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Survey of Arizona Private Schools: Tuition, Testing, and Curricula

by Vicki Murray, Ph.D., Education Analyst, Goldwater Institute, and Ross Groen, Legislative Assistant, Office of Congressman Trent Franks, former Education Researcher, Goldwater Institute

EXECUTIVE SUMMARY

Arizona public school enrollment is projected to exceed one million students by 2013. Currently, Arizona ranks first nationally for highest capital outlay expenditures and second for interest on school debt expenditures, totaling nearly $2,000 per student.[1] Arizona's private schools educate five percent of the state's K-12 student population. Developing policies that take advantage of existing and potential private school capacity could help ease the public school burden of educating significantly more students, while potentially saving hundreds of millions of dollars annually.

To shed light on this important segment of Arizona's education marketplace, this report details the results of the Goldwater Institute's first annual statewide survey of Arizona private schools, representing over 20 percent of private schools in Arizona. It shows that private schools serve a diverse student population and offer a variety of curricula at roughly half the average public school expenditure of $7,816 per student.[2] The average private elementary and middle school tuition is $3,700, and 89 percent of private schools offer financial aid. Three-quarters of private schools surveyed are sectarian, but 83 percent of those schools do not require religious affiliation for admission. Ninety-three percent of private schools surveyed administer standardized tests annually. Nearly 80 percent of private schools surveyed offer kindergarten, and 49 percent offer preschool programs. Forty-three percent of Arizona private schools surveyed accept special needs students, and nearly half of them have room for more. Private schools typically have half the student population of public schools and have smaller classes, 14 students per teacher compared to 18 students per teacher in public schools on average.

Absent private schools, approximately 44,000 children would likely be educated in public schools, costing the state and localities an estimated $260 million annually.[3] Currently, private schools have approximately 26,000 available seats.[4] Educating 26,000 students in public schools costs over $200 million. Fully using Arizona's private school marketplace could reduce pressure on public schools, give parents more choices, and save hundreds of millions of dollars.

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Introduction

Arizona's projected public elementary and secondary school enrollment growth over the next decade is among the nation's ten highest, increasing from 967,000 students in 2005 to over one million students in 2013.[5] As policymakers grapple with the challenges of impending K-12 enrollment growth, private schools have an important role to play in Arizona's education marketplace. Yet there is a great deal of misinformation about tuition, admissions policies, accountability mechanisms, and capacity at Arizona's private schools. For example, the state's largest teachers union, the Arizona Education Association, claims that private schools "are not accountable" and "restrict their enrollment." Arizona's private schools enroll about five percent of the state's K-12 student population, roughly 44,060 children.[6] To help shed light on this important segment of Arizona's education marketplace and provide answers to those concerns, we surveyed Arizona's private schools.

The mailing list for the Goldwater Institute Independent School Survey was compiled by combining lists obtained from the Arizona Department of Education, Association of Christian Schools International, the Arizona Christian School Tuition Organization, and the Catholic Dioceses of Phoenix and Tucson. Surveys were mailed to the resulting list of 475 private schools on February 20, 2004. The survey asked questions regarding enrollment, staffing, standardized testing practices, tuition, financial aid, school size, and growth potential. The survey also contained questions about basic admissions criteria and religious affiliation. A copy of the survey is found in the Appendix.

Of the 475 mailed surveys, 56 were undeliverable, leaving a survey pool of 419. Of those, a total of 130 surveys were returned. Of the returned surveys, 18 served only preschoolers and kindergarteners, which did not fit the profile of a school serving at least two grades between kindergarten and high school, 17 were charter schools, four were Arizona Department of Education-funded special education schools, one was a distance learning center, one was a resource center for home school families, and one survey was incomplete.[7] Thus, of the 130 returned surveys, removing the 42 with incomplete information and those that did not fit the survey profile, 88 had complete data, representing approximately 20 percent of Arizona private schools. Those surveys help provide a clearer picture of the type of private school education available in Arizona and at what cost.

The purpose of the Goldwater Institute survey is to help provide basic answers to the questions most frequently

raised during public policy debates, including admissions practices, enrollment, standardized testing practices, tuition, financial aid, school size, and growth potential. The survey relies on the reporting of school personnel. However, the 88 private schools that returned completed surveys are located throughout Arizona, represent a broad cross section of secular and non-secular affiliations, and serve diverse student populations.[8] Thus, this report does not rely on inferences about the average private school in Arizona. Instead, it presents what is perhaps the most accurate picture currently available of the average private school in Arizona. Future annual surveys will further clarify this picture.

A Composite of an Average Arizona Private School

The 2004 Goldwater Institute survey shows that the typical private school in Arizona serves kindergarten through eighth grade students and offers a preschool program. The school has been operating for about 35 years and has roughly 280 students with 18 full-time teachers, five part-time teachers, and three individuals in administration.[9] The student/teacher ratio is about 14 to one.

The average private school is religiously affiliated and is slightly more likely to be protestant than Catholic, but religious affiliation is not required for attendance. An application is required for admission, and students are typically interviewed prior to admission. Students take either a version of the Stanford Achievement Test or the Iowa Test of Basic Skills every year, and the school makes aggregate test scores available to parents of current and prospective students.

Average tuition at private schools is around $3,700 for K-8 and $5,500 for high school. The average private school receives some support from either a church or community foundation and offers need-based financial aid. About one-third of the typical private school's students each receive annual tuition tax credit scholarships worth $1,500 from non-profit school tuition organizations.

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Tuition at Arizona Private Schools

Arizona's private elementary and middle schools have tuition rates that are about half the average public school per-pupil expenditure of $7,816.[10] The average tuition for private elementary schools is $3,689. When the two highest and two lowest tuition rates are removed from the calculation, the average tuition is $3,581. Middle school tuition is slightly higher, averaging $4,008. Again, removing the two highest and two lowest tuition rates from the calculation, the average middle school tuition is $3,834. Thus, the combined average tuition for private elementary and middle schools is $3,700.

Tuition at private high schools is about 60 percent higher than the average middle school tuition, averaging $6,696. However, when the two highest and lowest tuition rates are removed, the average high school tuition rate drops to $5,511. In contrast, the average per-pupil public high school expenditure is $7,160, and $6,798 when excluding the two highest and two lowest district per-pupil expenditures.[11]

On average, then, public elementary and middle schools are twice as expensive as private schools, while public high schools spend over $2,000 more per pupil than private high schools.

On average, then, public elementary and middle schools are twice as expensive as private schools, while public high schools spend over $2,000 more per pupil than private high schools. It is important to keep in mind that just as per-pupil expenditures do not reflect the actual cost of educating a child in a public school, tuition likewise does not reflect the actual cost of educating a child in a private school.[12] However, private education spending figures are conservative because they do not include such costs as capital and construction. Table 1 and Figure 1 detail the average tuition charged by private schools and the number of schools that are available within a series of tuition ranges.

Forty-two of the 88 schools surveyed offer elementary, middle, and/or high school grades, and charge tuition according to those grade levels. To provide the most accurate tuition ranges possible, when schools with multiple grades indicated separate tuition amounts for elementary, middle, or high school students, those grade spans were treated as separate "schools." Thus, all figures total 130 schools, not 88.

The averages in Table 1 do not include tuition at the two most and two least expensive private schools surveyed for each level—elementary, middle, and high school—since those schools are not representative of most schools surveyed. However, when including those schools, the combined average tuition drops by almost $500.[13]

As shown in Figure 1, 76 out of 130 private schools statewide, or 59 percent, charge tuition that is less than $4,000 per year. Those findings closely parallel results from the 1993 Goldwater Institute private school survey. In 1993, 65 percent of private schools in Maricopa and Pima Counties charged tuition that amounts to $4,000 in 2004 dollars.[14] According to the 1993 Goldwater survey, tuition at 72 percent of private schools in Maricopa and Pima Counties was less than the total per-pupil public school expenditure.[15] The 2004 statewide survey finds that 97 percent—126 out of 130 schools—charge tuition that is less than the current average public school per-pupil expenditure of $7,816.

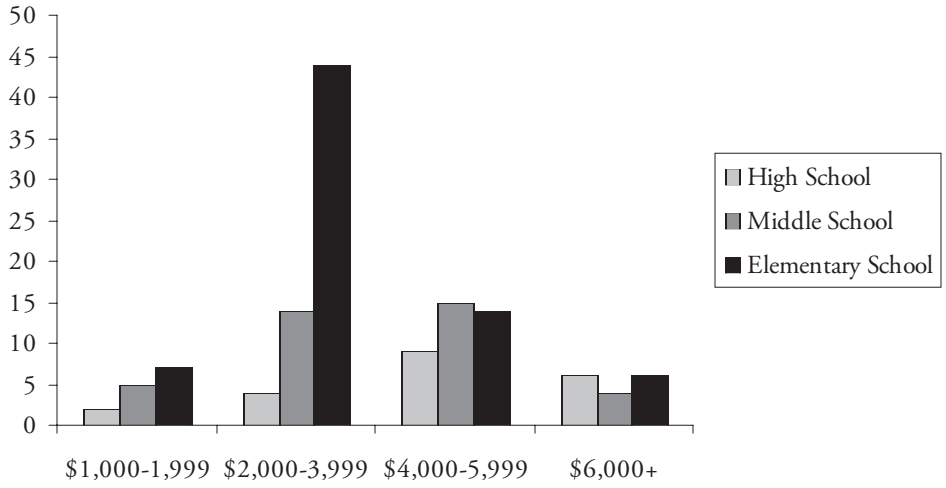
Thus, private schools on average charge less than public schools, and 89 percent of the private schools surveyed offer some form of financial aid. Ninety-six percent of private schools offer need-based financial aid, and 21 percent consider merit as a criterion for financial aid. Fifty-seven percent of private schools receive some form of support from a church or community foundation, while 80 percent work with school tuition organizations, which are non-profit organizations that collect

donations from Arizona taxpayers, who receive tax credits for their charitable gifts, and distribute the funds for private school scholarships.[16] The average private school enrolls 96 tuition scholarship recipients. Given that the average private school enrolls about 280 students, over one-third (34 percent) of a typical school's student body is likely to be scholarship recipients.

