THE BUCKEYE INSTITUTE FOR PUBLIC POLICY SOLUTIONS

A Child-Centered Solution to School Finance in Ohio

Brian Gottlob, Buckeye Institute Fellow

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EXECUTIVE SUMMARY

Educating children is not the same as directly funding school systems. A child-centered school finance policy that supports the choices of parents can create higher-quality schools and more equality in the educational opportunities available to children. The only way to ensure that all children have the same educational opportunities and equal resources to obtain them and at the same time create powerful incentives to improve school performance, is to adopt a student-centered school funding system.

Public schools are nominally "free," but pricing, which implicitly occurs through housing markets, fundamentally limits access to better schools and consigns less wealthy families to less desirable schools. The subsequent separation of students along class lines also means that the non-financial inputs critical to good schools, such as peer and family influences, can be even more unevenly distributed than financial resources. The unequal distribution of opportunity remains even when state aid is targeted at the "neediest" schools. State money that simply equalizes financial resources will have limited effects on the root causes of education inequities.

This report outlines an alternative approach that seeks to overcome the limits of past attempts to equalize opportunities. It investigates the combined policies of open enrollment (in public, charter, and private schools) with financial support that follows the child. Such a system will make the differences in local resources for education funding largely irrelevant. We limit our report to the mechanics and implementation issues of such a system, and demonstrate its fiscal impacts. Our purpose is not to argue for particular policies within such a system but to highlight how key policy choices would affect its implementation and costs. The report is an introduction to and not the final word on a fundamental shift in school finance policy in Ohio. As such, it will invite many questions and concerns that will deserve further research.

The report:

- Highlights the need for a reform of Ohio's school finance system.
- Documents Ohio's level of financial support and compares it to other states.
- Discusses the role of property taxes in funding schools.
- Outlines the basic structure of a child-centered school finance system.
- Presents a basic weighted system of per-pupil financial support and creates a matrix of students in Ohio schools to estimate the expenditures required to fund each child under a child-centered finance system.
- Presents a model to calculate the expenditures required to fund a child-centered system at different levels of per-pupil financial support and under various policy choices.
- Analyzes the implications for property taxes within communities under different policy choices within a child-centered funding system.
- Estimates how much money businesses and individuals would contribute towards the education of deserving, needy students after the introduction of a tax credit for donations to scholarship-granting organizations.

I. TRADITIONAL EDUCATION FINANCE REFORMS DON'T WORK

Since 1979, all but five states have had to defend their school funding systems in court. Twenty-eight states, including Ohio, have had some or all of their school funding systems overturned by the courts. Most of the 18 states that successfully defended their school finance systems have faced additional attempts, some to this day, to strike down their school funding laws. Even states that adopted reforms in response to court mandates have been confronted with subsequent litigation. Most importantly, in few, if any, states do citizens appear to be satisfied with the changes in education finance systems, as many of the key promises of finance reforms (e.g., improved education, tax relief, increased equity) have not been realized.

There are several reasons why litigation is more common than satisfaction when it comes to school finance systems. First, the demand for school finance reform is increasingly seen simply as a desire by interest groups for more education spending. In the 1970s and 1980s, state education-finance lawsuits were primarily concerned with resource differences among school districts due to differences in property wealth, thought to be the cause of disparate levels of spending. Reducing these disparities and the reliance on local property taxes was a reasonable and widely accepted goal. More recently, the basis of school-finance litigation has shifted from equity and fairness to securing the resources to provide an "adequate" education to all students.[1] Calls for states to fund an "adequate" education are invariably accompanied by calls (supported by studies from a cottage industry of education finance "experts") for large increases in spending on schools, even though evidence fails to show that large spending increases improves a state's overall educational performance.[2]

Second, court mandates and legislative calls for reform of education finance laws do not consider the ways in which economics and the way people respond to incentives will interact with the inherent (and often unanticipated) incentives in school finance systems to produce unsatisfactory or unintended consequences.

Most importantly, to date all school finance-reforms have been based on the premise that making school funding more equitable or adequate is synonymous with changing how school *districts* are funded. These reforms have not considered changes that could address equity by giving children and families direct access to more and better educational opportunities.

Educating children is a commitment to families, communities and to our collective social and economic well-being. It is not a commitment to any particular governing or funding process. Yet "reforms" in Ohio and elsewhere increasingly reflect a commitment to institutions (school districts) rather than to meeting the needs of children. Throughout the country, state courts have struck down funding systems under the premise that these systems failed to provide "equality of educational opportunity" or failed to provide funds sufficient to "adequately" educate each child.[3] To date, however, vindicating the right to equality of educational opportunity or to an adequate education has involved indirect remedies that take one or more paths: increase funding for school districts, alter the distribution of funds among districts and change the sources and uses of state education funds. When remedies for inequality or inadequacy of educational opportunity are not made directly available to the affected parties (parents and children), we should not be surprised that the results are disappointing. Nor should we be surprised that states, continually mired in litigation over school funding, are still unable to craft funding plans that satisfy the needs of parents, students and communities.

Complexity and Lack of Transparency Add to Need For Reform

As is true in most states, education funding in Ohio is a shared state and local responsibility, but the system is one of the most complex in the nation.[4] Local taxes on real property (real estate) are the primary source of local government revenue. Although the property tax is not popular, it offers a number of advantages in terms of economic efficiency for funding locally provided services. Nevertheless, funding local schools with property taxes raises concerns that inequities in property wealth across districts may contribute to inequities in per-pupil spending. A related concern is that communities may have to face dramatically different tax rates and tax burdens to provide similar levels of educational services. But the use of property taxes to fund local schools does not automatically make an education finance system inequitable. Narrowing the differences in education spending, tax rates and tax burdens that are attributable to differences in the size of a school district's property tax base can be accomplished in a well-designed education funding system. Assuring that every community will spend approximately an equal amount on each child, however, is not only much more difficult, it should not be a goal of any system of state aid. An appropriate and achievable goal for school finance systems is that education spending in a community not entirely depend on local property wealth. Spending differences among communities will remain, but they should reflect the taxing preferences of local voters, rather than simply be a function of relative wealth.

Most states attempt to achieve spending and tax equity by distributing state aid to communities. The formulas used to determine how much a community receives are rarely designed with economic principles, which will ultimately determine their effects, in mind. As a result, even when state education aid is designed to increase equity, the actions of school districts and communities often undo the desired effects of state education aid.[5] As a recent study of Ohio's K-12 school finance system noted, it "reduces inequalities between districts and is a move toward a world-class system. Actual allocations to schools, however, are done by districts, which can ignore the intentions of the State formula and do as they please."[6]

Ohio's education finance system contains a myriad of tax rates, levies, subsidies and categorical grants that create a large disconnect between the dollars citizens pay for education and the services they receive. Concepts such as "inside mills," "outside mills," "growing mills," "floor mills" and "enhancement mills," as well as numerous narrow tax rates or "mills" for specific funding purposes, make it difficult for citizens to make reasoned decisions about the appropriate level of spending and taxation needed to support educational services. The multitude of tax levies and rates means that making connections between those decisions and the quality of educational services they purchase is difficult. The complexity and numerous categorical programs and pupil weights of Ohio's state aid program makes the system especially prone to "gaming" to maximize revenue, rather than funding efforts needed to improve performance. The lack of transparency in the school finance system increases public concerns about the performance and productivity of Ohio's schools and undermines citizen confidence and commitment to funding and improving education.

A better way to assure equity between school districts and communities, and at the same time provide equal education opportunities for every child, is to directly provide every child with a level of funding that reflects the relative differences in the cost of educating him or her and to allow every family the opportunity to choose the appropriate educational setting for their child, whether that is a conventional public, charter, or private school.

The 2005 report of the Ohio Blue Ribbon Task Force on Financing Student Success noted: "Improving the academic performance of economically disadvantaged children is the state's most pressing educational and economic development need and must be treated as such in the financing system." A more recent report commissioned by the Ohio Department of Education discussed the traditional methods of attempting to assure educational equity and opportunity across school districts and among all children. It then made the case for a change. In discussing the state's current funding system the report notes:

> All in all, this district-centric funding approach creates two problems. First, funding within districts is typically inequitable and is not necessarily going to schools with students in greatest need. Second, because school-level data reported at the state level are so unreliable, it is impossible to precisely quantify Ohio's within-district funding inequalities.[7]

The same study noted the importance of providing choices for parents in which schools their children attend:

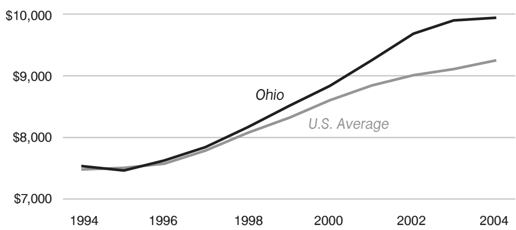
> Ohio should make it easier for parents to choose from the range of school options by increasing resources available, easing (and eventually eliminating) numerical and geographic limitations on new schools, and actively seeking innovative school providers from around the world to open new schools and turn around existing schools.... Ohio also would ensure the development of a wide and diverse portfolio of quality school options across the State, empowering parents and students to make informed and meaningful decisions about schools.

