An Analysis of the Economic Impact of Home and Private Schooling in Nevada

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ARE HOME AND private schools a "cost" to traditional public schools? This argument has often been used by local school districts, and others, to push for legislation that would restrict the establishment of these alternative schools. By focusing on home and private schools, and using Nevada as an example, this paper analyzes the impact of these alternative schools in depth. What is found is that aside from their superior effectiveness (Duvall, Delquadri, & Ward, 2004; National Center for Education Statistics [NCES], 2002; Rudner, 1999), the reduced public school enrollment caused by the presence of alternative schooling results in lower educational costs for the affected school district.

Indeed, as shown below, home and private schooling result in a net financial gain to the traditional public school system. Because the parents of home and private school students continue to pay taxes for services such as public education, local governments can choose to allocate funds to local schools at a higher per-pupil rate.

Taxpayers also can benefit. An allegation that homeschooling was a "cost" to public schools in Oregon resulted in a 2003 study by Brian Ray of the National Home Education Research Institute (NHERI) and Nick Weller of the Cascade Policy Institute. Their findings were similar to those of the present report: "... the Oregon case study clearly indicates that homeschool families reduce the financial burden on taxpayers by a considerable amount" (Ray & Weller, 2003). As shown below, in Nevada the potential cost savings to Nevada taxpayers ranged from \$24.3 to \$34.6 million in 2003.

This pattern of cost savings contradicts the beliefs of many school administrators. A 1996 survey showed that although an overwhelming proportion of school administrators had homeschoolers registered in their school districts, most administrators had an incomplete understanding of homeschooling practices and laws, and, apparently, of homeschooling's funding implications (Boothe,

Bradley, Flick & Kirk, 1997).

Background on Home, Private, and Public Schooling in Nevada

As a GENERAL rule, in Nevada public school attendance is compulsory between the ages of 7 and 17 (*Nevada Administrative Code*, 2003, Chapter 392). The relevant statute, NRS 392.070, however, provides an exception—specifying that such attendance "must be excused when satisfactory written evidence is presented to the board of trustees of the school district in which the child resides that the child is receiving at home or in some other school equivalent instruction of the kind and amount approved by the state board" (*Nevada Revised Statutes*, 2003, Chapter 392).

To constitute equivalent instruction, under the state board's regulations, schooling must include "English, including reading, composition and writing," mathematics, science and social studies. Instruction "may be taught as the parent determines is appropriate for the age and level of skill of his child," and "does not need to comply with the standards of content and performance" established for public schools (*Nevada Administrative Code* [NAC], 2003, §392.035).

Homeschooling parents must annually notify their local school district's homeschool office. This can be done with the state's "Notice of Intent to Homeschool" form or any form that meets the requirements of NAC 392.011-392.065—including a simple letter with the required information (Dragon, 2004). As shown in Table 1, under this requirement, Nevada had an estimated 4,136 homeschool students during the academic year 2003-2004, with growth rates of 2.17 percent and 5.81 percent for the previous two years.

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
|----------------|----------------|----------------------------------|-------------------|-------------------------------------|---|---------------------------------------|-------------------|-------------------------------------|---|--|---|---|
| School Year | Home School | Home School Growth Rate | Private School | Private School Growth Rate | Traditional Public School (Not Charter) | Traditional Public School Growth Rate | Charter School | Charter School Growth Rate | Total Public (Including Charters) | Total Public (Including Charters) Growth Rate | Total Public & Private (Excluding Home) | Total Public & Private Growth Rate |
| 1989-90 | | | 8,973 | | 186,834 | | | | 186,834 | | 195,807 | |
| 1990-91 | | | 9,425 | 5.04% | 201,316 | 7.75% | | | 201,316 | 7.75% | 210,741 | 7.63% |
| 1991-92 | | | 9,817 | 4.16% | 211,816 | 5.22% | | | 211,816 | 5.22% | 221,633 | 5.17% |
| 1992-93 | | | 9,840 | 0.23% | 222,846 | 5.21% | | | 222,846 | 5.21% | 232,686 | 4.99% |
| 1993-94 | | | 10,418 | 5.87% | 235,800 | 5.81% | 0 | | 235,800 | 5.81% | 246,218 | 5.82% |
| 1994-95 | | | 11,166 | 7.18% | 250,747 | 6.34% | 0 | | 250,747 | 6.34% | 261,913 | 6.37% |
| 1995-96 | | | 11,982 | 7.31% | 265,041 | 5.70% | 0 | | 265,041 | 5.70% | 277,023 | 5.77% |
| 1996-97 | | | 12,970 | 8.25% | 282,131 | 6.45% | 0 | | 282,131 | 6.45% | 295,101 | 6.53% |
| 1997-98* | 3,566 | | 13,848 | 6.77% | 296,536 | 5.11% | 0 | | 296,536 | 5.11% | 310,384 | 5.18% |
| 1998-99* | 4,150 | | 14,680 | 6.01% | 311,065 | 4.90% | 148 | | 311,213 | 4.95% | 325,893 | 5.00% |
| 1999-2000 | 4,924 | | 15,789 | 7.55% | 324,467 | 4.31% | 843 | 469.59% | 325,310 | 4.53% | 341,099 | 4.67% |
| 2000-01* | 5,233 | | 16,127 | 2.14% | 339,399 | 4.60% | 1,109 | 31.55% | 340,508 | 4.67% | 356,635 | 4.55% |
| 2001-02 | 3,826 | | 16,857 | 4.53% | 354,789 | 4.53% | 1,863 | 67.99% | 356,652 | 4.74% | 373,509 | 4.73% |
| 2002-03 | 3,909 | 2.17% | 17,340 | 2.87% | 366,649 | 3.34% | 2,753 | 47.77% | 369,402 | 3.57% | 386,742 | 3.54% |
| 2003-04 | 4,136 | 5.81% | 17,894 | 3.19% | 381,497 | 4.05% | 3,803 | 38.14% | 385,300 | 4.30% | 403,194 | 4.25% |

^{*} Data missing for home school counts in some districts. See Table Five.

Sources: Nevada Department of Education: Home Schooled Students by Grade; Nevada Department of Education: Research Bulletin, Student Enrollments and Licensed Personnel Information, Various years; Nevada Department of Education: School District Student Enrollment Forecast Model.

 Table 1. Nevada student enrollments.

In addition to the annual notice of intent, new homeschool parents and current homeschool parents who have moved to a new district must now provide:

1) a statement of the educational plan for the child that includes the proposed educational goals for the child or the instructional materials to be used, and 2) a statement initialed by the parent that he or she meets at least one of the following criteria:

- 1. At least one year of homeschooling experience in any state or territory of the United States; or
- 2. A teaching credential from any state or territory of the United States; or
- 3. Has read and understands NAC 392.011 to 392.065, inclusive.

Although parents need not submit evidence of homeschooling activities, they must notify the local school board that "the child is receiving at home ... equivalent instruction of the kind and amount approved by the state board of education." (Home School Legal Defense Association [HSLDA], 2006)

Most Nevada homeschoolers do register. Some, however, decline to do so, believing that how they school their children should not be the state's concern. (Dragon, 2004)

Although homeschool children in Nevada are required to receive an equivalent of 180 days of instruction, school-day length is not specified in either the homeschool laws or the regulations. Parents, therefore, are permitted to determine the length of the school day. By signing the Intent-to-Homeschool form, the parent accepts the responsibility of fulfilling all legal requirements.

The word "equivalent" was added recently to the 180 days, since one-on-one instruction can be much more efficient than group instruction (Schnorbus, 2004). Until 1997, Nevada homeschooling parents were required to submit a *minutes-per-day* schedule that equaled the public school requirements for grades 1-12. However, that regulation was repealed at the same time the requirement for annual testing was dropped because it was demonstrated that tutorial education took less time per day than mass education (Dragon, 2004).

Nevada has 17 counties, each with a school district. Over half of the state's budget is spent on education. Public schools in Nevada consist of traditional public schools, charter schools, and virtual charter schools, which provide distance education over the Internet. Non-public schooling options in Nevada include private schools and homeschools. The number of children enrolled in each type of school is listed in Table 1.

As of the 2003-2004 school year, 17,894 students— approximately 4.3 percent of Nevada's

school children—attended private schools (see Table 1). This percentage is substantially lower than the national average of 10 percent (Bloom, 2003). Most of the private school population is located in the population centers of Las Vegas or Reno. For children in sparsely populated areas of the state, forming private schools would actually be less convenient or economical than homeschooling.

Nevada charter school legislation was passed in 1997. Despite the state's charter school law being among the most restrictive in the nation, as of 2005 there were 14 such schools enrolling some 3,800 students. Because they divert funds from traditional public education, charter schools often face fierce scrutiny (Fusarelli, 2002; Boss, 2002).