Table 1: Average Tuition at Arizona Public Schools

Grade Level	Tuition ($)
Elementary School	3,688
Middle School	4,008
High School	6,696
Combined Average	4,797

Figure 1: Private School Tuition Ranges by Type of School



Note: The number of private schools, 130, exceeds actual number of private schools surveyed, 88, because of the breakdown by years taught.

Testing in Arizona Public Schools

One popular misconception about private schools is that they are not accountable for student achievement. For example, according to the state's largest teachers union, the Arizona Education Association, because private schools are not publicly funded, they "are not accountable to the public."[17] However, insofar as testing is a measure of accountability, over 93 percent of Arizona private schools surveyed require annual standardized testing, and among those schools, 95 percent provide aggregate standardized test scores to parents of current and prospective students, facilitating transparency and informed decisions.

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Nearly 53 percent of private schools use the Stanford Achievement Test series (SAT), which is a nationally norm-referenced test also used in Arizona's public schools.[18] The next most popular test, offered by about one-third of the private schools surveyed, is the Iowa Test of Basic Skills. A variety of other tests are also offered, but the next most widely used test is the Comprehensive Test of Basic Skills. The use of such nationally standardized tests is particularly informative, helping parents judge test scores of students at their children's private schools against those of students nationwide. The national tests are also less open to the politicization that has occurred with the Arizona's Instrument to Measure Standards (AIMS) test.[19] More than 93 percent of Arizona private schools test students annually, and six percent of schools administer more than one standardized test in a given year.

Table 2: Percentage of Private Schools Requiring Standardized Tests

Standardized Test Required Annually	93%
Aggregate Test Scores Available to Parents	95%

General Characteristics

A second misconception about private schools is the belief that they serve a homogenous student population and have exclusionary admissions policies. For example, the Arizona Education Association claims that private schools "restrict their enrollment to the students they choose."[20] As the following sections illustrate, Arizona's private schools serve a diverse student population, offer varied curricula, have a variety of admissions criteria, and overwhelmingly do not require religious affiliation as a criterion for admission.

Religious Affiliation

As Figure 2 and Table 3 show, 46 percent of the schools that responded to the survey are Christian, Non-Catholic; another 28 percent are Catholic; 25 percent either have no religious affiliation or did not specify one; and one percent are Jewish. These data closely track data reported in the 1993 *Goldwater Institute Survey of Private Schools*, which found that 40 percent of private schools were Christian, non-

Figure 2: Religious Affiliations of Arizona Private Schools

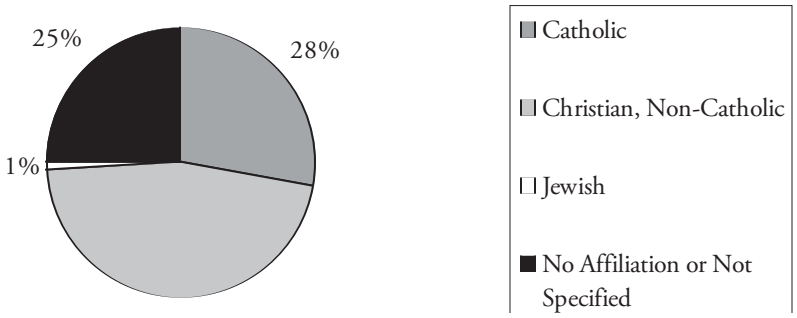


Table 3: Number and Percentage of Private Schools by Religious Affiliation

Religious affiliation	Number of schools	Percentage of schools
Christian, non-Catholic	40	46
Catholic	25	28
No affiliation or not specified	22	25
Jewish	1	1
Total	88	100

Catholic; 29 percent Catholic; 28 percent no religious affiliation; and two percent were Jewish.[21]

The diversity of Arizona's private school marketplace reflects a broader national trend toward increased diversity among private schools.[22] Harvard University economist Caroline M. Hoxby suggests that if private schools occupied a greater share of the education marketplace under expanded school choice, "It would almost certainly be largely nonreligious educational force… simply because school choice is ultimately about parents' preferences, and the vast majority of parents prefer nonreligious schools."[23] Hoxby explains that the education marketplace is currently constrained because religiously affiliated private schools that arose independently over time are typically the only alternatives to public schools under existing school choice plans.[24] Thus, in such a constrained marketplace most parents who choose private schools over public schools do so because they are the only available alternative. In an unconstrained education marketplace, a variety of schools would emerge in response to parent demand.

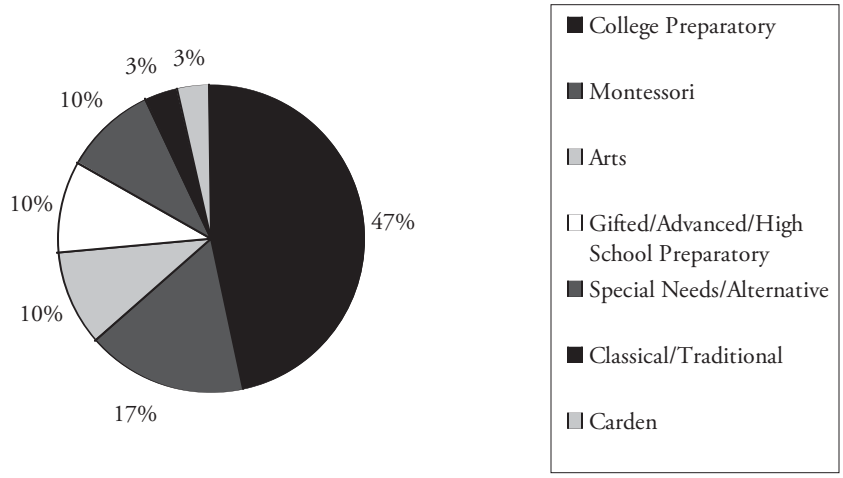
Many parents choose private schools because of the curricula and strong academics they offer. Over a third of schools surveyed, 30 of 88, specified using a particular curriculum, and of those, three schools specified using multiple curricula.

Curriculum

Many parents choose private schools because of the curricula and strong academics they offer.[25] Over a third of schools surveyed, 30 of 88, specified using a particular curriculum, and of those, three schools specified using multiple curricula.

Thus, Arizona's private schools infuse vitality into Arizona's overall education marketplace, expanding options available to parents and children and inspiring innovation among public schools.[26]

Figure 3: Curricula Used at Arizona Private Schools



Longevity

Private schools have always been part of Arizona's education landscape. In fact, two existing private schools pre-date the state's public school system. Institutionalized education open to all began in the mid-1860s with the establishment of a school at the San Xavier del Bac Mission outside Tucson. In 1870, the Sisters of St. Joseph at San Xavier also opened a school for girls that served the entire territory.[27] Five years later, on February 12, 1875, the territorial legislature passed "An act to Establish Public Schools in the Territory of Arizona."[28] It is not surprising, then, that a significant portion of Arizona's private schools has been around since before 1950. The average private school responding to the survey is nearly 35 years old, and the vast majority of schools have been serving students for at least 15 years. The oldest private school surveyed was founded in 1864.

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Table 4: Number and Percentage of Private Schools Founded by Decade

Decade	Number	Percentage
Pre-1900	2	2
1900-09	1	1
1910-19	1	1
1920-29	4	5
1930-39	0	0
1940-49	6	7
1950-59	12	14
1960-69	6	7
1970-79	11	13
1980-89	19	22
1990-99	19	22
2000-04	6	7
Total	87	101

Notes:
1. Percentages exceed 100 due to rounding.
2. Total is 87 schools, not 88, because officials from one school did not provide the year it was established.

Admissions

Nearly all of the responding schools require an application for admission. A little over three-quarters of the schools require an interview as well. Exactly 50 percent of schools review prospective students' grades, and 42 percent review standardized test scores. About one-third of schools require prospective students to take an admissions test. Fifteen responding private schools, or 17 percent, require adherence to a specific religion for admission.