Ohio can accomplish the multiple goals of increasing educational opportunities, equity among students and equity between districts by implementing the child-centered school finance system outlined in this report.

Ohio Taxpayers Have Not "Shortchanged" School Children

By nearly all objective measures, a lack of education funding should not be included among the widely acknowledged problems with Ohio's education funding system. Although there is little evidence to suggest that overall spending levels contribute to educational achievement,[8] Ohio's per-pupil spending compares favorably with other states, as seen in Figure 1. (The figures are adjusted by the National Center for Education Statistics, or NCES, to account for cost differences among the states, giving more accurate comparisons of real spending.) Per-pupil expenditures in Ohio are above the national average and

Figure 1: On average per pupil expenditures are higher and have grown faster in Ohio
Current expenditures per pupil constant (2007) dollars



Source: U.S. Dept. of Education, National Center for Education Statistics

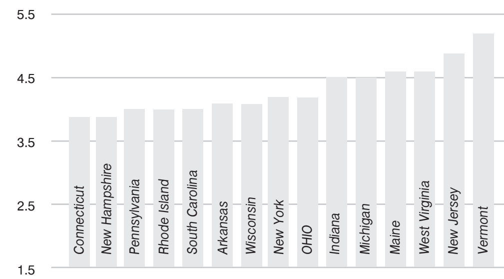
have been rising faster than the national average. In 2005, Ohio ranked 16th among the 50 states and higher than all surrounding states with the exception of Pennsylvania. At the same time, Ohio ranked 29th on per capita personal income and 30th in median household income. Ohio's above average per-pupil expenditures combined with its relatively lower income levels suggests that state residents are bearing a relatively large tax burden to pay for their schools.

Additional data confirm this. In terms of its tax "effort," or the percent of the state's taxable resources that are used to pay for public education, Ohio is among the top states. It will continue to be so under almost all the proposals being debated today, as long as current spending trends remain.

There are compelling reasons to reform Ohio's education finance system. But proposals that alter the source of funding or distribute state aid differently will not lower tax burdens. In fact, evidence from other states suggests reforms can lead to larger state and local tax burdens, [9] or at best have a mixed fiscal impact.[10]

Figure 2 compares Ohio with all other states on the percentage of its taxable resources used to fund K-12 public education. Ohio is near the top, ranking sixth.

Figure 2: Ohio's education funding "effort" is among the highest in the country
Education expenditures as a percent of state taxable resources (2005)



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

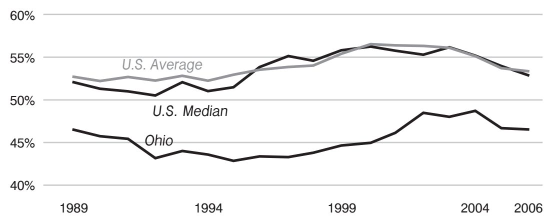
The State of Ohio's Share of Education Funding is Marginally Below the U.S. Average

Public finance experts and economists generally agree that the property tax is the most efficient tax to support spending that is entirely local. They also agree that the property tax is the least efficient tax to support spending that is non-local. ("Non-local" means "spending that will benefit people in other communities.") In other words, property taxes are the most efficient way to support local school spending.[11]

Thus, from the perspective of public finance theory, and on economic efficiency grounds, concerns about relying on local property taxes for education funding are largely overstated. As importantly, the property tax has been the largest source of funding for public education in the U.S. since the beginning of universal public education. As Figure 3 shows, most states provide just over half of the combined state and local revenue that goes to public schools. Ohio is slightly below the U.S. average and median, with the state providing 47% of combined revenue. Unlike most states, however, Ohio has gradually increased its share over the past few years. Even so, much of the impetus in Ohio for education finance

Figure 3: The percentage of funding from the state is increasing in Ohio and is close to the U.S. average of all states

State share of state and local education funding



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

reform stems from the perceived inequities of the local property tax. If Ohio policymakers want to move closer to the national average by increasing the state's share of education funding, they can accomplish this with relatively small changes in the state and local shares. They should beware, though, that increasing the state's share could have some unintended consequences. These include:

- Slower growth in per-pupil expenditures over time;
- A reduction in other non-education aid to local government;
- Overall larger tax increases over time; and
- State general fund expenditures that grow more slowly, suggesting that increased education spending comes at the expense of services to other citizens.

When policymakers increase the state's share of education funding, two things happen. First, educational spending becomes more dependent on state revenues, which are more volatile than the relatively stable local property tax. Second, education competes more and more with other services for funding at the state level. Together, these two changes result in slower long-term growth in states that that have moved towards centralized funding. In Michigan, for example, "School districts … receive less operating revenue under the [new] system."[12]

Overall, the evidence does not clearly demonstrate that increased state spending results in lower property tax burdens at the local level. Evidence from other states shows that while increased state funding can at first lower or at least slow the growth of local property taxes, the effect typically lasts only a few years. Over the longer term, local property taxes actually *grow more* when policymakers substantially increase the state's share of education funding. This occurs for several reasons. First, the additional state funds free up some local resources that then are spent on other, non-education services. Second, states that increase their share of funding cut back on other forms of local aid. Researchers have found that for every $1 of increased state aid, other local aid is reduced by about 20 cents.[13] In addition, the growth in state aid typically does not keep up with local government spending on education, forcing people to raise more funds locally to maintain their desired levels of spending. The typical result, then, is that after a short time, local property taxes increase more in states that enact education finance reforms that substantially increase the state share of education funding.[14]

Overall, combined (state and local) taxation tends to increase more when states that increase their share of education spending. A larger share of education spending by state governments also is associated with slower growth in general fund expenditures, suggesting that state education aid "crowds-out" spending on other services. The long-term result is likely to be slower growth in both state education aid and spending on other services as lawmakers try to balance competing needs.

The implications of these trends will become more serious as demographic changes reduce the percentage of Ohio residents that are school age and increase the percentage that are elderly. As the cost of providing services to older residents increases substantially over the next few decades, education spending that depends on state resources will likely face even greater competition.

No State Left Without Higher Spending

When people call for changing Ohio's education finance system, they typically begin by talking about its reliance on local property taxation, which is said to be largely responsible for disparate levels of per-pupil expenditures. While Ohio spends more per pupil, on average, than do a majority of states, it ranks in the middle or just below the middle, on several measures of equity.[15]

In terms of "wealth neutrality," or the degree to which per-pupil expenditures are a function of the property wealth of school districts, Ohio ranks 26th among 49 states.[16] Property tax wealth, then, accounts for somewhat more variation in per-pupil education expenditures in Ohio than in the average state. On measures of variation in spending between high- and low-wealth districts, Ohio is also in the middle. It is important to note, however, that property wealth is not the only factor that accounts for variations in education spending. Socioeconomic factors, such as parent educational attainment and household income, determine how much people are willing to spend on education. These factors are as important in determining variations in per-pupil expenditures across districts as is district property tax wealth. A well-designed system of state education aid can bring greater wealth neutrality and make local education spending much less dependent upon the wealth of communities. Ohio's current education finance system does not do this.

Are Local Property Taxes the Root of All Evil?

One reform proposal made over the years has been to reduce Ohio's reliance on property taxes for school funding and replace the money with other sources of revenue. All things equal, substituting $1 billion in new sales taxes for $1 billion in property taxes could have a modest positive economic impact, but substituting $1 billion in income taxes for $1 billion in property taxes would likely have a negative impact. (A full econometric analysis of any proposal to significantly substitute sales or income tax revenues for local property taxes is beyond the scope and purpose of this paper.)

The issue of relying on property taxes is complicated by the fact that, as Dartmouth College economist William Fischel notes in his "homevoter hypothesis,"[17] the strongest incentives for maintaining or improving the quality of local educational (and other) services occur when local property taxes are the primary funding source of the service. In addition, as noted above, state revenues tend to be more volatile than local property tax revenue and education spending faces more competition for resources at the state level than at the local level. The relationship we see between local funding and student performance probably does not lie in the nature of the tax itself. Rather, it most likely exists because increased local funding generally means greater community involvement in public schools. The argument for replacing some local property tax funding with sales tax revenues is weakened by the reduction in local accountability that occurs when school officials no longer have as strong a need to justify their actions to local property owners and voters. Requiring local approval of property tax rates is one of the few ways that citizens have to hold school administrators accountable.

