School Vouchers
Providing Choice to Improve Student Achievement and the Quality of Public Schools

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**Introduction:**

America’s urban public schools are in crisis, facing numerous challenges stemming from stagnant achievement levels, compared to increases in achievement in some international counterparts. Urban schools have a higher concentration of low income students (40 percent) compared to suburban school districts (10 percent), and research suggests that a high concentration of low income students in a school is related to lower student performance and lower graduation rates.¹

Over the years policymakers have looked toward solutions to the urban educational crisis, with some becoming advocates of school choice, particularly school voucher programs. School voucher programs allow low-income students and their parents to opt-out of the failing local public school and use public money to send their child to a local private school.

This paper will examine school voucher programs operating in urban school districts across the country, looking particularly at: what makes them successful and what have been some shortcomings that can be remedied; the financial impact of school vouchers on the state and local governments; and the constitutionality of school vouchers. Three successful voucher programs will be examined, the Milwaukee program, the Washington D.C. Opportunity Scholarship Program, and the Cleveland program. Budgetary reviews from the aforementioned programs will be looked at to understand the costs associated with such program. [*Zelman v. Simmons-Harris* (2002)](https://www.supremecourt.gov/decisions/scotus19992002/02-1207.html) will be examined to establish the constitutionality of school voucher programs. And finally, a cost-benefit analysis will be performed to show how improving graduation rates, through the use of school voucher programs, will be economically beneficial for both the students and the community.

The examined results will demonstrate how school voucher programs have the potential to be effective in improving academic achievement and increasing graduation rates for students in failing school districts.

This paper will propose that new pilot school voucher programs, established in urban settings, should include the following criteria as a starting point for development. The programs should...
also conduct systematic reviews every three years to evaluate the programs efficiency and see if more students can be admitted or eligibility criteria needs to change.¹

- Voucher dollar amounts must be at least 80 percent of the per-pupil funding that the school district receives for that student each year;
- Eligibility to receive a voucher will be based on socioeconomic status, and all eligible students must be under 185 percent of the Federal Poverty Level (FPL) and be enrolled in a low-performing school, as identified by their own state standards;
- Cap the number of students that can receive vouchers each year at 10 percent of the school districts enrolled students.
- Vouchers should be transferred with students as they progress through their K-12 education, unless their family’s financial situation changes rendering them unable to meet the financial requirements; and,
- Vouchers should be distributed by a lottery system rather than on a first come first serve basis.

**Problem Definition:**

Educational leaders, teachers, and parents of students in urban areas are not satisfied with the quality of education that students are receiving and have spent years trying to find feasible reforms for these struggling schools. While not all sides agree on how the changes can, and should be made, they do agree that change is necessary and that the children can no longer afford to receive a sub-standard education if they wish to compete in the ever growing global society. Some policymakers feel that educational choice will be the solution to the problem. Choice would ensure that students in low-performing urban schools have an equal opportunity to choose to move to higher performing schools in order to raise the quality of education they are receiving, and, as a result, increase their chances of graduating from high school.

¹ These rates have historically been decided on by the state legislature that creates the program, and therefore will vary depending on the state. The numbers chosen above are not indicators of a successful program, but are averages between the current states and are just suggested rates for new programs to start from.

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Education is a fundamental human right and a pillar to a healthy and successful democratic system. Education not only provides people with a breadth of knowledge, but also supplies a society with an active and informed citizenry. As a result, education has been a cherished establishment within the United States. While the people of the United States have not changed their feelings about the importance of education, the quality of the public education system in urban areas is not meeting the needs of students.

What has Caused American Schools to Slip:

In 1983, a forceful report was released by the National Commission on Excellence in Education, a Reagan sanctioned Blue Ribbon Commission, called *A Nation at Risk: The Imperative for Education Reform*. The Commission spent two-years looking into the state of education in America. This was the first time that a report had brought to light the failings of the nation’s public schools. The report found:

- only one-third of 17-year-olds could solve a math problem requiring several steps;
- only one-fifth could write a decent persuasive essay;
- millions of adults were illiterate; and,
- SAT scores across the country were dropping at an alarming rate.\(^i\)

The Commission then made recommendations for change in five areas: curriculum content, standards and expectations of students, time devoted to education, teacher quality, and educational leadership and the financial support of education.\(^ii\)

In the twenty-seven years since its release, *A Nation at Risk* has continued to spur talk about public schools and reform as there has been increasing evidence that the public schools have not improved but rather continued their downward trend in quality and student achievement levels. Research was conducted twenty-five years after the release of *A Nation at Risk* and the results were not positive, showing that, while the United States had made some progress, mainly in the development of extensive academic standards and standards-based testing, the global landscape has evolved to the point that the nation is not making progress at a fast enough pace to keep up. Research examined a typical group of twenty children born in 1983, all who started kindergarten

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together in 1988, and found that only fourteen of them would have graduated from high school on-time. Of those fourteen students, only ten would go on to start college, and only five of those would actually graduate with a degree on time.\textsuperscript{iv}

While federal K-12 education spending has grown from $16 billion in 1980\textsuperscript{v} to $50.7 billion in fiscal year 2011\textsuperscript{vi} the United States continues to be a nation at risk twenty-seven years later, as the education system is not keeping pace with the ever growing demands of students, business and global influences. Despite total expenditures per-pupil being nearly two-and-a-half times higher in 2008 than they were in 1970, student achievement levels remain similar to those seen in the 1970's. A study conducted in 2008 looked at proficiency data from 2005 and found that 39 percent of 12\textsuperscript{th} graders scored below basic on the national standardized tests in math, 18 percent of 12\textsuperscript{th} graders scored below basic on writing, and 27 percent scored below basic on reading tests.\textsuperscript{vii}

Urban school districts have seen some of the largest declines in student achievement because of the high concentration of low-income and minority students. Students that attended lower-poverty schools performed 8 percentage points higher on standardized tests than their peers attending higher-poverty schools.\textsuperscript{viii}

These low achievement and proficiency levels have been linked over time with higher dropout rates for urban American high school students with nearly seven thousand students becoming dropouts each day, or about 1.2 million dropouts each year, with the majority coming from urban school districts.\textsuperscript{ix} Academic achievement for urban students is one of the largest indicator that a student will graduate from high school. The higher the achievement, the higher the likelihood a student will graduate.\textsuperscript{x}

This increase in dropouts is not only harming the student and automatically putting them at an economic disadvantage, but is also greatly impacting society by:

- decreasing tax revenues;
- increasing crime rates and therefore increasing the cost of the justice system;

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• increasing dependence on social welfare programs like Medicare and Medicaid; and,
• decreasing the overall health of the community because research has shown that educational attainment is a predictor of overall lifetime health in a person.11

The severity of the situation has lead many educational policy leaders to try and address the situation in a way that would benefit students and increase graduation and achievement levels.

In response to the failing schools, the 1980’s ushered in the beginning of the school choice movement. In the 1990’s school vouchers were added as another option within school choice, and similar other choice options, school voucher programs had the same basic premise of raising student achievement and improving graduation rates.