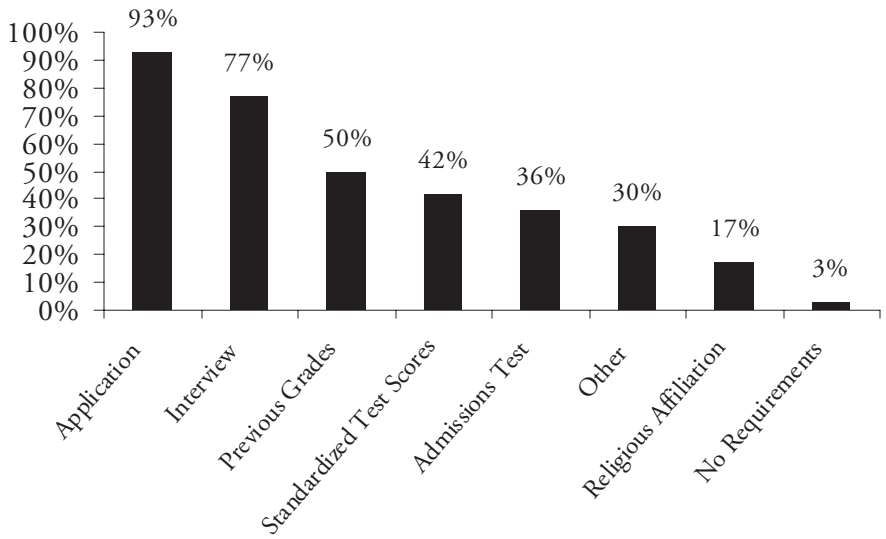
Among private schools listing other admissions requirements, a representative from one private school explained that to be admitted, students must pass a placement test or "[have] a desire to come here."

Nearly one-third of the private schools surveyed indicated that they had other admissions requirements. Letters of recommendation and a desire to learn were the most common responses. This is an especially important finding, given the common misconception that private schools are exclusionary. The Arizona Education Association, for instance, in an argument against a school choice program, stated:

> Backers also talk a lot about how this [tuition tax credit program] will increase parental "choice." That's nonsense. Arizona parents already have many choices. Arizona has statewide open enrollment among its public schools and there are charter, magnet and back-to-basics schools, as well. The only "choice" about this issue is the one that private schools have always had—deciding which students to accept and which to turn away.[29]

On the contrary, among private schools listing other admissions requirements, a representative from one private school explained that to be

Figure 4: Percentage of Arizona Private Schools by Admissions Requirements



admitted, students must pass a placement test or "[have] a desire to come here." Several more private school respondents reiterated that criterion and also require strong parental involvement. One private school official lists "student and parent desire" for admission, while another official explained the school required "parents committed to building an educational institution and [a] caring community." Additional responses echo that sentiment, specifying other admissions requirements such as space availability, adherence to student conduct and dress codes, parent interviews, and family visits to the schools

.

Grades Offered

More than 84 percent of private schools offer first through eighth grade. Of these, more than 78 percent offer kindergarten, and nearly half, 49 percent, offer preschool programs. A plurality of private schools, 42 percent, offer kindergarten through eighth grade, and 15 percent offer kindergarten through sixth grade. Ten percent of private schools serve grades nine through 12. Some schools offer just the earliest grades, which is typical for newer schools that plan to add higher grades over successive years. Others offer select elementary grades or combine the middle and high school grades.

Table 5: Number and Percentage of Private Schools by Grades Served

Grades Served	Number	Percentage
Preschool	43	49
K-2	1	1
K-3	1	1
K-4	3	3
K-5	6	7
K-6	13	15
K-7	1	1
K-8	37	42
K-9	2	2
K-12	5	6
First-8	3	3
First-9	1	1
Second-4	1	1
Six-12	5	6
High School (9-12)	9	10
Total	88	99

Note: Percentages do not total 100 due to rounding.

Special Needs Students

Students with special needs are a growing segment of the elementary and secondary school population.[30] Forty-three percent of private schools surveyed accept special needs students, and 47 percent of those schools have room for more. An average of 18 special needs students were enrolled at each of the 30 private schools serving special needs students during the 2003-2004 school year, or an average 11 percent of their total enrollment. Likewise, as of 2002, the latest year for which data are available, 11 percent of public school students in Arizona were enrolled in special education programs, or Individualized Education Programs (IEPs).[31]

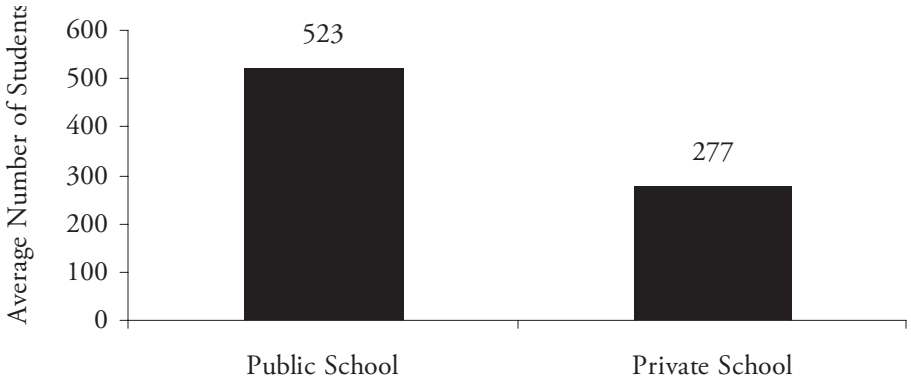
Students with special needs are a growing segment of the elementary and secondary school population.[30] Forty-three percent of private schools surveyed accept special needs students, and 47 percent of those schools have room for more.

Of the 30 schools serving special needs students during the 2003-2004 school year, 12 reported the costs of their special education programs.[32] The total cost of the average private school special education program at those schools was $43,000, with total program costs ranging from $15,000 to $100,000. In fact, one private school serves only special needs students and devotes its entire $100,000 budget to providing educational services for them. Sixteen of the remaining 18 private schools enrolling special needs children during the 2003-2004 school year reported having no separate special education program budget, or that the costs of providing special education services do not exceed their regular program costs.[33]

School Size

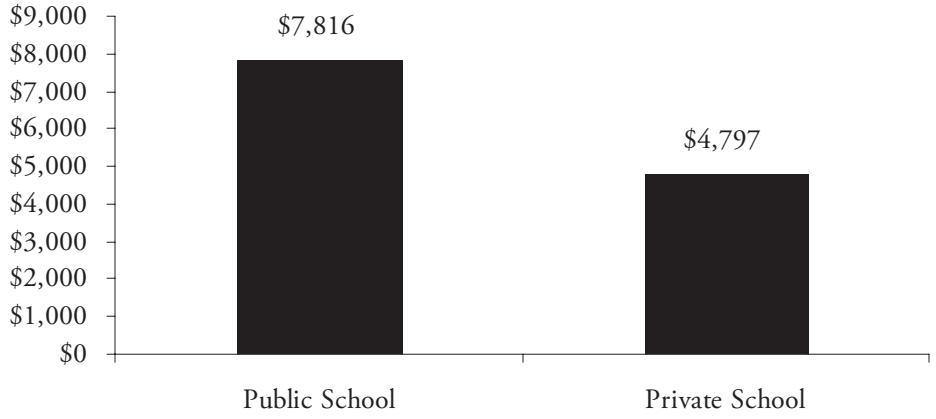
The average Arizona private school enrolls 277 students. That is about half the size of the average public school, which has 523 students.[34] When the two largest and two smallest private schools are removed, the average enrollment drops to 250 students.

Figure 5: Comparison of Average Private and Public by School Size



Sources: Average private school size from authors' survey. Average public school size from Andrew T. Lefevre and Rea S. Hederman, Jr., *Report Card on American Education: A State-by-State Analysis 1976-2001*, American Legislative Exchange Council, October 2002.

Figure 6: Comparison of Average Private School Tuition and Public School Per-Pupil Expenditure



Sources: Average private school tuition is from authors' survey. The average Arizona public school spends $7,816 per student. The Joint Legislative Budget Committee (JLBC) determined this figure based on data from the *Superintendent's Annual Report for Fiscal Year 2001-2002*.
Note: The tuition amount is derived by averaging the private elementary average tuition of $3,689; the middle school average tuition of $4,008; and the high school average tuition of $6,696. Those averages do not include tuition at the two most and two least expensive private schools surveyed for each level, elementary, middle, and high school, since those schools are not representative of most schools surveyed. When including those schools, the combined average tuition drops by almost $500.

Private schools have an average student/teacher ratio of 14 to one. Arizona public schools have an average student/teacher ratio of 18 to one. The average private school student/teacher ratio has dropped over the past decade, from 15 students per teacher to 14. However, the average student/teacher ratio in public schools has increased, from 16 to 18 students per teacher since 1993.