Adjusting the relative shares of state and local funding for schools to increase wealth neutrality and equity is a reasonable goal. Evidence from well-designed analyses of public school finance, however, suggests that Ohio should be cautious about moving dramatically away from local property tax funding. But, if it adopted reforms where state education aid did not simply fund a truly local service, a key public finance principle—local revenue sources should be used to support local services, with state resources used to create wealth neutrality in the provision of the service—would no longer apply. This would be the case if Ohio adopted a child-centered education finance system. In such a system, parents would be free to enroll their children in the school of their choice—public, charter, or private—and the funds that support their education would flow to the schools in which they enroll, not to the school districts in which they happen to be assigned. K-12 education would no longer be a strictly "local good." Most education services would continue to be provided by local schools. Since families and children would not necessarily be constrained by a requirement to obtain educational services only from a school in their district, schooling would no longer fit the definition of a "local good." Funding by a statewide tax (property, sales or other) then would not be contrary to accepted principals of public finance.

"Separate But Equal" Only Reinforces Inequality

Children across the state have unequal access to quality schools because higher-quality schools are often found in high-priced communities. To a great extent, students are sorted among public schools by the income and the education level of parents. It is a fallacy that only private schools "price" their services. Public schools are nominally "free," but pricing occurs implicitly through housing markets that limit access to the better schools and consign less wealthy families to less desirable ones. Good schools raise the price of homes in a community and thus families pay a higher implicit price to attend better but ostensibly "free" public schools. The separation along class lines due to the implicit pricing of public schools means that important non-financial inputs to education are as unevenly distributed as are financial resources. These non-financial inputs include peer and household characteristics that influence school quality. School finance systems acknowledge this segregation and attempt to overcome it by providing similar resources across communities of different wealth, or by mandating integration through forced busing or other controversial policies. Separation according to income, though, ensures that peer effects and differences in non-financial inputs remain, even when a large influx of state education aid reaches the "neediest" schools. State education aid that is simply designed to equalize financial resources will have limited power to address the root causes of education inequities.

The unsatisfactory results of this tacit "separate but equal" system contribute to the continued litigation in many states. Unfortunately, the type of reform typically sought by litigants—increased spending—is unlikely to affect school quality or student performance. There are several reasons:

- Research shows that simply increasing subsidies to lower-quality schools is unlikely to result in improved performance. Educators understand the importance of family background and peer effects in school performance, and neither is overcome by additional resources alone.[18]
- Economists understand that simply increasing subsidies, without changing the incentives faced by school districts, will not provide a mechanism to improve the quality and performance of schools, regardless of the characteristics of their students.
- Research shows that the gaps in educational performance among students of different economic strata are growing. This is despite greater efforts to direct more funding to schools with the highest concentrations of lower-performing students.[19]
- The differences in peer influences, parental involvement and community support mean that increasing the state subsidies cannot truly "fix" schools. Increased aid cannot increase their performance nor can it truly provide equality of educational opportunity. Rather, abundant state subsidies may unwittingly, and with the best of intentions, create a "separate but equal" philosophy of education funding.
- Allowing students to move from poorer performing schools to better performing schools will do far more to improve educational opportunity for all Ohio children than will increasing spending. At the same time it creates strong incentives for school districts to improve performance to attract and keep students.

School choice is currently a part of all public education systems in the country and Ohio has been in the forefront of many of these reforms. In Ohio, school choice takes several forms: private schools; charter or "community schools"; limited open enrollment, available to children in low-performing schools; publicly supported choice (the Cleveland and EdChoice voucher programs); and, by far the primary form of choice, a family choosing its place of residence.

A result of this incomplete and uneven menu of choice is that Ohio still does a lot of sorting of students by parental income and education levels. If families had more options to choose from among schools, we would see less segregation by income and parental education. We would also see communities with lower tax bases and less expensive housing experience rapid increases in their tax bases as their housing stock would become much more desirable, since it would no longer consign families to schools with a poor reputation.

A New Kind of Reform

To date, few if any states have been satisfied with the changes in educational equity and quality that have been produced by school finance-reforms. As is true in most states, efforts in Ohio to modify the education finance system have sought to create more equality in educational opportunities through one of two methods: altering or increasing overall state subsidies for less wealthy school districts, and increasing the subsidies for specific categories of educational programs or services. These approaches subsidize the "producers" of educational services (school districts) in hopes that they will provide "consumers" (parents and children) with the services necessary to create both quality and equal educational opportunities.

But it is clear that simply increasing subsidies to less wealthy school districts does not alter the availability of important non-financial inputs to education.

Government support for elementary and secondary education differs from other attempts to provide more equal access to important services. Housing, food, and energy assistance are important services that governments subsidize. In these cases, however, consumers rather than producers receive the subsidy. For a variety of reasons, housing assistance is increasingly offered through vouchers rather than subsidized public housing projects. Governments do not help citizens find adequate food by operating supermarkets. Rather, citizens are given "vouchers" (food stamps) to obtain necessary items from the grocery stores of their choice. Energy companies, meanwhile, are not given state money to provide low-income heating assistance; individuals are given payments or subsidies to help supply their energy needs.

When consumers are given these subsidies there is a tacit recognition that the ability to obtain services is the primary goal of the subsidy—and that the best way to assure that needed goods or services are obtained is to give consumers the ability to purchase them. Yet the task of assuring that each child has access to necessary educational services is treated differently. Distributing state funds to schools and districts has become synonymous with providing equal educational opportunity. Advocates of direct subsidies to children and their parents are attacked for "not supporting education" when in fact they simply wish to direct the support to the consumer rather than the producer.

Traditional school funding is first and foremost concerned with the welfare and interests of the institutions of public education in the belief that support for schools will "trickle down" to incorporate the interests of parents and children. But only parents can choose what is best for their child. Parents are most interested in the welfare of their children, while even well-meaning school officials try to maximize the welfare of their school districts. Although not every parent will have the knowledge or desire to make a wise choice for their child, this fact does not diminish the larger principle that consumers, whether it be in purchasing automobiles, telecommunications services, food, medical services, or any other good or service, are the ultimate arbiters of the quality of goods and services.

II. PUTTING CHILDREN AND FAMILIES FIRST: CHILD-CENTERED FUNDING

Educating children is not the same as directly funding school systems. The only way to ensure that all Ohio children have the same educational opportunities and equal resources to obtain them—and at the same time create powerful incentives to improve school performance—is to adopt a student-centered school funding system. What follows are a number of principles that should be incorporated in any child-centered education funding system. Well-known economists have proposed similar ideas; directly or indirectly, the list is adapted from the works of Merrifield, Vedder, and Hoxby.[20] The basic outline of a child-centered funding reform for Ohio should:

- Provide freedom for parents and children to select the school that best meets their needs, whether that school is within their current school district, outside that school district, a charter school, or one of many private schools in Ohio;

- Distribute state education funds according to the schools that parents and students choose;
- Provide funding for each child sufficient to create an incentive for existing schools to enroll students from all backgrounds and of all abilities, and for new schools to open;
- Eliminate non-financial disincentives that would reduce the willingness of schools to enroll students from all backgrounds.

A child-centered funding system means that parents directly control the funding, public and private, of each school. Policymakers can control the level of per-pupil public funding, but parents decide which schools receive those funds when they choose a school. Parents also decide whether they want to spend some private funds to purchase more schooling than the public funds will pay for. Child-centered funding creates tremendous flexibility in the design and delivery of and payment for educational services. It would greatly reduce the complexity of the current education finance system with its myriad of targets and grants and questionable incentives.

A child-centered funding system can operate in many ways and implementing such a system will require making a number of important policy decisions. The list below presents the core principles of such a funding system.

Principles of a Child-Centered Funding System

1. Lawmakers will determine the total amount of state and local funding per pupil, but the decisions of parents about where to send their children will determine each school's share of state and local funding. Schools attracting more students will receive more funds.
2. All school-age children can participate in and receive per-pupil student funding. One key objective of Ohio's education reforms, a reduction in the concentration of children from lower-income families, is especially amenable to treatment by child-centered funding.
3. The number of per-pupil dollars that flow to each school from public funds will be the same, regardless of the type of school. The same amount of public money supports comparable children, whether they attend public, charter, private nonprofit, or private for-profit schools.
4. To create equality of opportunity and help overcome the reluctance of some schools to welcome lower-income students, larger per-pupil funding amounts should follow low-income students. More than any other factor, socioeconomic status is the key determinant in educational achievement. The exact funding differential for disadvantaged students is not obvious but can be determined by policymakers. One example of a progressive funding system, applied to data on Ohio's school-age children, is provided later in this report. Although per-child funding differentials should reflect the relative costs of educating students of different abilities and

backgrounds, education finance reforms and child-centered funding should not be viewed as a public assistance program. Currently, many households, especially middle- and upper-income ones, feel as though they have little stake in Ohio's schools. A child-centered funding system that increases options for all children is the most direct way to increase educational equity while also giving households across all income strata a greater stake in the funding and operation of schools.

