Findings of a study that investigated the feasibility of educational vouchers for California education and their budgetary impact are presented in this paper. In a survey of 300 parents in the Los Angeles Unified School District with children under the age of 16 who do or will attend public schools, 52 percent said that they would use a $2,600 voucher to send their children to private school. Support was highest among minorities, particularly African-Americans. Budgetary implications are that a 52 percent use of vouchers statewide could reduce California's education budget by $3 billion, which could be reinvested in public schools or for other general foundation purposes. However, cost savings at the state level may not map the underlying cost structure of individual school districts. Because public school operating costs are composed of both fixed and variable costs, the number of students who leave the public school must be great enough to reduce fixed costs before the voucher program becomes cost-effective for individual school districts. Two tables and one graph are included. (LMI)
Executive Summary

A survey of Los Angeles Unified School District parents with children under the age of 16 currently enrolled in public schools shows that 52 percent of those surveyed would use a $2600 voucher to send their children to private school. Enthusiasm for the voucher was especially high among Afro-Americans. Over two-thirds of Afro-American parents with school-aged children said they would use the voucher. Overall, minorities, including Latinos and Asians, supported the idea of vouchers by nearly 58 percent.

A 52 percent use of vouchers statewide among all students now enrolled in public schools could reduce California's state education budget by $3 billion—a savings which could be reinvested in public schools or used for other general fund purposes. Calculation of such a reduction assumes current enrollment and current funding levels from the state’s general fund and local property taxes with all savings accruing to the state.

Cost savings at the state level may not map the underlying cost structure of individual school districts. Because operating costs for public schools are composed of both fixed and variable costs, the number of students who leave the public schools must be great enough to reduce fixed costs before the voucher program becomes cost-effective for individual school districts.
Survey Results

A survey commissioned by the Reason Foundation found widespread support for education vouchers in the Los Angeles Unified School District in California. Parents or guardians of children 16 years-old and under currently enrolled in public schools were asked if they would switch their child to private schools if a $2600 scholarship were made available to them. Over 52 percent responded "yes," that they would enroll their child in private school.

Moreover, support for the scholarship, also known as a voucher, was highest among racial minorities. Overall, minorities including Asians supported the idea of vouchers by nearly 58 percent. Over 69 percent of Afro-Americans and 51 percent of Latino parents with children currently enrolled in public schools said they would use the $2600 voucher.

Parents who registered the greatest support for the voucher were those who belonged to households earning less than $25,000 a year. Nearly 62 percent of these parents said they would take advantage of a voucher to enroll their child in a private school.

The survey was conducted by the independent polling firm Arnold Steinberg and Associates, Inc. during the period June 19 to June 28, 1992. Three hundred parents or guardians in the Los Angeles Unified School District with children under the age of 16 who do or will attend public school responded to the twenty-question survey. Respondents who spoke only Spanish were read the survey questions in Spanish. Other results include:

- Among parents with non-school-age children who plan to send their children to public schools in the future, 64 percent said they would take advantage of the voucher.

- Between 40 and 50 percent of respondents could not answer when asked the cost of tuition in private schools. Those who did respond, on average, estimated tuition as being $5,500 for a private religious school and $5,700 for a private non-religious school. Actual average costs are $2,000 for private religious schools and $4,000 for non-religious schools. These figures were given by survey interviewers before parents were asked if they would use a $2600 voucher to send their children to private school.

- Those with higher incomes were more likely to believe that tuition costs were higher. White parents, more than non-white parents, were likely to believe tuition costs were higher.

- One third of respondents said that they knew of the current school choice ballot initiative. (The Parental Choice in Education Initiative proposes a voucher valued at 50 percent of total state and local government spending per student—about $2500 in 1991-1992. The initiative was not approved for the November 1992
ballot, but has qualified for the June, 1994 ballot).

- Awareness varied depending on age and race. Nearly half of whites had heard of the initiative as had 40 percent of Afro-Americans, and 20 percent of Latinos. In general, older parents knew about the initiative more than younger parents.

- Those who were more likely to use the voucher had not heard of the initiative and tended to be of a lower socio-economic status.