**Methods:**

The goal of this policy memorandum is to use research based evidence to evaluate the societal benefits of implementing school voucher pilot programs in districts across the country. The data on school voucher programs was collected from a number of varying sources, including empirical research studies, peer reviewed articles, governmental agency statistics, and collaborative research books. All utilized data pertained to graduation levels, student test scores, and economic benefits of higher educational attainment. All monetary figures were adjusted for inflation.

While data and research was collected on all voucher programs available in the United States, a bulk of the research focused on voucher programs in Milwaukee, Washington D.C., and Cleveland, mainly because there have been a number of empirical studies done on these programs and they have been the most widely studied by proponents and opponents of school vouchers. Of the research looked at, variables such socio-economic status and ethnic background of students remaining in public schools were controlled for when comparing the current voucher recipients to their counterparts. This was to ensure that there was a level playing field in the evaluation process.

All monetary figures for spending etc. have been adjusted for inflation.

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Prior to reporting on the data, it was important to establish a set of definitions on certain terms that would be used throughout the memorandum to make assertions and solidify recommendations. Below is a list of key definitions:

- **Success**: as it related to school voucher programs, will be defined as increasing student achievement by a statistically meaningful percentage, as well as improving the overall quality of public schools in the district, calculated by improved student performance and higher graduation rates.
- **Failing School**: A school that fails to make adequate yearly progress for two or more years in a row. This definition comes directly from the language of the No Child Left Behind Act.\textsuperscript{xii}
- **Federal Poverty Level**: Income threshold determined by the U.S. Department of Health and Human Services and used as a measure to determine if a person or family is eligible for assistance through various federal programs.\textsuperscript{xiii}

**Issue Analysis:**

**History of School Vouchers:**

The debate over school vouchers and the movement of the issue to the forefront of education policy first occurred in 1955 when Milton Friedman proposed a revolutionary educational idea that the United States Government should pay for a student’s compulsory education without actually being the vehicle that provides it.\textsuperscript{xiv} Friedman suggested a radical reconstruction of the traditional education system, and proposed one that would include privatizing a major segment of the education system and allowing private institutions to enter the market, creating competition to public schools. He believed that parents should be given a large voucher that would cover the entire cost of their children’s attendance at the private school of their choice, with no conditions attached.\textsuperscript{xv}

Friedman’s primary goal was to give disadvantaged students a chance at receiving the kind of education that their more advantage peers had. He felt that the movement towards centralization severely hindered the success of schools, and that introducing more of a free market economic

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model would benefit the schools, students, parents and communities. Friedman believed that the
traditional public school system was a government run monopoly where schools are guaranteed
students and a set amount of resources, regardless of how the students perform. This monopoly
results in a lack of incentive to produce a high-quality education, or provide innovative programs
to students. While he did not feel it was valuable for the government to completely leave the
world of education, because education is partially considered a public good, he did feel there was
a significant need to introduce competition in the market.

Currently the United States has 13 publically funded school voucher programs in various states,
and numerous privately funded programs, serving nearly 160,000 students a year.\textsuperscript{xvi} Due to the
controversial nature of school vouchers, the expansion of such programs has been slow.
Following Friedman’s initial proposal, the first proposal to implement a school voucher program
did not occur until the late 1960’s when Christopher Jencks, a Harvard educated scholar,
formulated a school voucher proposal that provided a large sum of money to the parents to cover
the full cost associated with attending a private school. His proposal also required that schools
accept students on a random basis to ensure continued diversification among the students
attending that school. The program was met with resistance however, and was shut down in
1976.

A number of states established voucher programs. In 1989 the Wisconsin legislature approved
the Milwaukee Parental Choice Program (MPCP), which provided state funding to low-income
students to attend private schools in Milwaukee.\textsuperscript{2}

Following Milwaukee’s lead, Ohio passed a similar measure in 1995\textsuperscript{3}, to be enacted for the
1996-1997 school year. This program was intended to give educational choice, through tuition

\textsuperscript{2} Students whose parents income was at or below 175 percent of the Federal Poverty Level, and the legislation capped the
number of students at 15 percent of the student population within the district. The measure also stipulated that once a student is
eligible for and receives a voucher, they continue to receive that voucher until they graduate from high school. Initially, the
program allowed vouchers to only be used at non-sectarian private schools, but was amended in 1995 to include religious private
schools in the list of schools eligible to take in voucher students.

\textsuperscript{3} Parents who were eligible for the voucher program had the ability to decide whether to send their child to a community school
(funded by the state but also run by their own school boards and receive twice the per-student funding as participating private or
magnet schools), religious affiliated schools, or magnet schools. Also, Cleveland, like several other cities around the country,
aid and tutorial support, to families with children enrolled in the Ohio public school districts that met certain criteria.\textsuperscript{xvii}

In 1999 Florida developed the first statewide voucher program called the Florida A+ Opportunity Scholarship Program to provide vouchers to students currently enrolled in schools that have been classified as "failing."\textsuperscript{d}

Four years later Colorado enacted a statewide school voucher program called the Colorado Opportunity Contract Pilot Program\textsuperscript{5 xviii}

In 2004, President George W. Bush signed into law the first federally funded school voucher program into law in the District of Columbia, and the only voucher program in the country to be administered through the United States Department of Education. The Voucher program was called the D.C. Choice Incentive Act.\textsuperscript{6}

However, in June 2010, Congress stopped funding the D.C. School Voucher Program by preventing new students from enrolling in the program. Current students will continue to receive their vouchers until they complete high school. \textsuperscript{xix}

**Public vs. Private School Education:**

In order to better understand school vouchers, it is important to look at the differences that exist between public (specifically urban) and private schools. Public schools are defined as being

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\textsuperscript{4} If a school receives and F two out of four consecutive years, it is deemed failing and students may be granted a voucher to attend a higher performing public school, or private/parochial school. However, in 2006 the Florida Supreme Court struck down the Florida Opportunity Scholarship Program, stating that it violated the state’s constitutional requirement for a “uniform, efficient, safe, secure and high quality system of free public schools.

\textsuperscript{5} The law was later repealed in 2003 due to infringement on local control. The legislation provided a voucher to students in grades K-12 who qualify for free or reduced lunch and have attended a public school for at least one year.

\textsuperscript{6} The Act allowed for nearly 2,000 students coming from low-income families to receive a voucher to attend a private or parochial school within the District of Columbia. Vouchers would be granted up to $7,500, as part of a $14 million dollar initiative to improve education within the District of Columbia’s public schools. The program required that eligible students be in grades K-12, qualify for free and reduced lunch programs and have a family income at or below 185 percent of the Federal Poverty Level.

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"schools provided by state and federal funding, including traditional public schools, charter schools, and magnet schools", where as private schools include both parochial and non-parochial schools and are privately funded. Nearly 90 percent of all students in the United States attend a public school. In 2008 the 100 largest urban school districts in the country accounted for 1 percent of all public school districts, but were responsible for the education of 22 percent of all public school students. The majority of students within these 100 districts were minority or low-income students (63 percent compared to just 17 percent of students in all school districts).xx

In 2008 there were 132,656 public schools in the United States, the majority of which were elementary, and 32,740 private schools.xxii Public schools are, on average much larger than private schools, having larger class sizes and higher student to teacher ratios. In total there were 49,293,000 students enrolled in a public school during the 2007-2008 school year, and 5,910,210 enrolled in a private school during that same school year. In public schools, students could expect an average student to teacher ratio of 15.7:1, that number is higher in urban schools than in suburban public schools. The average student to teacher ratio in an urban school is 18:1.xxiii compared to a private school where students could expect an ratio of 11.1:1.xxiv

Public schools spent $562.3 billion during the 2007-2008 school year. The general cost to educate a student is also much greater for public schools with the average per-pupil expenditure of $12,018, compared to the average tuition at a private school which was about $8,549 for the 2007-2008 school year.