5. Market-determined private school tuition levels indicate that it costs more to school older children than younger ones. Some age-based differences in funding are thus appropriate. Without a higher level of public funding for older children, there may not be enough schools willing to accept the public funding level as full payment.

6. Schools should be allowed to charge tuition levels as they see fit. Currently, both public and private schools charge different prices; this should not change in a child-centered funding system. Prices are critical to the operation of markets, and price controls inevitably create more problems than they solve. Schools that offer the best educational value to parents will receive the greatest enrollments and a child-centered system will, unlike the current system, act as a check on price increases. Schools must be free to offer schooling that costs more or less than the per-pupil public funding level of any one student. As long as per-pupil funding in a child-centered system approximates the level of a traditional district-based system, there will be more than enough school operators.

7. Parents should be free to supplement public funding with their own money. This freedom will facilitate more price variation and insert stronger market forces into educational services. Some schools will charge more than the public subsidy and thus attract fewer students, but parents should be free to spend more than taxpayers are willing to spend. No system of education funding should discourage private spending by anyone. If some families spend more, other families are not made worse off.

8. Children who enroll in a school that charges less than the value of his or her payment voucher will be allowed to use the balance for tutoring, educational books and materials, art or music lessons and other approved educational services.

9. To completely maintain equality of opportunity, a privately funded tuition tax credit scholarship program should be instituted. Such a program can give scholarship "co-payments" to children unable to make the additional payments necessary to attend the few schools that charge more than the public subsidy.[21] Privately operated "scholarship-granting organizations" (SGOs) will accept charitable donations, for which tax credits will be given, from individuals and businesses. In turn they will award funds to promising or deserving students, allowing them to attend more costly private schools or to obtain the kind of supplemental services that are typically available to students from higher-income families.

10. Paying individual schools based on enrollment reports is the simplest way to

implement a child-centered funding system. But direct payments can invite litigation as well as costly and perhaps stifling regulations. To avoid this problem, payment vouchers should be sent to parents. Doing this has the extra benefit of conveying the true intent of putting parents in charge of schooling decisions.

11. Implementing a child-centered education funding system will cause some students to move to different facilities, increase some schools' need for space and reducing the needs of others. New schools will face construction or renovation costs. Accordingly, per-pupil funding should include a facilities component that will allow schools to adjust to changes in enrollment. Following a procedure for calculating facilities aid suggested by Caroline Hoxby,[22] per-pupil facilities aid should be based on the average per-square-foot construction costs for commercial space in Ohio, multiplied by 36 square feet per child, with a 10-year depreciation schedule. The approximate amount per child, $470, could be used only for facility construction, acquisition, and lease of instructional facilities or for principle and interest payments on bonds for the same purposes. Schools could accumulate funds in facilities accounts for later uses.

12. A high percentage of children are likely to remain within the boundaries of the school districts to which they are assigned today. To reduce the probability that school districts continue to operate in an "institutionally funded" rather than "child-funded" mindset, a decentralized system of school-based management is necessary to unlock critical market forces and introduce greater incentives for performance, innovation, and customer service. Existing public school administrators, accustomed to centralized, district-level hiring, budgeting, planning, and curricula decisions, should have the ability to decide these issues at the building level. School officials will receive per-pupil funds according to enrollment and then decide how to allocate those funds. Private schools have always faced these issues. Individual schools may still benefit from centralizing some functions, but funding for central offices will be determined at the school level, the opposite of how central administration funding is now determined.

13. State and federal K-12 education funding should continue to support special needs children and follow each child.

14. Regulation of schools should be limited and must not be used to limit the number and diversity of school choices. Concerns about the use of public funding are appropriate. But nearly 2 million children and their parents, free to choose from among many schools, can monitor the quality and viability of schools more effectively than can rigid state regulations, enforced by a small number of government officials. Schools will attract students (and funding), in part, by the quality of their personnel, curriculum, and facilities. Parents are thus better able to determine standards by the choices they make. Guidelines about which schools are eligible for funding should be limited. They may include a minimum enrollment level, evidence of financial surety and insurance coverage, compliance with standard health and safety regulations and procedures for conducting

criminal background checks for employees and school volunteers. A very small minimum enrollment level will help deter fraud. The restriction is not meant to question the value of home schooling; however, the provision could have some unintended "population and labor force consequences that are not germane to providing Ohio's children with the best possible education".[23]

15. The state's role will evolve into one of generating data and providing information. As a result, the Ohio Department of Education will redefine its role. The state will continue defining and assessing basic skills, while the primary role of state education officials should evolve into that of offering parents information about the variety of schools available, the nature of their programs and their characteristics. The department may, as it currently does, collect and make available information about the financial, demographic, and performance characteristics of each school.

16. Where excess capacity in public schools exists, it should be made available to non-public schools. This will increase the utilization of public facilities and lower their costs as open enrollments in child-centered funding results in the movement of students between districts and individual schools. Done correctly, having public and private schools share facilities can lower non-instructional expenses for all schools, make a greater percentage of per-pupil funding available for instructional purposes, and save taxpayers money.

Child-Centered Funding Addresses Key Objectives of Education Finance Reform Proposals

- School district and within-district differences in property taxation, state funding, and education spending become largely irrelevant.
- Changes in the sources of education funding would dramatically reduce or eliminate the importance of variation in property valuations among school districts.
- Child-centered funding would increase accountability by making most school revenues dependent on satisfying nearly 2 million students and their parents.
- It would provide students, particularly low-income ones, with new options among existing programs and let them obtain extra enrichment services to reduce their educational disadvantages.
- It would provide all the benefits listed above with no net incremental cost to the taxpayer. Indeed, under many scenarios, it could reduce state funding.

III. THE BASIC CHILD-CENTERED EDUCATION FINANCE MODEL

The effects of a child-centered funding system, and how they will differ from the current system, will be determined by several factors:

- Property tax rates (assuming one, statewide rate for each class of property);
- The amount of state funding that accompanies each child;

- The amount of additional state aid supplied to reflect differing costs of educating some students and to create incentives to enroll harder-to-educate students;
- Whether and how many students currently enrolled in private schools are eligible; and
- The source of any additional funds required or the source of funds that will replace current sources of funds (no assumption is made in the baseline scenario presented below about new or substitute revenue sources).

The baseline scenario is presented in Table 1 for illustrative purposes. (Changing the per-pupil funding amount, adjustments for student age and socio-economic status, property tax rates and other variables will of course produce different numbers.) The model uses the most recent publicly available data on property valuations, student enrollment, state education aid and other variables to calculate the costs of a child-centered funding system. The baseline scenario reflects the following:

- A single-rate state property tax, replacing the local property tax, to support the funding needs of all children regardless of where they attend school;
- A 23-mill Class I (residential) property tax that would yield about $1.2 billion less than the current system, with 549 school districts that would see a reduction in their total school tax burden;
- A 32-mill Class II (commercial/industrial) property tax rate would yield about $218 million less than the current system;
- Total pupil expenditures that are about $1billion less than the current system at $7,500 per student, despite the addition of 195,000 private school students;

Table 1: Ohio Child-Centered Funding Model (Base Scenario)

Funds Per Pupil		
Base Value:	$7,500	
Grade Level Adjustment	+/- 5%	
Income Adjustment Range	32% Max	
Students		
Public	1,732,225	*(Each Kindergarten Student Counted at 1/2)*
Private	195,263	
Total	**1,927,488**	
State Property Tax Rate		
	Rate	**Districts Receiving Tax Cut**
Class I:	23.00	549
Class II:	32.00	305
Revenues		
	New System	**Existing System**
Class I Real Property Taxes	$4,130,784,113	$5,310,456,090
Class II Real Property Taxes	$1,629,625,112	$1,847,409,043
Tangible Property Taxes	$1,392,499,509	$1,392,499,509
Local Income Tax	$241,336,734	$241,336,734
State Funds	$7,066,168,786	$7,066,168,786
Federal Funds	$1,301,717,438	$1,301,717,438
Total Revenue (Includes Federal)	$15,762,131,692	$17,159,587,600
Contributions to Scholarship Granting Organization (not included in revenue totals)[24]	$125,000,000	
Expenditures		
Total Costs (Expenditures)	$14,586,651,300	
Avg. Per-pupil Expend.	$7,568	
+ Per-pupil Building Aid	$470	
Total Per Pupil	$8,038	
+ Total Building Aid	$905,919,360	
TOTAL EXPENDITURES	**$15,492,570,660**	$17,159,587,600
Revenues vs. Expenditures		
	$269,561,032	
Funding Shares		
Real Property Taxes	$5,760,409,225	$7,157,865,133
Change in Property Taxes	-$1,397,455,908	
Local Share of Funding	47.7%	51.2%
Real Property Tax Share	37.2%	41.7%
Non Property Tax Share	62.8%	58.3%

- Adding $470 per pupil in building aid increases costs by just under $ 1 billion and results in a surplus of $270 million with a Class I tax rate of 23 mills and a Class II tax rate of 32 mills;
- The local share of funding would fall below 50% and the share of funding from taxes on real property would fall from 42% to 31%.