**Budget Implications**

The potential savings for the State of California under a voucher program are considerable. Depending on one's assumptions, the state could realize a net gain of over $3 billion if 52 percent of currently enrolled public school students used a $2600 voucher to transfer into private schools as the survey indicated. The savings to the state come from the difference between current per-pupil spending for public schools, approximately $4260 (paid from state and local funds) and the cost of the voucher, $2600 (paid from the state's general fund), summed across all transferring students and accounting for the 550,000 students currently enrolled in private schools.

It is important to note that current per-pupil spending paid from the state general fund and local property taxes is spending for operating costs only and does not include spending for items such as school infrastructure. Total per-pupil spending in California is over $5,000 annually and comes from a variety of revenue sources including the general fund and property taxes.

Even if far fewer than 52 percent of public-school students decide to use the voucher, the state will still save money. The information conveyed in Graph 1 shows that the break-even point for vouchers depends on approximately 17 percent of public-school students transferring to private schools. That leaves a wide margin for error between the indicated level of participation (52 percent) and the lowest level of participation in the voucher program that would be cost effective (17 percent) from the state's perspective.

Under the terms of the Parental Choice in Education Initiative, students enrolled in private schools at the time the measure is enacted would not be eligible for vouchers for one or perhaps two years beyond the enactment date. This means that for the first year or two under the voucher program, the state would not incur the costs associated with students who had enrolled in private schools prior to the enactment of the initiative. This is significant for the purposes of cash flow analysis because the state can delay voucher payments to roughly 550,000 private school students for as many as two years.

However, because a cash flow analysis involves many assumptions about how the voucher program would actually play out over time, such an analysis is too complex to take up in this summary report. The calculations presented here are a rough estimate of the costs and benefits to the state and local governments associated with the voucher program.
Break-Even Analysis

Graph 1 shows the point at which the voucher initiative would begin to pay for itself and reduce education spending at the state level. Using the formula in Graph 1, the break-even point is calculated at roughly 862,000 students, or, expressed as a percentage of currently enrolled public school students, about 17 percent. By comparison, our survey results indicate that the actual level of participation in the voucher initiative could be around 52 percent of current public school students, or about 2.7 million students.

Projected Savings From Voucher Initiative

Under the assumptions stated in Table 1 and below, savings for the state would equal approximately $3.1 billion with the voucher initiative. The calculation for this figure and related break-out figures at the state and local government level are shown in Table 2. Education spending for operations is calculated as a revenue limit per student and draws upon two sources: state money from the general fund, and local money from property taxes. Due to interdependencies between the two revenue sources, the break-out savings figures at each level of government do not accurately reflect the true allocation of savings. For example, under the section titled “State Savings” there is an apparent net loss; similarly, under the section labeled “Local savings,” there is an apparent net gain. In actuality, the state accrues all of the savings, while no changes occur in local government revenues under the voucher program. A brief explanation of the Serrano v. Priest ruling helps explain the interdependency between the two figures.

The Serrano ruling found the previous system of funding education primarily through property taxes discriminatory against students from poorer districts. Accordingly, the Court ruled the funding process unconstitutional and required the legislature to reduce the disparities between districts for basic funding to less than $100 per student (with inflation, this figure is now around $280).³ The legislature complied by setting up the state as a balancing mechanism. After local revenue from property taxes is divided among the number of students in the district, the state will top off districts that fall short of the per-student spending allocation (known as the revenue limit per Average Daily Attendance—ADA) calculated by the Department of Education. Adjustments in spending per ADA and adjustments made with other funding sources are made for size and function characteristics of different schools and for children with special needs.

Local government revenues (property taxes) are generated as a lump sum to be allocated across whatever number of students are in the district. As such, the proportion of local government funding which goes toward the ADA revenue limit per student may vary up or down depending on how many students share the local revenue amount, which stays the same no matter how the student population may change. State funding, by contrast, is not calculated the same way. It is allocated on a per-student basis up to the amount by which local government revenue falls short of the revenue limit per ADA.