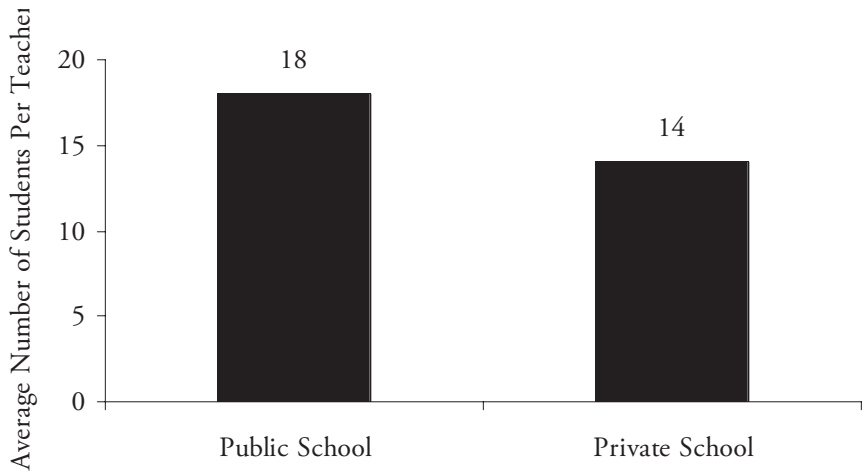
Class Size

The average private school has 18 full-time teachers and five part-time teachers. The average public school has 35 full-time teachers.[35] Dividing the average student population by the number of full-time teachers, private schools have an average student/teacher ratio of 14 to one.[36] Arizona public schools have an average student/teacher ratio of 18 to one.[37] Comparing those results to findings from the 1993 Goldwater Institute private school survey, the average private school student/teacher ratio has dropped over the past decade, from 15 students per teacher to 14.[38] However, the average student/teacher ratio in public schools has increased, from 16 to 18 students per teacher since 1993.[39]

As shown in Figure 6, the 2004 survey shows 50 percent of public school staff is in administration, whereas 13 percent of private school staff is in administration.[40]

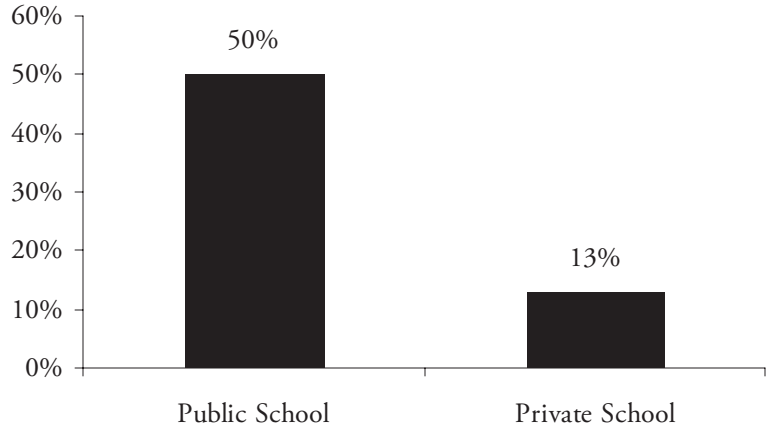
This administrative burden on Arizona's elementary and secondary schools is costly, and suggests why, in part, private school tuition is significantly less than the average public school per-pupil expenditure.[41] For

Figure 7: Comparison of Student/Teacher Ratios at Average Private and Public Schools



Sources: Authors' survey. Data are from the 2003-2004 school year. Public school data are from the National Center for Education Statistics' (NCES) Common Core of Data for the 2002-2003 school year, the latest year for which complete data are available; and *Digest of Education Statistics, 2002*, Table 83.

Figure 8: Comparison of Administrative Staff Percentage at Average Private and Public Schools



Sources: Authors' survey. Data are for the 2003-2004 school year. Public school data are from the National Center for Education Statistics' (NCES) Common Core of Data for the 2002-2003 school year, the latest year for which complete data are available; and *Digest of Education Statistics, 2002*, Table 83.

example, according to the U.S. Department of Education, the total Arizona public school per-pupil expenditure during the 1999-2000 school year was $6,878. Of this amount, 51 percent, $3,525, was spent on instruction, general student services and instruction-related services. The remaining 49 percent, $3,356, went to non-instructional activities, the most expensive of which were capital outlay and interest on school debt.[42]

Capacity

At more than $1,500 per pupil as of the 1999-2000 school year, Arizona's capital outlay expenditures are the highest in the country.[43] Moreover, with the state's significant projected enrollment growth to top one million students within the next decade, school capacity is a pressing public policy concern. For example, public school enrollment for the 2004-2005 school year is at record highs in the Phoenix metropolitan/East Valley area. Bob Cox, an assistant principal at Desert Vista High School in Ahwatukee Foothills explains, "We're expecting 3,000 kids for the first time this year, and it won't take long for Corona del Sol or Mountain Pointe (high schools in the East Valley) to reach that milestone, either. Every year you have to accommodate more kids."[44]

Survey results show that Arizona's private schools have room for more students. The surveyed schools had 5,927 open seats, or roughly 69 open seats per school. If we assume that the schools surveyed reflect the larger private school population, then an estimated 26,000 seats are available.[45] While those seats constitute only about three percent of Arizona's projected public school enrollment growth through 2013, research indicates that private school supply, including secular, non-secular, and non-profit schools, is elastic. Writing for the Brookings Institution, Paul Peterson and William G. Howell of Harvard University estimate that based on the experience of three existing school choice programs, the private school sector could absorb as much as 10 to 15 percent of all existing public school students.[46]

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Arizona private schools appear to substantiate that projection. During the 2003-2004 school year, for example, 360 students from the Scottsdale Unified School District transferred to Notre Dame Preparatory High School. Since opening in August 2002, student enrollment has nearly doubled, from about 360 students to 670 students in 2004.[47] Evidence also suggests that a variety of private schools are responsive to increased enrollment demands, with religious schools representing a broader array of faiths, and secular schools offering curricula that is distinct from public schools.[48]

Based on aggregate figures from their spring 1997 survey of 500 private schools in 22 large urban areas with overcrowded public schools, Lana Muraskin and Stephanie Stullich of the U.S. Department of Education's Planning and Evaluation Service

indicate that private schools could be even more responsive to demand. If schools' current policies were preserved, 77 percent of private schools responded that they would "definitely" or "probably" be willing to accept public school student transfers.[49]

Findings from Muraskin and Stullich's survey also indicate that the least expensive private schools would likely be the most responsive to demand. Nearly two-thirds of the 500 private schools they surveyed were operating below 80 percent capacity. Significantly, while 70 percent of the most expensive private schools in the spring of 1997 were at near full capacity, 71 percent of the least expensive private schools at that same time had excess capacity in areas with overcrowded public schools. This is an important finding for Arizona policymakers grappling with ways to meet explosive enrollment growth with limited public resources.[50]

Absent private schools, the state and localities would have had to spend an additional $260 million during the 1999-2000 school year to educate the more than 44,000 children who attended private schools.

Making Use of Private Schools is Fiscally Responsible

Recognizing private schools as a vital and cost-effective segment of Arizona's education marketplace should be a top priority for policymakers, especially given the impending enrollment growth over the next decade. Yet the Arizona Education Association has criticized policies such as the tuition tax credit program, designed to facilitate private school enrollments, because private schools "educate less than a tenth of our children."[51] However, by educating just five percent of Arizona's K-12 school children, private schools yield an annual savings to the state and localities that belies their small market share. As shown in Table 6, absent private schools, the state and localities would have had to spend an additional $260 million during the 1999-2000 school year to educate the more than 44,000 children who attended private schools.

Estimates based on existing private school capacity, which require no major construction or plant renovations, are encouraging. Currently, there are an estimated 26,000 available private school seats.[52] As shown in Table 7, educating 26,000 students in public schools costs over $200 million. Because private schools, on average, are half as expensive as public schools, if the state offered education grants worth the combined average elementary, middle, and high school tuitions—roughly $4,800—for 26,000 public school students to fill available private school seats, the projected savings could be nearly $80 million.[53]

Projections based on survey responses indicate one-third of private school students on average receive tuition tax credit scholarships worth $1,500. Assuming the current percentage of scholarship recipients and the average scholarship amount, one-third of the 25,868 students filling available private school seats, or 8,537 students, would be recipients of tuition tax credit scholarships worth $1,500 each. Given that a $4,800 education

Table 6: Savings to State and Local Taxpayers

	Per-pupil expenditure by funding source ($)	Total expenditure ($ billions) (enrollment=896,672)	Total expenditure minus 5% private school enrollment ($ billions)	Savings ($ millions)
Federal	694	—	—	—
State	2,999	2.69	2.56	130
Local	2,964	2.66	2.53	130
Total	6,876			260

Notes:
1. Federal funding provides 10.1 percent of the per-pupil expenditure, state funding provides 43.6 percent, and local funding provides 43.1 percent. Percentages do not total 100 because revenues from private gifts, tuition, and fees amounted to 2.6 percent, or $186 per pupil.
2. Total per pupil expenditure was $6,898. Total per-pupil revenue was $6,843, leaving a $35 discrepancy.
3. Projections based on 1999-2000 data.

Table 7: What Private Schools Could Save by Using Existing Private School Capacity

	Capacity at all Arizona private schools
Number of Schools	377
Number of Seats Available	25,868
x $4,797 = Average Private School Tuition	$124 million
x $7,816 = Average Public School Expenditure	$202 million
Savings	$78 million

Note: Projections do not include the tuition tax credit.

grant would likely cover or exceed the tuition of most private elementary and middle schools, as well as nearly 40 percent of private high schools, it is unlikely that one-third of public school students transferring to private schools would in fact use $1,500 tuition tax credit scholarships. However, even if they did, the cost of those scholarships would amount to $13 million. Even accounting for the cost of the tuition tax credit, offering public school students education grants to attend private schools could still save taxpayers an estimated $65 million.

From 2004 through 2016, if private schools continue to educate just five percent of the state's K-12 population, roughly 660,000 students would not have to be educated in public schools, saving the state $2.6 billion, or roughly $2.2 billion if one-third of private school students use tuition tax credit scholarships.