Phasing out the personal tangible property tax will create a need for additional revenue. However, because the phase-out affects the current (and any proposed) system, it is assumed that whatever state revenues replace the lost tangible property tax will also be available to a child-centered funding system.

Key Policy Decisions Influencing the Fiscal Effects of a Child-Centered Funding System

1. A State Property Tax Will Replace the Local Property Tax

In general, using a statewide property tax to fund local educational services is not advisable. The child-centered education finance reform is different, however, because it will be combined with open enrollment and school choice to make education services a non-local good. We noted earlier that many state and local finance experts believe that the property tax is the most efficient tax to support local spending but the least efficient tax to support non-local spending.[25]

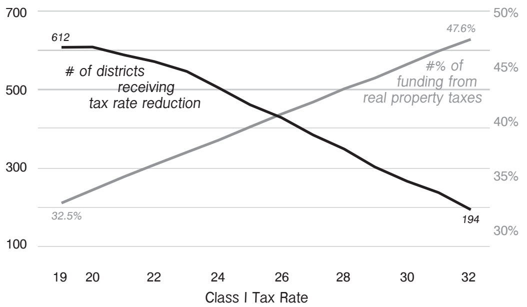
A state property tax that redistributes education aid has a major drawback: It is economically inefficient. A tax is "efficient" if it does not shrink much when its rate is raised. A statewide property tax is generally considered an inefficient way to fund education if it redistributes money from wealthier districts to poorer districts. A statewide property tax that funds a child-centered funding system, on the other hand, does not violate accepted economic principles of public finance.

When a state property tax is used to redistribute funds from wealthier to poorer school districts such redistribution makes living in a wealthier district less attractive and makes living in a poorer district more attractive. The shift in attractiveness reduces home-buyers' and renters' willingness to pay for homes in wealthier districts and therefore causes those property values to fall relative to property values in poorer areas. If the base of a statewide property tax is largely made up of property from wealthier districts, the tax causes its own base to grow more slowly, or even shrink, as it puts downward pressure on property values in the wealthier areas. The tax base shrinks even if only people who are already looking for homes react to property tax changes, because all home valuations move with market valuations, which are in turn determined by current buyers and rents.[26]

But as part of a broader education reform that includes greater parental control over educational decisions and enhanced competition, the use of a statewide property tax to fund education is appropriate. Using local revenue to provide local services provides accountability through local voter approval of taxes and of candidates, but 2 million students and their parents could more directly introduce accountability in education, just as consumer preferences determine the nature and quality of goods and services in any marketplace.

A state property tax paired with open enrollment and school choice could more directly accomplish the goal of equalizing educational opportunity, as well as inter-district variation in property valuation and tax revenues, than any education aid equalization formula.

Figure 4: A residential (Class I) tax rate of 23 mills will decrease reliance on real property taxes (from 42% to 37% of school funds) and lower taxes for homeowners in 90% of school districts



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

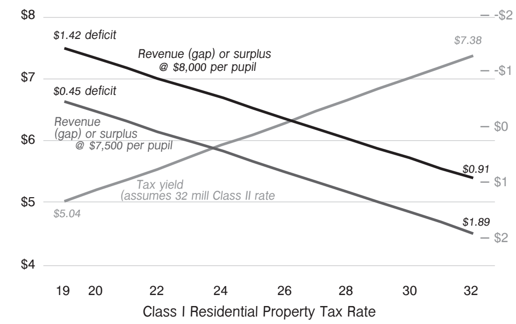
Figure 4 shows that using the baseline scenario of Table 1, with per-pupil funding of $7,500 and a state property tax rate on residential property of 23 mills, would result in a reduction in school property tax rates in nearly every district.[27]

The baseline scenario would also create a small surplus of $270 million. Alternatively, the state could increase the rate of the state property tax, with each 1 mill on residential property raising about $180 million in 2006-07, and reduce Class II rates from the 32 mills in our baseline scenario. Each 1-mill increase in the Class I property tax rate would fund a 4-mill decrease in Class II rates. Any number of variables in the baseline could be changed to produce different combinations of spending, taxes, and distribution of benefits. Building aid at $470 per pupil costs just under $1 billion. Whether this is an adequate per-pupil payment for facilities should be considered. A lower or higher figure for facilities payments, as well as tuition payments, will significantly alter the costs and thus the property tax rates and other revenue required.

Allowing private school students to participate in a child-centered funding program eliminates the discrimination against households who send their children to private schools. This is an improvement from today's system but it increases the costs of the proposal by about $1.5 billion without building aid and about $1.6 billion with it.

Figure 5: Each statewide property tax mill would add about $180 million in residential property tax revenue. At $7,500 per pupil in funding and a residential rate of 22 mills creates a surplus of $8,000 per pupil. A rate of 27 is needed to avoid a revenue gap.

Tax yields and revenue gaps



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

Figure 5 shows how, using the figures in Table 1, changing the rate of the residential state property tax affects tax yields. It also shows the surplus or gap for two levels of per-pupil payments ($7,500 and $8,000). The gap is the amount of state tax money, other than the property tax, that would be required to fund the program as outlined in Table 1. Changing any of the other variables will also change the cost of the program and thus change the revenue gap or surplus. While Figure 5 illustrates a baseline scenario, the policy choices involving these variables could be combined to produce a near-infinite number of fiscal and educational outcomes. The models in this report allow policy makers to understand the implications of these choices.

IV. KEY FACTORS AFFECTING THE COST OF CHILD-CENTERED FUNDING

Amount of Per-pupil Funding

The costs of this proposal, and thus the amount of revenue needed, are largely determined by the eligibility standards and the amount of funding for each child. The analyses above are based on estimated costs that were developed by using: 1) actual enrollment data reported by the Ohio Department of Education for the 2006-07 school year; 2) estimates of the income levels of families with school children in Ohio's public and private schools, using microdata from the U.S. Census Bureau; and 3) a matrix of the total number of school children in Ohio by grade and income, with variables (amount of funding, difference in funding value by grade level and income) applied to the matrix to develop a total cost of the program. Scenarios with and without students currently enrolled in private school students were developed.

A base per-pupil funding value of $7,500 was applied to students in middle school, decreased by 5% ($400) for elementary school students, and increased by 5% for high school students. In addition, per-pupil values were adjusted more extensively according to family income, with the lowest income students receiving a 25% premium over the base per-pupil funding and the highest income students receiving a reduction of 15% from base per-pupil funding amount. Increasing the value of the payment for lower-income students is critical to creating incentives for schools to educate them.

These adjustments for income are not based on an empirical study; rather they are simply an acknowledgement of differences in the cost of educating children. The adjustments, which can be refined, were chosen on general principle and to establish a base scenario. Modifying the adjustments for age and socioeconomic background will result in a recalculation of all model results. Table 2 shows the estimate of the population of students by grade and income. Figure 6 shows the average value of

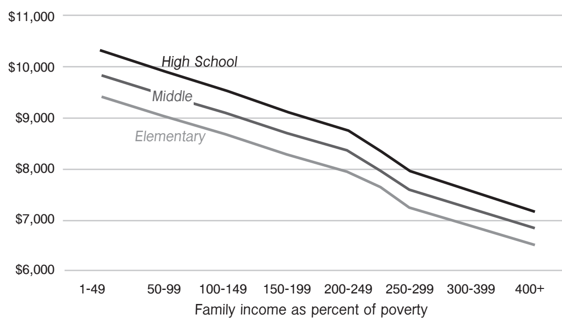
Table 2: Estimated Distribution of Ohio Students By Grade and Income

Income Adjustment	1.25	1.2	1.15	1.1	1.05	0.95	0.9	0.85
Income as a % of Poverty	1 to 49%	50 to 99%	100 to 149%	150 to 199%	200 to 249%	250 to 299%	300 to 399%	400+%
Kindergarten(1)	3,951	7,098	7,806	9,098	9,889	10,646	16,173	10,670
1st Grade	8,078	14,510	15,958	18,600	20,216	21,764	33,065	21,813
2nd Grade	7,846	14,094	15,500	18,067	19,636	21,139	32,116	21,187
3rd Grade	7,813	14,035	15,435	17,991	19,554	21,051	31,981	21,098
4th Grade	7,721	13,869	15,253	17,779	19,323	20,803	31,604	20,850
5th Grade	7,780	13,975	15,369	17,914	19,470	20,961	31,845	21,008
6th Grade	7,991	14,353	15,786	18,399	19,998	21,529	32,707	21,578
7th Grade	8,185	14,702	16,169	18,846	20,483	22,051	33,501	22,101
8th Grade	8,359	15,014	16,512	19,246	20,918	22,519	34,212	22,570
9th Grade	9,319	16,738	18,409	21,456	23,320	25,105	38,141	25,163
10th Grade	8,409	15,104	16,611	19,361	21,043	22,654	34,417	22,706
11th Grade	7,998	14,365	15,799	18,415	20,014	21,547	32,735	21,596
12th Grade	7,427	13,341	14,672	17,101	18,587	20,010	30,400	20,055
Totals	**100,877**	**181,197**	**199,281**	**232,274**	**252,450**	**271,777**	**412,898**	**272,396**

(1) Kindergarten totals reflect the number of students divided by 2 to reflect typical half day schedules

Figure 6: "Progressive" per pupil funding would increase funds for lower income students, reflecting the belief that these children require greater effort (and resources) to educate

Average value of per pupil funding by income and grade level ($7,500 Base funding amount



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

per student funding at each grade and income level when the values in Table 2 are used.