³
Cost savings from public-school transfers 
(4,259 - $2,600) T

Cost of vouchers for currently enrolled private-school students 
(550,000 x $2,600) = $1.43 billion

$3.1 billion

17%  
Break-even point

52%  
Participation level indicated by survey

Student Transfers (T)

Equation:

\[ T = \frac{V}{S - V} \times P \]

where:  
\( T \) = number of students needed to transfer to break even  
\( V \) = voucher amount  
\( P \) = private school enrollment  
\( S \) = public school spending per pupil  
(state general fund, and local property taxes)

Calculation:

\[ 861,966 = \frac{2,600}{4,259 - 2,600} \times 550,000 \]

or approximately 17%

Note: Stripes represent total savings.
### Table 1

#### Assumptions

<table>
<thead>
<tr>
<th>Enrollment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>5,206,000 students</td>
</tr>
<tr>
<td>Private</td>
<td>550,000 students</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Spending$^1$</th>
<th>Total</th>
<th>Per Pupil (rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State General Fund$^2$</td>
<td>$15.558$ billion</td>
<td>$2,988$</td>
</tr>
<tr>
<td>Local Property Taxes</td>
<td>$6.618$ billion</td>
<td>$1,271$</td>
</tr>
<tr>
<td>Total</td>
<td>$22.176$ billion</td>
<td>$4,259$</td>
</tr>
</tbody>
</table>

#### Transfers

Percentage of public-school students transferring to private schools:
- 52% or 2,707,120 students

#### Voucher Amount

- $2,600

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$^1$ These figures do not represent total spending on education, over $5,000 per student. Only state general fund and local property tax amounts are used here because these are the sectors likely to be affected by a voucher program.

$^2$ Includes general fund revenues from Proposition 98 ($15.478$ billion) and non-Proposition 98 general fund revenues ($80$ million).
### State and Local Savings

<table>
<thead>
<tr>
<th>Calculation</th>
<th>New Cost</th>
<th>Avoided Cost</th>
<th>Savings (Avoided Cost - New Cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per pupil spending multiplied by the number of transferring students</td>
<td>$4,259 \times 2,707,120 = $11,529,624,080</td>
<td>$11,529,624,080</td>
<td></td>
</tr>
<tr>
<td>Subtract the cost of vouchers for transfer students</td>
<td>$2,600 \times 2,707,120 = $7,038,512,000</td>
<td>$7,038,512,000</td>
<td></td>
</tr>
<tr>
<td>Subtract the cost of vouchers for currently enrolled private school students</td>
<td>$2,600 \times 550,000 = $1,430,000,000</td>
<td>$1,430,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$8,468,512,000</strong></td>
<td><strong>Total</strong></td>
<td><strong>$3,061,112,080</strong></td>
</tr>
</tbody>
</table>

### State Savings (General Fund)*

<table>
<thead>
<tr>
<th>Calculation</th>
<th>New Cost</th>
<th>Avoided Cost</th>
<th>Savings (Avoided Cost - New Cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of transfer students multiplied by the state's portion of per student spending</td>
<td>$2,988 \times 2,707,120 = $8,088,874,560</td>
<td>$8,088,874,560</td>
<td></td>
</tr>
<tr>
<td>Subtract the cost of vouchers for transfer students</td>
<td>$2,600 \times 2,707,120 = $7,038,512,000</td>
<td>$7,038,512,000</td>
<td></td>
</tr>
<tr>
<td>Subtract cost of vouchers for currently enrolled private school students</td>
<td>$2,600 \times 550,000 = $1,430,000,000</td>
<td>$1,430,000,000</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$8,468,512,000</strong></td>
<td><strong>Total ($379,637,440)</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Local Savings (Property Taxes)*

<table>
<thead>
<tr>
<th>Calculation</th>
<th>New Cost</th>
<th>Avoided Cost</th>
<th>Savings (Avoided Cost - New Cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students transferring multiplied by the local portion of per student spending</td>
<td>$1,271 \times 2,707,120 = $3,440,749,520</td>
<td>$3,440,749,520</td>
<td></td>
</tr>
<tr>
<td><strong>Total $3,440,749,520</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*All savings accrue to the state. Combining break-out figures for state and local governments, we get $3,440,749,520 - $379,637,440 = $3,061,112,080
When the number of students in a school district goes down because some have opted out of the public-school system and into private schools, the same amount of local money will be spread among fewer students, and the proportion of local funding per student will increase vis a vis state funding. Alternatively, state funding for ADA, per student, and in total, goes down. This is precisely the scenario that results in a net savings to the state government under the voucher initiative without changing the total local revenue amount (from property taxes) used to fund education.