Arizona's public school enrollments are projected to increase by 12 percent between 2001 and 2013, exceeding one million students.[54] Research suggests that private schools currently could absorb as much as 10 to 15 percent of public school enrollments.[55] However, even assuming private schools continued to educate just five percent of Arizona's growing K-12 population, the savings would be significant. Using financial and enrollment data from the U.S. Department of Education, and adjusting the current average public per-pupil expenditure of $7,816 by a two percent annual inflation growth rate, it is possible to track the estimated annual savings to the state and localities through 2016.[56]

As shown in Table 8, even if private school enrollments remained at just five percent of K-12 enrollments through 2016, the average annual savings to the state would amount to roughly $200 million.[57] The tuition tax credit program would reduce that average annual projected savings by an estimated 15 percent to $168 million.[58] Thus, from 2004 through 2016, if private schools continue to educate just five percent of the state's K-12 population, roughly 660,000 students would not have to be educated in public schools, saving the state $2.6 billion, or roughly $2.2 billion if one-third of private school students used tuition tax credit scholarships.[59]

Total annual savings projections for private school enrollments are significant. However, as shown in Table 9, the potential savings over the course of just one private school student's K-12 education are similarly striking. Assuming public school spending per pupil expands at a two percent rate of inflation, each child who begins and completes his or her education in a private school could save the state and local governments approximately $100,000.

Perhaps the most common complaint against policies to encourage private school enrollments is that they will divert resources away from public schools. For example, referring to the tuition tax credit, the Arizona Education Association argues, "With state coffers bulge [sic], public schools remain on a starvation diet. It seems reckless to siphon off a minimum of $50 million in general state funds—money that should be spent to…support neighborhood schools—for another tax break for the well off."[60] In December 2003, the Goldwater Institute released a study on

Table 8: Projected Private School Enrollment Savings to the State

School year	Years corresponding to enrollment	Per-pupil expend. ($)	State 44% of revenue total ($)	Total public K-12 enrollment	Cost to state ($ billions)	Less 5% private school enrollment	Private school enrollment	State savings at 5% private school enrollment ($ millions)
1	2004	7,816	3,439	954,000	3.30	906,230	47,770	164
2	2005	7,972	3,508	967,000	3.40	918,650	48,350	170
3	2006	8,131	3,578	980,000	3.50	931,000	49,000	175
4	2007	8,294	3,649	991,000	3.60	941,450	49,550	181
5	2008	8,459	3,722	999,000	3.70	949,050	49,950	186
6	2009	8,628	3,796	1,005,000	3.80	954,750	50,250	191
7	2010	8,801	3,872	1,011,000	3.90	960,450	50,550	196
8	2011	8,977	3,950	1,018,000	4.00	967,100	50,900	192
9	2012	9,156	4,029	1,025,000	4.10	973,750	51,250	207
10	2013	9,339	4,109	1,033,000	4.30	981,350	51,650	212
11	2014	9,526	4,192	1,043,000	4.40	990,850	52,150	219
12	2015	9,717	4,276	1,054,000	4.50	1,001,300	52,700	225
13	2016	9,911	4,360	1,064,000	4.60	1,010,800	53,200	232
Total		114,727	50,480	13,144,000	51.10	12,486,730	657,270	2,550

Sources: Public K-12 enrollment projections are based on Projections of Education Statistics to 2013, NCES, Table 4. State percentages of public school per-pupil expenditures are from 1999-2000. See *Digest of Education Statistics, 2002*, NCES, Table 157.

Notes:

1. All dollar figures are derived by adjusting the average per-pupil public school expenditure of $7,816 by a two percent annual rate of inflation.
2. The state percentage of public school per-pupil expenditures is kept constant at 1999-2000 levels.
3. Enrollment projections for years one through 10 correspond to estimates for 2005 through 2013 from *Projections of Education Statistics to 2013,* NCES. Projections for years 11 through 13, corresponding with 2014 through 2016, are authors' projections using an average one percent annual enrollment growth, the average enrollment growth rate of *Projections of Education Statistics to 2013* enrollment data.
4. Projections do not include the tuition tax credit program.

Table 9: Savings to Taxpayers from One Child Beginning and Completing K-12 Education in Private School

School year	Per-pupil expenditure ($)	Federal- 10% of revenue total ($)	State- 44% of revenue total ($)	Local- 43% of revenue total ($)
1	7,816	782	3,439	3,361
2	7,972	797	3,508	3,428
3	8,131	813	3,578	3,496
4	8,294	829	3,649	3,566
5	8,459	946	3,722	3,637
6	8,628	863	3,796	3,710
7	8,801	880	3,872	3,784
8	8,977	898	3,950	3,860
9	9,156	916	4,029	3,937
10	9,339	934	4,109	4,016
11	9,526	953	4,192	4,096
12	9,717	972	4,276	4,178
13	9,911	991	4,360	4,262
Total	114,727	11,574	50,480	49,331

Sources: Public K-12 enrollment projections are based on *Projections of Education Statistics to 2013*, NCES, Table 4. Federal, state, and local percentages of public school per pupil expenditures are from 1999-2000. See *Digest of Education Statistics, 2002*, NCES, Table 157.

Notes:

1. All dollar figures are derived by adjusting the average per-pupil public school expenditure of $7,816 by a two percent annual rate of inflation.
2. Federal, state, and local percentages of public school per-pupil expenditures are kept constant at 1999-2000 levels. Percentages do not total 100 because revenues from private gifts, tuition, and fees amounted to three percent, and are not included in the calculation.
3. Enrollment projections for years one through 10 correspond to estimates for 2005 through 2013 from *Projections of Education Statistics to 2013*, NCES, Table 157. Projections for years 11 through 13, corresponding with 2014 through 2016, are authors' projections using an average one percent annual enrollment growth, the average growth rate of enrollment figures provided by *Projections of Education Statistics to 2013*.

the tuition tax credit program. The study found that because opponents ignore the savings achieved when students who would otherwise attend public schools enroll at private schools, their cost estimates are significantly higher than the actual cost of the tuition tax credit program. In 2002, the latest year for which the relevant data were available, the cost of the program actually amounted to between $7.5 million and $13.4 million.[61] All education funding that year was over $6.7 billion, meaning the tuition tax credit expense is less than one percent, between 0.11 percent and 0.20 percent of all K-12 education funding.[62]

Over the course of 13 years, private school enrollments could yield billions of dollars in savings to the state. Again, even if private school enrollments remained at their current rate of five percent of Arizona's K-12 enrollments, the state would realize a savings of nearly $3 billion over 13 years. If private school enrollments reached 10 percent of K-12 enrollments, the total savings to the state over 13 years could exceed $5 billion.[63] To put the magnitude of those savings in perspective, Arizona's entire fiscal year 2005 general fund revenues amount to $7.4 billion.[64]

As policymakers grapple with the challenges of impending K-12 enrollment growth over the next decade, private schools have an important role to play in Arizona's education marketplace. Among these challenges is the fact that Arizona has the highest capital outlay costs nationwide, amounting to $1,500 per student during the 1999-2000 school year. The state also ranks second nationally for interest on school debt, $360 per student during the same school year.[65] Developing policies that take advantage of existing and potential private school capacity would help ease the burden on public schools of educating a growing number of students, while potentially saving taxpayers and the state hundreds of millions of dollars annually.

Conclusion

Arizona's private schools educate five percent of the state's K-12 student population, 44,060 children in the 1999-2000 school year, the latest year for which data are available. With public school enrollment projected to exceed one million students in the next decade, the private school marketplace will become increasingly important. Yet misconceptions abound regarding private school tuition, admissions policies, accountability, and capacity. However, the Goldwater Institute's 2004 statewide private school survey finds that the average private elementary and middle school tuition is roughly half the average per-pupil public school expenditure, $3,700 compared to $7,816, while the average private high school tuition is around $5,500. Moreover, 89 percent of private schools statewide offer financial aid, and over one-third of the typical private school's student body is composed of students using a tax credit tuition scholarship

Even if private school enrollments remained at their current rate of five percent of Arizona's K-12 enrollments, the state would realize a savings of nearly $3 billion over 13 years. If private school enrollments reached 10 percent of K-12 enrollments, the total savings to the state over 13 years could exceed $5 billion.[63] To put the magnitude of those savings in perspective, Arizona's entire fiscal year 2005 general fund revenues amount to $7.4 billion.

worth an average of nearly $1,500 each.

There are also common misconceptions about private schools' admissions policies, accountability, and capacity. Three-quarters of private schools surveyed are sectarian, but 83 percent of those schools do not require religious affiliation for admission. Insofar as testing is a measure of accountability, over 93 percent of Arizona private schools administer standardized tests annually, and among those schools, more than 95 percent make aggregate test scores available to parents of current and prospective students. Nearly 80 percent of private schools surveyed offer kindergarten, while 49 percent offer preschool programs. Forty-three percent of Arizona private schools surveyed accept special needs students, and nearly half of those schools have room for more. Private schools are typically half the size of public schools with smaller classes, 14 students compared to 18 students per teacher.

Nearly 80 percent of private schools surveyed offer kindergarten, while 49 percent offer preschool programs. Forty-three percent of Arizona private schools surveyed accept special needs students, and nearly half of those schools have room for more. Private schools are typically half the size of public schools with smaller classes, 14 students compared to 18 students per teacher.

