Utah FOUNDATION

Research Report

Report Number 653
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Highlights

- Utahns pay a high tax burden and a large share of tax revenues are dedicated to education.
- Despite the high funding effort for education, per-pupil funding is the lowest in the nation and class sizes are the largest.
- Utah students perform at an average level on standardized tests, but most Utah racial groups, including white students, are scoring below average compared to their racial group nationally.
- The 1990s brought unusually favorable conditions for public education, allowing increased per-pupil funding and lower class sizes. These conditions will not be repeated in this decade.
- The proportion of state spending dedicated to K-12 education fell in recent years, as increased funds were directed to capital projects.
- If the economy grows slowly, education funding will not be able to keep up with enrollment growth.
- The new No Child Left Behind law at the federal level will require increased effort and changes to Utah's education system.

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Utah at the Crossroads: Challenges for K-12 Education in the Coming Ten Years

Editor's Note: Utah Foundation has spent most of the past three months providing data and analysis to the newly formed Employers Education Coalition. This coalition of business organizations and representatives of public and higher education has sought a solid understanding of Utah's education system, its finances, performance, and the challenges facing education in the next ten years. Utah Foundation, as a non-advocacy research group, does not participate as a member of the coalition, but was hired by the group to provide objective, factual data to facilitate understanding of this subject. This research report presents major findings of this project.

Introduction

Providing adequate funding for public education is difficult in Utah. Although taxpayers pay relatively high taxes and a large share of that tax revenue is dedicated to education, the size of Utah's student population leads to the lowest per-pupil funding in the nation. We have become adept at doing our best with limited resources, like the old New England proverb adopted by early Utahns, "use it up, wear it out, make it do, or do without."

It is often said that Utahns are highly educated, compared to other states, and this can be seen when viewing levels of educational attainment. For example, Utah is ranked 11th nationally for the percent of people over age 25 who hold bachelor's degrees. However, when looking at the skills and knowledge of Utah's public school children compared to other states, we are not excelling—our students are just about average in most areas of study. Further examination of the test scores used for comparison shows that we would be below average if it were not for favorable demographics, such as an unusually high proportion of white, middle class students.

The past ten years brought very favorable conditions to Utah's state and local governments. With a booming economy, tax revenues increased rapidly. Public school enrollment slowed dramatically, and the combination of slow enrollment growth with high revenue growth allowed a greater investment in education, even as the state focused resources in other budget areas, such as infrastructure development.

However, the current decade is bringing a much different landscape, with a formidable enrollment boom, prospects of much slower economic growth, and new federal rules that will require a higher level of performance from public schools. These challenges will certainly need the attention of policymakers at all levels of government if Utah's schools are going to be able to improve quality or even just maintain the current level of quality.

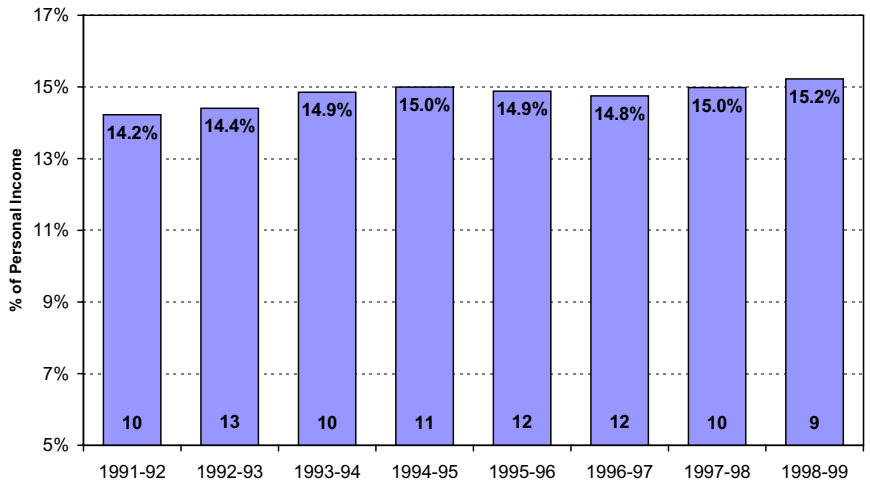
Utah's Education Paradox

In 1997 and 1999, Utah Foundation published reports about Utah's "education paradox." The crux of this paradox is that Utahns exercise a significant funding effort for K-12 and higher education, but that effort yields low per-pupil funding because of the unusually large number of children in Utah. In this section,

Figure 1

Utah's Tax Burden

State and Local Taxes and Fees as a Percent of Personal Income (National Rank Shown at Bottom of Bars)



Sources: Bureau of the Census, Bureau of Economic Analysis, and Utah Foundation.

various indicators of that paradox are updated to determine the extent that the paradox continues to hold true.

Tax Burden

One measure of the state's effort for funding government programs is the tax burden. There are various ways to measure tax burden, but the most common and useful is measuring taxes as a proportion of personal income. When measured in proportion to statewide personal income, Utah has a high tax burden. Figure 1 shows the overall burden of all taxes and fees collected by Utah's state and local governments. In 1998-99 (the most recent year with comparable data on all states), this burden was 15.2% of personal income, ranking ninth highest among the 50 states. Through the 1990s, the tax burden grew in most years, although efforts were made, at least at the state level, to reduce taxes.

Looking in greater detail at Utah's taxes, Figure 2 lists the major state and local taxes, their burdens as a percent of personal income, and how they rank against other states. Utah's individual income tax, which is constitutionally earmarked for public and higher education funding, ranks 16th highest in the nation. Although Utah's income tax rates are not unusually high, the highest rate applies to more income than in most states that have graduated rates. For example, married taxpayers reach the highest tax rate after earning a little more than $8,600 in taxable income.

Sales taxes are the highest-ranking tax for Utah, at eighth highest. The high ranking for this tax probably results from having fewer exemptions than many states. For example, Utah does not exempt food from the sales tax. Because this is the state's only major tax for general government purposes, policymakers have been cautious about protecting the tax base from erosion.

The third-largest tax in Utah is the property tax. This is a local tax, levied by cities, counties, special districts, and school districts. This tax ranks fairly low compared to other states, at 36th highest. The low ranking is likely the result of two forces: Utah's truth-in-taxation law has induced many local agencies to reduce tax rates dollar-for-dollar when property values increase; and the Legislature increased the residential property tax exemption and reduced the state-mandated portion of school tax levies in the early- and mid-1990s to provide property tax relief to Utahns.

In addition to these major taxes, the chart shows that Utah is low in the use of "other taxes" and high in the use of fees for government services. Utah is average in its reliance on corporate income taxes, ranking right in the

Figure 2

Utah Tax Burden

By Type of Tax

Tax	Utah	U.S. Avg	Utah % of U.S.	Utah Rank
All Taxes & Fees	15.22%	13.51%	113%	9
Individual Income Tax	3.05%	2.49%	122%	16
Corporate Income Tax	0.38%	0.45%	84%	25
General Sales Tax	3.68%	2.64%	139%	8
Property Tax	2.48%	3.16%	79%	36
Other Taxes	1.82%	2.00%	91%	37
Fees	3.82%	2.78%	138%	10

Sources: Bureau of the Census, Bureau of Economic Analysis, and Utah Foundation.

middle of the states, at 25th.

These statistics show that, for Utah's state government at least, a high tax effort exists. When looking at all 50 states, it is apparent that most of the states in the top 10 for tax burden are small states with small economies and small income bases. These include Idaho, Maine, Mississippi, New Mexico, and North Dakota, for example. These small-economy states often must exert high tax efforts simply to provide basic services and infrastructure. Such is the case in Utah, especially with respect to funding education. Much of Utah's tax burden is directed towards funding education.

Budget Effort for Education

Utahns have a history of dedicating a large share of tax revenues to education. Figure 3 shows that Utah's spending on all education (K-12 and higher education) is almost 47% of total state and local government revenues. This dedication of resources is the fourth highest in the nation, although it has declined from a number one ranking several years ago. This signifies a very high level of commitment to education funding in this state.

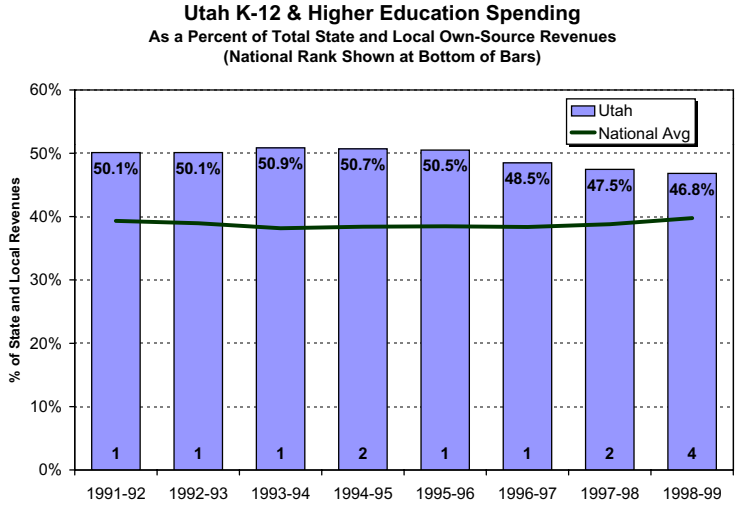
However, it is instructive to break this figure apart to separate the trends in higher education from K-12 education. Figure 3 also shows higher education and K-12 spending as a percent of total state and local government revenues. In higher education, Utah ranks number one with 18.3% of all state and local resources going to fund higher education.[1] Utah maintained this rank since 1996 and was in the top three states for budget effort for higher education throughout the 1990s.