The differences between public and private schools is important when looking at school vouchers, particularly in the areas of class size, student to teacher ratio and per-pupil spending/tuition. The first two factors are important because numerous studies have shown the impact on student achievement of smaller class sizes and lower student to teacher ratios, particularly for students with lower economic statuses and minority students. Average class sizes in urban schools are 26.6, and studies indicate that student achievement improves 30 percent as class sizes are reduced to around 17 students a class.xxv
**Legality:**

School voucher programs have not only faced political challenges, but have also faced numerous legal challenges, calling into question whether the programs violate state or federal constitutional law, particularly establishment clause jurisprudence. For as long as school choice options have been available, every school choice program adopted prior to 2000 was subjected to a legal challenge.\(^{xxv}\)

See Addendum A for the major legal challenges to school voucher programs, and cases dealing with the Establishment Clause as it related to public education.

The most significant ruling on school vouchers came in 2002 with *Zelman v Simmons-Harris* (2002). This ruling set new precedent for future school voucher programs, by upholding their constitutionality and changing the focus of the school voucher debate from protecting the Establishment Clause to removing discriminatory practices within public schools and leveling the playing field for all students in the country regardless of race or socioeconomic status. *Zelman v. Simmons-Harris* is thought to be the most important educational decision since *Brown v. Board of Education* because of the number of policy options set forth for addressing future crisis in public education.\(^{xxvi}\)

See Addendum B for more information on the Zelman case.

**Proposed Solutions:**

In order to begin to improve many of the urban school systems across the country, policymakers should consider developing pilot voucher programs that will implement aspects of school voucher programs proven to be successful already in existence across the country. The creation of a number of state administered pilot programs will give urban districts the opportunity to improve the overall achievement levels and improve graduation rates.\(^{xxvii}\)

The ability for school voucher programs to raise educational achievement levels for students in urban school districts is important because there has been a significant amount of research indicating that low-income and minority students, which are the largest populations within urban
school districts, have 15 to 20 percent lower graduation rates due to the poor education they receive and their lack of proficiency in important areas like math, reading and writing. A number of large urban school districts have worked diligently to improve their achievement levels and have thus seen a correlated higher graduation rate. For example, New York City, the largest and most diverse school district in the nation, has been working to improve student achievement and graduation rates over the last five years, and has seen success through various school choice programs. Graduation rates within New York City have improved 15 points since 2002. While school choice is not the only reason for the improvements, it has played a significant role. New York has not yet integrated school vouchers into their school choice program, but this example still shows that alternatives to traditional public schools can have a significant impact on graduation rates.

**Current School Voucher Programs:**

While a number of states and local school districts have been successful at, or have attempted to, implement school voucher programs, Milwaukee Washington D.C. and Cleveland have seen the relative success with their programs and are described below. Over the years the impact of these voucher programs have been studied in numerous ways, with a significant number of them proving effective at improving achievement levels and graduation rates, particularly for African American urban students.

**Milwaukee:**

The Milwaukee Parental Choice Program (MPCP) was created in 1990, with the passage of Wisconsin Act 366, and is the oldest and largest school voucher program in the country.

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7 Mayor Michael Bloomberg was elected Mayor of New York City in 2011 and decentralized the school system. He dispersed authority among a central board, community school district superintendents, and elected school boards. He also focused on reducing teacher turnover and increasing principals' autonomy. Studies conducted on the school system have found that there are significant savings that would occur if graduation rates were improved by 50 percent. The city stands to gain $480/ year in increased spending and investment levels, which would in turn create $92 million per year in additional state and local tax revenue.

8 The Milwaukee program has also improved parental satisfaction, which, according to some who have studied school vouchers, is an important indicator of the programmatic success. Studies looking at parental satisfaction within the district found that 36 to 56 percent of parents who had children participating in the voucher program gave their school an A, whereas 25 to 30 percent of parents with children in public schools gave their child's school an A.
MPCP provides state funding exclusively for low-income students attending public schools within the Milwaukee public school system to attend private schools. In the last nine years the program has grown from 337 students at seven schools to 20,328 students at 111 schools in 2009-2010. Currently enrollment is capped at 22,500.\textsuperscript{xiii}

The data also shows some significant improvements for students who participate in the program. 8\textsuperscript{th} graders, required to take a formalized standardized exam to monitor their proficiency levels, in 2007-2008, scored higher in all three tested areas than their public school counterparts by a statistically significant number. These same students illustrated a higher level of proficiency in two of the three main subjects tested than their public school counterparts.\textsuperscript{xii} Reading and Math scores for voucher recipients improved, on average, 4.5 percent over four years, compared to the students currently attending public schools.\textsuperscript{xxxii}

The MPCP has also shown to improve graduation rates among voucher recipients. A 2009 report found that 82 percent of 9\textsuperscript{th} grade students in voucher schools graduated from high school, while just 70 percent of 9\textsuperscript{th} graders in the Milwaukee Public Schools did. Graduation rates have increased steadily over the past five years in Milwaukee for students receiving school vouchers (62 percent in 2005, 64 percent in 2006, 87 percent in 2007, 77 percent in 2008, and finally 82 percent in 2009).\textsuperscript{xxiv} These improvements in graduation rates indicate that the program has been successful at moving students from lower achieving schools and into higher performing schools, which has increased their likelihood of graduating from high school.

\textbf{Washington D.C.:}

The District of Columbia School Choice Incentive Act was passed by the United States Congress in 2004. The Act provided funding for the District of Columbia Public Schools to implement improvement activities including a school voucher program called the D.C. Opportunity Scholarship Program. This was the first federal government initiative that provided vouchers to K-12 students to attend private schools. To be eligible for the program, students must reside in the District and have a family income at or below 185 percent of the federal poverty level. Participating students receive a $7,500 voucher to cover the costs of attendance at a participating private school, and these vouchers are renewable for up to 5 years, if the student maintains...
eligible. Since 2004, funding has been sufficient enough to support 1,500-2,000 students annually.\textsuperscript{xxxv}

In the latest review, the D.C. Opportunity Scholarship Program\textsuperscript{9} has proven to be successful at increasing graduation rates among participants, and improve academic achievement among certain subsets of the student population, particularly African American participants. African Americans currently make up 80 percent of the students participating in the school voucher program in D.C.