Recognizing private schools as a vital and cost-effective segment of Arizona's education marketplace should be a top priority for policymakers, especially given the impending enrollment growth over the next decade. Absent private schools, state and local governments would have to spend an estimated $260 million annually to educate the more than 44,000 Arizona children who attend private schools. Currently, there are about 26,000 open private school seats. Filling just those seats with students who would otherwise attend public schools could save Arizona taxpayers another $80 million annually.

From 2004 through 2016, if private schools continue to educate just five percent of the state's K-12 population, roughly 660,000 students would not have to be educated in public schools, saving the state $2.6 billion, or roughly $2.2 billion if one-third of private school students use tuition tax credit scholarships. The savings from just one child beginning and completing his or her K-12 education in a private school could save the state and local governments nearly $100,000 over 13 years.

Research indicates private schools could absorb up to 15 percent of public school enrollments. Developing policies that maximize this capacity could save the state between $200 million and $600 million annually, or between $168 million and $500 million annually if one-third of private school students receive tuition tax credit scholarships. Such policies could include expansion of the tuition tax credit and the existing state special education voucher program for public school students to attend private schools offering the educational services they need. Other incentives could also be introduced, including a corporate tuition tax credit, a universal education grant valued below the current per-pupil public school expenditure for students to attend private schools, as well as offering parents the option of establishing tax-deductible education savings accounts. There would likely be initial costs to

implement such programs. However, the hundreds of millions of dollars in annual savings achieved by educating children in private schools rather than public schools could easily offset those initial costs, leaving substantial resources for public schools.

APPENDIX

Goldwater Institute 2004 Survey of Independent Schools

GENERAL INFORMATION

1. a) When was your school established?

   b) What is the name of your school? (Optional)

2. Please check all grade levels served:

P ☐ Preschool
K ☐ Kindergarten
01 ☐ Grade 1
02 ☐ Grade 2
03 ☐ Grade 3
04 ☐ Grade 4
05 ☐ Grade 5
06 ☐ Grade 6
07 ☐ Grade 7
08 ☐ Grade 8
09 ☐ Grade 9
10 ☐ Grade 10
11 ☐ Grade 11
12 ☐ Grade 12

3. Which category best fits your school? Please check all that apply:

01 ☐ Catholic
02 ☐ Protestant
03 ☐ Jewish
04 ☐ Montessori
05 ☐ Waldorf
06 ☐ arts
07 ☐ college preparatory
08 ☐ special needs
09 ☐ charter school
10 ☐ other

4. What are the criteria for admission to your school? Please check all that apply:

01 □ application
02 □ interview
03 □ admissions test
04 □ religious affiliations
05 □ standardized test scores
06 □ school grades
07 □ other
08 □ no admission requirements

5. What was your school's total enrollment for the 2002-2003 school year?

6. What is your school's current total enrollment?

OPERATIONS

7. Please specify the number of full-time teachers at your school.

8. Please specify the number of part-time teachers at your school.

9. Please estimate what percentage of your school's staff is administrative.

10. Approximately how many more students could your school accommodate without major physical renovations?

TESTING

11. a) Do your school's students take any standardized test(s) to gauge performance?

00 □ No → skip to next section
01 □ Yes

b) Which test(s) do your school's students take?

c) Are aggregate test scores made available to parents?

00 □ No
01 □ Yes

TUITION, SCHOLARSHIP PROGRAMS AND FINANCIAL AID

12. What is tuition at your school for the 2003-2004 school year?
High School: Middle School: Elementary School:

13. Does your school receive financial support from another organization, such as a church or community foundation?

00 □ No
01 □ Yes

14. a) Does your school offer any financial aid?
    00 □ No → skip part b
    01 □ Yes

b) What type of financial aid does your school offer? (Check all that apply).
    01 □ Aid based on financial need
    02 □ Aid based on merit

15. a) Does your school have a relationship with a school tuition organization(s)?
    01 □ No → skip part b
    01 □ Yes

b) Which organization(s)?

16. a) How many students at your school receive scholarships from school tuition organizations?

b) Please estimate the average scholarship amount.

SPECIAL NEEDS STUDENTS

17. a) Does your school serve students with learning disabilities?
    00 □ No → go to the end
    01 □ Yes

b) How many of your school's students are classified as learning disabled?

c) Please estimate the total cost of your school's special education program.

d) Does your school have the capacity to take on more learning disabled students?
    00 □ No
    01 □ Yes

ADDITIONAL INFORMATION

To expedite future surveys, please provide your email address.

□ Check here to be notified of future Goldwater Institute education studies and events.

Thank you for taking the time to complete this survey. Please return it in the enclosed business reply envelope by March 5. Please include any literature that will help us learn more about your school. If you have any questions, please call 602/462-5000. Goldwater Institute, 500 E Coronado Road, Phoenix, AZ 85004.

NOTES

1. During the 1999-2000 school year, capital outlay amounted to $1,520 per student, the highest in the country, while interest on school debt came to $360 per student, the second highest per-pupil amount in the country. Indiana is first at $601 per pupil for interest on school debt. See *Digest of Education Statistics*, 2002, Table 167, 195.

2. The Joint Legislative Budget Committee (JLBC) determined this figure based on data from the *Superintendent's Annual Report for Fiscal Year 2001-2002*. See Vicki Murray and Ross Groen, "Competition or Consolidation: The School District Consolidation Debate Revisited," Goldwater Institute Policy Report no. 189, January 12, 2004, 46, www.goldwaterinstitute.org/pdf/materials/401.pdf. This figure does not include Proposition 301 monies generated from the 20-year, 0.6 percent state sales tax passed by voters in November 2000.

3. During the 1999-2000 school year, the latest year for which data are available. See Stephen Broughman and Lenore Colaciello, *Private School Universe Survey, 1999-2000*, National Center for Education Statistics (NCES), August 2001, Table 22, 26, nces.ed.gov/pubs2001/2001330.pdf. According to the U.S. Department of Education's National Center for Education Statistics (NCES), "The PSS [Private School Survey] is conducted every 2 years with the first collection during the 1989-90 school year and again in 1991-92, 1993-94, 1995-96, 1997-98, 1999-2000, 2001-2002, which is currently being edited, and then every 2 years thereafter." See "Overview" on NCES' Private School Survey main website, nces.ed.gov/surveys/pss/.

4. Survey results show that Arizona's private schools have room for more students. The surveyed schools had 5,927 open seats, or roughly 69 open seats per school. If we assume that the schools surveyed reflect the larger private school population, then an estimated 26,000 seats are available. This figure is derived by multiplying the 289 private schools that did not respond to the survey by the average number of open seats at private schools that did respond to the survey. Thus, 69 seats multiplied by 289 schools equals 19,941 seats. By adding that figure to the number of seats currently available at schools that did respond to the survey, 5,927, the result is an estimated 25,868 open seats.

5. Debra E. Gerald and William J. Hussar, *Projections of Education Statistics to 2013*, NCES, October 2003, Table A and Table 4, pp. 6 and 49, nces.ed.gov/pubs2004/2004013.pdf.

6. That figure is from the 1999-2000 school year, the latest year for which data are available Five percent is half the national average. Broughman and Colaciello, *Private School Universe Survey, 1999-2000*, Table 22, 26. Arizona public K-12 enrollment was 852,612 in the fall of 1999. Total private

school enrollment was 44,060 for the 1999-2000 school year. Thus, Arizona's combined public and private school enrollment was 896,672, with private school enrollment accounting for five percent. On total K-12 public school enrollment, see Thomas D. Snyder and Charlene M. Hoffman, *Digest of Education Statistics, 2002*, NCES, June 2003, Table 37, 51, nces.ed.gov/programs/digest/d01/tables/PDF/table037.pdf. For the national average percentage of private school enrollments, see Barbara Holton, *A Brief Profile of America's Private Schools*, NCES, June 2003, 2, nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003417. As of 2002, 11 percent of K-12 students were enrolled in private schools nationwide. See *Digest of Education Statistics*, 2002, 1.

7. Removing those 42 schools, a total survey pool of 377 remained. This figure is consistent with the 2001-2002 school year number of private schools recorded by the U.S. Department of Education based on data from the NCES' *Private School Universe Survey, 2001-2002*. There were 346 private schools in Arizona during that corresponding school year. The NCES Private School locator listing Arizona private schools is available online at nces.ed.gov/surveys/pss/privateschoolsearch/school_list.asp?Search=1&SchoolName=&SchoolID=&Address=&City=&State=04&Zip=&Miles=&County=&PhoneAreaCode=&Phone=&SchoolType=&Coed=&Religion=&NumOfStudents=&NumOfStudentsRange=more&IncGrade=-1&LoGrade=-1&HiGrade=-1.

8. The statewide 2004 Goldwater Institute private school survey builds on the findings of the 1993 Goldwater Institute telephone survey, which focused on Maricopa and Pima counties. See Michael Coffey, "A Survey of Arizona's Private Schools," Arizona Issue Analysis no. 129, Goldwater Institute, October 1993.

9. The survey asked for the "administrative staff percentage." This figure is derived as a percentage of the teaching staff.

10. This figure was determined by the Joint Legislative Budget Committee (JLBC) based on data from the *Superintendent's Annual Report for Fiscal Year 2001-2002*. See Murray and Groen, "Competition or Consolidation," 46. This figure does not include Proposition 301 monies generated from a 0.6 percent state sales tax passed by voters in November 2000.