Virtual (i.e., online) schooling is growing in popularity (Boss, 2002; Cook, 2002; Joiner, 2002; Lopez, 2003; Maeroff, 2003; Morris, 2004; Payne, 2002). Virtual charter schools offer their instruction entirely or predominantly via the Internet or other computer linkages. As of 2002 there were 31 virtual charter schools in 12 states including Nevada (National Charter School Clearinghouse, 2002). However, by 2005, there were 14 virtual charter schools just in the state of Arizona ("Arizona's Virtual Charter Schools", 2005). In fact it was reported that one out of ten students in Arizona have taken at least one class online during the 2004-2005 school year.

Although many private schools, corporations, and individuals offer online or virtual education, neither Nevada charter schools nor any other Nevada public school may provide distance education to children registered as homeschoolers (NRS §388.850 #3). Additionally, NRS 386.550 states

A charter school shall not provide instruction through a program of distance education to children who are exempt from compulsory attendance authorized by the State Board pursuant to subsection 1 of NRS 392.070. As used in this subsection, "distance education" has the meaning ascribed to it in NRS 388.826" (Nevada Revised Statutes, 2003).

Homeschool students may utilize private distance education programs, whether they are based in Nevada or any other state. Homeschool students are prohibited only from being served by a Nevada public school distance education program, traditional or charter (Schnorbus, 2004).

Nevada law permits homeschool children, as well as children from private and charter schools, to attend occasional classes and/or extracurricular activities at a public school. The state reimburses the school for that child's participation but does not provide transportation. This degree of participation is

conditioned on there being space in the class or activity and the parent demonstrating that the child is qualified. Nevada Revised Statutes (NRS) §392.070 #3 reads (in part): "...the board of trustees of the school district in which the child resides shall authorize the [homeschool or private school] child to participate in a class that is not available to the child at the private school or home school..." There is nearly identical language in NRS §386.580, pertaining to charter schools (Nevada Revised Statutes, 2003, Chapters 386, 392). Sports and other interscholastic activities are exempted from the space availability clause.

Laws governing the availability of publicly funded services to special-needs children vary substantially from state to state. The Ninth Circuit Court of Appeals, which includes Nevada, concluded: "Nothing in the IDEA (Individuals with Disabilities Education Act) requires that school districts provide services to children who have rejected the state's offer of an education and have failed to enroll in any 'school,' in the state's definition of that word" (Zirkel, 2003). IDEA 2004 does not specifically address homeschooling, but with regard to private schooling, it maintains language from the previous version of IDEA that Nevada has cited in support of its position vis-à-vis homeschooling.

For the purposes of federal IDEA services, Nevada law equates "home schooling" with "private school, parentally placed;" and under IDEA, private school students and home school students are not automatically entitled to "a free and appropriate education" (Nevada Department of Education, 2004). This does not mean that the state cannot provide such services, but merely that provision of State money is not mandatory. Moreover, states must provide federal monies for the provision of special education services for homeschool or private school children who are identified as having disabilities.

In reality, homeschool parents more often have been concerned about having their children evaluated against their wishes under the "child find" provisions of IDEA than they have about demanding special services.

Public School Enrollment

In evaluating the budgetary impact of homeand private schooling on Nevada's public schools, it is useful to present comprehensive student enrollment data for K-12 education. These are displayed in Table 1. For purposes of discussion, we distinguish among three types of students: public school students, private school students, and homeschool students. Public school students are further distinguished as those in traditional public schools and those in charter schools.

Driven by rapid population growth, the pace of Nevada's public school enrollment has been among the highest in the United States for years. Columns 9 and 10 in Table 1 show the number of students and growth rates for the last decade and a half. While the growth rate has fallen from an average of 6.06 percent annually during the first half of the 1990s to 5.35 percent during the second half to 4.32 percent during the first years of the present decade, these growth rates are still very high nationally. During the last four years, Nevada's public schools have added almost 60,000 students. Most of this occurred in the urban areas of Las Vegas (Clark County) and Reno (Washoe County), with some declines in rural counties.

Nevada has 14 charter schools. Most of these are in the most populated counties, Clark (four charter schools) and Washoe (eight charter schools). As discussed in more detail below, it appears that the charter school enrollment growth came mainly out of private school enrollment growth.

Table 2 shows the Nevada Department of Education's forecasted public school enrollment through 2012. Generally, these forecasts show that the enrollment growth for public schools is expected to continue at a 4-5 percent annual rate, with a declining growth rate for charter schools. Most of the growth is forecast to come in the Clark and Washoe school districts (Wenders & Clements, 2005). Given the constraints on charter school growth, their assumed declining growth rate is understandable. However, if the artificial constraints on charter schools were lifted, their growth rate might continue at the present high rate for some time. As discussed in more detail below, whether or not this growth would continue to come out of private school enrollment growth is problematic.

Private School Enrollment

Historical data for total private school enrollment are shown in column 3 of Table 1 and in Table 3. These, too, show a generally high growth rate—even higher than the public school growth rate during the mid- to late 1990s. However, private school enrollment growth slowed by roughly 50 percent during the first four years of the present decade—from 6-8 percent to about 3 percent annually.

The drop in the private school enrollment growth rate coincides partly with the growth of charter schools, suggesting this growth primarily came at the expense of private school enrollment. In both the Las Vegas (Clark County) and Reno

(Carson, Douglas, Lyon, Story, and Washoe counties) metropolitan areas, the growth rate of total public school enrollment (which includes charter schools) exceeded that of traditional public schools (see Table 4). Had private school enrollment in 1997-98 continued to grow at the same rate as during the previous four years (7.38 percent annually), there would have been an additional 3,329 private school students during 2003-04. This coincides closely with the rise in charter school enrollment, which reached 3,803 in 2003-04. The tentative conclusion that charter school growth came largely out of private school enrollment is at least partially supported by the trends in private school enrollment shown in Tables 3 and 4. In Washoe County, where eight charter schools are located, private school enrollment showed a drop of some 300 students between 2001 and 2004. And while the growth in private school enrollment in Clark County was below that of public schools, private school enrollment actually declined in the Reno metropolitan area. This suggests that the growth of charter schools affected private school enrollment mostly in the Reno metropolitan area where most of the charter schools are located. The complementary suggestion is that the growth in

charter school enrollment did not significantly slow the enrollment growth of traditional public schools.

To the extent that charter schools drew their students from potential private school enrollment, an increase in total taxpayer expenditures on public education was required. (The converse of this is that private and homeschools save taxpayers education monies.) Further, since the charters undoubtedly operate at a higher resource cost than private schools—private schools typically operate at 60-70 percent of the cost of public schools (Wenders, 2005)—the charters' growth also represented a net increase in total expenditure (public and private) on K-12 education.

Given that the public revenues per student received by Nevada charter schools were not significantly different from those received by the traditional public schools in the same districts (Clark and Washoe counties), the movement of students from traditional public schools to charter schools required no significant increase in public education funding. However, neither did it create any decrease in public education spending in those counties.

| | Forecast Enrollment | | Forecast Enrollment | | Forecast Enrollment | |
|---------|---------------------|----------------|---------------------|----------------|---------------------|----------------|
| | With Charters | Percent Change | without Charters | Percent Change | Charters | Percent Change |
| 2004-05 | 400,446 | | 396,220 | | 4,226 | |
| 2005-06 | 418,153 | 4.42% | 413,700 | 4.41% | 4,453 | 5.37% |
| 2006-07 | 435,191 | 4.07% | 430,452 | 4.05% | 4,739 | 6.42% |
| 2007-08 | 453,460 | 4.20% | 448,515 | 4.20% | 4,945 | 4.35% |
| 2008-09 | 472,696 | 4.24% | 467,627 | 4.26% | 5,069 | 2.51% |
| 2009-10 | 493,642 | 4.43% | 488,488 | 4.46% | 5,154 | 1.68% |
| 2010-11 | 516,329 | 4.60% | 511,131 | 4.64% | 5,198 | 0.85% |
| 2011-12 | 540,516 | 4.68% | 535,254 | 4.72% | 5,262 | 1.23% |

Source: Nevada Department of Education, School District Student Enrollment Forecast Model.