The D.C program has proven successful at increasing graduation rates among recipients. In 2009 82 percent of students who received a voucher received a high school diploma, compared with 70 percent of those in public schools. In 2004, when this program took effect, Washington D.C. public schools had only 58.2 percent of their students graduating from high school. In the seven years the program has been in effect graduation rates have increased 11.8 percent for non-voucher students and 23.8 percent for voucher recipients. While both have seen an improvement over the years, voucher students are clearly seeing a much higher rate of graduation. Whether or not the increase in both groups graduation rates is due to the increased competition among private and public schools, that is not known.\textsuperscript{xxxvi}

Finally, the achievement levels have also seen improvements for certain groups of students participating in the program, particularly African Americans. The current research suggests that student achievement levels are not improved the first year, but that African American recipients of school vouchers saw combined gains of 9.2 percent in reading and math the second year.\textsuperscript{xxxvii}

\textsuperscript{9} Parental satisfaction is also important. Seventy-six percent of parents with children that qualified for vouchers gave their child's school a grade of "A" or "B", compared with just 63 percent of parents whose children still attended public schools.\textsuperscript{9} Not only are parents more satisfied with the overall quality of the school, they are satisfied that their children are graduating in higher numbers than their public school counterparts. Receiving a D.C. Opportunity Scholarship raised a student's probability of graduating from high school by 12 percentage points.\textsuperscript{9}
Cleveland:

In 1995, the Ohio legislature created the Cleveland Scholarship and Tutoring Program. This was a pilot program established to provide students within the Cleveland City School district an opportunity to apply for either a tutoring grant or a voucher to attend a private or parochial school in the area, or attend a public school in participating higher performing adjunct school districts.\textsuperscript{10}

Cleveland’s program has proven successful in a few areas (graduation rates and parental satisfaction)\textsuperscript{11}, however the program has not shown significant academic achievement advancements over the years,, according to a research study conducted by Harvard’s Program on Education Policy and Governance (PEPG).\textsuperscript{xxxviii} During the 2009-2010 school year, voucher students in grades 5-8 outperformed their public school counter parts in both reading and math by 3 to 8 percentage points.\textsuperscript{xxxix}

Cleveland has seen an increase in graduation rates for those students utilizing voucher than regular public school students. For years, Cleveland Public School system has had one of the worst graduation rates in the country, dropping to just 53.2 percent in 2007. However, voucher recipients attending private schools in Cleveland have increased their graduation rates over public school students by more than 10 percent.\textsuperscript{xl}

\textsuperscript{10} In 2005 the Cleveland Scholarship and Tutoring Program was expanded to include vouchers to students in both 11\textsuperscript{th} and 12\textsuperscript{th} grade, and increased the amount the vouchers were worth. The same year the legislature established the Educational Choice Scholarship Pilot Program which provides scholarships to students attending a public school that has been identified as in “academic emergency” for three consecutive school years. The law that created the program stipulates that scholarships must first be awarded to eligible students who received them in a previous year, and then they will be awarded to student whose family incomes that are at or below 200 percent of the Federal Poverty Level, and finally they will be awarded on a lottery basis. The law provides funding for up to 14,000 students to attend nonpublic schools, but does not allow for students in the Cleveland Municipal School District to apply.

\textsuperscript{11} The study found that 50 percent of parents of voucher recipients were “very satisfied” with the academic program that their children was receiving at school, compared to less than 30 percent of public school parents in the area. The study also found that test scores in both mathematics and reading showed substantial gains, gaining nearly seven percentile points in reading and 15 percentile points in math in just the first two years.\textsuperscript{ll}
Strategic Recommendations:

While every school voucher program has their own unique qualities to meet the needs of the audiences they serve, a number of empirical studies have shown that there are certain elements of a school voucher program that have been implemented in some existing school voucher programs already in existence. After reviewing research pertaining to school voucher programs, four major components of different school voucher programs stood out as critical factors. While none of the current programs implement all of these components together, research done on the individual programs has highlighted a successful portion of the program, and for future programs implemented, the most successful components have been combined here. The four key components are:

1. Increase voucher rates to 80 percent of per-pupil operating revenue;
2. Set income qualification rates at or below 185 percent of the Federal Poverty Level (FPL);
3. Cap the number of students who can receive a school voucher at 15 percent of the number of students enrolled in the district;
4. Continuous coverage so that once a student qualifies for a school voucher, that voucher remains with them until they graduate from high school, as long as they continue to be financially qualified; and,
5. Vouchers will be distributed to eligible students using a lottery system, until the cap is reached.

Voucher Rate:

At the present time, the majority of school voucher programs are being funded at a percentage of the actual per-pupil revenue being given to the district by the state to educate a child. In Milwaukee, Washington D.C. and Cleveland voucher students are receiving 69.8 percent\textsuperscript{xii}, 51 percent\textsuperscript{xiii}, and 75 percent of per-pupil revenue respectively for Fiscal Year 2008. This means that the districts are then able to keep the difference, leaving them with additional money that they will not have to spend to educate that voucher student. For example, in Washington D.C., voucher recipients receive $7,500 to attend a private school, but the district receives $12,081 per-
pupil each year, leaving them with an additional $7,091 after having sent a voucher recipient to a private school.

Pilot program creating a new school voucher program in an urban district in the U.S. should consider voucher amounts equal to 80 percent\textsuperscript{12} of the amount given to public schools to educate that child. By doing this, the district is not losing money on the voucher, but all of the students costs are covered by the voucher amount. Research has shown that the lower the dollar value of the voucher, the less likely parents are to opt into the program because it is cost prohibitive.\textsuperscript{xliii}

The smaller the dollar amount for the voucher the less likely parents will be to send their student to a participating private school because they don’t have the economic resources to supplement the cost between the actual voucher rate and the cost of attendance.\textsuperscript{xliv} In 2009, the average cost of a private school education was $8,549, while the average per-pupil amount spent in a public school was $12,081.\textsuperscript{xlv}

Using Washington D.C. as an example again, if school voucher recipients saw their amounts increased from 62 percent (2010 per-pupil operating allotment) to 80 percent of the per-pupil revenue received by the school district, which would increase the dollar amount received by the family by $2,740. That would make up for the difference in costs that a family would have to supplement in order to meet the average private school tuition rate of $8,549.\textsuperscript{xlvi}

**Income Qualification:**

Currently, each school voucher program has different qualifications for students, in terms of income, in order to receive a voucher. Milwaukee requires students to have a family income at or below 175 percent of the federal poverty level; Washington D.C. requires recipients to have a

\textsuperscript{12} 80 percent was chosen because it is higher than the average student voucher currently in place but would reduce the gap between the cost of tuition at a private school and the voucher. This level would also ensure schools could continue to see a positive economic impact. This would also reduce the amount that parents may have to supplement for their child to attend private school.

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family income at or below 185 percent\textsuperscript{13} of the federal poverty level; and Cleveland requires families have a combined income at or below 200 percent of the federal poverty level. Because the main goal is to provide an equal opportunity for low income students to attend a private school, it is important to capture the neediest students in the qualifications for receiving a school voucher.