11. The statewide average public per-pupil expenditure of $7,816 includes both elementary and secondary students. Based on data from the Arizona Department of Education's (ADE) *Annual Financial Report for 2002-2003*, the average per-pupil expenditure of the state's 15 high school districts is $7,160. The average private high school tuition is $6,696, $460 less. Eliminating the two highest and two lowest tuition rates in public high school districts, the average public high school per-pupil expenditure drops to $6,798. When the two highest and lowest private high school tuition rates are eliminated,

the average tuition becomes $5,511, which is $1,287 less than the average public high school. Thus, the average public high school cost is roughly the same as the average private high school tuition, $6,723 compared to $6,696. See "Per-Pupil Expenditures" from the *Annual Financial Report for 2002-2003*, which is available through the ADE's website at www.ade.az.gov/annual report/annualreport2003/PerPupilExpe nditures/CurrentExpenditures.aspx.

12. For example, according to the National Catholic Educational Association, tuition covers approximately 60 percent of the cost to educate a child in a private Catholic school. See Dale McDonald, PBVM, *United States Catholic Elementary and Secondary Schools 2001-2002, Annual Statistical Report on Schools, Enrollment, and Staffing*, National Catholic Educational Association, 2002. Public school per-pupil funding is based on weighted formulas, according to student and district type. Arizona district schools also use prior year budgeting, which means they are funded not on the actual number of students they educate during a given school year but according to a prior-year student count that is automatically increased. See Michael Hunter and Mary Gifford, "School Finance Primer: A Taxpayer's Guide to School Finance," Arizona Education Analysis, Goldwater Institute, February 2000, www.goldwaterinstitute.org/ pdf/materials/100.pdf.

13. The difference is $490. When the two highest and two lowest private school tuitions are included, the average tuition amounts are as follows: $3,581 for elementary school; $3,834 for middle school; $5,511 for high school; and $4,308 for the combined average.

14. For 1993 private school tuition distributions and averages, see Coffey, "A Survey of Arizona's Private Schools," 9-10. $4,000 today would be worth $3,196.26 in 1993 based on data from the annual Statistical Abstracts of the United States. See www.sls.lib.il. us/reference/por/features/98/money.ht ml. Authors' independent calculation using the 10-year average annual inflation rate of 2.5 percent amounts to $3,185. See Economic History Services, www.eh.net/hmit/inflation/inflation r.php.

15. Coffey, "A Survey of Arizona's Private Schools," 17.

16. On Arizona's tuition tax credit program, see Carrie Lukas, "The Arizona Scholarship Tax Credit: Providing Choice for Arizona Taxpayers and Students," Goldwater Institute Policy Report no. 186, December 11, 2003, www.goldwaterinstitute.org/ article.php/380.html; Dan Lips, "The Impact of Tuition Scholarships on Low-Income Families: A Survey of Arizona School Choice Trust Parents," Goldwater Institute Policy Report no. 187, December 11, 2003, www.goldwaterinstitute.org/article.php/ 392.html.; and "Growth of Arizona School Tuition Tax Credit Program Exceeds Projections," Goldwater Institute news release, April 7, 2004,

www.goldwaterinstitute.org/article.php/450.html.

17. Arizona Education Association, "Tuition Tax-Credit—More than Meets the Eye," 2000, www.arizonaea.org/issues/tuitiontaxcredit.html.

18. The SAT is scheduled to be blended with the state's Arizona's Instrument to Measure Standards (AIMS) test by 2006. See Pat Kossan, "State education board OKs blending AIMS, Stanford 9," *Arizona Republic*, November 18, 2003.

19. The AIMS test was intended as a graduation requirement but has been delayed twice. See Howard Fischer, "Poor AIMS Scores Worry Governor," *East Valley Tribune*, August 26, 2004. Math and reading requirements have been lowered, and as of last year, students have five chances, not three, to pass the AIMS test. See Mary Bustamante, "Promises of AIMS Changes Cheered," *Tucson Citizen*, September 4, 2003; and Pat Kossan, "Impact of Test Hitting Class of '06," *Arizona Republic*, August 31, 2003. Principals in the Phoenix Union High School District even organized parties and raffles to encourage juniors and seniors who already passed the AIMS test to retake it to help improve their schools' overall performance ratings. See Darcia Harris Bowman, "Ariz. Students Retake Tests to Help Schools," *Education Week*, May 5, 2004. State law requires Arizona students take a nationally "norm-referenced" test like the Stanford 9 achievement test to compare Arizona students' performance against peers nationwide. Federal law requires students take a standards-based test, such as AIMS. A controversy erupted in the fall of 2003, when State Superintendent of Public Instruction Tom Horne recommended that the State Board of Education combine the Stanford-9 with the AIMS test. Proponents argued that combining the tests eliminates redundancy, saving classroom time and resources. Critics charge that combining the tests means parents will no longer be able to compare their children's performance with that of peers nationwide and that the shorter test will yield less reliable results. See Sarah Garrecht Gassen, "Stanford AIMS to become one test," *Arizona Daily Star*, November 18, 2003; "Keep the Stanford 9 test," *East Valley Tribune*, October 29, 2003; and Tom Horne, "Two birds with one test," *East Valley Tribune*, November 2, 2003.

20. See "Tuition Tax-Credit—More than Meets the Eye."

21. Coffey, "A Survey of Arizona's Private Schools, " 6. Percentages do not total 100 due to rounding.

22. Education researchers Clive Belfield, Henry Levin, and Heather Schwartz of the National Center for the Study of Privatization in Education at Columbia University report that the proportions of religious and secular schools remained fairly constant throughout the 1990s. From 75 to 78 percent of all private schools were religiously affiliated, representing

roughly 84 percent of all private school enrollments. However, as of 2000, the range of religious schools expanded, with "Other Christian" and Islamic schools growing at much faster rates. "Islamic schools and enrollment, while still only 0.3 percent of the total private school population, more than doubled throughout the 1990s. Christian evangelical enrollment also grew at a rate above average. Catholic schools, however, consolidated over the 1990s, yielding fewer schools but a slight increase in total enrollment." See Clive Belfield, Henry Levin and Heather Schwartz, "School Choice and the Supply of Private Schooling Places: Evidence from the Milwaukee Parental Choice Program," Occasional Paper no. 84, National Center for the Study of Privatization in Education Teachers College, Columbia University, 2003, 4, www.ncspe.org/publications_files/OP_84.pdf.

23. Caroline M. Hoxby, ed. "Preface," in *The Economics of School Choice* (University of Chicago and National Bureau of Economic Research Press: Chicago, 2003), xii.

24. In fact, Hoxby explains that it is when existing public school quality declines that families switch to private schools. Thus private schools and private school choice do not cause the decline in public school quality, as critics assert. Rather, private schooling becomes common because of poor quality public education. This is what happened in California after it enacted school finance equalization and in Washington, D.C., which has notoriously poor public schools despite spending the most per pupil in the United States. See the unabridged version of Caroline M. Hoxby "Rising Tide," *Education Next*, Winter 2001, titled "School Choice and School Productivity (Or, Could School Choice be a Tide that Lifts All Boats?)," presented at the National Bureau of Economic Research Conference on the Economics of School Choice, Cheeca Lodge, Islamorada, FL, February 22-24, 2001, 19. A more recent version of this study is "School Choice and School Productivity: Could School Choice be a Tide that Lifts All Boats?" in Caroline M. Hoxby, ed. *The Economics of School Choice*, 287-342, see 303.

25. Dan Lips, "The Impact of Tuition Scholarships," Table 9, 21.

26. See, for example, Hoxby, "Rising Tide."

27. Dorothy Prater Niemi, "An Historical Survey of Public Education in Arizona 1863-1994," Ph.D. diss.: Northern Arizona State University, December 1995, 19, 22-23.

28. Ibid.

29. See "Tuition Tax-Credit—More than Meets the Eye."

30. The number of students in special education programs nationwide grew 65 percent between the 1976-1977 and the 1999-2000 school years, when it reached 6.1 million students. This number represents 8.2 percent of the U.S.

student body. See Wade F. Horn and Douglas Tynan, "Time to Make Special Education 'Special' Again," in *Rethinking Special Education for a New Century*, eds. Chester E. Finn Jr., Andrew J.Rotherham, and Charles R. Hokanson Jr. (Washington, D.C.: Thomas B. Fordham Foundation, 2001), 23-51, www.edexcellence.net./doc/special_ed_final.pdf.

31. According to the NCES' Common Core of Data, 101,648 out of 929,111 students.

32. An additional school has a special education program but did have any special education students enrolled in it for the 2003-2004 school year. However, the school did budget $1,600 for the program.

33. One school refused to provide any special education cost information, and one school left the section blank. It is important to note that a growing body of research suggests that many public school students enrolled in special education programs, or IEPs, have been mislabeled. Many researchers explain that perverse financial incentives exist that have the effect of rewarding schools with increased funding for every child labeled with a disability and placed into special education programs. Those researchers observe that while percentages of medically based disabilities have remained constant since 1975, the cases of more subjective, non-medically diagnosed "specific learning disabilities" have risen sharply. See Horn and Tynan, "Time to Make Special Education 'Special' Again," 23-51; and Matthew Ladner, "Race and Disability: Racial Bias in Arizona Special Education," Goldwater Institute Policy Report no. 178, March 31, 2003, www.goldwaterinstitute.org/article.php/251.html.