Table 2. Enrollment forecasts.

| County | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 | 2003-2004 | 2000-2004 | |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| Carson City | 565 | 576 | 567 | 538 | 487 | -13.81% | |
| Churchill | 33 | 45 | 66 | 98 | 108 | 227.27% | |
| Clark | 11,216 | 11,337 | 12,095 | 12,808 | 13,356 | 19.08% | |
| Douglas | 50 | 74 | 115 | 128 | 131 | 162.00% | |
| Elko | 100 | 109 | 112 | 103 | 94 | -6.00% | |
| Esmeralda | 0 | 0 | 0 | 0 | 0 | | |
| Eureka | 0 | 0 | 0 | 0 | 0 | | |
| Humboldt | 0 | 0 | 0 | 0 | 0 | | |
| Lander | 0 | 0 | 0 | 0 | 0 | | |
| Lincoln | 0 | 0 | 0 | 0 | 0 | | |
| Lyon | 52 | 80 | 53 | 45 | 66 | 26.92% | |
| Mineral | 0 | 0 | 0 | 0 | 0 | | |
| Nye | 98 | 113 | 138 | 137 | 166 | 69.39% | |
| Pershing | 0 | 0 | 0 | 0 | 0 | | |
| Storey | 0 | 0 | 0 | 0 | 0 | | |
| Washoe | 3,675 | 3,793 | 3,711 | 3,483 | 3,486 | -5.14% | |
| White Pine | 0 | 0 | 0 | 0 | 0 | | |
| Total | 15,789 | 16,127 | 16,857 | 17,340 | 17,894 | 13.33% | |
| Reno Metro | 4,342 | 4,523 | 4,446 | 4,194 | 4,170 | -3.96% | |
| Percent Change | | | | | | | |
| Total | | 2.14% | 4.53% | 2.87% | 3.19% | | |
| Clark | | 1.08% | 6.69% | 5.89% | 4.28% | | |
| Washoe | | 3.21% | -2.16% | -6.14% | 0.09% | | |
| Reno Metro | | 4.17% | -1.70% | -5.67% | -0.57% | | |

Source: Nevada Department of Education, Student Enrollment and Licensed Personnel Information, Research Bulletin, Various Years.

Table 3. Private school enrollments by county.

| | Public Without Charters | Public With Charters | Private Schools |
|------------|-------------------------|----------------------|-----------------|
| Clark | 23.65% | 24.37% | 19.08% |
| Washoe | 11.76% | 14.12% | -5.14% |
| Reno Metro | 10.41% | 12.07% | -3.96% |

Source: Computed from Table 1.

Table 4. Enrollment change 2000-2004.

Homeschool Enrollment

Nevada homeschool student numbers obtained from the Nevada Department of Education are

presented in column 1 of Table 1. For the 2003-2004 school year, the number of homeschool students was 4,136 out of a total of 403,194 public and private

school students. In addition, there may have been some homeschool students who did not register with their local school districts as required by Nevada's compulsory education laws. To the extent that this is true, these data underestimate the number of homeschool students.

Note that the Department believes that data before 2001-02 are inaccurate and inflated. At that time, public school student dropout rates were artificially reduced as a result of districts assuming that some dropouts moved to homeschooling. The Department is confident that this reporting problem has been corrected, that the homeschool student numbers for the past three years are accurate, and that homeschooling is growing. These data show growth rates of 2.17 percent and 5.81 percent for the last two years.

Table 5 shows the distribution of homeschool students by county. Again, only data for the last three years are considered reliable. The number of homeschool students as a percentage of county public school enrollment is shown in the last column of Table 5. Overall, homeschool students are equal to 1.07 percent of public school students. While Clark County's number of homeschool students is the largest of any county in the state, the actual percentage is below the state average. Generally, the more rural counties have a higher percentage of homeschool students.

The Nevada Plan

PUBLIC EDUCATION IN Nevada is financed by the "Nevada Plan" and its associated Distributive School Account (DSA). Typical of such plans, the Nevada Plan is simple in concept but Byzantine in detail. In essence, it guarantees a basic level of per-student support for each of Nevada's 17 county school districts by using state funds to make up the difference between the local county's "ability-to-tax" and the guaranteed minimum.

Table 6 reproduces the proceeds of the Nevada Plan on a statewide basis for the 2002-2003 school

year. Each individual school district's finances are determined by an identical formula. To effect the Plan, the state specifies a level of "basic support per student" (line 10) for each district, which, when multiplied by a measure of enrollment (line 9a), yields a total dollar level of "total basic support" (line 13). Certain minor revenues are added to this base support, mostly special education funds (lines 14 through 16), to get a "total state guarantee" (line 18).

From the total state guarantee certain local tax revenues are deducted, pro forma—mostly the 2.25 cent local sales tax and a 25 cent (per \$100 of assessed valuation) property tax (lines 19 and 20), yielding the "state responsibility" (line 22). Note that these pro forma deductions are a measure of the county's "ability-to-tax." To the state responsibility are added certain other elements of state support (lines 23 through 23d), yielding "total other state support" in line 23e. Total state support for each school district is the sum of lines 22 and 23e.

School revenues from local sources are comprised of the revenues from the local 2.25 cent sales tax, the mandated 25 cent property tax, a discretionary 50 cent property tax, and certain other (minor) tax revenues (lines 24 through 29), amounting to total county taxes in line 30. To these county taxes are then added certain other (minor) local financing sources (lines 31 and 32). For federal support for local schools see lines 34 through 38.

In short, state support is the sum of lines 22 and 23e, local support is the sum of lines 30 and 33, and federal support is in line 38. The sum of these three is given in the line labeled "total revenue" at the bottom of Table 6. These funds can be divided by "full enrollment" in line 6 to yield a per-student value for each. The result for each school district is labeled "Average Current \$ Per Student" in column 6 of Table 7.

Charter schools are also financed through the Nevada Plan. Their total revenues received per student are shown in column 3 of Table 8.

Home School Enrollment by Year

| | | | , or 2 o | | | | | | |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------------------|--|
| School Year | 1997-1998 | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 | 2003-2004 | Public School Enrollment 2003-2004 | Home School as Percent of Public 2003-2004 |
| | | | | | | | | | |
| Carson City | 28 | 77 | 100 | 102 | 99 | 114 | 134 | 8,801 | 1.5226% |
| Churchill | 111 | 114 | 102 | a | 99 | 111 | 109 | 4,567 | 2.3867% |
| Clark | 2,024 | 2,484 | 2,968 | 2,961 | 1,981 | 2,091 | 2,152 | 270,365 | 0.7960% |
| Douglas | 177 | 245 | 248 | 298 | 260 | 214 | 230 | 7,192 | 3.1980% |
| Elko | 254 | 224 | 272 | 273 | 187 | 152 | 179 | 9,582 | 1.8681% |
| Esmeralda | 4 | 6 | 10 | 10 | 11 | 9 | 11 | 69 | 15.9420% |
| Eureka | 5 | 8 | 7 | 16 | 22 | 24 | 32 | 220 | 14.5455% |
| Humboldt | 71 | 72 | 87 | 78 | 54 | 69 | 52 | 3,523 | 1.4760% |
| Lander | 52 | 36 | 42 | 37 | 13 | 13 | 19 | 1,255 | 1.5139% |
| Lincoln | 12 | 20 | 22 | 16 | 15 | 9 | 17 | 1,012 | 1.6798% |
| Lyon | a | a | 153 | 183 | 171 | 156 | 169 | 7,685 | 2.1991% |
| Mineral | 18 | 19 | 13 | a | 4 | 17 | 12 | 745 | 1.6107% |
| Nye | 145 | 135 | 95 | 412 | 136 | 160 | 187 | 5,472 | 3.4174% |
| Pershing | 9 | 5 | 11 | 17 | 22 | 16 | 21 | 841 | 2.4970% |
| Storey | 6 | 10 | 7 | 15 | 5 | 9 | 10 | 467 | 2.1413% |
| Washoe | 624 | 653 | 766 | 799 | 732 | 726 | 777 | 62,124 | 1.2507% |
| White Pine | 26 | 42 | 21 | 16 | 15 | 19 | 25 | 1,380 | 1.8116% |
| TOTAL | 3,566 | 4,150 | 4,924 | 5,233 | 3,826 | 3,909 | 4,136 | 385,300 | 1.0734% |

^a Missing data

Source: Nevada Department of Education, Student Enrollment and Licensed Personnel Information, Research Bulletin, Various Years.

Table 5. Nevada home school enrollment by county as compared to public school enrollment.

Other Property Tax Revenues

School revenues for local bonds and interest lie outside the Nevada Plan. These are local county property taxes in excess of those given in lines 24 and 25 in Table 6 and must be computed separately. Adding these to the "Current Local \$ Per Student" in column 3 of Table 7 yields "Total Local \$ Per Student" in column 4.

"Total \$ Per Student" for each Nevada school district is given in column 7 of Table 7. These range

from a high of \$16,440 per student for Esmeralda school district to \$5,773 per student for Washoe County school district. As seen in column 2, state funding varies inversely with the counties' "ability-to-tax."