Therefore, it is important for future school voucher programs to implement criteria for income levels that will capture students within the district that are in the most need. Therefore it is suggested that future programs require eligibility to be granted to students whose families combined income is at or below 185 percent of the federal poverty level which would translate to $40,792.50 for a family of four.\textsuperscript{14} By making that the benchmark, school voucher programs would capture all students receiving free and reduced lunch, which is one of the main government indicators of poverty for a student.\textsuperscript{15}

**District Cap on Number of Vouchers:**

All of the current school districts that have implemented school voucher programs have caps on the number of students that can receive a voucher, which were established by the state legislature when they were drafting the legislation that created the program. Some districts cap the percentage of eligible students, while others have placed numerical caps on students. For example, in 2009, Ohio’s program was capped at 14,000, and 13,000 were actually being used by students.\textsuperscript{15} The purpose behind imposing a cap is to ensure that there will not be an overload of students entering private schools. This would give the private school market time to adjust to the new students.\textsuperscript{16}

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\textsuperscript{13} A student qualifies for Free and Reduced Lunch if their family income does not exceed 185 percent of the Federal Poverty Limit. According to the Federal government, the Federal Poverty Level is one of the best indicators of need within schools.

\textsuperscript{14} Family units are most often cited as containing four members for examining purposes.

\textsuperscript{15} Some parents have been dissuaded from even applying for a voucher because of the cap. Ohio Gov. John Kasich has vowed to increase the number of school vouchers available, up to 56,000, to reduce the feeling of uncertainty by parents.

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Transferring:

When students meet eligibility requirements and utilize the school voucher program, it is important that the initial money and opportunity they receive follows them throughout the remainder of their education, rather than having the student have to reapply each year, unless they no longer meet eligibility requirements. All three programs examined above allow for students to have the vouchers “transfer” with them to new grades and other qualifying private schools, but mandate that if a student no longer meets eligibility requirements, they remove themselves from the program. All three programs stipulate that if a student’s family income exceeds 220 percent of the federal poverty level than they are no longer considered to be eligible to receive school voucher funding because they are no longer deemed “low income”. If, at a point in the student’s academic career, their family’s income disqualifies them, but then falls back too qualification levels, those students must reapply and are reentered into the general pool of applicants.

This ability to keep the school voucher over the life of a student’s k-12 education is critical to the success of the programs overall, because the longer a student remains in a private school, or higher achieving school, the better their academic success will be and the higher the probability is that they will graduate from high school. Many of the studies cited above indicate that achievement levels continue to improve the longer a student is in a voucher program, and therefore increases their likelihood of graduating from high school.¹

Lottery:

The majority of school voucher programs select recipients of the vouchers through a process known as lottery. The lottery system operates as follows: At the beginning of each year, students who are not currently receiving a voucher, but who meet the income requirements are put into a large pool. Names of students are drawn until the maximum number of vouchers allowed in the statute, are granted. If the student looks at eligible schools and their family does not feel they can supplement the cost that the voucher may not cover for a private school, that voucher is then
reallocated for the next year. Some programs award vouchers to eligible students on a first-come-first-serve basis, but this has proven to be more controversial and has diminished as a practice as school voucher programs have grown to include more students.

The lottery system is one of the more efficient and fair ways to distribute school vouchers and therefore should be used as a distributional method for future programs. All students must meet the same eligibility requirements and then are given the same opportunity to receive a voucher, rather than have them given out as a first-come-first-serve option where some might be given a slight advantage.

Pilot programs created can establish a deadline for applying to be entered into the pool of applicants to prevent some families from procrastinating application. Once all applications are received, the lottery system will allow the district to distribute the vouchers in a way that will not favor those who were able or willing to apply to the program very early on, leveling the playing field for each eligible student and family. While there has not been a lot of research conducted on the success of the lottery system, based on anecdotal evidence it appears to be the most effective and efficient.

**Weaknesses and Limitations:**

While the evidence listed above is conclusive in the beneficial impact of school vouchers, there remains some limitations on the programs, and critics still maintain certain faults in the currently operating programs. One of the largest limitations is the amount of research done on some of these programs and a good description of what works and why. One of the reasons for the lack of research is that most of these programs are implemented on a relatively small scale, not offering a large enough sample size for a strong empirical analysis to be conducted on it. Also, the education landscape in each of these areas where programs have been set up are very different, making it difficult to be prescriptive in recommendations. That is one justification for starting a few additional pilot programs so that different populations will be studied and the programs can

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16 Milwaukee uses a modified version of the lottery. The legislation stipulated that all eligible students should fill out an application, and if applications exceed the number of places available in the private school, a random lottery decides the selection of choice students.

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help determine where to set limits like voucher rate, number of students that can qualify, and where income level qualification, should be set.

The weaknesses and limitations listed below have been developed from anecdotal evidence. The fact of the matter is that these weaknesses cannot be fully explored or validated until school voucher programs have been in existence for more time. Also, while these are the weaknesses and limitations that are being addressed now, there may be additional weaknesses in the future that cannot be anticipated just yet.

**Cream skimming:**

Despite Friedman’s deep concern for the nations education system and his request for change, his ideas for school vouchers and school choice was met with severe resistance from policy leaders and the general public. People believed that a system of school choice and vouchers would continue to take away the most advanced and highest achieving students from public schools, and would be an economic burden on the public school systems and communities. Opponents feel that school vouchers would leave behind all of the lowest performing students and those with disabilities that cannot be taken care of at a private school, bringing down the quality of public schools further.

The argument behind this is that school vouchers are not available to everyone, and that parents must be significantly more knowledgeable, and already very proactive in their child’s education to want to take advantage of these vouchers. Opponents then believe that working parents who do not have the time to be involved in their child’s education will not be able to take advantage of the vouchers that they may qualify for. Opponents also feel that voucher schools have an incentive to give preferential treatment to higher performing and wealthier students because, often times the amount of the voucher does not cover the entire cost of tuition.

The anecdotal evidence suggests that cream skimming effects on targeted programs (which all U.S. school voucher programs are categorized as currently) are relatively small, but may become more serious if a universal, statewide program is implemented. The reason behind this is that school voucher programs are targeted toward children with family incomes falling under 200
percent of the federal poverty level, suggesting that these are vulnerable and underprivileged children who would benefit from receiving monetary help to go to a private school.

There has not been sufficient research done on the impact of cream skimming due to the relative infancy of many of these programs. This may become a problem in the future, but has not yet proven to be true.

**Impact on the Private Schools:**

Opponents of school voucher programs fear the impact that school vouchers will have on private schools because of the influx of underperforming students entering the more rigorous private schools. Critics see the increase number of students leading to larger class sizes and incentivizing profit seeking business people to enter the market and build schools to take the government money and accommodate the demand. Others argue that the quality of the education received within a private school will go down as more low performing students enter private school classrooms.\(^{iv}\)

Anecdotally, this is not a significant argument because the number of vouchers being granted within each school district has not been shown to create a significantly bigger market, and most of the legislation caps the number of students who are eligible to receive the vouchers, preventing any future issues with schools being overrun. In terms of the quality of education, this too is an unfounded belief, as numerous studies have proven that when children are put in more challenging situations, with higher performing peers, they tend to move at a faster pace to catch up to their fellow students.\(^{iv}\) One way to mitigate this fear is to assert that reviews on the program will be done after three years, and all school enrollment levels will be looked at, if it is apparent that the market can take additional students, the program may be expanded 10-20 percent.

If pilot programs are launched it will help to determine where these programs might need to cap the number of students receiving vouchers so this does not become a wide-spread issue. Each district will need to determine what works for their district and what doesn’t. This too has not
been highly studied, and therefore will not gain traction until the programs are in affect for a longer length of time.