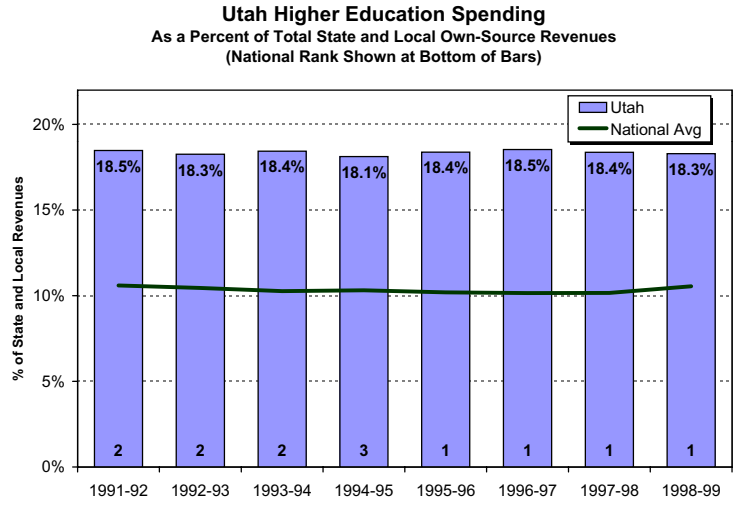
In the mid-1990s, Utah's budget effort for K-12 schools was among the highest in the nation. Utah ranked fifth highest in 1996 but had fallen below the national average by 1999, the latest year for which data are available from the U.S. Census Bureau.

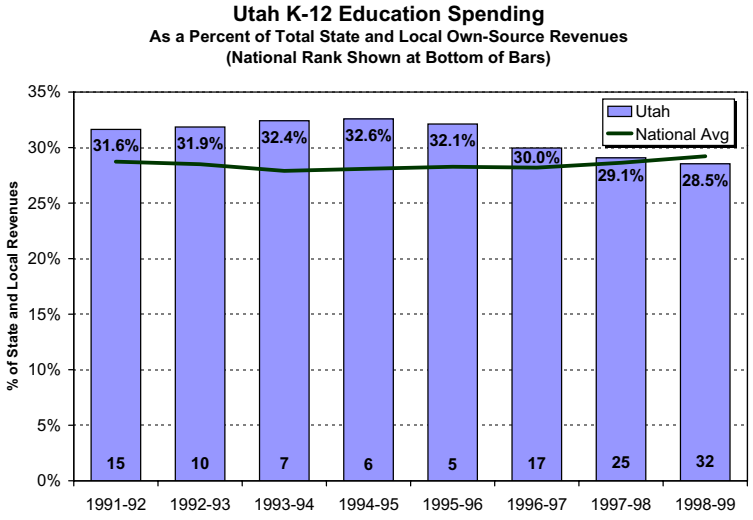
The data show that, although Utah's overall budget effort for education (K-12 and higher education) is high and

Figure 3

Measures of Utah's Education Budget Effort





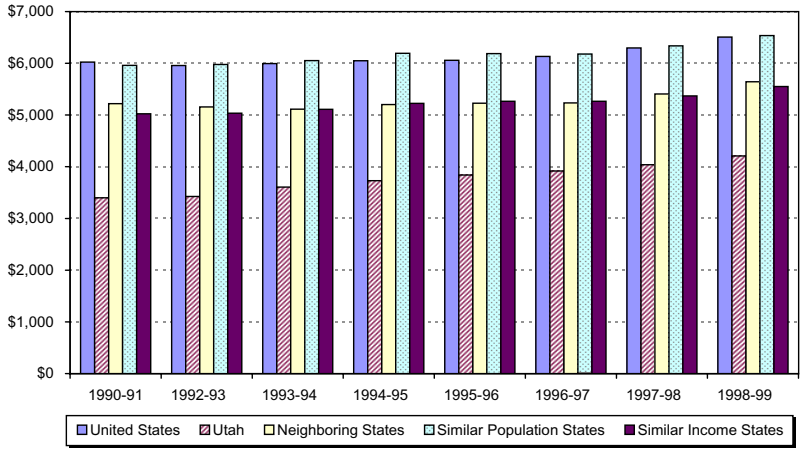


Sources: Bureau of the Census and Utah Foundation.

Figure 4

K-12 Public Education Per Pupil Expenditures

In Constant (1998-99) Dollars for Utah, its Cohort States & the United States



Source: National Center for Education Statistics (NCES). Calculations by Utah Foundation.

stayed high throughout the 1990s, the amount dedicated to K-12 schools has fallen while higher education funding stayed strong. This decline for K-12 education does not mean that schools actually dealt with reductions in their budgets; school budgets continued to grow during this period, but they did not grow as fast as other components of state and local spending. Some primary reasons for this include a leveling off of public education enrollment growth in the late 1990s, an increase in higher education enrollments, and the need for the state to dedicate large amounts of money to capital projects, such as highway construction, during this period.

Figure 5

K-12 Spending Required to Change Utah's Rank in Per-Pupil Spending

State	Spending Per Pupil FY 1998-99	Rank	Difference from Utah (Per Pupil)	$ Increase For Utah to Reach Rank (Millions)	% Increase For Utah to Reach Rank
Utah	$4,210	50	---	---	---
Mississippi	4,565	49	$355	$171	8%
Arizona	4,672	48	462	223	11%
Arkansas	4,956	47	746	359	18%
Idaho	5,066	46	856	412	20%
Tennessee	5,123	45	913	440	22%
Alabama	5,188	44	978	470	23%
South Dakota	5,259	43	1,049	505	25%
Oklahoma	5,303	42	1,093	526	26%
New Mexico	5,440	41	1,230	592	29%
North Dakota	5,442	40	1,232	593	29%
Louisiana	5,548	39	1,338	644	32%
Kentucky	5,560	38	1,350	650	32%
Nevada	5,587	37	1,377	663	33%
South Carolina	5,656	36	1,446	696	34%
North Carolina	5,656	35	1,447	696	34%
Texas	5,685	34	1,475	710	35%
Florida	5,790	33	1,580	760	38%
California	5,801	32	1,592	766	38%
Missouri	5,855	31	1,645	791	39%
Colorado	5,923	30	1,713	824	41%
Montana	5,974	29	1,764	849	42%
Kansas	6,015	28	1,805	869	43%
Hawaii	6,081	27	1,871	900	44%
Georgia	6,092	26	1,882	906	45%
Washington	6,110	25	1,900	914	45%
Iowa	6,243	24	2,034	978	48%
Nebraska	6,256	23	2,046	984	49%
Virginia	6,350	22	2,140	1,030	51%
New Hampshire	6,433	21	2,223	1,070	53%
Ohio	6,627	20	2,417	1,163	57%
West Virginia	6,677	19	2,467	1,187	59%
Illinois	6,762	18	2,553	1,228	61%
Indiana	6,772	17	2,562	1,233	61%
Minnesota	6,791	16	2,581	1,242	61%
Oregon	6,828	15	2,618	1,260	62%
Wyoming	6,842	14	2,632	1,266	63%
Maine	7,155	13	2,945	1,417	70%
Maryland	7,326	12	3,116	1,499	74%
Michigan	7,432	11	3,222	1,550	77%
Pennsylvania	7,450	10	3,240	1,559	77%
Wisconsin	7,527	9	3,317	1,596	79%
Vermont	7,541	8	3,331	1,603	79%
Delaware	7,706	7	3,496	1,682	83%
Massachusetts	8,260	6	4,050	1,949	96%
Rhode Island	8,294	5	4,085	1,965	97%
Alaska	8,404	4	4,194	2,018	100%
Connecticut	9,318	3	5,108	2,458	121%
New York	9,344	2	5,135	2,471	122%
New Jersey	10,145	1	5,936	2,856	141%

Source: NCES, calculations by Utah Foundation.

Despite the recent downward trend for K-12 schools, the data presented above show that Utah has historically exerted a large tax effort and a strong budget effort to fund public schools. Next, this report will show what results these efforts have had, in terms of funding in the classroom.

Per-Pupil Funding

Figure 4 shows Utah's total funding per pupil for K-12 schools. Utah has consistently ranked last in the nation in funding per pupil, although the graph shows that funding increased in the 1990s. Because Utah's funding is so much lower than other states, and because those states increased their levels of funding as well, these increases did not change Utah's ranking. Figure 4 also shows the average funding levels of comparison states, including neighboring states and those states with personal income levels and school populations similar to Utah. The latest data, from 1999, show Utah providing about $4,200 per pupil. This ratio is based on operating costs for schools and does not include amounts spent on capital projects, such as building new schools, or amounts spent on state-level administration.