In Table 2, we see the local government's share of the total per-student allocation times the number of students transferring out of public schools broken out as "savings" (around $3.5 billion). However, these savings actually accrue to the state. The state, for its part, appears to be losing money. That is because in disaggregated form, the state is made to bear all of the costs of the voucher ($8.5 billion), and shows only part of the savings ($8 billion). But by combining the two net effects at the state and local level, we see a net gain of $3.1 billion which is consistent with the savings realized when the state and local per-student allocations were combined in the first section of Table 2.

Vouchers, Revenues and School District Budgets

Many critics of vouchers have raised the concern that vouchers will drain money from public schools. Although spending per public-school pupil does not change with a voucher program, government spending per district will likely decline under a voucher program because fewer students, which bring state money with them, will choose to attend public schools. This may or may not have a negative effect on public schools depending on how many students decide to transfer out of the public schools and depending upon the point at which fixed costs may be reduced. Consider two hypothetical scenarios:

Under the first, assume that each public-school student receives $3,000 from the state and $1,000 from local government funds. There are 5,000 students in the district. The total amount of ADA funds available for the school district is $4,000 x 5,000 = $20 million. (Of that, $15 million are state funds and $5 million are local funds). If half of the students in public schools leave and enroll in private schools, the total amount available to the district to spend on its remaining 2500 students will be $10 million. (Of that, $5 million are state funds and $5 million local funds). Funding per pupil, $4,000 is still the same, but total school district funds have fallen. However, with only half the number of students to teach, fewer classrooms, fewer teachers, fewer administrators, and probably fewer school buildings would be needed so that fixed costs could fall to keep pace with lower enrollment and lower revenues. In this case, the size of a district may shrink, or be combined with another district, and some individuals may be dislocated, but the district as a whole is not made worse off.

Now consider a scenario in which only 100 students out of 5,000 decide to leave the public schools. The district would lose $400,000 in ADA revenue (100 x $4,000) and 100 students, but may not be able to reduce fixed costs enough to offset the decrease in revenue. In this case, the district could be made worse off.
Precisely how the operating costs of each district would be affected by a voucher program would require a sophisticated cost structure analysis. The point is that the cost savings to the state may not mirror the cost savings to individual school districts. It is made here only to prompt further consideration of this issue.

Assumptions

- Survey showing support for vouchers in the Los Angeles area reflects parent attitudes statewide.
- Funding for school vouchers would come from the general fund of the state budget.
- All savings accrue to the state.
- Cost of voucher remains stable over time.
- Total enrollment and education spending figures are projections for 1992-1993 and are rounded approximations.
- Per-pupil spending comes from the state general fund and local property tax revenues and is averaged across all districts and individual students for purposes of this analysis.

Caveats

- Cost savings at the state level and cost shifts at the local level do not map the underlying cost structure for individual school districts. Because operating costs of public schools are composed of both fixed and variable costs, the number of students who leave the public schools must be great enough to reduce fixed costs (i.e. school buildings, libraries, debt repayments) before the voucher program becomes cost-effective for individual school districts.

- Not all costs at the state level will decline in proportion to the number of students who leave. For example, fixed costs, such as transportation, will only decline when a significant number of students have left the public school system. If proportionately fewer students enrolled in special education leave the public schools than non-special-education students, then costs may not decline as much as projected.

- Ability of the private sector to absorb all students who wish to transfer out of the public schools will depend on how many private schools participate in the voucher program and how quickly capacity can be added to meet the increased rate of demand.
• Fewer or greater than 52 percent of all students enrolled in public schools may transfer into the private sector.

About the Author

Janet Beales is a policy analyst for the Education Center at the Reason Foundation. Before earning her M.B.A. degree at the University of Washington, Janet was a project manager with the National Chamber Foundation, the research affiliate of the U.S. Chamber of Commerce, in Washington, D.C. Concurrent with this working paper, she is researching and writing a report on the private provision of school infrastructure due out this Fall.

Endnotes


2. Analysis of budget implications and voucher use involves many assumptions leaving all conclusions subject to modification as more data become available over time.


4. Because of interdependencies between state and local funding regulations as they are currently written, it is possible for per-pupil spending to actually exceed or fall short of the spending amount allocated by ADA. For this to happen, there would have to be a large migration into the private sector. Presumably, the laws governing funding mechanisms would be changed to reflect the new distribution in students.