34. Andrew T. Lefevre and Rea S. Hederman, Jr., *Report Card on American Education: A State-by-State Analysis 1976-2001*, American Legislative Exchange Council, October 2002, 11, www.alec.org/meSWFiles/pdf/Education_Report_card.pdf. A significant body of research indicates that smaller schools provide a host of benefits, including stronger academic outcomes, improved interaction between teachers and students, and increased opportunity for participation in extracurricular activities. See Kathleen Cotton, *School Size, School Climate, and Student Performance*, Northwest Regional Educational Laboratory, School Improvement Research Series (SIRS), Close-Up no. 20, May 1996 www.nwrel.org/scpd/sirs/10/c020.html. See also Thomas Toch, *High Schools on a Human Scale: How Small Schools Can Transform American Education*, (Boston, MA: Beacon Press, 2003).

35. Private school averages based on authors' survey. Public school data is from the National Center for Education Statistics' (NCES) Common Core of Data for the 2002-2003 school year, the latest year for which complete data are available; and *Digest of Education Statistics, 2002*, Table 83. Data for

public school part-time teachers were not available.

36. To create this figure, two part-time teachers were considered to be equivalent to one full-time teacher.

37. The high student/teacher ratio for Arizona is 19 to one. See Lee Hoffman, *Overview of Public Elementary and Secondary School Districts: School Year 2001-2002*, NCES, May 2003, Table 8, 16, nces.ed.gov/pubs2003/2003411.pdf.

38. Coffey, "A Survey of Arizona's Private Schools," 12.

39. Ibid., 17.

40. In fact, Arizona ties for the tenth worst teacher-as-a-percentage-of-staff ranking in the country. Excluding the District of Columbia, (46.2 percent), Arizona, Alaska, and Louisiana rank tenth with 49.3 percent each. *Digest of Education Statistics, 2002*, Table 83, 93.

41. As illustrated by the survey results described above, there are discrepancies between what public and private schools charge per pupil on the one hand, and between sectarian and nonsectarian private schools on the other. Critics have suggested that the lower-cost sectarian private schools can charge reduced tuition primarily because of subsidies from their sponsoring religious institutions, and the fact that teachers are members of religious orders who receive insignificant salaries. Andrew Coulson refutes those claims and argues instead that market incentives, which reward fiscal responsibility, efficiency, and responsiveness to parents, are responsible for lower private school tuition. See *Market Education: The Unknown History*, ed. Harry Dolan (New Brunswick, NJ: Transaction Publishers, 1999): especially 277-78 and 309-10. See also chapter 3, where Coulson treats how economies of scale are achieved as private school size grows, while diseconomies of scale result when public school size grows; cf. Murray and Groen, "Competition or Consolidation?"

42. For the 1999-2000 school year, the latest year for which data are available, capital outlay amounted to $1,520 per student, and the interest on school debt came to $360 per student, *Digest of Education Statistics, 2002*, Table 167, 195.

43. During the 1999-2000 school year, capital outlay amounted to $1,520 per student, the highest in the country, while interest on school debt came to $360 per student, the second highest per pupil amount in the country. Indiana is first at $601 per pupil for interest on school debt. See *Digest of Education Statistics, 2002*, Table 167, 195. The 2002 *Digest* is the most recent, complete version available.

44. Quoted in Mel Meléndez, "Back to school: Campus congestion," *Arizona Republic*, August 9, 2004.

45. See note 4.

46. Those programs are in Edgewood, Texas; Milwaukee, Wisconsin; and a statewide voucher program in Florida. See Paul Peterson and William Howell, *The Education Gap: Vouchers and Urban Public Schools* (Washington, D.C.: Brookings Institution, 2002), 199-200.

47. Chris Rasmussen, "Baracy wants to stem school exodus," *East Valley Tribune*, September 21, 2004.

48. Belfield, Levin, and Schwartz, "School Choice and the Supply of Private Schooling Places," 2003, 16-17; cf. Thomas J. Nechyba, "What Can Be (and What Has Been) Learned from General Equilibrium Simulation Modals of School Finance?" *National Tax Journal*, LVI, 387-414. Caroline M. Hoxby believes a greater number of for-profit private schools would also emerge. See Hoxby, *The Economics of School Choice*, 2003.

49. However, this figure drops significantly with the prospect of government regulation. See Lana Muraskin and Stephanie Stullich. *Barriers, Benefits, and Costs of Using Private Schools to Alleviate Overcrowding in Public Schools*, U.S. Department of Education, Planning and Evaluation Service, 1998.

50. For more studies treating private school supply elasticity, see Belfield, Levin, and Schwartz, "School Choice and the Supply of Private Schooling Places," 2003.

51. See, for example, Arizona Education Association, "Tuition Tax-Credit—More than Meets the Eye."

52. See note 4.

53. The $80 million figure was derived by calculating the combined average private school tuition amount of the projected currently available seats at the 377 private schools fitting the survey profile: $4,797 times 25,868 seats equals $124 million. Next, the total cost of educating the same number of students at public schools was calculated by multiplying 25,868 students by the average public school expenditure of $7,816 (which includes federal, state, and local funding), which equals $202 million. Thus, the cost difference between educating the same number of students at public schools and private schools is $78 million in savings to taxpayers ($202 million minus $124 million). Averaging the private elementary average tuition of $3,689; the middle school average tuition of $4,008; and the high school average tuition of $6,696, results in a $4,800 education grant amount. Those amounts include all tuition amounts, with the highest and lowest amounts removed. When including those schools, the combined average tuition drops by almost $500 to $4,297. Calculating the savings when offering public school students an education grant worth $4,297 to fill the estimated 25,868 private school seats yields a savings of $91 million. Even if one-third of those students used a tuition tax credit

scholarship worth $1,500, the savings to the state would be $78 million.

54. Debra E. Gerald and William J. Hussar, *Projections of Education Statistics to 2013*, NCES, October 2003, Table A and Table 4, pp. 6 and 49, nces.ed.gov/pubs2004/2004013.pdf

55. Peterson and Howell, *The Education Gap*, 198-200.

56. The inflation-adjusted figure becomes $9,528 in 2013. Projections based on two percent annual rate of inflation for 10 years.

57. Adjusting dollar amounts at a two percent annual rate of inflation, the average per-pupil public school expenditure would grow from $7,816 in 2004 to $9,911 in 2016. Public K-12 enrollments would grow from 954,000 in 2004 to 1.01 million in 2016 at a growing cost to the state of $3.3 billion in 2004 to $4.6 billion in 2016. To put those expenditures in perspective, as of fiscal year 2005, total general fund expenditures are over $7 billion. See "10 Year History of General Fund Expenditures (FY 1996-FY 2005)," Joint Legislative Budget Committee, September 29, 2004, www.azleg .state.az.us/jlbc/spendhistory7-04.pdf. If private schools continued to educate five percent of Arizona's K-12 population through 2016, the annual savings to the state would grow from $164 million in 2004 to $232 million in 2016, averaging $200 million annually. Use of the tuition tax credit would reduce those average annual savings by approximately 15 percent to $170 million. A chart detailing those annual savings is available upon request.

58. Assuming the average number of students using the scholarship remains constant at one-third of private school students, and adjusting the current average scholarship amount of $1,500 at a two percent rate of inflation for 13 years.

59. The average amount of each tuition tax credit scholarship is currently $1,500. Adjusting that amount by a two percent annual inflation adjustment rate, each scholarship would be worth an average of $1,962 in 2016.

60. Arizona Education Association, "Tuition Tax-Credit—More than Meets the Eye."

61. Carrie Lukas, "The Arizona Scholarship Tax Credit."

62. See Joint Legislative Budget Committee, "All Funding: K-12 Funding (M&O [Maintenance and Operation], Capital and All Other)," for FY 1995 through FY 2004, prepared February 19, 2004, www.azleg.state .az.us/jlbc/mocapital.pdf.

63. At 15 percent of K-12 enrollments, private school enrollments could save the state more than $7.7 billion over 13 years. Adjusting dollar amounts at a two percent annual rate of inflation, the average per-pupil public school expenditure would grow from $7,816 in 2004 to $9,911 in 2016.

Public K-12 enrollments would grow from 954,000 in 2004 to 1.01 million in 2016 at a growing cost to the state of $3.3 billion in 2004 to $4.6 billion in 2016. If private schools educated 10 percent of Arizona's K-12 population, the annual savings to the state could reach $464 million in 2016. If private schools educated 15 percent of the state's K-12 population, the annual savings to the state would reach nearly $700 million in 2016. Use of the tuition tax credit could reduce those savings by approximately 15 percent to $394 million and $595 million annually, respectively. A chart detailing those annual savings is available upon request.

64. See Joint Legislative Budget Committee, "'Then and Now'—FY 1995 vs. FY 2005 General Fund Revenue and Carry-Forward Balances," www.azleg.state.az.us/jlbc/gfrrev.pdf.

65. See *Digest of Education Statistics*, *2002*, Table 167, 195.

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500 East Coronado Rd., Phoenix, AZ 85004 | *Phone* (602) 462-5000 | *Fax* (602) 256-7045 | *email* info@goldwaterinstitute.org