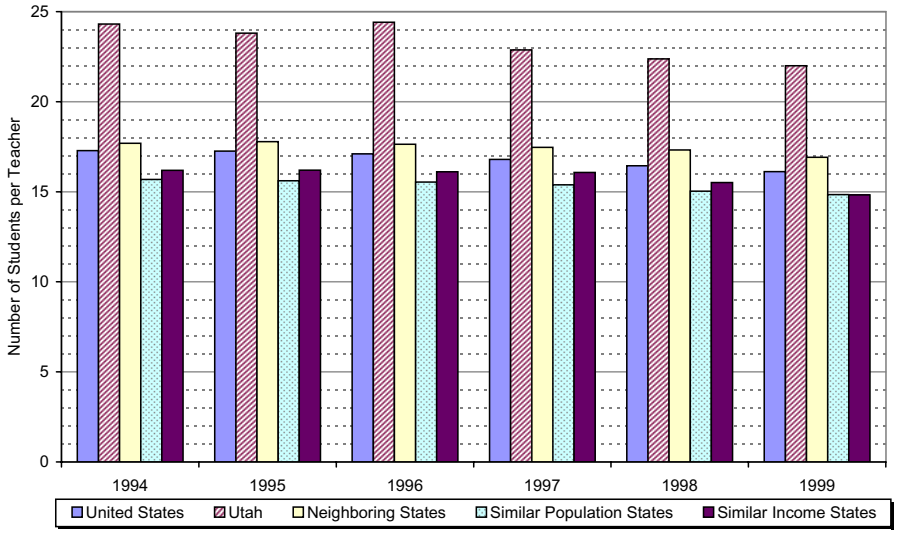
Some observers have wondered how much money it would take to raise Utah's per-pupil funding from last in the nation to another rank. Looking at 1999 data for reference, Figure 5 shows how each state differs from Utah in per-pupil spending and how much additional spending would have been required in that year to bring Utah to the same rank as any of the other states. For example, an additional $171 million in spending would have moved Utah up to 49th in the rankings, rather than 50th. It would have taken $663 million in 1999 to move Utah out of the bottom quartile in the rankings, to 37th highest, where Nevada stands. An additional $1 billion would have placed Utah just above the national average. This would be 50 percent more than all the state and local money Utah spent on K-12 education in 1999. Obviously, adding a billion dollars or even several hundred million in one year would require large tax increases or huge

spending cuts in other parts of the budget, and these actions would be very difficult politically and economically. But Figure 5 provides a reference point on how far the state would need to move to change the rankings.

Figure 6

K-12 Public Education Pupil-Teacher Ratios

For Utah, its Cohort States and the United States



Source: NCES.

Class Sizes

Utah class sizes, or pupil-teacher ratios, are like a mirror image of funding per pupil. Figure 6 shows that Utah is significantly higher than neighboring states and those with similar incomes and school populations. In fact, Utah has the highest class sizes in the country, with a ratio of about 22 pupils for each teacher. This improved in the 1990s, but Utah is so much higher than other states (which also were improving), that its ranking did not change. Although these numbers show a statewide average of 22 pupils per teacher, many schools experience far larger class sizes than 22. It is not uncommon for classes to exceed 30 students.

The essence of Utah's education paradox is illustrated in the data presented thus far. Utah exerts one of the highest funding efforts as measured by tax burden and the proportion of state and local resources dedicated to education. But even with such aggressive funding effort, the results are low per-pupil funding and high class sizes. Why is this the case? This paradox arises from Utah's unique demographics, as will be explained below.

Utah's Unique Demographics

According to the 2000 census, Utah has approximately 500,000 residents that are school aged. This is 22.8 percent of the total state's population, the highest percentage in the nation. When comparing the number of school aged children to the adult working population between the ages of 18-64, Utah again ranks first in the nation. For every 100 working age adults, there are 38.5 children. This ratio is commonly referred to as a "dependency ratio" and is a rough estimate of the demands non-tax paying citizens, the children, place on those that are supporting them.

The state also has the highest fertility rate of any state at 91.4 live births per 1,000 women of childbearing years. This rate is extremely high. Arizona is second behind Utah, with a considerably lower rate of 78.2 per 1,000 women. The table in Appendix A details Utah's unique demographics, as well as the state's rankings.

These figures from the Census Bureau explain the current situation within the public education system; however, it is necessary to look towards the future. In 2000, children ages zero to five comprised 9.4 percent of Utah's population—again, the highest in the nation. This large population of preschoolers hints at a school-age population that will explode over the next ten years. Enrollment projections from the Utah State Office of

Figure 7

Statewide Personal Income, 2001

State	Personal Income	Rank	Per Capita Personal Income	Rank
Alabama	$109,045,148	24	$24,426	42
Alaska	19,679,491	47	30,997	14
Arizona	135,224,634	23	25,479	38
Arkansas	61,681,559	34	22,912	48
California	1,127,425,666	1	32,678	10
Colorado	145,592,562	21	32,957	7
Connecticut	143,613,367	22	41,930	1
Delaware	25,573,889	44	32,121	12
Florida	467,188,821	4	28,493	25
Georgia	238,420,395	11	28,438	27
Hawaii	34,960,878	40	28,554	23
Idaho	32,044,136	42	24,257	43
Illinois	408,857,645	5	32,755	9
Indiana	168,349,148	16	27,532	31
Iowa	79,753,070	30	27,283	33
Kansas	76,816,374	31	28,507	24
Kentucky	101,871,355	26	25,057	39
Louisiana	107,545,885	25	24,084	45
Maine	33,949,050	41	26,385	35
Maryland	187,862,106	15	34,950	5
Massachusetts	247,801,089	10	38,845	2
Michigan	295,107,895	9	29,538	18
Minnesota	163,047,254	17	32,791	8
Mississippi	61,854,994	33	21,643	50
Missouri	157,796,821	18	28,029	28
Montana	21,283,049	45	23,532	46
Nebraska	48,937,441	36	28,564	22
Nevada	62,886,368	32	29,860	17
New Hampshire	42,721,317	37	33,928	6
New Jersey	323,706,315	8	38,153	3
New Mexico	42,366,297	38	23,162	47
New York	682,205,553	2	35,884	4
North Carolina	224,449,254	13	27,418	32
North Dakota	16,202,347	49	25,538	37
Ohio	325,504,721	7	28,619	21
Oklahoma	85,765,150	29	24,787	40
Oregon	97,239,984	28	28,000	29
Pennsylvania	376,197,148	6	30,617	15
Rhode Island	31,750,588	43	29,984	16
South Carolina	99,924,067	27	24,594	41
South Dakota	19,899,642	46	26,301	36
Tennessee	153,594,329	20	26,758	34
Texas	607,466,432	3	28,486	26
Utah	**54,933,505**	**35**	**24,202**	**44**
Vermont	17,161,377	48	27,992	30
Virginia	232,129,292	12	32,295	11
Washington	189,111,297	14	31,582	13
West Virginia	40,948,061	39	22,725	49
Wisconsin	156,175,355	19	28,911	19
Wyoming	14,242,933	50	28,807	20

Source: Bureau of Economic Analysis.

Figure 8

Average Annual Pay, 2000

State	Average Annual Salary	Average Hourly Wage	Rank
Alabama	$29,041	$13.96	33
Alaska	35,142	16.90	14
Arizona	32,610	15.68	21
Arkansas	26,317	12.65	46
California	41,186	19.80	5
Colorado	37,168	17.87	7
Connecticut	45,486	21.87	1
Delaware	36,533	17.56	10
Florida	30,560	14.69	29
Georgia	34,214	16.45	17
Hawaii	30,628	14.73	28
Idaho	27,701	13.32	39
Illinois	38,044	18.29	6
Indiana	31,017	14.91	26
Iowa	27,929	13.43	37
Kansas	29,360	14.12	31
Kentucky	28,801	13.85	35
Louisiana	27,889	13.41	38
Maine	27,664	13.30	41
Maryland	36,395	17.50	11
Massachusetts	44,329	21.31	3
Michigan	37,011	17.79	9
Minnesota	35,413	17.03	12
Mississippi	25,205	12.12	47
Missouri	31,385	15.09	24
Montana	24,274	11.67	50
Nebraska	27,692	13.31	40
Nevada	32,276	15.52	23
New Hampshire	34,738	16.70	16
New Jersey	43,676	21.00	4
New Mexico	27,497	13.22	42
New York	45,357	21.81	2
North Carolina	31,068	14.94	25
North Dakota	24,683	11.87	49
Ohio	32,507	15.63	22
Oklahoma	26,988	12.98	43
Oregon	32,774	15.76	19
Pennsylvania	34,015	16.35	18
Rhode Island	32,615	15.68	20
South Carolina	28,179	13.55	36
South Dakota	24,802	11.92	48
Tennessee	30,554	14.69	30
Texas	34,941	16.80	15
Utah	**29,229**	**14.05**	**32**
Vermont	28,914	13.90	34
Virginia	35,172	16.91	13
Washington	37,090	17.83	8
West Virginia	26,887	12.93	44
Wisconsin	30,694	14.76	27
Wyoming	26,837	12.90	45

Source: Bureau of Labor Statistics. Hourly wage conversion by Utah Foundation.

Education show school enrollments increasing by 102,434 over the period of 2001-2011, a number roughly even with the enrollment boom of the 1980s, when the student population increased by approximately 101,800 from 1980-1990. The enrollment projections will be discussed in more detail later in this report.

