Regular Ed)					
Kindergarten teacher salaries	7,059,512	0	7,059,512	K students	2,894
G1-G6 teachers salaries	52,479,365	0	52,479,365	G1-G6 stu.	3,533
G7-G12 teachers salaries	66,209,428	0	66,209,428	G7-G12 stu.	4,364
Bilingual/ESL teachers salaries	7,224,325	0	7,224,325	LEP stu.	2,349
Non-instructional salaries	320,519	0	320,519	All students	10
Non-personnel	23,589,493	0	23,589,493	All students	723
Special Education					
Salaries	62,274,732	0	62,274,732	Stu. w Disabil.	10,101
Non-personnel	5,751,079	0	5,751,079	Stu. w Disabil.	933
Pupil Services ¹					
Salaries	15,767,630	154,339	15,613,291	All students	484
Non-personnel	9,023,971	7,558,539	1,465,432	All students	202
Transportation					
Salaries	8,453,579	8,453,579	0		
Non-personnel	40,948,094	40,948,094	0		
Pre-K					
Salaries	7,221,685	7,221,685	0		
Non-personnel	1,930,745	1,930,745	0		
Other Expenditures ²					
Salaries	24,152,178	6,000,644	18,151,534	G7-G12 stu.	1,109
Non-personnel	5,464,061	3,321,041	2,143,020	G7-G12 stu.	141
Capital & debt service	89,303,537	89,303,537	0		
TOTAL	680,234,255	308,818,182	371,416,073		

Source: Authors computations based on 2009-10 ST-3 and PMF files.

1. Includes library/instructional technology and food service, which are not typically classified as pupil services.

2. Includes employment preparation, occupational education, special schools, community service, athletics, as well as capital and debt service.

	Spending Reductions, Scenario 1	Spending Reductions, Scenario 2	Spending Reductions, Scenario 3
Administration			
General support - salaries	0	0	0
General support - non-personnel	0	0	0
Plant oper. & maintsalaries	0	0	0
Plant oper. & maintnon-personnel	0	0	0
Superv. & improvement - salaries	1,152,549	1,037,294	900,429
Superv. & improvement - non-personnel	278,565	250,709	217,629
Teachers & Instruction (Regular Ed)			
Kindergarten teacher salaries	841,925	752,967	664,009
G1-G6 teachers salaries	6,164,497	5,513,002	4,861,506
G7-G12 teachers salaries	1,805,310	1,614,822	1,424,334
Bilingual/ESL teachers salaries	76,155	59,401	42,647
Non-instructional salaries	696,399	622,827	549,254
Non-personnel	1,306,911	1,168,839	1,030,767
Special Education			
Salaries	712,386	640,347	568,308
Non-personnel	144,055	129,488	114,920
Pupil Services			
Salaries	1,772,367	1,585,121	1,397,875
Non-personnel	93,308	83,449	73,590
Transportation			
Salaries	0	0	0
Non-personnel	0	0	0
Pre-K			
Salaries	0	0	0
Non-personnel	0	0	0
Other Expenditures			
Salaries	197,074	176,280	155,485
Non-personnel	50,643	45,300	39,956
Capital & debt service	0	0	0
TOTAL	19,093,955	17,080,297	15,033,683

Table A3. Reduction in Expenditure Needs Due to charter school Enrollinents in Albany, 2003-1

200	Spending Reductions,	Spending Reductions,	Spending Reductions,
Administration	Scenario I	Scenario 2	Scenario S
General support - salaries	0	0	0
General support - non-personnel	0	0	0
Plant oper & maint -salaries	0	0	0
Plant oper & maint -non-personnel	0	0	0
Superv & improvement - salaries	3 016 879	2 436 925	2 029 841
Superv. & improvement - non-nersonnel	766 219	618 924	515 534
Teachers & Instruction (Regular Ed)	700,215	010,524	515,554
Kindergarten teacher salaries	1 252 709	1 102 198	910 008
G1-G6 teachers salaries	9 448 688	8 411 396	6 955 795
G7-G12 teachers salaries	8 652 180	5 610 998	4 319 107
Bilingual/FSL teachers salaries	208.624	184,191	169,155
Non-instructional salaries	49.794	45.862	40.160
Non-personnel	4.580.877	4.219.153	3.694.653
Special Education	.,	.))	0,00 .,000
Salaries	7.143.664	6.529.503	6.141.612
Non-personnel	824.648	753.750	708.973
Pupil Services ¹	- ,	,	
Salaries	2,425,574	2,234,041	1,956,318
Non-personnel	24,314	21,393	17,662
Transportation	,	,	,
Salaries	0	0	0
Non-personnel	0	0	0
Pre-K			
Salaries	0	0	0
Non-personnel	0	0	0
Other Expenditures			
Salaries	2,372,024	1,538,274	1,184,097
Non-personnel	350,060	227,016	174,747
Capital & debt service	0	0	0
TOTAL	52,552,238	43,227,065	36,659,765

Table A4: Reduction in Expenditure Needs Due to Charter School Enrollments in Buffalo,2009-10