On average, charter schools receive approximately the same total financing per student as traditional public schools: \$5,986 vs. \$5,997.

| Line Number ^a | Type of Enrollment | | |
|--------------------------|--|-----------------|--|
| 6 | Full Enrollment | 369,392 | |
| 7 | Weighted Enrollment | 357,489.6 | |
| 8 | Transported Out Less Transported In | -267.8 | |
| 9 | "Hold Harmless" Enrollment | 1,412.2 | |
| 9a | TOTAL APPORTIONMENT ENROLLMENT | 358,634 | |
| | Resources | | |
| 10 | Basic support per student | \$3,987 | |
| 11 | Special Adjustment | (In Line 10) | |
| 12 | Total per student support | \$3,987 | |
| 13 | TOTAL BASIC SUPPORT | \$1,429,877,972 | |
| 13a | Growth Increment - NRS 387.1243 | \$184,015 | |
| 13b | Non-Trad. Student Pay. NRS 387.1243(3) | \$59,759 | |
| 13c | Net Proceeds from Mines Adjustment | -\$239,287 | |
| 14 | Special Education units (General Fund) | 116.2 | |
| 14a | Special Education Units not in Gen. Fund | 2,397.8 | |
| 15 | Amount per Special Education unit | \$30,576 | |
| 16 | TOTAL SPECIAL EDUCATION SUPPORT | \$76,868,063 | |
| 17 | Adult HS Diploma Program (General Fund) | \$384,566 | |
| 17a | Adult HS Diploma Prog. not in General Fund | \$15,022,377 | |
| 17b | Transportation Reimbursement | \$80,719 | |
| 18 | TOTAL STATE GUARANTEE | \$1,522,238,184 | |
| | Deductions: | | |
| 19 | Local School Support Tax, 2.25 | \$686,820,222 | |
| 20 | Ad Valorem Property Tax, .25 | \$144,705,551 | |
| 20a | Charter School DSA Adjustment | \$0 | |
| 20b | Charter School Special Payment | \$0 | |
| 21 | TOTAL DEDUCTIONS | \$831,525,773 | |
| 22 | STATE RESPONSIBILITY | \$690,712,411 | |
| | Other State Support: | | |
| 23 | Elementary Counselors | \$650,000 | |
| 23a | Group Insurance Special Appropriation | \$6,826,379 | |
| 23b | Utility Insurance Special Appropriation | \$4,793,952 | |
| 23c | Endangered Programs | \$3,206,085 | |

| | I | | |
|---------------|-----------------------------------|-----------------|--------|
| 23d | Other State Support | \$176,729 | |
| 23e | TOTAL OTHER STATE SUPPORT | \$15,653,145 | |
| | County Taxes: | | |
| 24 | Ad Valorem Property Tax, .50 | \$293,498,724 | |
| 25 | Ad Valorem Property Tax, .25 | \$144,705,551 | |
| 26 | Local School Support Tax, 2.25 | \$686,820,222 | |
| 27 | Motor Vehicle Privilege Tax | \$65,464,903 | |
| 28 | Franchise Tax | \$2,699,084 | |
| 29 | Other County Taxes | \$1,470,017 | |
| 30 | TOTAL COUNTY TAXES | \$1,194,658,501 | |
| | Other Local Sources of Financing: | | |
| 31 | Interest on Investments | \$3,758,390 | |
| 32 | Other County Taxes | \$16,541,849 | |
| 33 | TOTAL OTHER LOCAL | \$20,300,239 | |
| | Federal Support: | | |
| 34 | Public Law 874 (Impact Aid) | \$3,770,470 | |
| 35 | Forest Reserve | \$152,015 | |
| 36 | Fish & Wildlife | \$42,089 | |
| 37 | Other Federal Support | \$2,375,246 | |
| 38 | TOTAL FEDERAL SUPPORT | \$6,339,820 | |
| TOTAL REVENUE | | | |
| State | | \$706,365,556 | 36.64% |
| Local | | \$1,214,958,740 | 63.03% |
| Federal | | \$6,339,820 | 0.33% |

^a Line numbers are given for reference purposes within the text.

Source: NRS 387.303 Report for 2002-03.

Table 6. NRS 387.303 Report - Fiscal Year 2003. Combined statewide General and Special Education Fund.

Basic Support per Student

A key driver in the Nevada Plan is the exogenously determined "basic support per student" parameter for each school district (line 10 of Table 6). This parameter is determined uniquely "by an apportionment formula that considers several school district specific factors, including student enrollment, teacher and staff licensing, other operating costs, the school district's degree of urbanization [determined] through the concept of 'attendance areas', consideration for transportation costs, special education unit cost allocation, and a local wealth factor incorporating each school district's relative ability to raise local taxes." The result of this process yields the "basic support per student" for each school district (Nevada Department of Education, n.d.). Table 9 gives recent history of basic support per student for each school district. Table 10 shows the

history of the state average basic support per student since 1975 in both current and constant 2003 dollars, as computed using the Consumer Price Index (CPI). While basic support per student in constant dollars has grown by 58.1 percent from 1975 to 2003, all of this growth came before 1990. Since the late 1980s to the present, real basic support per student, as computed, has been essentially flat. It is well known that the CPI overstates inflation because it does not adequately account for product quality improvement. Thus, using this index to compute real basic support per student understates its growth. Nevertheless, it is still clear that most of the growth in basic support came in the 1970s and 1980s with only a modest increase since then.

Economic Impact

| | [1] | [2] | [3] ^a | [4] ^b | [5] | [6] | [7] |
|-------------------------|-----------------|-------------------------|---------------------------------|-------------------------------|---------------------------|--|--|
| Category | Full Enrollment | State \$ Per Student | Current Local \$ Per Student | Total Local \$ Per Student | Federal \$ Per Student | Average Current \$ Per Student [2] + [3] + [5] | Average Total \$ Per Student [2] + [4] + [5] |
| All Public | 369,392 | \$1,912 | \$3,289 | \$4,067 | \$17 | \$5,218 | \$5,997 |
| Carson City | 8,827 | \$2,401 | \$3,433 | \$4,010 | \$14 | \$5,849 | \$6,425 |
| Churchill | 4,545 | \$4,183 | \$1,864 | \$2,452 | \$309 | \$6,356 | \$6,944 |
| Clark | 255,306 | \$1,593 | \$3,378 | \$4,244 | \$2 | \$4,973 | \$5,840 |
| Douglas | 7,180 | \$2,010 | \$4,083 | \$4,562 | \$2 | \$6,095 | \$6,575 |
| Elko | 9,694 | \$3,354 | \$2,621 | \$3,335 | \$119 | \$6,094 | \$6,808 |
| Esmeralda | 74 | \$8,597 | \$7,796 | \$7,843 | \$0 | \$16,393 | \$16,440 |
| Eureka | 239 | \$3,127 | \$10,495 | \$12,286 | \$134 | \$13,756 | \$15,547 |
| Humbolt | 3,500 | \$3,436 | \$3,060 | \$3,242 | \$2 | \$6,498 | \$6,680 |
| Lander | 1,276 | \$3,952 | \$2,743 | \$2,753 | \$207 | \$6,901 | \$6,911 |
| Lincoln | 992 | \$7,502 | \$1,690 | \$1,963 | \$0 | \$9,192 | \$9,465 |
| Lyon | 7,256 | \$4,490 | \$1,551 | \$2,173 | \$2 | \$6,043 | \$6,665 |
| Mineral | 780 | \$5,791 | \$1,948 | \$2,180 | \$688 | \$8,427 | \$8,659 |
| Nye | 5,312 | \$3,957 | \$2,476 | \$3,400 | \$26 | \$6,460 | \$7,383 |
| Pershing | 870 | \$6,761 | \$2,583 | \$3,308 | \$36 | \$9,381 | \$10,106 |
| Storey | 450 | \$4,982 | \$4,384 | \$5,146 | \$0 | \$9,366 | \$10,128 |
| Washoe | 58,903 | \$1,669 | \$3,493 | \$4,095 | \$9 | \$5,171 | \$5,773 |
| White Pine | 1,435 | \$5,805 | \$2,003 | \$2,472 | \$15 | \$7,823 | \$8,292 |
| Traditional Public Only | 366,639 | \$1,889 | \$3,310 | \$4,094 | \$13 | \$5,212 | \$5,997 |
| Charter Schools c | 2,752 | \$4,929 | \$520 | | \$538 | \$5,986 | |

Notes: The difference between columns [6] and [7] is local property tax revenues in excess of those in the Nevada Plan. All other data are from NRS 387.303 Report for each school district.
^a Column [3] computed from Nevada NRS 387.303 Report and includes all local taxes there.

Table 7. Nevada School District revenues per student: school year 2002-2003.

^b Column [4] computed by multiplying school district assessed valuation times school district property tax rate, subtracting both property taxes in NRS 387.303 Report, then adding back in other local taxes from NRS 387.303 Report.