Utah's Economy

While there are large numbers of public school children requiring support through tax funds, the state has few resources with which to meet that

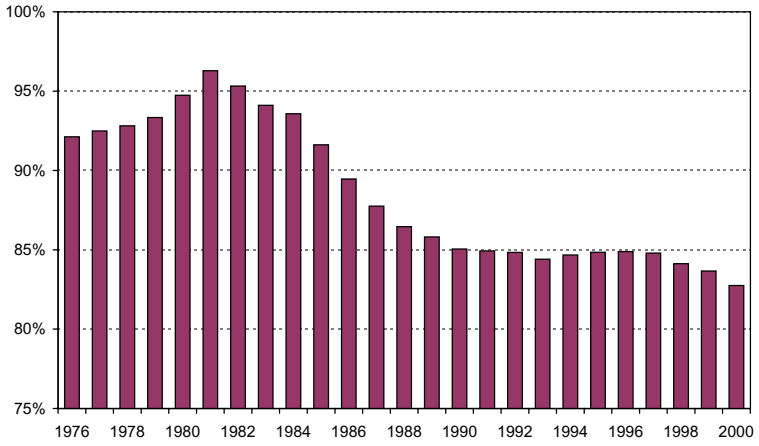
demand. Figure 7 highlights Utah's economic health as measured by personal income. Personal income traces all of the income that is generated in a state from: wages and salaries, dividends, interest, rent, and government transfers. Therefore, economists often use it as a proxy to measure the size of a state's economy. According to 2001 preliminary figures, Utah has the 35th largest economy in the nation, placing it amidst Arkansas, Mississippi, Nebraska and New Hampshire. However, when that income is divided by the population, Utah drops to 44th in the nation, with a per capita personal income of $24,202. The large decline is another indicator of that percentage of the population within the state, namely children, who are consumers, but not producers in the economy. Wages, the largest component of personal income, also highlight the difficulty that Utah has in meeting the demands of the education system. In 2000, the average annual salary in the state was $29,229; divided by a 2080-hour work year, that places Utah's workers 32nd in the nation with an average hourly salary of $14.05 as detailed in Figure 8. This wage is about 83% of the national average, a figure which has been in decline since 1981, as shown in Figure 9. However, Figure 10 shows that Utah's average wage, adjusted for inflation, did grow in the 1990s, but it did not grow as fast as the national average.

The small size of Utah's economy, with low wages earned by workers and unusually large numbers of children, combine to produce low per-pupil funding even while the tax burden and budget effort for education are high. Given the low funding and high class sizes, how is the education system performing in terms of teaching children what they need to know to succeed in life? One way to measure performance is through testing programs.

Figure 9

Utah Average Annual Pay

As % of U.S. Average Annual Pay

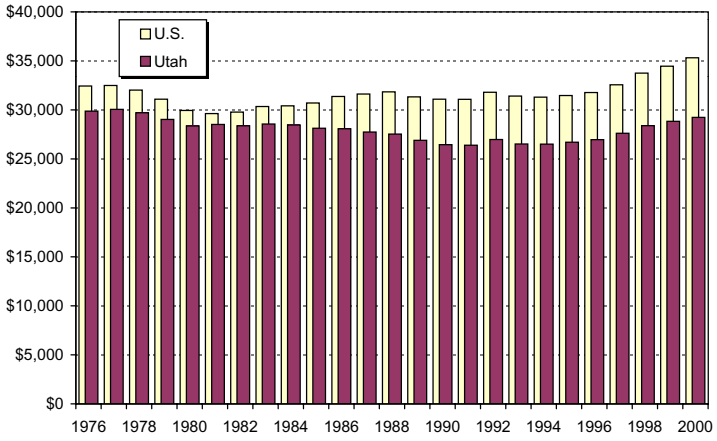


Sources: Bureau of Labor Statistics, Governor's Office of Planning and Budget, Utah Foundation.

Figure 10

Utah & U.S. Average Annual Pay

Adjusted for Inflation (2000 Dollars)



Sources: Bureau of Labor Statistics, Governor's Office of Planning and Budget, Utah Foundation.

Test Scores

Utah schools administer numerous tests to gauge students' performance on different levels. In Utah, four tests represent the most commonly taken and important measures of achievement. These are: the National Assessment of Educational Progress (NAEP), which is a federal test designed to assess achievement on a state and subject level; the Ninth Edition of the Stanford Achievement Test (SAT 9), which is a norm-referenced test (comparing Utah students to national averages) legislated by the State of Utah and administered yearly to third, fifth, eighth, and eleventh graders; the Core

Figure 11

Utah's NAEP Results

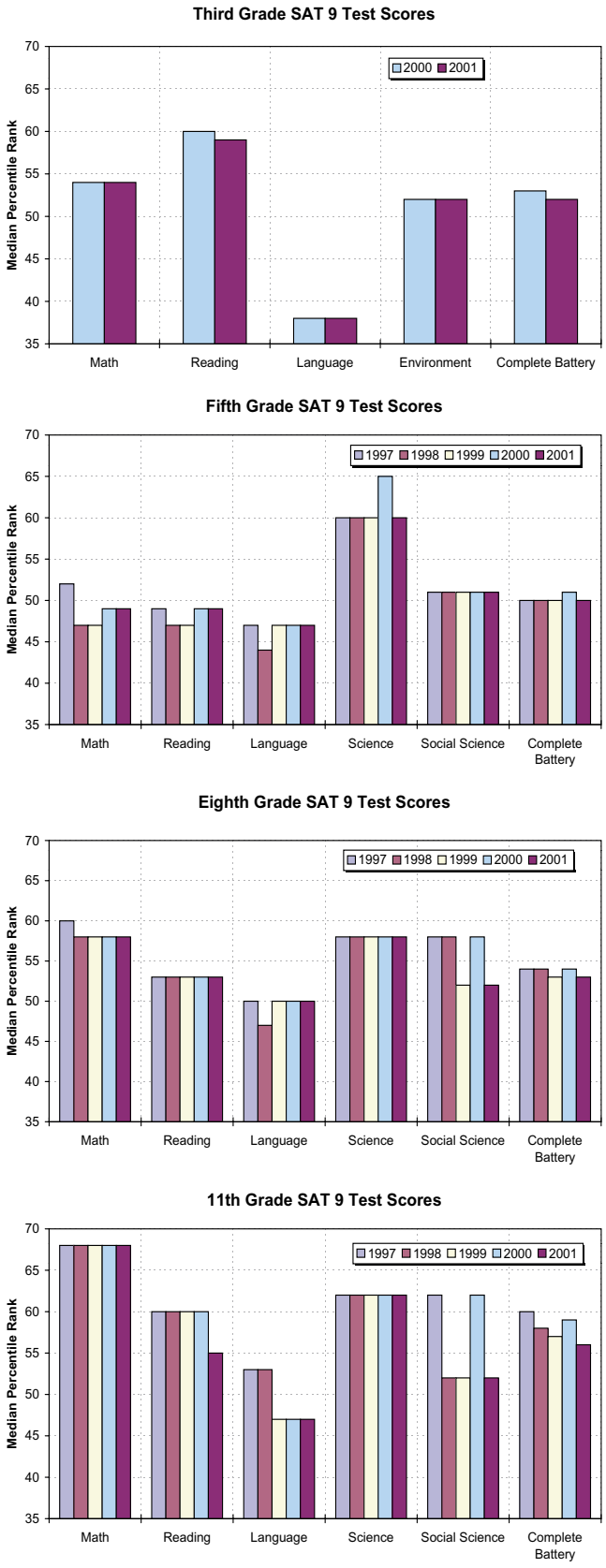
By Subject, Grade, & Year

Test	UT Score	U.S. Avg.	UT Rank	# of States Participating
4th Math 2000	227	226	18	40
8th Math 2000	275	274	21	39
4th Science 2000	155	148	12	39
8th Science 2000	155	149	14	38
8th Writing 1998	143	148	24	36
4th Reading 1998	220	215	10	33
8th Reading 1998	265	261	11	35

Source: National Center for Education Statistics, "The Nation's Report Card."

Figure 12

SAT 9 Results, By Grade



Source: Utah State Office of Education.

Assessments, which are criterion-referenced tests (CRTs), given at the end of the year to quantify how well students learned the state-required curriculum in a given subject; and the American College Test (ACT), which is taken by college-bound juniors and seniors nationwide, and used by colleges to analyze their preparedness for college.

Utah has historically scored at or near the national average on NAEP tests, in all areas except science, where Utah has scored better than the national average. The results of the science and math tests for 2000 were no exception (see Figure 11). Of the 40 states administering the NAEP mathematics test to fourth graders, Utah ranks 18th with a raw score one point higher than the national average. In fourth grade science, Utah ranks 12th nationally, indicating that Utah's students perform better in science than the nation as a whole. Eighth graders ranked higher in math than science (14th and 21st respectively) but still outperformed the national average. Utah fourth graders have been tested three times in reading, and have improved their standing relative to the nation each time. Eighth graders have been tested once, and ranked 11th out of 35 states. The only area where Utah students are significantly below average is writing. Our eighth graders ranked 24th out of 35 states in 1998 and were five points below the national average.