**Local Control Barriers:**

Several states maintain have constitutional provisions stipulating that the state’s education system will operate as a local control system, meaning that each district is able to direct how that particular district operates. Under the provisions, districts must elect school boards of education that will act as the governing body of that particular school district. The state itself also creates a larger state board of education, but that board serves as more of an appeals board, and can only make recommendations to school districts rather than institute direct requirements or create specific laws.

Many favor local control because they feel as if the people within the district will have more knowledge of what the district would need, rather than deferring to state officials. However, states with local control provisions face numerous difficulties when trying to implement school voucher programs because the state legislature is able to pass formal legislation creating a statewide voucher program, but the school districts are not required to implement the program within their district. The best example of this took place in Colorado in 2003 when the state legislature passed House Bill 1160 creating the Colorado Opportunity Pilot Program. This Program allowed districts with eight failing schools to provide school vouchers to financially eligible students.\textsuperscript{bvi}

While the Colorado State Legislature passed this Bill, the legality of the Bill was challenged in court because opponents felt that it violated the state’s local control laws and took away power from the school boards. This point was later upheld in the courts, and ended up forcing the program to cease before it was even fully implemented.\textsuperscript{17}

\textsuperscript{17} In November 2010, the Douglas County School District Board of Education announced that it was formally considering implementing a school voucher program within the district. Under the local control regulations, the School Board would be within their power to implement the program if they deem it necessary. However, critics have argued that the Douglas County School District is one of the more affluent and highest performing in the state, and therefore such a program is not warranted.
As a result, many other local control states could face similar issue if they are looking to implement similar programs and decide to pass legislation creating the programs rather than allowing individual school districts to implement the programs on their own.

**Cost-Benefit Analysis:**

Funding the public education system is a large portion of both federal and state funding. However poor and inadequate education for substantial numbers of young people may have public and social consequences that are far more costly than education in general. That is why it is important to invest in young people now so that society is not paying more for it later.

**Costs and benefits:**

When looking at the impact of school vouchers, it is important to focus on both the cost to communities, and the benefits. A few studies have been done on the actual cost to states and local governments when school voucher programs are implemented. While critics of school voucher programs have claimed that they are taking away funding from public schools, there has been no indication in any of the states with school voucher programs that they are in fact taking away funding. Rather it has been the opposite. Studies have shown that all school voucher programs are either fiscally neutral or financially beneficial to a school district. Between 1990 and 2006, school voucher programs have saved about $444 million ($22 million saved in state budgets and $422 million saved in local public schools).\textsuperscript{iviii}

The benefit to school districts comes from the difference in the voucher amount, and what the district is receiving in funding for that student. Students who are receiving a voucher are only given a portion of the total state funding formula for students, leaving the district with the difference and increasing their net revenue gain. The fiscal impact will be the difference between the total amount spent on the vouchers and the total amount of formula funding that would have been spent regardless on that student using that money.\textsuperscript{lix}

Of the eleven school voucher programs currently implemented throughout the country, two have been found to be fiscally neutral, with the remaining ten being financially beneficial to the school
districts where vouchers are in use. Maine and Vermont are the two states that have school
voucher programs that have been shown to be revenue neutral, and that is simply because of the
way these programs have been set-up. In both states, the school vouchers were created to send
students in rural areas that did not have a school to a neighboring town in order to attend school.
So in this case, the state would be paying for that student whether they went to a private or public
school because of the lack of schools in the rural areas.\textsuperscript{lx}

The remaining nine school voucher programs (Arizona, Florida, Iowa, Ohio, Pennsylvania,
Rhode Island, Utah, Washington D.C., and Wisconsin) have proven to increase revenue to the
state in which they reside.\textsuperscript{lxii} For example, in Ohio, since the program’s inception, the school
district has saved over $61 million, and that is just general cost savings to the district. That does
not account for the net benefit to the community for higher graduation rates.\textsuperscript{lxii}

Some argue that there will be some cost born by the school district, even if it is just additional
administrative costs associated with implementing school voucher programs. Therefore, it is
important to account for is the additional administrative costs when determining the potential
impact on a school district. These costs would include: staff time for advertising the program and
determining eligibility; staff time for reviewing applications and administering funds; and
finally, staff time for follow up and evaluation of voucher recipients.\textsuperscript{18} The cost to each district
will vary significantly because costs for the above mentioned things are not going to be the same
everywhere, and will vary based on the school year. However, it is still important to recognize
these potential costs as being a factor when looking at whether or not a school district should
implement vouchers.

Also, parents may incur some costs associated with enrolling their student in the programs, and
these would include: additional clothing costs for uniforms; additional transportation costs if
buses are not provided; additional school supply and book costs. While these are potential costs,

\textsuperscript{18} When Douglas County school district in Colorado was researching whether or not to implement school vouchers within the
district, they estimated that the cost of administering the program would be less than what the district would make from the
difference between the cost of the voucher and what the district brings in for per-pupil operating revenue. One estimate put the
savings at $3 million by not having to teach 500 kids. For 500 kids the district would have to pay out about $2.29 million in
voucher scholarships. Subtract an estimated $360,000 in expenses to track the private school kids, administer CSAP testing to
them and other expenses and the district would end up making $402,500.

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no studies have been conducted on the actual average cost to a family for using a voucher to send their student to a private school. This is also difficult to quantify because it is going to vary greatly between locations.

The cost to society of not implementing school voucher programs, which would in turn increase graduation rates, is higher than to an individual school district. Unless high schools are able to graduate their students at higher rates, nearly 13 million students will drop out over the next ten years. Research conducted in October 2005 by Cecilia Rouse shows that each dropout, over his or her lifetime, costs the nation approximately $260,000. The result will be a loss of $3 trillion to the country.

With increased graduation rates comes higher earning potential increases and more paid in income tax and have a higher purchasing power. In 2008, 65 percent of adults age 25-34 were employed full-time year-round, only 46 percent of high school dropouts were employed in some capacity during that same time, meaning that 54 percent of the nation’s high school dropouts were unemployed in 2008. The percentage of adults working full-time was significantly higher for those with higher levels of educational attainment, with 72 percent of adults with a bachelor’s degree or higher were employed full-time, compared to 62 percent of adults with a high school diploma or equivalent. The average annual income for someone who completed high school was 96 percent higher than those that had dropped out of high school and failed to complete their GED in 2008.\textsuperscript{lxiii}

A higher income translates to high tax revenue. If half of the 1.3 million students who dropped out of high school in 2010 would have graduated, that would have translated to an additional $713 million in additional state tax revenue and increase their spending ability by $5.6 billion.\textsuperscript{lxiv} One study found that if the male graduation rate was increased by just 5 percent increase earnings by $2,799,525,519.\textsuperscript{lxv}

Each state will see differences in their economic loss. See Table 2 in Addendum C for more information on this.

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High school dropout also cost the state in increased incarceration fees. Between 1987 and 2008, total state general fund expenditures on corrections rose 349 percent, to total of $47.73 billion.\textsuperscript{lxvi} Cost-per state varies widely, but on average, per-prison operating costs in 2005 were $23,876.\textsuperscript{lxvii} If the male graduation rate were increased by only 5 percent, the nation would see an annual savings of $4.9 billion in crime-related costs.\textsuperscript{lxviii}

Students that dropout of high school also cost the nation more in health care costs. Every student that graduates from high school saves states an average of $13,706 in Medicaid and expenditures for uninsured care over the course of his/her lifetime.