^c Excludes one charter school with one student.

| | [1] | [2] | [3] |
|---------------------------------|---------------|------------|----------------------------|
| School | Home District | Enrollment | Total Revenues Per Student |
| Academy for Career Education | WASHOE | 113 | \$6,926 |
| Andre Agassi | CLARK | 206 | \$7,874 |
| Bailey | WASHOE | 285 | \$5,954 |
| Coral Academy of Science | WASHOE | 178 | \$6,492 |
| Gateways to Success (Churchill) | CHURCHILL | 66 | \$10,613 |
| Gareways to Success (Lyon) | LYON | 1 | \$93,442 |
| High Desert Montessori | WASHOE | 41 | \$5,121 |
| ICDA | WASHOE | 366 | \$5,343 |
| Keystone Academy | CLARK | 53 | \$10,512 |
| Mariposa Academy | WASHOE | 93 | \$5,192 |
| Nevada Leadership Academy | WASHOE | 82 | \$6,507 |
| Odyssey | CLARK | 566 | \$5,314 |
| Odyssey Secondary | CLARK | 396 | \$5,502 |
| Sierra Nevada Academy | WASHOE | 307 | \$5,183 |
| Charters w/o GS (Lyon) | | 2,752 | \$5,986 |
| Average Clark | \$6,033 | | |
| Average Washoe | \$5,739 | | |
| Ave Both | \$5,873 | | |

Source: NRS 387.303 Reports.

Table 8. Charter school revenue and enrollment: school year 2002-2003.

Shown in Table 10 are certain other statistics pertaining to per-student cost. They indicate that from 1980 to 1999, total per-student costs increased by about the same percentage as state average basic support, except that from 1992 to 1999 they increased faster than basic support per student. The importance of the "basic support per student" concept is that it is the largest element of a local school district's revenues that varies with short-run enrollment change. Since the mandated local school taxes are essentially independent of enrollment, changes in enrollment have the immediate effect of changing a school district's state revenues. Of course, as can be seen by comparing columns 1 and 5

in Table 10, this basic support per student falls well short of total cost per student for any school district—the difference being made up primarily by local taxes.

Home- and private school parents pay taxes but do not educate their children in public schools. This either saves taxpayers money or makes additional tax money available for other uses, including bolstering the educational opportunities for children who remain in public schools. The extent of this saving can be measured by estimating the additional cost that Nevada's public schools would incur if homeand private school students were placed in public schools.

| School Districts | FY1996 1995-96 | FY1997 1996-97 | FY1998 1997-98 | FY1999 1998-99 | FY2000 1999-00 | FY2001 2000-01 | FY2002 2001-02 | FY2003 2002-03 | FY2004 2003-04 | FY2005 2004-05 |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | | | | | | | | | |
| Carson City | \$3,805 | \$3,953 | \$4,052 | \$4,226 | \$4,266 | \$4,310 | \$4,435 | \$4,545 | \$4,923 | \$5,092 |
| Churchill | \$4,084 | \$4,246 | \$4,390 | \$4,611 | \$4,675 | \$4,751 | \$4,894 | \$5,020 | \$5,418 | \$5,608 |
| Clark | \$3,389 | \$3,503 | \$3,554 | \$3,640 | \$3,632 | \$3,630 | \$3,731 | \$3,819 | \$4,127 | \$4,250 |
| Douglas | \$3,711 | \$3,803 | \$3,931 | \$4,102 | \$4,129 | \$4,142 | \$4,135 | \$4,227 | \$4,541 | \$4,654 |
| Elko | \$4,028 | \$4,211 | \$4,339 | \$4,512 | \$4,559 | \$4,615 | \$4,781 | \$4,903 | \$5,307 | \$5,504 |
| Esmeralda | \$6,625 | \$7,084 | \$7,261 | \$7,413 | \$7,419 | \$7,546 | \$7,861 | \$8,032 | \$9,169 | \$9,559 |
| Eureka | \$100 | \$100 | \$100 | \$100 | \$1,956 | \$2,700 | \$3,052 | \$5,081 | \$50 | \$50 |
| Humboldt | \$3,976 | \$4,110 | \$4,278 | \$4,420 | \$4,454 | \$4,594 | \$4,749 | \$4,864 | \$5,362 | \$5,565 |
| Lander | \$3,978 | \$4,177 | \$4,316 | \$4,642 | \$4,225 | \$4,278 | \$4,314 | \$4,407 | \$4,836 | \$5,181 |
| Lincoln | \$6,053 | \$6,364 | \$6,511 | \$6,957 | \$7,037 | \$7,064 | \$7,229 | \$7,417 | \$7,943 | \$8,272 |
| Lyon | \$4,394 | \$4,520 | \$4,656 | \$4,855 | \$4,880 | \$4,906 | \$5,025 | \$5,152 | \$5,553 | \$5,743 |
| Mineral | \$4,088 | \$4,290 | \$4,550 | \$4,916 | \$5,041 | \$5,189 | \$5,415 | \$5,554 | \$6,012 | \$6,245 |
| Nye | \$4,200 | \$4,400 | \$4,594 | \$4,843 | \$4,910 | \$4,924 | \$5,018 | \$5,141 | \$5,561 | \$5,716 |
| Pershing | \$4,538 | \$4,747 | \$4,856 | \$5,136 | \$5,291 | \$5,404 | \$5,706 | \$5,845 | \$6,385 | \$6,726 |
| Storey | \$5,651 | \$5,675 | \$5,209 | \$5,823 | \$5,809 | \$6,140 | \$6,292 | \$6,438 | \$7,082 | \$7,366 |
| Washoe | \$3,258 | \$3,388 | \$3,533 | \$3,639 | \$3,663 | \$3,680 | \$3,777 | \$3,865 | \$4,161 | \$4,317 |
| White Pine | \$4,474 | \$4,622 | \$4,869 | \$5,142 | \$5,198 | \$5,386 | \$5,596 | \$5,741 | \$6,164 | \$6,418 |
| State Totals | \$3,497 | \$3,621 | \$3,698 | \$3,812 | \$3,806 | \$3,804 | \$3,897 | \$3,991 | \$4,295 | \$4,424 |

Table 9. Nevada Department of Education, DSA basic support per student.

The cost of providing public education in Nevada is driven, on the margin, by enrollment. Indeed, providing for Nevada's spectacular growth in student enrollment has been the driving force behind school funding for decades. From 1994 to 2004, enrollment in Nevada's traditional public schools increased by 61.8 percent. Most of this growth occurred in Nevada's largest school districts, Clark and Washoe counties-84.7 percent and 38.2 percent respectively—which accounted for 95.9 percent of Nevada's total increase in enrollment during this period. Because of declining enrollment in smaller and more rural counties, enrollment in the five highgrowth counties—Carson City, Clark, Lyon, Nye and Washoe—grew by slightly more than that of the state as a whole (Wenders & Clements, 2005, Appendix Table A-2).

With 217,033 and 54,053 students respectively in 2000, Clark and Washoe county school districts

ranked 6th and 68th in size among the United States' 14,928 school districts that year (NCES, 2002). Since then, these districts have grown by another 23.7 percent and 11.8 percent respectively. The rapid growth in these already very large school districts raises the issue of whether serious diseconomies are being encountered there. With optimal elementary school size estimated at 300-400 students, and optimal secondary school size at 400-800 students, some 75 percent of U.S. students are in schools that are most likely too large for maximum effectiveness (Cotton, 1996). One suspects that the same is true in Nevada's largest school districts. It is worth noting that private schools, which operate at a per-pupil cost of some 60-65 percent of their public school counterparts, are usually much smaller and have no administrative structure above the school level (Wenders, 2005).