With this national context in mind, we turn to the percentile scores achieved by Utah's students on the Ninth Edition of the Stanford Achievement Test. The SAT 9 is a norm-referenced achievement test that has been administered to fifth, eighth and eleventh graders since 1997. Before 1997, the Eighth Edition of the test was used. In 2000, third graders were added to the grades whose progress is tracked using the SAT 9. Norm-referenced tests measure a student's ability versus a representative sample of students. A percentile score of 50 means that the student or group is performing equal to the average student in the norm group. A percentile score of 90 would mean that the student or group is performing better than 90 percent of the students in the norm group. The norm group has been the same since 1997, making these scores comparable over time. Utah's overall performance has remained relatively static in the last five years. Figure 12 shows Utah's results in each area. Utah's students score better on the complete battery as they get older, with scores for the fifth grade slightly below, or barely above the 50th percentile, and eleventh graders approaching the 60th percentile.

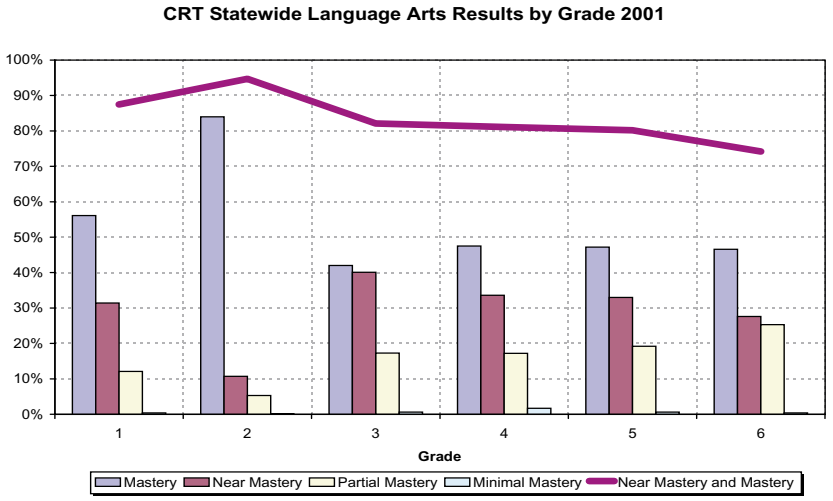
In the subject areas for the SAT 9, third graders lag far behind the national average in language, or writing skills. Utah's language scores remain below or at the national median in the fifth, eighth and eleventh

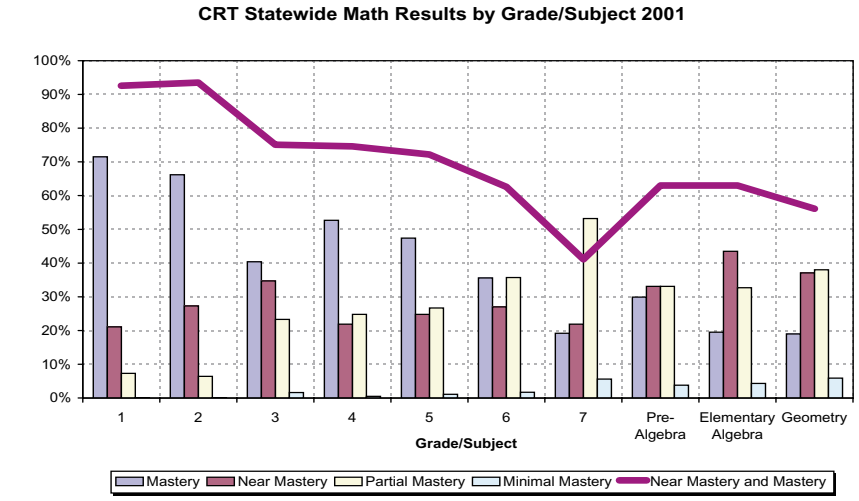
grade results. Similar to the NAEP science results, Utah's school children scored remarkably well in science at all grade levels. The only notable decline in scores from last year in science was seen at the fifth grade level, with a decline to 60th percentile from 65th percentile. However, scores at the 60th percentile level were observed in 1997 through 1999, suggesting that the 2000 score of 65th percentile was uniquely high. Additionally, scores at the 60th percentile suggest a student population that is quite capable in science. Social science results for eighth and eleventh graders continued to fluctuate significantly, with each grade seeing a significant decline in their scores from last year (6 and 10 percentile points, respectively). A similar decline was observed in 1999 in the eighth grade and in 1998 and 1999 in the eleventh grade.

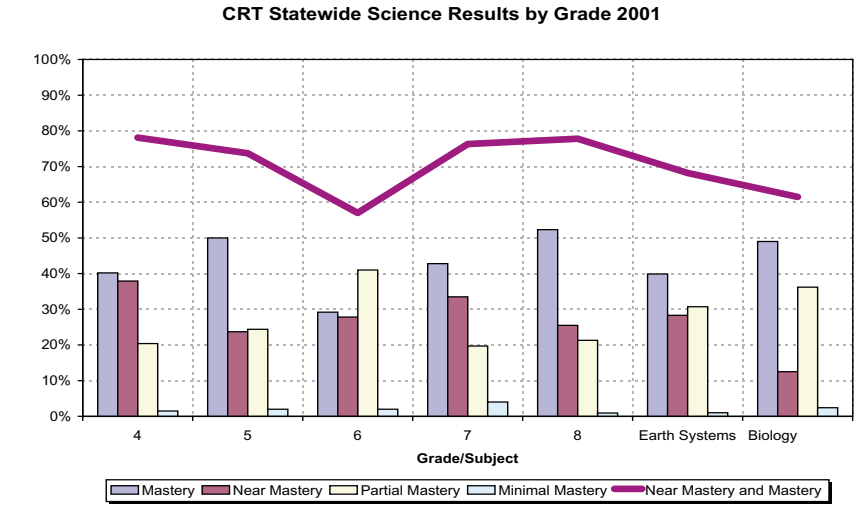
Utah's Core Assessments are currently administered in language/reading in grades one through six, mathematics in grades one through seven, science in grades four through eight, and in various subjects at the junior high and high school level. The tests are given to all students in elementary schools, but once students enter junior high or high school, they only take a given subject test when they take the corresponding class. Therefore, scores beyond the sixth grade are not indicative of a grade level achievement; however, they are still useful for measuring the effectiveness of instruction in specific subjects. These criterion-referenced tests measure student understanding of the core curriculum by assigning students to one of four categories: mastery, near mastery, partial mastery, or minimal mastery. Ideally, educators would like to have all students scoring at or above near mastery. While close to this goal in the early grades, the number of students scoring at or above near mastery falls significantly over time. Figure 13 shows the scores on the

Figure 13

2001 Core Assessment Results by Subject & Grade Level







Source: Utah State Office of Education.