The matrix in Table 2 generates the estimated total costs in the baseline scenario. No adjustment is made for children with special needs. Existing federal funds can be used for some students, but adjusting the per-pupil amount for special needs creates a strong incentive to game the system. This incentive already exists in public schools for both parents and schools. Schools receive additional state funds for "identified" students and such children enjoy additional treatment options. Many children have real needs but decisions about the design of programs should address children with the physical, emotional, and learning needs that are least subjective and open to interpretation or manipulation. Currently about 15% of public and 5% of private school students are classified as having special needs.

Using the proposed adjustments for age level and family income produces progressive funding as highlighted in Figure 6. While the base per-pupil funding amount is $7,500, when the $470 in building aid is added and income adjustment factors applied, there is a much wider range of per-pupil funding amounts. Although students from higher-income families receive less in per-pupil funding, they will more often reside in communities that supplement the basic funds. More schools will also court them, even if they carry a lower per-pupil grant, because of their generally higher scores on standardized tests and their positive peer effects.

Building Aid Should Accompany Each Child to Their School of Choice

Building aid should accompany each student, each year, along with their per-pupil aid. Because spending on facilities tends to fluctuate, even when enrollment is stable, schools should be allowed to save their building aid. A school would be able to save its aid when its facilities expenses were low and spend it when its facilities expenses were greater. It is important to give schools the tools they need, such as bonding, to smooth out the demands on taxpayers for facilities expenditures. Under this proposal, schools would be able to spend the building aid that accompanies each child on expenditures for instructional facilities, including maintenance, construction, and operations (e.g., rents and leases, bond payments, construction and renovation expenses, heating and electricity).

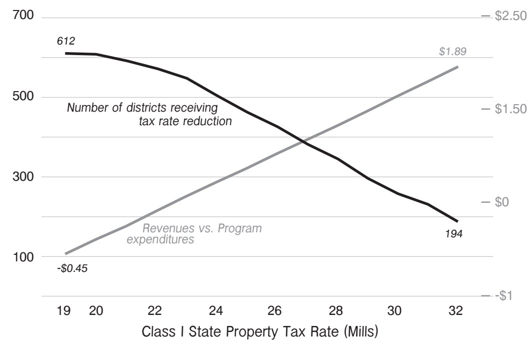
There are a number of ways that the building aid per pupil could be calculated. To illustrate the financial ramifications of building aid, a procedure proposed by Hoxby was used.[28] Per-pupil facilities aid would be based on the average per-square-foot construction costs for commercial space in Ohio multiplied by 36 square feet per child, with a 10-year depreciation schedule. The approximate amount per child would be $470.

Understanding the Impacts of Key Elements in the Proposal

Several factors will significantly influence costs in a child-centered funding system: the per-pupil funding amount; the weights or adjustments to per-pupil payments for poverty or other student characteristics; whether current private school students are included and whether building aid is included and if so, how it is calculated. Figures 7 and 8 incorporate several of those factors in one graphic to illustrate their impact on program expenditures and revenues. Figure 7 shows the impact on the costs of the program according to the value of per-pupil funds, as well as the surplus or deficit created at a residential tax rate of 23 mills. The chart shows that including building aid allows per-pupil funding of about $7,600 to be achieved at a tax rate of 23 mills, without producing a deficit. Eliminating building aid allows per-pupil funds to increase to nearly $8,000 without a deficit at a state property tax rate of 23 mills for residential property and a 32-mill rate for non-residential property.

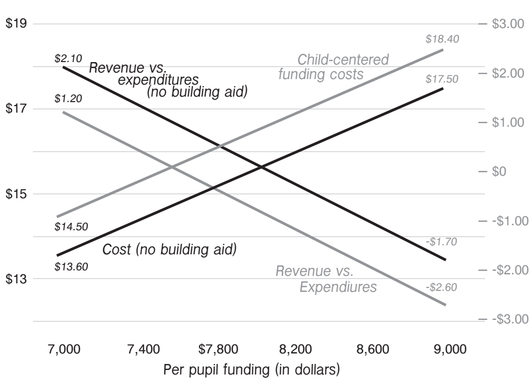
Larger per-pupil funding amounts would require a higher state property tax rate to avoid a deficit or, alternatively, using state funds aside from the property tax. A higher state property tax would reduce the number of school districts that receive a tax rate cut and reduce the amount of non-property tax revenues required from the state. Figure 8 illustrates these trade-offs. With a state property tax on residential property of 23 mills, residential property owners in 547 school districts would have a lower school property tax rate. At the same time, a small surplus of about $270 million would be created at per-pupil funding of $7,500 and $470 per-pupil in building aid.

Figure 8: At a statewide property tax rate of 23 mill, 549 districts experience a school tax reduction relief while creating a program surplus of $270 million



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

Figure 7: At a 23 mill tax rate (residential), per pupil payments can be $7,600 without requiring additional state funds. Without building aid, per pupil aid can be $8,000 without additional revenue



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

Commercial/Industrial Property Tax Rates

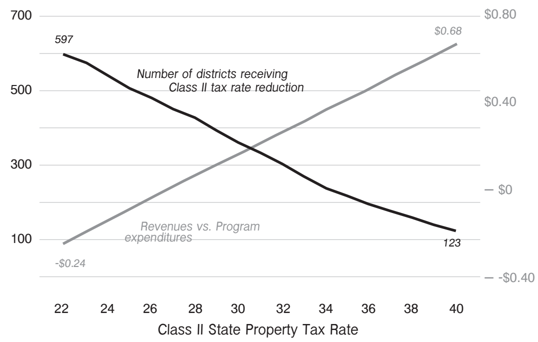
As noted earlier, a Class I (residential) state property tax rate of 23 mills and a Class II (commercial/industrial) property tax rate of 32 mills results in a small surplus of $270 million in our baseline scenario. The Class II tax rate of 32 mills results in a lower property tax rate in 305 of 614 districts. Figure 9 shows how a different state property tax rate would affect the number of districts receiving a tax reduction, as well as the impact of different rates on the surplus or deficit. The red line in Figure 9 shows the amount that revenues will exceed or fall short of program expenditures for combinations of the baseline proposed tax rate (Class I property tax rate of 23 mills) and Class II property tax rates ranging from 22 to 40 mills.

Each 1 mill of tax increases revenues by about $51 million and at a Class I rate of 23 mills, the rate on Class II property could be reduced to 27 mills without creating a deficit in the baseline scenario. The most important information in Figure 9 is that raising or lowering the state property tax rate on Class II property will have only a limited effect on the finances of the proposed child-centered funding system. This is because only about 20% of taxable real property in Ohio is commercial/industrial or Class II. Under these circumstances, it may be better to apply a lower tax rate than the 32 mills in the baseline scenario. The economic benefits of giving commercial and industrial property owners a tax reduction may be worth the reduced revenues of $255 million under a rate of 27 mills. A 27-mill Class II tax rate and a 23 Class I tax rate would approximately balance program expenditures with revenues under our baseline scenario; this combination lowers Class II school district tax rates in 73% of districts, and Class I tax rates in 90% of districts. Using a different scenario for per-pupil expenditures and building aid would alter these numbers, but the overall principal remains the same: Any combination of Class I and Class II tax rates could be developed to accommodate desired policy objectives in per-pupil support, revenue yield, and impact on taxpayers by type of property.