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|--------------------------|--|------------------|---------------------------------------|------------------|--|--|---|
| School Year Ending | Support Per Student Current \$\$ | Annual Change | Support Per Student (2003 \$\$) | Annual Change | NCES Current Cost Per Student (2003 \$\$) | Clark County Current Cost Per Student (2003 \$\$) | Washoe County Current Cost Per Student (2003 \$\$) |
| 1975 | \$738 | Ü | \$2,524 | <u> </u> | , , | | ` |
| 1976 | \$864 | 17.1% | \$2,794 | 10.69% | | | |
| 1977 | \$918 | 6.3% | \$2,787 | -0.24% | | | |
| 1978 | \$1,035 | 12.7% | \$2,921 | 4.79% | | | |
| 1979 | \$1,159 | 12.0% | \$2,937 | 0.57% | | | |
| 1980 | \$1,252 | 8.0% | \$2,796 | -4.82% | \$4,261 | | |
| 1981 | \$1,331 | 6.3% | \$2,694 | -3.63% | \$3,897 | | |
| 1982 | \$1,631 | 22.5% | \$3,110 | 15.43% | | | |
| 1983 | \$1,787 | 9.6% | \$3,301 | 6.15% | | | |
| 1984 | \$1,885 | 5.5% | \$3,338 | 1.12% | | | |
| 1985 | \$1,926 | 2.2% | \$3,294 | -1.34% | | | |
| 1986 | \$2,201 | 14.3% | \$3,695 | 12.19% | \$5,365 | | |
| 1987 | \$2,354 | 7.0% | \$3,813 | 3.19% | | | |
| 1988 | \$2,517 | 6.9% | \$3,915 | 2.68% | | | |
| 1989 | \$2,655 | 5.5% | \$3,940 | 0.63% | | | |
| 1990 | \$2,904 | 9.4% | \$4,088 | 3.77% | \$5,372 | | |
| 1991 | \$3,111 | 7.1% | \$4,203 | 2.80% | \$5,801 | | |
| 1992 | \$3,285 | 5.6% | \$4,308 | 2.51% | \$6,091 | \$5,696 | \$5,502 |
| 1993 | \$3,231 | -1.6% | \$4,114 | -4.50% | \$5,938 | \$5,730 | \$5,268 |
| 1994 | \$3,320 | 2.8% | \$4,122 | 0.19% | \$5,873 | \$5,644 | \$5,488 |
| 1995 | \$3,323 | 0.1% | \$4,012 | -2.67% | \$5,907 | \$5,534 | \$5,463 |
| 1996 | \$3,497 | 5.2% | \$4,101 | 2.22% | \$5,962 | \$5,501 | \$5,656 |
| 1997 | \$3,621 | 3.5% | \$4,151 | 1.22% | \$6,070 | \$5,621 | \$5,682 |
| 1998 | \$3,698 | 2.1% | \$4,174 | 0.56% | \$6,307 | \$5,766 | \$5,879 |
| 1999 | \$3,812 | 3.1% | \$4,210 | 0.86% | \$6,361 | \$5,966 | \$5,935 |
| 2000 | \$3,806 | -0.2% | \$4,067 | -3.40% | | \$5,938 | \$5,971 |
| 2001 | \$3,804 | -0.1% | \$3,952 | -2.82% | | \$5,743 | \$5,971 |
| 2002 | \$3,897 | 2.4% | \$3,986 | 0.85% | | | |
| 2003 | \$3,991 | 2.4% | \$3,991 | 0.13% | | | |
| 2004 | \$4,295 | 7.6% | | | | | |
| 2005 | \$4,424 | 3.0% | | | | | |
| Change 1975- | -2003: | | Chg 1980-99 | | Chg 1980-99 | | |
| Current \$: | 440.79% | | 50.59% | | 49.30% | | |
| Adjusted \$: | 58.12% | | Chg 1992-99 | | Chg 1992-99 | Chg 1992-99 | Chg 1992-99 |
| | | | -2.28% | | 4.44% | 4.75% | 7.88% |

Source: Nevada Department of Education, DSA Basic Support per Student.

Table 10. Statewide basic support per student.

This is not simply an issue of classic diseconomies of individual school size, but also of the resulting increased costs from diseconomies in multi-school operations—such things as decreased competition among schools and increased bargaining power by labor unions. Not only may schools become too large, so may districts. Or, as expressed in economists' terms, an enrollment increase may not only slide along classic average cost curves, but also

may cause these curves to shift upward.

None of this addresses the quality of education issue, which many would argue declines as school and district sizes increase (Cotton, 1996). While we do not propose to solve the issue of scale diseconomies here, we do believe that both an average and incremental cost of enrollment should be considered in assessing how much money home- and private school enrollment either saves Nevada's

taxpayers, or makes available for other uses. (Note on definitions: in contrast to the average cost per student, incremental cost is the unit cost of adding a student to an existing school district.) As Nevada's student population continues to grow in its largest school districts, diseconomies will cause incremental costs to increase faster than average costs.

Annual Savings Based on Average Public School Costs

THE SAVINGS FROM both homeschool and private school students are computed in Tables 11 and 12. The fulcrum in Table 11, in column 3, is the annual average current cost of education in each of Nevada's school districts in 2002-03, found in column 6 of Table 7. (Recall that current costs exclude those covered by property taxes outside the Nevada Plan.) These average costs are multiplied by the number of home- and private school students, to arrive at the total cost savings for each district displayed in columns 4 and 5, which are totaled in column 6 (of Table 11). These total approximately \$109 million for all districts and \$103 million in Nevada's highgrowth districts (Carson City, Clark, Lyon, Nye and Washoe), or \$283.93 and \$290.04 per public school student, respectively (bottom of Table 11). Table 12 shows the potential cost savings using annual average total costs from column 7 of Table 7. These total \$126 million for all districts and \$119 million in Nevada's high-growth districts, or \$327.48 and \$335.81 per public school student, respectively.

Annual Savings Are Based on Incremental Public School Costs

REASONABLY ACCURATE ESTIMATES of incremental public school costs are most likely to be found in districts that have experienced significant growth. As indicated, Nevada's Clark and Washoe school districts have experienced the most growth, but other urban districts have been growing as well. Between 2001-02 and 2002-03 six school districts experienced both an increase in total costs and an increase in enrollment—the five high-growth districts plus Douglas. Most of Nevada's rural school districts have experienced declining enrollment over the past decade—see column 3 of Table 13.

For these six growth districts, the ratio of their increase in total costs to their increase in enrollment is reflected in column 1 of Table 13. This result is used to determine the (average) incremental cost of an additional student in each of these districts.

Since the increase in total costs may have been partly due to inflation costs, an adjustment was made

to account for the 2.1 percent increase in the CPI between the two years. The resulting adjusted increase in cost per student is shown in column 2 of Table 13, and represents the ratio of the increase in inflation-adjusted costs to the increase in enrollment. Only Douglas school district, the district with the slowest positive growth rate over the past decade (+7.36 percent), experienced incremental costs less than its average costs, as shown in Tables 11 and 12 (average cost) and Table 13 (incremental cost). For Clark and Washoe districts, incremental total costs were 46.1 percent and 24.8 percent greater than average total costs. For the group as a whole, incremental costs exceeded average costs by about 44 to 45 percent. The details are presented in Table 14.

Summary

THE ANNUAL SAVINGS results are summarized in Table 15, where computations parallel to those in Tables 11 and 12 are made based on traditional public school average total costs and incremental total costs, respectively. Based on 2003 data, the results show an annual potential cost savings in the range of \$24.3 million to \$34.6 million attributable to homeschool students, \$101.9 million to \$147 million attributable to private school students, and \$126.2 million to \$181.7 million combined. These are the costs avoided by Nevada public schools by not having to educate the home- and private school students. These totals amount to an annual potential cost savings ranging from \$327.48 to \$471.64 per public school student. The per-student cost savings are obtained by dividing the total dollar amount avoided by the total number of public school students in Nevada.

If homeschools and private schools continue to grow as they have in the past two years (3.99 percent and 3.03 percent annually), by 2013 these ranges of annual cost savings will total \$35.9 million to \$51.2 million attributable to homeschools, \$137.3 million to \$198.2 million attributable to private schools, and \$173.2 million to \$249.4 million attributable to both.

This analysis does not prejudge the issue of exactly what is done with the savings attributable to home- and private schools. The savings might be used to reduce tax burdens, in which case the savings would accrue directly to taxpayers. They also could be used for other public purposes, including enhancing the education of those students who remain in public schools.

| | | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---------------------------------|---------------------------------------|-----------------------------------|--------------------------------------|---|---|--|---|--|
| Public School District | Number of Public School Student | Number of Home School Students | Number of Private School Students | Average Current Cost Per Public School Student | Annual Current Cost Saving from Home School Students | Annual Current Cost Saving from Private School Students | Total Annual Current Cost Saving from Home & Private Students | Annual Savings Per Public School Student |
| Carson City | 8,801 | 114 | 538 | \$5,849 | \$666,768 | \$3,146,676 | \$3,813,443 | \$433 |
| Churchill | 4,567 | 111 | 98 | \$6,356 | \$705,543 | \$622,912 | \$1,328,454 | \$291 |
| Clark | 270,365 | 2,091 | 12,808 | \$4,973 | \$10,398,538 | \$63,694,151 | \$74,092,689 | \$274 |
| Douglas | 7,192 | 214 | 128 | \$6,095 | \$1,304,268 | \$780,123 | \$2,084,390 | \$290 |
| Elko | 9,582 | 152 | 103 | \$6,094 | \$926,319 | \$627,703 | \$1,554,023 | \$162 |
| Esmeralda | 69 | 9 | 0 | \$16,393 | \$147,540 | \$0 | \$147,540 | \$2,138 |
| Eureka | 220 | 24 | 0 | \$13,756 | \$330,155 | \$0 | \$330,155 | \$1,501 |
| Humboldt | 3,523 | 69 | 0 | \$6,498 | \$448,346 | \$0 | \$448,346 | \$127 |
| Lander | 1,255 | 13 | 0 | \$6,901 | \$89,715 | \$0 | \$89,715 | \$71 |
| Lincoln | 1,012 | 9 | 0 | \$9,192 | \$82,729 | \$0 | \$82,729 | \$82 |
| Lyon | 7,685 | 156 | 45 | \$6,043 | \$942,669 | \$271,924 | \$1,214,593 | \$158 |
| Mineral | 745 | 17 | 0 | \$8,427 | \$143,260 | \$0 | \$143,260 | \$192 |
| Nye | 5,472 | 160 | 137 | \$6,460 | \$1,033,538 | \$884,967 | \$1,918,504 | \$351 |
| Pershing | 841 | 16 | 0 | \$9,381 | \$150,089 | \$0 | \$150,089 | \$178 |
| Storey | 467 | 9 | 0 | \$9,366 | \$84,296 | \$0 | \$84,296 | \$181 |
| Washoe | 62,124 | 726 | 3,483 | \$5,171 | \$3,754,341 | \$18,011,529 | \$21,765,870 | \$350 |
| White Pine | 1,380 | 19 | 0 | \$7,823 | \$148,644 | \$0 | \$148,644 | \$108 |
| Total for All Districts | 385,300 | 3,909 | 17,340 | \$5,212 | \$21,356,757 | \$88,039,984 | \$109,396,741 | \$284 |
| Total for High Growth Districts | 354,447 | 3,247 | 17,011 | | \$16,795,853 | \$86,009,246 | \$102,805,099 | \$290 |

Table 11. Annual current cost saving due to home and private school students in school year 2002-2003.

Economic Impact

| | | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|------------------------------------|---|-----------------------------------|--------------------------------------|--|---|---|---|---|
| Public School District | Number of Public School Students | Number of Home School Students | Number of Private School Students | Average Current Cost Per Public School Student | Annual Current Cost Saving from Home School Students | Annual Current Cost Saving from Private School Students | Total Annual Current Cost Saving from Home & Private Students | Annual Saving Per Public Student |
| Carson City | 8,801 | 114 | 538 | \$6,425 | \$732,476 | \$3,456,772 | \$4,189,248 | \$476 |
| Churchill | 4,567 | 111 | 98 | \$6,944 | \$770,824 | \$680,547 | \$1,451,371 | \$318 |
| Clark | 270,365 | 2,091 | 12,808 | \$5,840 | \$12,211,030 | \$74,796,206 | \$87,007,236 | \$322 |
| Douglas | 7,192 | 214 | 128 | \$6,575 | \$1,406,968 | \$841,551 | \$2,248,519 | \$313 |
| Elko | 9,582 | 152 | 103 | \$6,808 | \$1,034,854 | \$701,250 | \$1,736,103 | \$181 |
| Esmeralda | 69 | 9 | 0 | \$16,440 | \$147,961 | \$0 | \$147,961 | \$2,144 |
| Eureka | 220 | 24 | 0 | \$15,547 | \$373,130 | \$0 | \$373,130 | \$1,696 |
| Humboldt | 3,523 | 69 | 0 | \$6,680 | \$460,904 | \$0 | \$460,904 | \$131 |
| Lander | 1,255 | 13 | 0 | \$6,911 | \$89,843 | \$0 | \$89,843 | \$72 |
| Lincoln | 1,012 | 9 | 0 | \$9,465 | \$85,186 | \$0 | \$85,186 | \$84 |
| Lyon | 7,685 | 156 | 45 | \$6,665 | \$1,039,733 | \$299,923 | \$1,339,656 | \$174 |
| Mineral | 745 | 17 | 0 | \$8,659 | \$147,207 | \$0 | \$147,207 | \$198 |
| Nye | 5,472 | 160 | 137 | \$7,383 | \$1,181,271 | \$1,011,463 | \$2,192,734 | \$401 |
| Pershing | 841 | 16 | 0 | \$10,106 | \$161,688 | \$0 | \$161,688 | \$192 |
| Storey | 467 | 9 | 0 | \$10,128 | \$91,150 | \$0 | \$91,150 | \$195 |
| Washoe | 62,124 | 726 | 3,483 | \$5,773 | \$4,191,236 | \$20,107,540 | \$24,298,776 | \$391 |
| White Pine | 1,380 | 19 | 0 | \$8,292 | \$157,544 | \$0 | \$157,544 | \$114 |
| Total for All Districts | 385,300 | 3,909 | 17,340 | \$5,997 | \$24,283,003 | \$101,895,253 | \$126,178,256 | \$327 |
| Total for High Growth Districts | 354,447 | 3,247 | 17,011 | | \$19,355,745 | \$99,671,905 | \$119,027,650 | \$336 |

Table 12. Annual total cost saving due to home and private school students – school year 2002-2003.

| | [1] | [2] | [3] |
|----------------|---|---------------------------|--|
| | Average Incremental Cost Per Student 2002-2203 | Adjusted for Inflation | Enrollment Percent Change 1994-2004 |
| Carson City* | \$39,313 | \$21,267 | 24.0% |
| Churchill | | | 8.0% |
| Clark* | \$11,250 | \$8,298 | 84.7% |
| Douglas | \$9,760 | \$4,570 | 7.4% |
| Elko | | | 4.7% |
| Esmeralda | | | -46.9% |
| Eureka | | | -31.0% |
| Humbolt | | | 2.0% |
| Lander | | | -22.1% |
| Lincoln | | | -7.2% |
| Lyon* | \$12,935 | \$8,099 | 57.1% |
| Mineral | | | -36.4% |
| Nye* | \$40,907 | \$15,950 | 39.6% |
| Pershing | | | -6.1% |
| Storey | | | -3.5% |
| Washoe* | \$12,354 | \$6,945 | 38.2% |
| White Pine | | | -18.4% |
| Regular Public | | | 61.8% |

^{*}High-growth school districts.

Table 13. Change in cost per student.

Local educators should look at home- and private school students as an asset that can make increased monies available for their local schools on a per-student basis. Indeed, if all of the savings were used to enhance the education of the state's public school students, this would amount to an additional \$327.48 to \$471.64 per public school student.

It is common for traditional public school advocates to argue that private, charter and home schools—the last, particularly—"cost" the traditional public schools revenues. This argument is often offered as justification for legislation that would handicap such alternative schools because they are a competitive threat to public schools. The logic goes as follows: To the extent that state aid to local schools is paid on a per-student basis, each student who attends an alternative school "takes" state aid

from the traditional public school that this student would otherwise attend. This logic is flawed. The argument that students who attend alternative schools "cost" the traditional public schools revenue ignores the total cost to taxpayers of providing for each child's education.

Consider Table 16. Column 1 shows the combined home- and private school students in each of Nevada's school districts. Column 2 shows the "basic support per student" for each school district under the Nevada Plan discussed above. As there noted, any short-run changes in enrollment are multiplied by the "basic support per student" figure and thus directly result in an increase (or decrease) in that district's "state responsibility" revenues (see line 22 in Table 6). According to this logic, the lost revenues to each school district from home or private school students can be calculated by multiplying their numbers by the "lost" basic support per student. Thus, by this calculation, in total Nevada's school districts "lost" some \$83.4 million of state aid in 2002-03.

Of course, what goes unsaid in this short-run argument is that the "loss" to the school districts in column 3 is a potential "gain" of \$83.4 million to Nevada's taxpayers. The state aid monies saved could be used to fund other state programs or to reduce the need to raise state taxes by that amount. They also could be used to increase school funding in other ways, including increasing the basic support per student that drives the Nevada Plan. But putting this observation aside for the moment, the argument also ignores the fact that these same home- and private school students benefit school districts in the long run by relieving the school districts of the far greater costs of educating them.

Consider the average current and average total costs of educating students in each of Nevada's school districts (columns 6 and 7 of Table 7). They are reproduced in columns 4 and 5 of Table 16 and they do not include incremental costs. Assuming that all revenues received were spent, each district's avoided total current costs and avoided total costs for home- and private school students may be calculated by multiplying the average costs by the number of each district's home- and private school students. These totals—given in columns 6 and 7 of Table 16—amount to \$109.4 million and \$126.2 million respectively—amounts far in excess of the "lost" revenues in state aid.