Figure 14

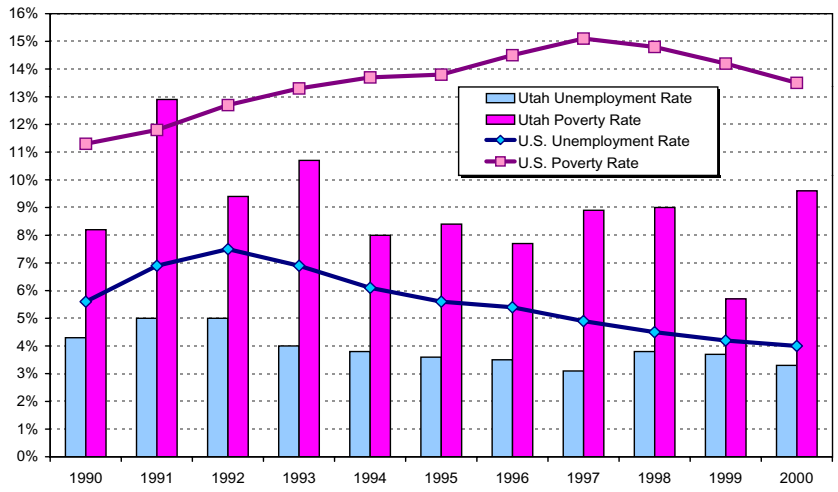
ACT & SAT Results by State 2001

	% of Graduates Tested ACT	Average Composite Score	Rank by Score	% of Graduates Tested SAT	SAT Score	Rank by SAT Score	SAT--->ACT Score
United States	36	21.0		43	1016		21.6
Alabama	65	20.2	41	8	1116	15	24.2
Alaska	35	21.1	32	52	1030	30	22.0
Arizona	28	21.4	20	32	1049	27	22.5
Arkansas	69	20.3	39	6	1119	13	24.2
California	12	21.3	28	47	1011	36	21.5
Colorado	62	21.5	17	31	1076	23	23.1
Connecticut	3	21.6	14	80	1019	34	21.7
Delaware	3	20.5	38	70	1000	41	21.2
Washington DC	13	18.6	51	83	972	49	20.5
Florida	39	20.6	35	52	997	42	21.2
Georgia	16	20.0	45	64	969	50	20.5
Hawaii	18	21.6	14	55	995	44	21.1
Idaho	60	21.4	20	16	1082	22	23.3
Illinois	67	21.4	20	13	1154	6	25.5
Indiana	19	21.2	30	59	994	45	21.1
Iowa	66	22.0	8	5	1192	2	26.3
Kansas	75	21.5	17	9	1154	6	25.5
Kentucky	68	20.1	43	13	1094	19	23.6
Louisiana	76	19.6	47	8	1119	13	24.2
Maine	4	22.1	6	68	1010	37	21.5
Maryland	10	20.9	33	65	1014	35	21.6
Massachusetts	6	22.0	8	77	1022	32	21.8
Michigan	69	21.3	28	11	1122	12	24.3
Minnesota	64	22.1	6	9	1184	3	26.1
Mississippi	82	18.7	50	4	1111	17	24.0
Missouri	67	21.6	14	8	1144	8	25.1
Montana	54	21.8	12	24	1092	20	23.5
Nebraska	73	21.7	13	8	1139	9	22.2
Nevada	41	21.5	17	33	1029	31	22.0
New Hampshire	5	22.2	5	74	1038	29	22.2
New Jersey	4	20.7	34	79	1008	38	21.4
New Mexico	64	20.1	43	12	1091	21	23.5
New York	14	22.0	8	76	997	42	21.2
North Carolina	12	19.4	48	62	986	48	20.9
North Dakota	79	21.4	20	5	1199	1	26.5
Ohio	59	21.4	20	24	1072	24	23.0
Oklahoma	69	20.6	35	8	1127	11	24.6
Oregon	11	22.6	2	53	1050	26	22.5
Pennsylvania	7	21.4	20	71	993	46	21.1
Rhode Island	3	22.7	1	72	1003	40	21.3
South Carolina	18	19.1	49	61	954	51	20.1
South Dakota	70	21.2	30	5	1173	5	25.8
Tennessee	77	19.9	46	13	1112	16	24.0
Texas	31	20.3	39	51	993	46	21.1
Utah	**68**	**21.4**	**20**	**4**	**1138**	**10**	**24.9**
Vermont	9	21.9	11	71	1020	33	21.8
Virginia	7	20.6	35	66	1007	39	21.4
Washington	18	22.6	2	53	1051	25	22.5
West Virginia	58	20.2	41	18	1039	28	22.2
Wisconsin	67	22.3	4	7	1179	4	26.0
Wyoming	66	21.4	20	10	1097	18	23.7

Source: American College Testing and the College Board. Conversion tool from the College Board. Calculations by Utah Foundation.

Figure 15

Utah and U.S. Poverty and Unemployment



Sources: Bureau of Labor Statistics, LAUS Series, and Bureau of the Census, Current Population Survey, Poverty Estimate Series.

core assessments by grade level and level of proficiency, with an indication of the proportion of students scoring at or above near mastery.

The ACT is a voluntary college entry exam taken by the majority of Utah's college-bound juniors and seniors. There is very little difference between states' performance on the ACT. Utah's college bound students scored an average of 21.4, and the average composite score in the United States was 21. While this appears to be slightly above average, it falls within a statistically insignificant range of difference. Figure 14 shows the ACT scores attained by state. In some states, the college entrance exam of choice is the SAT; therefore, a conversion score is offered. The score used for comparison should be based on the test taken by the most students in the state. For example, in Connecticut, only 3% of students take the ACT; therefore the more accurate score is the converted SAT score of 21.7. Utah's 24.9 converted SAT score is not an accurate representation of the student population, as only 4% of graduates took the SAT.

Overall, these data offer either encouragement or disappointment, depending on the reader's expectation. Some Utahns, having heard the oft-repeated assertion that the state has a highly educated workforce, will view these results as disappointing. Utah's performance on most of these tests is simply average, not outstanding. On the other hand, those who focus on Utah's low level of per-pupil funding and high class sizes may be encouraged to know that, with the nation's worst funding level, our students do not perform anywhere near worst in the nation.

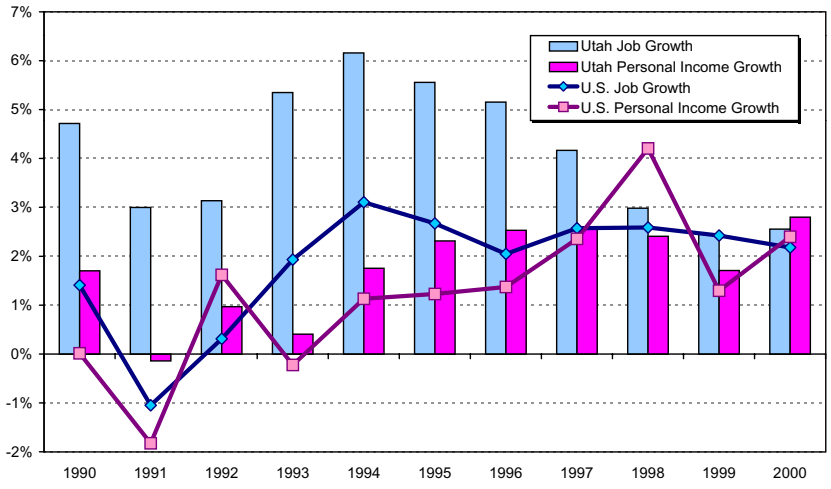
Utah in the 1990s

To more fully understand Utah's recent educational performance, it is important to review what happened in the 1990s economy and how that influenced education. The 1990s were a decade of incredible economic growth, while school enrollment

slowed dramatically, allowing an increased investment in education, even while the state budget focused greater resources on other areas, such as capital projects.

Figure 16

Utah and U.S. Job Growth and Personal Income Growth



Sources: Bureau of Labor Statistics, Current Employment Survey, and Bureau of Economic Analysis, Annual State Personal Income.

The Economy Boomed

The economic boom of the 1990s benefited few states as greatly as Utah. The state saw unparalleled job growth, falling poverty, almost unbelievable unemployment rates, and steady increases in personal income. Figures 15 and 16 show Utah's growth in the above categories compared to national averages. In 1997, the state's unemployment rate averaged 3.1 percent. Many economists consider five percent unemployment as "full employment;" to drop below that is a sign of an economy that is growing faster than there are workers for the jobs. As unemployment fell, so did poverty. In 1999, the poverty rate in the state was just 5.7 percent, the lowest figure on record and almost a third of the national average of 14.2 percent. The number of jobs in the state increased with a rapidity only expected in the developing economies of the third world. In 1994, Utah increased its jobs by 6.2 percent; double the national peak reached that same year of 3.1 percent. While growth slowed down through the rest of the decade, it wasn't until 1998 that Utah saw growth rates in the range to be expected of its economy. Also from 1994 until 1997, Utah's personal income grew at a rate faster than the national average. While the 1998 growth rate was well below the national spike, 1999 and 2000 saw rates slightly above the national average.

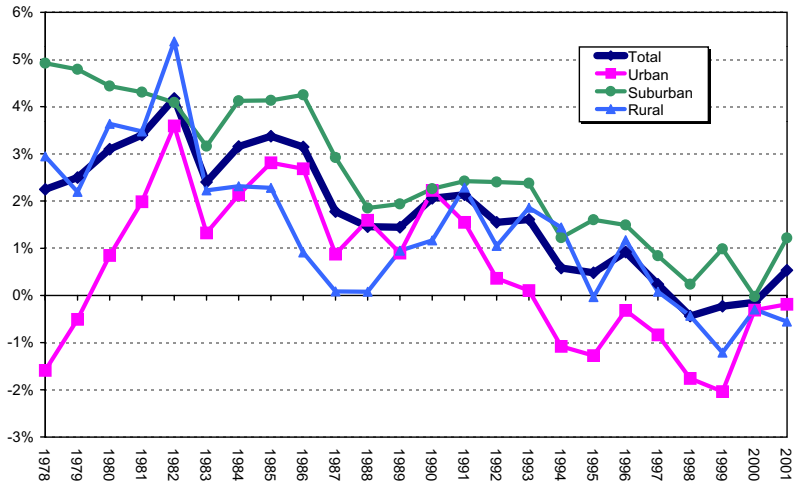
Enrollment Growth Slowed

During this time, with an extremely strong economy, enrollment growth in Utah's public schools slowed dramatically. The decade only saw a 7 percent increase in the number of children enrolled and most of that growth came in the early part of the decade, between 1990 and 1993. Figure 17 details this growth on an annual basis, highlighting the differences between urban, rural, and suburban districts within the state.

Figure 17

Annual Growth Rates of Enrollment in Utah

Urban, Rural and Suburban Districts 1978-2001



Sources: USOE, Enrollment Data; calculations and classifications by Utah Foundation.