The Impact of Private School Student Eligibility

Providing vouchers for students currently enrolled in private schools is likely to be controversial, but is the right thing to do. There is no sound justification for excluding current private school students, other

Figure 9: At Class I rate of 23 mills, Class II property tax rates could be set at 27 mills without creating a deficit while reducing rates in 451 districts



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

than doing so will increase the costs of the program. Most private school students and their families currently are discriminated against in that, unlike public school students, they receive no state or local support. Excluding current private school students will create incentives to subvert a child-centered funding system. As an example, families wanting to choose a non-public school might temporarily send their children to public schools to become eligible for state support. This could undermine current private schools and result in a temporary boom in public school enrollments. That said, the cost of adding an additional 195,236 students to the population of students that receive state and local funding is about $1.56 billion.

When building aid is included, the break-even millage rates change significantly with and without the inclusion of private school students. If students currently in private schools are not included, a Class I rate of approximately 15 mills will still produce a surplus when the Class II rate remains at 32 mills, and all but two districts would see a lower tax rate. As an alternative to this dramatic tax rate reduction, a somewhat smaller reduction in Class I rates could be implemented while still lowering Class II rates below 32 mills. Our preferred alternative is simply to include current private school students.

Whenever revenues exceed costs, policymakers can make a number of adjustments within this funding proposal. In general they involve the following choices:

- Make no change to the program and use the excess to offset the eventual phase-out of the tangible personal property tax;
- Lower tax rates on one or both classes of real property; or
- Increase all per-pupil spending; alternately, increase only spending on different segments of the student population or on students in certain geographic regions to create greater incentives to educate or accommodate some students and thereby increase their educational options.

Impacts of Child-Centered Funding on the Cost of Education

Merrifield has argued that child-centered funding would eliminate some school district tasks and would reduce the need for others.[29] School budgets would depend on parents' choices, not the decisions of a district central office. There would be no need for a centralized budget and resource planning or maintaining and enforcing school attendance areas. Some communities and public schools will maintain their district identity, but others may choose not to. Schools will perform many services formerly provided by districts. A child-centered and school-based funding system would give school principals the authority to hire, supervise and evaluate personnel. Because individual schools within a district would not benefit equally from district-provided support services, the schools would increasingly resist funding them.

The market forces that a child-centered funding system would introduce would also act to restrain school costs. Market forces prevent organizations from increasing costs and prices for any length of time, and any district or school that does so will face increased competition as a result. Many people are uncomfortable about thinking that education is a business. But for the state's citizens who pay for it, the 2 million students and their parents served by it, and especially for the hundreds of thousands of people who earn their living from it, school systems are very much like businesses. Actually there is one very important way in which school systems are not like businesses: Students and their parents currently have little choice about whom they can obtain services from.

Universal per-pupil funding will create additional competition, which will eliminate the excess profits or economic "rents" of traditional public schools. New schools will emerge, attracted by increased funding, and they could create excess capacity in existing schools and reduce the co-payment, if any, that schools could demand. In the current system, school operators see no downside to across-the-board funding increases. A child-based finance system, on the other hand, would weaken pressures for government funding increases. In the competitive environment that would result from a child-based system, school operators could not stifle the market incentives, like quality improvement and reducing excess capacity, that require spending restraint.

V. SUPPLEMENTAL FUNDING: TUITION TAX CREDITS

Competition and child-centered funding will eliminate some costs in publicly operated schools and also make private schools more efficient; but market forces may take awhile to take hold and drive costs down. Supplemental funding can help deserving, low-income students access premium private schools that charge more than the public funding level. Charitable organizations, philanthropies, and small donors already spend millions per year to give a fraction of low-income applicants access to private schools. In a child-based school finance system, low-income families could use those private funds as co-payments. At the same time, having to fund only co-payments would allow those private scholarship organizations to help far more children than they do now.

The Volume of Scholarship Contributions

A base level of child-centered funding from state and local revenue sources can be supplemented with tuition scholarship grants funded through contributions to scholarship-granting organizations (SGOs). Individual and business contributors would receive a tax credit equal to 75-80% of their contribution. Giving contributors a partial rather than a full credit assures that the tax revenue reduction of the credits is lower than the educational services they purchase.

With a tuition tax credit, would-be donors can choose to pay taxes to the state to be used for general state services, or they can contribute to an SGO, targeting some of their tax dollars to education. Given this choice, many individuals and businesses can be expected to contribute to SGOs. Seven states offer some type of tuition tax credit or deductions to assist families who want to send their children to independent schools. Minnesota, Iowa, Illinois, and most recently Utah, offer a direct tax credit or deduction to parents sending their children to independent schools. Arizona, Florida, and Pennsylvania offer credits to individuals or corporations that contribute to organizations that provide scholarships to lower-income students. The experience of these states is directly relevant to the proposed supplemental tuition tax credit proposal.

To estimate the volume of contributions and tax credits that will be claimed by individuals and businesses, a model was developed that uses data on the charitable contributions of Ohio residents derived from the Internal Revenue Service's "Statistics of Income" (SOI) data, survey research on the percentage of charitable contributions that are directed to educational organizations, and analyses of the experience of other states.

In nationwide surveys nearly half (48%) of all businesses indicated that education was the top priority for their philanthropic and civic activities.[30] Among individuals, about 20% of taxpayers have indicated that they contribute to educational organizations and about 30% of their total contributions go to education organizations.[31] Charitable contributions as a percentage of adjusted gross income (AGI) in Ohio have varied little over time, standing at approximately 2.0% since 1997. In 2005, Ohio residents claimed charitable tax deductions equal to 2.1% of their total adjusted gross income, or roughly over $5.2 billion.[32]

Arizona has more than eight years of experience with similar tax credits for individual contributions to scholarship granting-organizations, experience that can help us project what might happen in

Table 3: Projected Tuition Tax Credits Claimed By Individuals– By Taxpayer AGI[35]

AGI	2008	2009	2010	2011	2012	2013	2014	2015
<20k	$1,595,180	$1,627,084	$1,659,625	$1,692,818	$1,726,674	$1,761,208	$1,796,432	$1,832,361
20-30K	$2,206,592	$2,250,724	$2,295,738	$2,341,653	$2,388,486	$2,436,256	$2,484,981	$2,534,681
30-50K	$6,640,682	$6,773,495	$6,908,965	$7,047,144	$7,188,087	$7,331,849	$7,478,486	$7,628,056
50-75K	$10,260,479	$10,465,688	$10,675,002	$10,888,502	$11,106,272	$11,328,397	$11,554,965	$11,786,065
75-100K	$8,119,618	$8,282,011	$8,447,651	$8,616,604	$8,788,936	$8,964,715	$9,144,009	$9,326,889
100-150K	$7,813,091	$7,969,353	$8,128,740	$8,291,315	$8,457,141	$8,626,284	$8,798,810	$8,974,786
150-200k	$3,306,163	$3,372,286	$3,439,732	$3,508,526	$3,578,697	$3,650,271	$3,723,276	$3,797,742
200-500k	$6,096,766	$6,218,701	$6,343,075	$6,469,937	$6,599,336	$6,731,322	$6,865,949	$7,003,268
500k-1M	$2,764,698	$2,819,992	$2,876,392	$2,933,920	$2,992,598	$3,052,450	$3,113,499	$3,175,769
1M>	$7,433,113	$7,581,775	$7,733,410	$7,888,079	$8,045,840	$8,206,757	$8,370,892	$8,538,310
Total	$56,236,381	$57,361,108	$58,508,330	$59,678,497	$60,872,067	$62,089,508	$63,331,298	$64,597,924

Ohio. In Arizona, contributions to scholarship organizations is equal just over 1% of all charitable contributions, and they equal about 0.03% of the total AGI of state residents.[33] As for Ohio, there are two ways of estimating how much money taxpayers will give to SGOs. One puts contributions in relationship to all charitable contributions, and the other puts them in relationship to AGI. Table 3 is based on an average of those two estimates, which depend in turn on Ohio's historical rate of charitable giving and projections of state AGI into the future.[34]

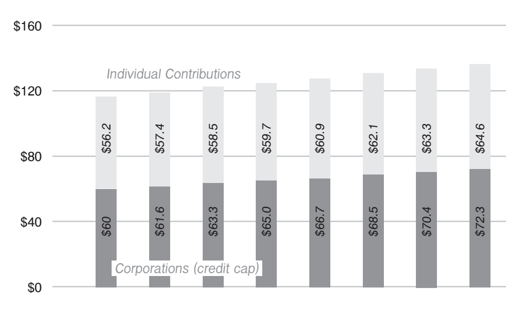
In addition to funding scholarships, SGO contributions could go to monetary support for student transportation. Only 5% of contributions could be used for administrative expenses of the SGOs.