Economic Impact

| | | | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|-------------------------------------|-------------------------------------|---------------------------|----------------------------|-------------------------------|---------------------------------------|--|---|--------------------------------|--|
| School District | Number of Public School Students | Student Growth 1994-04 | Home School Students | Private School Students | Change Cost Per Student 2002-03 | Annual Cost Saving from Home School Students | Annual Cost Saving from Private School Students | Annual Total Cost Saving | Annual Saving Per Public Student |
| Carson City | 8,801 | 24.04% | 114 | 538 | \$21,267 | \$2,424,438 | \$11,441,644 | \$13,866,082 | \$1576 |
| Clark | 270,365 | 84.66% | 2,091 | 12,808 | \$8,298 | \$17,351,399 | \$106,282,504 | \$123,633,902 | \$457 |
| Douglas | 7,192 | 7.36% | 214 | 128 | \$4,570 | \$977,992 | \$584,967 | \$1,562,960 | \$217 |
| Lyon | 7,685 | 57.11% | 156 | 45 | \$8,099 | \$1,263,383 | \$364,437 | \$1,627,821 | \$212 |
| Nye | 5,472 | 39.64% | 160 | 137 | \$15,950 | \$2,551,921 | \$2,185,082 | \$4,737,003 | \$866 |
| Washoe | 62,124 | 38.19% | 726 | 3,483 | \$6,945 | \$5,041,769 | \$24,187,991 | \$29,229,760 | \$471 |
| Regular Public Only | | 61.79% | | | \$8,637 | | | | |
| Total Growth Districts | 361,639 | | 3,461 | 17,139 | | \$29,610,902 | \$145,046,626 | \$174,657,527 | \$483 |
| Percent in Growth Districts | | | 88.54% | 98.84% | | 1.46% | 7.17% | 8.64% | |
| Percent Above Average Cost | | | | | | 42.62% | 44.31% | 44.02% | |
| Total High Growth Districts | 354,447 | | 3,247 | 17,011 | | \$28,632,909 | \$144,461,658 | \$173,094,568 | \$488 |
| Percent in High Growth Districts | | | | | | 1.39% | 7.04% | 8.43% | |
| Percent Above Average Cost | | | | | | 47.93% | 44.94% | 45.42% | |

Table 14. Incremental total cost savings due to home and private school students: growth and high growth school districts: school year 2002-2003.

In other words, the loss of these students results in a net gain to the public schools. Given that their revenue loss is \$83.4 million attributable to homeand private school students, and that their expenses are reduced by \$109.4 million (on an average basis) and \$126.2 million (on an incremental basis), the schools' net gain is \$25.9 million and \$42.7 million respectively. See columns 8 and 9—which are the differences between columns 6 and 7 and column 3.

In essence, the reduction in students relieves the school districts of the need for these revenues, and the local taxpayers (i.e., those who pay the local school taxes as opposed to the state aid, which is paid from state taxes) could ultimately benefit by having their school taxes reduced by \$25.9 million and \$42.7 million respectively. Or as suggested above, these monies could be used for other public purposes including enhancing the educational opportunities of those students who remain in public schools.

The bottom line is that home- and private schooling is a "win-win" arrangement for both taxpayers and individual public school districts. Taxpayers benefit on the order of \$109.4 million to \$126.2 million. The individual public school districts' net gain ranges from \$25.9 million to \$42.7 million, thanks to their costs decreasing by more than the decrease in state aid.

In reply, public school advocates will say that most of the costs embodied in the average costs given in columns 4 and 5 of Table 16 are fixed and do not decline when students choose alternative schooling and leave traditional public schools. But their logic is

belied by their own figures when student numbers increase. When student numbers increase, costs are said to increase and additional funding is required. When student numbers decrease, however, costs are never said to decrease. Plainly there is a self-serving asymmetry to this argument. But even if correct, this argument is largely irrelevant in the context of Nevada's fast-growing student enrollment. The issue is not one of students leaving public schools causing a decline in enrollment, but of slowed growth in the number of students and the accelerating costs, and, as noted previously, this slowed growth saves the public schools their incremental costs, which surely exceed the average costs (see columns 4 and 5 of Table 16).

Finally, in addition to being logically flawed, the argument that students who fail to enroll in public schools are a "cost" implies that public schools are somehow *entitled*, as a property right, to every child and are being deprived of something that is their due. This is eminent domain in the extreme. The underlying assumption here is statist—one characteristic of totalitarian societies. In America, it is parents who are legally entitled to manage the upbringing of their children, not the public schools.

The notion that homeschool children somehow "cost" the public schools turns reality on its head. In truth, the situation could be more accurately characterized as one in which Nevada's public education establishment profits from unwarranted taxes on parents who choose to exercise their parental rights.

| | [1] | [2] | [3] | [4] |
|------------------------------------|--|---|--|---------------------------------|
| | Annual Cost Saving from Home School Students | Annual Cost Saving from Private School Students | Annual Total Cost Saving Home & Private | Saving Per Public Student |
| Based on Average Total Costs* | \$24,283,003 | \$101,895,253 | \$126,178,256 | \$327.48 |
| Based on Incremental Total Costs** | \$34,632,419 | \$147,045,039 | \$181,721,924 | \$471.64 |

^{*}From Table 12.

Table 15. Summary: 2003 annual total cost savings due to home and private school students.

^{**}Using % Increase of Incremental over Average Costs in Table Fourteen

Economic Impact

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] |
|-------------|--|---------------------------------|--------------------------|--|--|--------------------------------|---------------------|----------------------------------|----------------------------------|
| | Number of Home & Private School Students | Basic Support Per Student | Total "Lost" Revenues | Average Current Cost Per Student in Public Schools | Average Total Cost Per Student in Public Schools | Total Current Costs Avoided | Total Costs Avoided | Savings to School District #1 | Savings to School District #2 |
| Carson City | 652 | \$4,545 | \$2,963,340 | \$5,849 | \$6,425 | \$3,813,443 | \$4,189,248 | \$850,103 | \$1,225,908 |
| Churchill | 209 | \$5,020 | \$1,049,180 | \$6,356 | \$6,944 | \$1,328,454 | \$1,451,371 | \$279,274 | \$402,191 |
| Clark | 14,899 | \$3,819 | \$56,899,281 | \$4,973 | \$5,840 | \$74,092,689 | \$87,007,236 | \$17,193,408 | \$30,107,955 |
| Douglas | 342 | \$4,227 | \$1,445,634 | \$6,095 | \$6,575 | \$2,084,390 | \$2,248,519 | \$638,756 | \$802,885 |
| Elko | 255 | \$4,903 | \$1,250,265 | \$6,094 | \$6,808 | \$1,554,023 | \$1,736,103 | \$303,758 | \$485,838 |
| Esmeralda | 9 | \$8,032 | \$72,288 | \$16,393 | \$16,440 | \$147,540 | \$147,961 | \$75,252 | \$75,673 |
| Eureka | 24 | \$5,081 | \$121,944 | \$13,756 | \$15,547 | \$330,155 | \$373,130 | \$208,211 | \$251,186 |
| Humboldt | 69 | \$4,864 | \$335,616 | \$6,498 | \$6,680 | \$448,346 | \$460,904 | \$112,730 | \$125,288 |
| Lander | 13 | \$4,407 | \$57,291 | \$6,901 | \$6,911 | \$89,715 | \$89,843 | \$32,424 | \$32,552 |
| Lincoln | 9 | \$7,417 | \$66,753 | \$9,192 | \$9,465 | \$82,729 | \$85,186 | \$15,976 | \$18,433 |
| Lyon | 201 | \$5,152 | \$1,035,552 | \$6,043 | \$6,665 | \$1,214,593 | \$1,339,656 | \$179,041 | \$304,104 |
| Mineral | 17 | \$5,554 | \$94,418 | \$8,427 | \$8,659 | \$143,260 | \$147,207 | \$48,842 | \$52,789 |
| Nye | 297 | \$5,141 | \$1,526,877 | \$6,460 | \$7,383 | \$1,918,504 | \$2,192,734 | \$391,627 | \$665,857 |
| Pershing | 16 | \$5,845 | \$93,520 | \$9,381 | \$10,106 | \$150,089 | \$161,688 | \$56,569 | \$68,168 |
| Storey | 9 | \$6,438 | \$57,942 | \$9,366 | \$10,128 | \$84,296 | \$91,150 | \$26,354 | \$33,208 |
| Washoe | 4,209 | \$3,865 | \$16,267,785 | \$5,171 | \$5,773 | \$21,765,870 | \$24,298,776 | \$5,498,085 | \$8,030,991 |
| White Pine | 19 | \$5,741 | \$109,079 | \$7,823 | \$8,292 | \$148,644 | \$157,544 | \$39,565 | \$48,465 |
| Total | | | \$83,446,765 | | | \$109,396,741 | \$126,178,256 | \$25,949,976 | \$42,731,491 |

Table 16. Spurious "costs" of home and private schooling to local school districts.

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