Per Pupil Funding Increased

There were two main results for Utah's education system from this decade of strong economic growth and slowing enrollment rates: one, an increase in per-pupil funding; and two, a decline in pupil-teacher ratios. Since the last enrollment boom of the 1980s, Utah has

Figure 18

Utah State Expenditures from State Sources

Major Categories of Spending as a Percent of Total Spending

Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Change 1990-'95	Change 1995-'00
Operations													
K-12 Education	41.1%	41.3%	40.7%	42.0%	41.3%	41.2%	40.9%	40.2%	39.2%	39.4%	38.5%	0.1%	-2.7%
Higher Education	15.2%	15.2%	15.2%	15.9%	15.6%	15.5%	15.8%	14.8%	14.6%	14.7%	14.9%	0.2%	-0.6%
Transportation	4.6%	4.7%	4.0%	4.6%	3.9%	3.9%	3.8%	3.5%	3.4%	3.3%	3.4%	-0.6%	-0.5%
Law and Order*	6.5%	7.0%	6.8%	7.0%	6.9%	7.3%	7.7%	7.6%	7.9%	8.4%	8.9%	0.8%	1.6%
Health	4.2%	4.5%	4.9%	5.1%	5.5%	5.9%	6.3%	5.8%	6.2%	6.5%	6.7%	1.7%	0.8%
All Other	16.5%	16.4%	16.7%	17.2%	16.7%	17.4%	15.9%	15.0%	15.2%	15.2%	15.4%	1.0%	-2.1%
Total Operations	**88.0%**	**89.1%**	**88.4%**	**91.8%**	**90.0%**	**91.2%**	**90.3%**	**86.8%**	**86.5%**	**87.5%**	**87.7%**	**3.1%**	**-3.5%**
Capital Spending													
K-12 Education	0.4%	0.3%	0.2%	0.3%	0.3%	0.8%	0.7%	0.6%	0.6%	0.7%	0.7%	0.4%	-0.1%
Higher Education	0.0%	0.0%	0.0%	0.1%	0.4%	0.0%	0.1%	0.7%	0.2%	0.4%	0.4%	0.0%	0.4%
Transportation	4.1%	4.2%	4.5%	3.7%	5.3%	4.0%	4.6%	7.4%	7.7%	6.9%	6.6%	-0.1%	2.5%
All Other	4.5%	4.0%	4.3%	1.7%	1.6%	1.5%	1.5%	2.0%	2.0%	1.2%	1.0%	-3.0%	-0.5%
Total Capital Spending	**9.0%**	**8.4%**	**9.0%**	**5.8%**	**7.6%**	**6.4%**	**6.9%**	**10.8%**	**10.5%**	**9.2%**	**8.7%**	**-2.7%**	**2.3%**
Debt Service	**2.7%**	**2.3%**	**2.3%**	**2.2%**	**2.3%**	**2.4%**	**2.7%**	**2.4%**	**3.0%**	**3.3%**	**3.3%**	**-0.2%**	**0.8%**
Other	**0.2%**	**0.2%**	**0.3%**	**0.2%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.4%**	**-0.2%**	**0.4%**
Total Spending	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**0.0%**	**0.0%**

* Law and Order includes Corrections, Courts, Public Safety, and National Guard.

Source: Utah State Budget Summaries, various years. Calculations by Utah Foundation.

had the lowest per-pupil funding of any state. However, when comparing growth of per-pupil funding during the 1990s, Utah made tremendous strides. In 1990, the per-pupil funding in the state, adjusted for inflation, was $3,400 compared with a national average of $6,023. By 1999, Utah's funding level was at $4,210 per pupil, adjusted for inflation. This was an increase of almost 24 percent. The national average grew by just over eight percent for a per-pupil funding level of $6,508. Figure 4 (on page 4) shows per-pupil funding levels over time for Utah, its cohort states with similar income levels and school populations, and the U.S. average.

Class Sizes Decreased

The second result of the 1990s was the decline in the pupil-teacher ratio. This ratio measures the number of students divided by the number of teachers within the state. It does not give an accurate measure of the average classroom size, because special education and part-time staff are included. Still, it approximates the magnitude of enrollment growth compared to the growth of the number of teachers. Utah has usually had the highest pupil-teacher ratio of any state; and in 1994 that number stood at 24 students per teacher. Since then, the state's ratio has declined to 22 students per teacher. Figure 5 (on page 4) compares Utah's pupil-teacher ratio to its cohort states and the U.S. average.

Budget Effort Decreased

Figure 3, earlier in the report, showed education spending as a percent of all state and local government revenues. According to that measure, total state and local K-12 spending fell in proportion to total resources available in the late 1990s. A closer look at the state budget shows the same trend existed for state-only funds. Figure 18 shows the proportion of state spending allocated to major program areas during the 1990s. These proportions are calculated from spending of state resources only—these figures exclude federal funds that pass through the state budget. For reference, the inflation-adjusted dollar amounts on which these proportions are based are included in Appendix B.

During the 1990s as enrollments in K-12 education slowed, so did budgetary efforts. From 1995 to 2000, K-12 education spending fell from 41.2 percent of state spending to 38.5 percent. If it had remained at 41.2 percent, an additional $137 million would have been appropriated to schools. At the same time, spending on capital projects increased from 4.0 percent of total spending to 6.6 percent. This increase of 2.5 percentage points is nearly identical to the reduction in K-12 education's share of

spending. Other categories increased and decreased as well, with the law and order category becoming a significantly larger portion of spending. Health spending took a slightly increased share of the budget by the end of the decade, although most of the increase in health spending has been in federal funds, which are not reflected in this table.

Overall operations spending fell as a share of the total, because the state focused more resources on capital spending. This table does not include funds spent from proceeds of bond sales, since the focus of this analysis is to examine the state's allocation of ongoing resources such as tax revenues. Utah utilizes a mixture of bond financing and "pay-as-you-go" spending on capital projects. In addition to the pay-as-you-go spending shown in this chart, significant funds were raised by issuing bonds and spending the proceeds on capital projects. This bonding activity impacts the state's spending on debt service, or principal and interest payments, which also increased during this period.

Historically, spending on education has been a high priority in the state budget. While K-12 and higher education spending still make up the largest percent of the state budget at 53.4 percent, in 1990, they accounted for 56.3 percent of total state expenditures. Both budgets have grown in absolute dollar terms; however, they have not grown at the same rate as the overall state budget.

During the 1990s, higher education spending grew at a faster rate than K-12 funding (see Appendix B). This was in response to the increase in enrollments at the state's colleges and universities as students that were part of the 1980s K-12 enrollment boom continued into post secondary education.

Challenges For the Next 10 Years

Despite the reduced budget effort of the later 1990s, K-12 per-pupil funding increased and class sizes decreased. These were welcome improvements made possible by a strong economy providing ample revenues at the same time that school enrollment growth slowed and even declined. From all indications, the current decade will be far more challenging for K-12 education than the 1990s. A surge in K-12 enrollment is projected, and the economy is likely to grow slower, providing lower revenue growth at the same time that needs are increasing rapidly. In addition, new regulations from the federal government will require a greater level of achievement from Utah students, teachers, and school officials.

Enrollment Projections

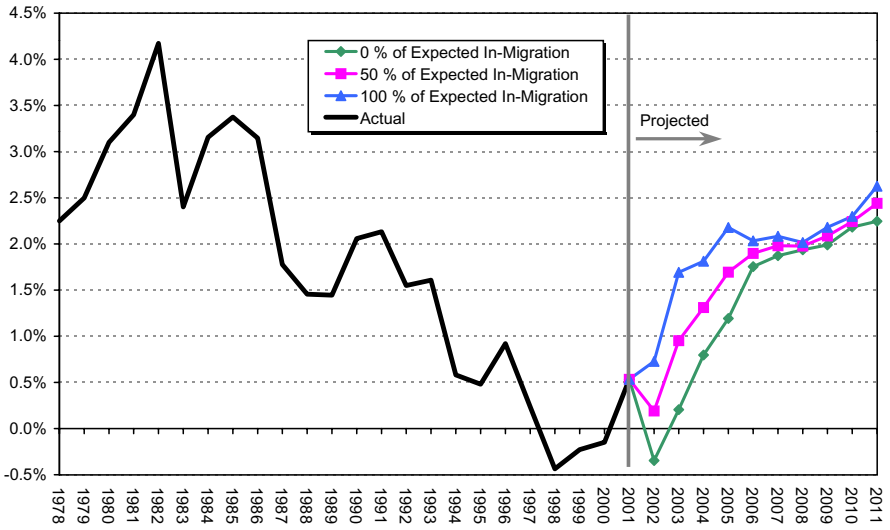
To help determine future enrollments for the public education system, the Utah State Office of Education relies on a complex input/output model called the Utah Process Economic and Demographic Model (UPED). This model is operated by the Governor's Office of Planning and Budget. According to the model, enrollments between 2001 and 2011 are expected to grow by 102,434 students. This is a 21.5 percent increase over the ten-year period; a phenomenon not seen since the 1980s, when enrollments increased almost 30 percent over the decade.

Because this is such a rapid increase in enrollments, Utah Foundation reviewed the assumptions underlying the numbers. Discussions with state demographers revealed that two thirds of the figure is derived from the natural increase of the state's population. Those 70,000 projected students are the direct result of the state's high fertility rate and the number of women in their prime childbearing years. The other 32,000 projected

Figure 19

Annual Growth Rate of K-12 Public School Enrollment

Actual and Projected 1977-2011



Sources: USOE, Bureau of Economic and Business Research, Governor's Office of Planning and Budget, and Utah Foundation.

students are to be the result of migration to Utah from other states. This is where Utah's economic growth becomes critical. In-migration to a state is strongly correlated with the strength of its economy overall and relative to its surrounding neighbors; hence the large in-migration to Utah during the mid-1990s.