Corporate Contributions

States that have instituted tuition tax credit programs have initially capped the dollar value of credits available to businesses. In 2005, businesses in Ohio (excluding financial institutions) claimed about $200 million in tax credits against their corporate franchises tax liability.[36] Ohio could make a tuition tax credit available to all business by allowing the credit to be used against a number of business-related taxes, including the corporate franchise and commercial activity tax. If tax credits were capped at the approximate amount of projected individual tax credits claimed, roughly $60 million initially and adjusted annually for inflation, tax credits for businesses and individuals would be shared about equally. Figure 10 presents estimates of the total amount, both corporate and individual, of contributions to scholarship-granting organizations. If corporate credits were initially capped at $60 million (which would require contributions of $75 million)[37]and individual contributions reached $56 million, then approximately $125 million would be available

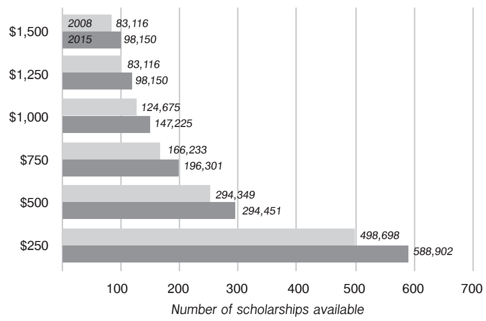
Figure 10: Corporations can be expected to make contributions up to the maximum allowed by the tax credit cap

Projected contributions to scholarship granting organizations



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

Figure 11: Depending on the average size of supplemental scholarships, a large percentage of Ohio's deserving lower income students could be given scholarships
Available supplemental scholarships by average scholarship value



Source: PolEcon analysis of data from U.S. Dept. of Education, National Center for Education Statistics

for supplemental tuition scholarships.[38] Figure 10 shows the projected volume of tax credits.

Figure 11 shows that, depending on the average size of the supplemental tuition scholarships granted, a high percentage of deserving lower-income students could receive supplemental scholarships to help them have the broadest possible educational opportunities.

VI. OTHER ISSUES

Local District Supplemental funding

The statewide property tax would not prevent local communities from augmenting the revenues that accompanied each child with local dollars. In fact, even without a tax increase, most communities could still fund their students at levels higher than the state grant if they maintained their current tax levels. The average tax rate in Ohio is about 28 mills. If 23 mills of Class I property went to the state property tax fund, the "average" school district could still add another $505 per student locally without raising taxes beyond current levels. These funds could be added to the per-pupil grant that follows each child, or more likely, they would go to support expenditures of the district and its schools.

"Empty Schools" and Job Dislocations

Some public schools might face sharp declines in financial support, necessitating the transfer of staff to other schools or, possibly, even layoffs. If this happens, however, it is because the public schools are not attracting students because they are perceived to be inferior to other schools. Nevertheless, a program to help staff transition to new opportunities would be advisable and demonstrate that a desire to implement a child-centered funding system is designed to shift education funding from concern and support for school systems to concern and support for individual students. Concern for individuals should, however, also extend to individual staff members as well as individual students.

School Choice Options in Rural Areas

Rural areas with sparse populations may not see a variety of schools competing for students armed with $8,000 or more in state and local support. It is important to note, however, that this situation under a child-centered funding system is no worse than the one under the current funding system. Moreover, with funding of up to $10,300 and the opportunity to obtain more if the proposed tuition tax credit scholarship program is enacted, even rural education markets will be attractive to entrepreneurs. If they are not, the high level of student funding will enable rural children to search farther for the educational opportunities they desire.

No Child Left Behind Requirements

The open enrollment of a child-centered funding system would mean substantial changes in the population and demographics of many districts and would make problematic the year-to-year comparisons for measuring the "adequate yearly progress" required by the No Child Left Behind Act (NCLB). But by allowing parental control over educational options, much of the rationale and data collection requirements of NCLB will become less relevant. The decision of parents about where to send their children will provide more valuable feedback about the quality of educational services than the measures mandated by NCLB. Nevertheless, some dispensation regarding NCLB requirements would need to be sought.

Lack of Information About Educational Choices

School choice programs are often criticized because it is argued that not all parents have enough information or the ability to make informed choices. Effective markets do depend upon informed consumers. But to date, state and local agencies have largely not provided parents with much information about school options, or worse, provided disinformation. Recent high-quality research by Yale University professors for the National Bureau of Economic Research shows that lower-income families, when provided with even brief and limited information about school quality and options, become more likely to take an active role in selecting school options for their children.[39]

Education "Trust Fund"

With or without a child-centered school finance system, Ohio needs to make information about the revenue sources that it uses to provide state education aid much clearer. It is difficult for anyone to find out how, and how much, taxpayers fund their obligation to children and schools. Establishing an education trust fund where revenues for education aid are deposited and accounted for will help bring clarity to important policy discussions about education finance.

VII. CONCLUSIONS

There is a widespread recognition that educational opportunities vary greatly among Ohio's children and that the quality of educational opportunity available depends in large part on where a child resides. The school funding system needs reform, but traditional funding reforms cannot do much to address key concerns about opportunity. A child-centered school funding system that provides equality of opportunity by creating true choice and funding children directly will immediately provide equal access to educational opportunities. At the same time, a child-centered funding system will help align the interests of providers of education services (schools and their employees) with the interests of families and children, increasing consumer (families) satisfaction in the process. Such a system will largely make differences in the local resources available to support education irrelevant. Although a child-centered funding system can accommodate any level of per-pupil support, it can be used to reduce the property tax rates in most communities while still allowing them to provide extra resources if they so choose. Finally, although performance is not the focus of this report, there is increasing evidence that the introduction of meaningful choice policies will also result in improvements in the performance and productivity of Ohio's public schools.

ABOUT THE BUCKEYE INSTITUTE

The Buckeye Institute for Public Policy Solutions is Ohio's only free market think tank and the leading independent source of research and commentary on education, economic growth and government transparency. Buckeye Institute provides agenda shaping analysis and research to legislative leaders, opinion leaders and the public.

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ENDNOTES

1 Christopher Berry, *School Finance Judgments and Spending on Education: A Review of the Evidence* (Chicago, IL: University of Chicago, 2004); Peter Shrag, *The Final Test: Battle for Adequacy in America's Schools* (New York: The New Press, 2003).

2 Recently, a commission in California produced several studies on school reform, including a study on school finance that recommended California increase spending on schools by at least 50%, or between $24 and $32 billion. Other studies from the commission, however, suggest little educational improvement in states that enacted reforms and significantly increased state funding for education. Available at: http://irepp.stanford.edu/projects/cafinance-studies.htm.

3 All but five states have had education funding lawsuits, most more than once. In more than half of those states courts have struck down some or all of the education funding system.

4 Federal funds supply less than 10% of the total funds of schools.

5 For example, see the Buckeye Institute's 2007 report, "Shortchanging Disadvantaged Students: An Analysis of Intra-District Spending Patterns in Ohio."

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15 Measures of equity in education spending include wealth neutrality, the McLoone Index and the coefficient of variation. A description

of these measures and data tables is available through the Editorial Projects in Education Research Center, online at http://edcounts.edweek.org/createtable/step1.php?categoryId=6.

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21 Nationally only about 1% of students attend "elite" private schools with tuitions higher than the typical public school spends per pupil.

22 C. Hoxby, "A New School Finance Plan for Texas," in *Putting the Two Sides Together*, ed. Chris Patterson, (Austin, TX: Texas Public Policy Foundation, 2004).

23 The importance of minimum enrollment levels and ineligibility is a source of disagreement among some proponents of "child-centered" education funding. Merrifield (2003) supports excluding "home-schoolers" while Vedder (2003) argues they should be included.

24 The scholarship program is discussed in section 5 of this report. The amount indicated in the table is an estimate and is not included in the revenue totals in the table. If such a program were implemented, it would increase available revenues but would add state costs equivalent to the dollar value of tax credits granted.

25 op. cit., Kenyon 1997, Ladd and Hansen 1999.

26 Hoxby made this point in her paper on Texas school finance.

27 This analysis uses property tax valuation and rate data for 2007 from the Ohio Department of Taxation.

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33 PolEcon's analysis of Internal Revenue Service SOI data for Arizona and Arizona tax credit data is reported in Lukas, C., "The Arizona Scholarship Tax Credit: Providing Choice for Arizona Taxpayers and Students," Goldwater Institute (No. 186), December, 2003.

34 2004 AGI from IRS "Statistics of Income" was adjusted to reflect an average annual growth rate of 1.5%.

35 These figures represent the amount of contributions that can be expected in the absence of a cap on available tax credits. Because contributions from corporations can be expected to be much greater than those from individuals, the actual amount of contributions claimed by individuals will depend upon how credits are allocated between corporations and individuals. Based on the Florida experience, Ohio corporations are expected to make full use of all available credits if they are capped.

36 Ohio Department of Taxation, Table CF-Credits, No 37 (2006).

37 If corporations receive a credit equal to 80% of their contribution, $75 million in contributions would lead to $60 million in tax credits granted.

38 $75 million + $56 million = $131 million times 95% (the amount of contributions minus administrative allowance) = $125 million.

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