Because the above suggested school voucher programs are aimed at low-income and minority students, it is important to look directly at these categories of students and compare their dropout rate and subsequent increased cost to society to their higher income white counterparts. High school students living in low-income families drop out of school at six times the rate of their peers from high-income families. Graduation rates are significantly lower in districts with higher percentages of students who are eligible for free or reduced-price lunches. Achievement levels also play a major role in dropout rates. The lowest-achieving 25 percent of students\textsuperscript{lxix} are twenty times more likely to drop out of high school than students in the highest achieving quartile. In 2007, 16 percent of people between 16 and 24 years of age (62 million people) were high school dropouts. Among those, 60.1 percent were men, 18.8 percent were black and 30.1 were Hispanic.

The combined cost savings from reduced incarceration fees, increased income, increased state and local taxes, and reduced reliance on government subsidized health care proves that it is beneficial for society to implement strategies that will increase graduation rates, particularly for low-income and minority students. Implementing a school voucher program is one such option.

**Conclusion:**

The quality of education received by students in the United States not only benefits those students greatly, but also greatly benefits the country as a whole. As it stands now, the United States is failing to properly educate students in urban areas because lawmakers are relying too
heavily on the traditional public schools rather than looking toward school choice and educational equity programs. While the school choice movement is relatively new, the results have proven to be strong, and show that, if used under the right conditions, are successful, particularly for urban students.

School vouchers, as part of the general school choice movement have proven their ability to raise student achievement, parental satisfaction with schools, and increase graduation rates. All of these proven factors show that additional school voucher programs should be considered in other states to ensure that students attending failing schools and do not have the family financial resources to attend private school have an equal opportunity to choose where they receive their education, and move from poor performing schools to higher performing schools.

Policymakers sit at a critical juncture right now, and must act quickly to move toward significant educational improvements.
Addendum A

Legal History

In 1947, the Supreme Court of the United States first stepped in and delivered their first verdict regarding the Establishment Clause and education. In *Everson v Board of Education* (1947), the Court upheld a state law that reimbursed parents for the cost of busing their children to parochial schools, ruling that the payments did not violate a separation of church and state because it was the safest and most expedient route to get children to school.  

The next major case involving education and the Establishment Clause was *Lemon v. Kurtzman* (1973). This case established for future cases addressing the Establishment Clause, a three-part test for determining whether a statute passes scrutiny under the First Amendment’s prohibition of laws “respecting the establishment of religion”. The “Lemon Test” stipulated that in order for a law to pass the test, it must meet the requirements of the First Amendment and: 1) the law must have a secular (not religious) legislative purpose; 2) the law in its principle or primary effect must neither advance nor inhibit religion; and 3) the law must not foster excessive entanglement of church and state. The Supreme Court concluded that the program’s “primary effect” was to advance religion, because the Court found that the aid programs being looked at in the case was skewed entirely in favor of private schools and therefore not neutral to the advancement of religion.

School voucher programs began to be specifically targeted by lawsuits in the 1990’s originating in two states, Maine and Vermont. Both of these programs were designed to allow students who lived in rural areas with no public schools, to use vouchers in near-by towns to attend school. In 1961 Vermont passed a state constitutional amendment excluding parochial schools from receiving state funded vouchers from students. Maine followed suit in 1981. However, during the 1990’s lawsuits were filed to try and restore the ability of religious schools to participate in the school voucher program. However, two states lower courts refused to reinstate parochial schools. Their decision was appealed all the way to the Supreme Court in both states, and later the U.S. Supreme Court, but was denied.
In 1995, a teachers union in Wisconsin filed a lawsuit in the lower courts addressing new provisions to the Milwaukee School Voucher Program, allowing for the inclusion of religious schools into the school voucher program. The case was later appealed to the Supreme Court in Wisconsin (Jackson v. Benson 1998), whereby the Court reversed the lower court ruling, upholding the constitutionality of the Milwaukee programs inclusion of religious schools, claiming that the inclusion of religious schools was not a direct violation to the state’s "compelled support" provisions or the Blaine Amendments.\textsuperscript{1xxiii}
Addendum B

Zelman vs Simmons-Harris

The Zelman case was initiated by a group of Ohio taxpayers who challenged the creation of a School Voucher Pilot Program in state court on state and federal grounds. The case was taken all the way to the Ohio State Supreme Court. \textsuperscript{lxiv} The Legislature moved to remedy the problem and was able to keep the basic principles of the Pilot Program intact while appeasing the Ohio taxpayers.

The United States Supreme Court granted Zelman v. Simmons-Harris 533 U.S. 976 certiorari in 2001. The question presented to the Court was whether the Ohio Pilot Program offends the Establishment Clause of the United States Constitution. The Court reversed the Court of Appeals summary judgment that the Ohio program has the primary effect of advancing religion. \textsuperscript{lxv} In the holding, the Court developed a five part test, "Private Choice Test" to determine whether a voucher program is Constitutional. The "Private Choice Test" stipulated that a voucher program must meet the following criteria, 1) the program must have a valid secular purpose; 2) aid must go to parents and not the schools directly; 3) a broad class of beneficiaries must be covered; 4) the program must be neutral with respect to religion, and: 5) there must be adequate nonreligious options. The Court ruled that the Ohio program met all five criteria and was enacted for valid secular purposes of providing educational assistance to underserved students in failing schools, and did not offend the Establishment Clause. \textsuperscript{lxvi}

The 5-4 decision not only addressed the Establishment Clause issue, as so many cases before it had, but also looked at the Equal Protection Clause, and how all students should have equal access to a high quality education, regardless of economic barriers. The Zelman case has also opened the doors for other states to look at implementing school voucher programs to students in their failing districts.
Addendum C
Charts and Graphs

Table 1
Earnings Payoff Relative to a non-High School Diploma Holder

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Lifetime Earnings</th>
<th>Earnings Payoff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a High School Diploma</td>
<td>$993,466</td>
<td></td>
</tr>
<tr>
<td>High School Graduate</td>
<td>$1,298,316</td>
<td>$304,850</td>
</tr>
<tr>
<td>Some College/No Degree</td>
<td>$1,462,379</td>
<td>$468,913</td>
</tr>
<tr>
<td>2-Year Degree</td>
<td>$1,527,582</td>
<td>$534,116</td>
</tr>
<tr>
<td>4-Year Degree</td>
<td>$2,173,417</td>
<td>$1,179,951</td>
</tr>
<tr>
<td>Master’s Level Degree</td>
<td>$2,312,426</td>
<td>$1,318,960</td>
</tr>
<tr>
<td>Doctorate or Professional Degree</td>
<td>$2,907,904</td>
<td>$1,914,438</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>States</th>
<th>Estimated Graduation Rate (2005-2006)</th>
<th>Projected Number of Nongraduates for the Class of 2009</th>
<th>Total Lifetime Additional Income if Dropouts Graduated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>61.4%</td>
<td>25,136</td>
<td>$6,335,360,000</td>
</tr>
<tr>
<td>Alaska</td>
<td>65.9%</td>
<td>3,893</td>
<td>$1,012,180,000</td>
</tr>
<tr>
<td>Arizona</td>
<td>68.6%</td>
<td>23,834</td>
<td>$6,196,840,000</td>
</tr>
<tr>
<td>Arkansas</td>
<td>71.9%</td>
<td>10,931</td>
<td>$2,842,060,000</td>
</tr>
<tr>
<td>California</td>
<td>67.5%</td>
<td>175,011</td>
<td>$45,502,860,000</td>
</tr>
<tr>
<td>Colorado</td>
<td>72.7%</td>
<td>17,391</td>
<td>$4,521,660,000</td>
</tr>
<tr>
<td>Connecticut</td>
<td>78.9%</td>
<td>9,394</td>
<td>$2,442,440,000</td>
</tr>
<tr>
<td>Delaware</td>
<td>66.0%</td>
<td>3,783</td>
<td>$983,580,000</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>48.8%</td>
<td>2,328</td>
<td>$605,280,000</td>
</tr>
<tr>
<td>Florida</td>
<td>57.5%</td>
<td>103,990</td>
<td>$27,037,400,000</td>
</tr>
<tr>
<td>Georgia</td>
<td>55.9%</td>
<td>64,052</td>
<td>$16,653,520,000</td>
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<td>Hawaii</td>
<td>63.9%</td>
<td>6,202</td>
<td>$1,612,520,000</td>
</tr>
<tr>
<td>Idaho</td>
<td>76.8%</td>
<td>4,989</td>
<td>$1,297,140,000</td>
</tr>
<tr>
<td>Illinois</td>
<td>74.1%</td>
<td>46,130</td>
<td>$11,993,800,000</td>
</tr>
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<td>Indiana</td>
<td>73.3%</td>
<td>23,414</td>
<td>6,087,640,000</td>
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<td>Iowa</td>
<td>80.7%</td>
<td>7,859</td>
<td>$2,043,340,000</td>
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<td>Kansas</td>
<td>75.4%</td>
<td>9,419</td>
<td>$2,448,940,000</td>
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<td>Kentucky</td>
<td>72.0%</td>
<td>16,193</td>
<td>$4,210,180,000</td>
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<tr>
<td>Louisiana</td>
<td>61.9%</td>
<td>20,011</td>
<td>$5,202,860,000</td>
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<tr>
<td>Maine</td>
<td>76.3%</td>
<td>3,810</td>
<td>$990,600,000</td>
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<td>Maryland</td>
<td>73.5</td>
<td>21,133</td>
<td>$5,494,580,000</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>75.9%</td>
<td>15,221</td>
<td>$3,957,460,000</td>
</tr>
<tr>
<td>Michigan</td>
<td>69.6%</td>
<td>46,295</td>
<td>$12,036,700,000</td>
</tr>
<tr>
<td>Minnesota</td>
<td>79.2%</td>
<td>13,999</td>
<td>$3,639,740,000</td>
</tr>
<tr>
<td>Mississippi</td>
<td>60.5%</td>
<td>16,246</td>
<td>$4,223,960,000</td>
</tr>
<tr>
<td>Missouri</td>
<td>74.4%</td>
<td>20,455</td>
<td>$5,318,300,000</td>
</tr>
<tr>
<td>Montana</td>
<td>76.1%</td>
<td>3,038</td>
<td>$789,880,000</td>
</tr>
<tr>
<td>Nebraska</td>
<td>78.7%</td>
<td>5,293</td>
<td>$1,376,180,000</td>
</tr>
<tr>
<td>Nevada</td>
<td>47.3%</td>
<td>20,722</td>
<td>$5,387,720,000</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>77.0%</td>
<td>4,202</td>
<td>$1,092,520,000</td>
</tr>
<tr>
<td>New Jersey</td>
<td>82.1%</td>
<td>19,573</td>
<td>$5,088,980,000</td>
</tr>
<tr>
<td>New Mexico</td>
<td>56%</td>
<td>13,210</td>
<td>$3,434,600,000</td>
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<tr>
<td>New York</td>
<td>68.3%</td>
<td>81,079</td>
<td>$21,080,540,000</td>
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<td>North Carolina</td>
<td>63.3%</td>
<td>46,675</td>
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<td>North Dakota</td>
<td>79.0%</td>
<td>1,777</td>
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<tr>
<td>Ohio</td>
<td>74.3%</td>
<td>40,198</td>
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<td>Oklahoma</td>
<td>70.6%</td>
<td>14,707</td>
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<td>Oregon</td>
<td>74.9%</td>
<td>11,350</td>
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<tr>
<td>Pennsylvania</td>
<td>77.6%</td>
<td>35,026</td>
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<td>Rhode Island</td>
<td>72.8%</td>
<td>3,377</td>
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<tr>
<td>South Carolina</td>
<td>66.3%</td>
<td>21,873</td>
<td>$5,686,980,000</td>
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</table>

Kristin Leigh Bugbee May 2011
<table>
<thead>
<tr>
<th>State</th>
<th>Dropout Rate</th>
<th>Number of Dropouts</th>
<th>Total Lost Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dakota</td>
<td>77.1%</td>
<td>2,348</td>
<td>$610,480,000</td>
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<tr>
<td>Tennessee</td>
<td>69.5%</td>
<td>24,856</td>
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<td>Texas</td>
<td>65.3%</td>
<td>133,160</td>
<td>$34,621,600,000</td>
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<td>Utah</td>
<td>72.2%</td>
<td>10,503</td>
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<tr>
<td>Vermont</td>
<td>78.7%</td>
<td>1,765</td>
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<td>Virginia</td>
<td>69.2%</td>
<td>33,540</td>
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<td>Washington</td>
<td>62.4%</td>
<td>33,850</td>
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<td>West Virginia</td>
<td>71.8%</td>
<td>6,913</td>
<td>$1,797,380,000</td>
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<td>Wisconsin</td>
<td>81.7%</td>
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<td>Wyoming</td>
<td>73.2%</td>
<td>1,995</td>
<td>$518,700,000</td>
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<tr>
<td>United States</td>
<td>69.2%</td>
<td>1,286,915</td>
<td>$334,597,900,000</td>
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</tbody>
</table>

Addendum D
Cost-Benefit Matrix

No cost benefit matrix is included in this policy memorandum because the costs (administrative and parental) will vary so significantly between locations, and cannot be averaged with any accuracy. Any numbers put into the matrix would be purely speculative and not be relevant.

The benefits, in cumulative numbers are listed above in the narrative section of the cost benefit analysis.

Section 119.23, Wisconsin Statutes


Ibid.

Peterson, Paul E., Howell, William G., Greene, Jay P. An Evaluation of the Cleveland Voucher Program after Two Years.

Ibid.

http://www.cmsdnet.net/en/News/CMSD%20in%20the%20News/Cleveland%20students%20hold%20their%20own%20with%20vouchers%20students%20on%20state%20tests.aspx

Ibid.


Ibid.


Ibid.


http://www.nber.org/chapters/c10087.pdf

Kristin Leigh Bugbee May 2011