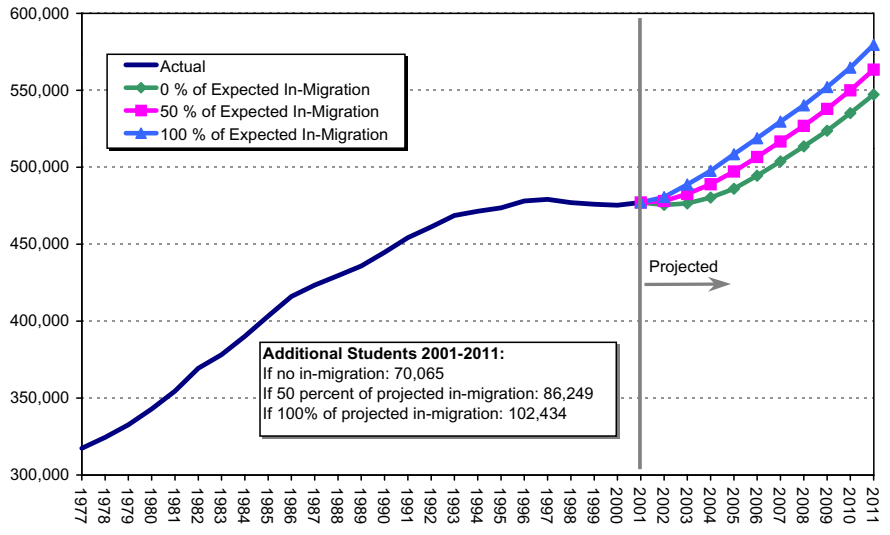
The UPED data show in-migration to be the driver of enrollment growth through 2005. Figure 19 illustrates this point. However, Utah's economic performance relative to its neighbors no longer seems great enough to induce such results. Therefore, the enrollment projections might be overstated. Figure 20 delineates three possible growth scenarios. One with no in-migration, indicative of weak economic growth, a second with moderate in-migration and the third, using UPED's assumption of significant in-migration. As the graph shows, in all three instances and even if no in-migration is assumed, growth during the coming decade will not look like the 1990s but will more closely parallel the strong growth of the 1980s. This will put pressure on both per-pupil funding and pupil-teacher ratios.

Although this report focuses on challenges of the coming ten years, this enrollment boom will continue beyond this decade. The Bureau of Economic and Business Research at the University of Utah recently released new projections of school-age and college-age population growth. Figure 21 shows that the wave of growth in this population does not ebb until after 2020. If the economy is strong and the fertility rate remains high, this growth will continue to 2030 and beyond.

Figure 20

Utah K-12 Public Education Enrollment Growth Scenarios

Actual and Projected, 1977-2011



Sources: USOE, Bureau of Economic and Business Research, Governor's Office of Planning and Budget, and Utah Foundation.

Economic Growth in This Decade

Once the current recession is clearly over, Utah's economy will grow again. But it is unlikely to grow as it did in the 1990s. In the 1990s, Utahns saw a unique convergence of forces that made this state one of the country's strongest economies. The major reasons for this growth were:

- Significant pent-up demand was left over from the 1980s, when Utah was near recession while the rest of the country boomed. Utah consumers, after a long period of economic malaise, were ready to spend on things they couldn't afford during the difficulties of the 1980s.

- The American corporate climate was ripe for investment in Utah. After a decade of strong growth in most of the country, companies were looking to expand. Corporations were also going through much restructuring, including aggressive cost cutting to stay competitive internationally. Utah was a natural venue for expansion, with low costs for labor, housing, and property, a business-friendly climate, and a high number of college-educated workers who did not demand high pay. National magazines touted Utah as a great place to live and locate a business, which added to the attention.

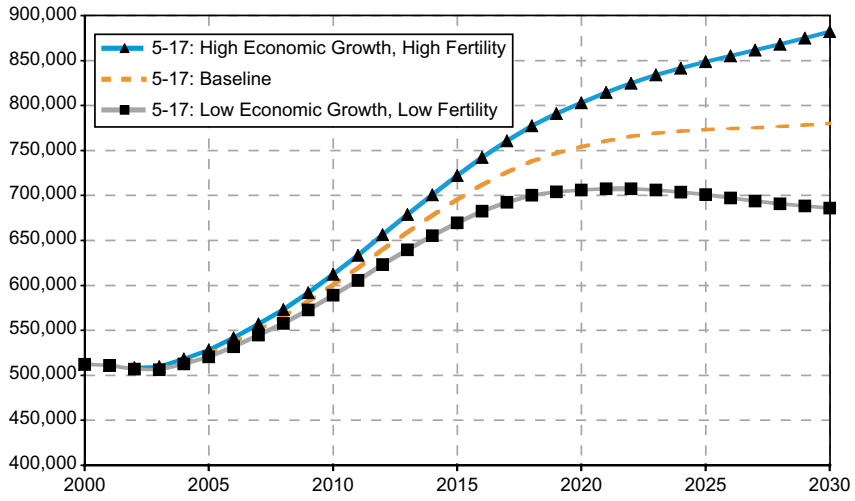
- Utah's growth fueled a housing boom, with rapidly increasing home values. This created a wealth effect, in which consumers saw their wealth increase rapidly and felt more free to spend on big-ticket items, like new cars, home remodeling, or new appliances. This wealth effect combined with the effect of rapidly rising stock values, creating an even greater effect on consumption.

- The early 1990s brought a recession to much of the country, which was especially deep in California. This caused significant in-migration to Utah, as Californians and others sought jobs and moved to Utah. Often these in-migrants (especially the Californians) brought large amounts of cash from selling expensive homes in their home state. This added further impetus to the housing boom and other consumption.

Figure 21

Projected Utah School Age Population (Ages 5-17)

Long-Term Projection



Source: Bureau of Economic and Business Research: "The Coming Boom in Utah's School Age and College Age Populations," Sep. 2002.

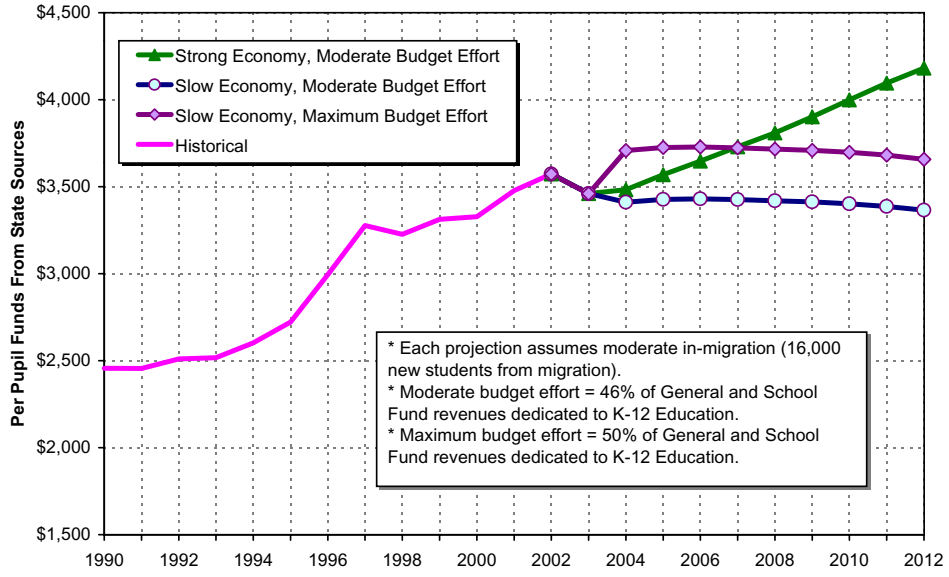
These factors, which were so prominent in the 1990s boom for Utah, have all but evaporated. During the current recession, consumers have continued to spend at surprising levels, which will not provide the pent-up demand expected at the end of most recessions. Corporate America is no longer growing like it was in the last decade, and some aspects of Utah's attractiveness, such as low property prices, have diminished. Also, the wealth effect of the 1990s is reversing, as investors have lost large sums in the stock market, and some economists are predicting a bursting real estate price "bubble."

All of these factors combine to indicate an economy that probably will not be as vigorous as the 1990s, neither for Utah nor for the country as a whole. What kind of impact will slower economic growth have on education funding? As shown earlier in this report, the strong growth of

Figure 22

K-12 Real Operating Funds Per Pupil From State Sources

Projected with Varying Economic and Budget Assumptions



Sources: USOE, Bureau of Economic and Business Research, Governor's Office of Planning and Budget, and Utah Foundation.

the 1990s, coupled with low student population growth, allowed K-12 education funding per pupil to increase at a healthy rate and helped to shrink class sizes. With the large enrollment boom projected for this decade, coupled with a slower economy, Utah will likely struggle to provide an increased investment in education.

Figure 22 illustrates several possibilities for per-pupil funding depending on economic growth and the level of budget resources dedicated to K-12 education. Each scenario in the graph assumes a moderate level of in-migration, or about 16,000 additional students from migration. This is half of the official projection for in-migration, but in light of Utah's current economy, Utah Foundation believes this to be the most realistic figure. Assuming this level of in-migration, total enrollment growth for the period would be 86,000 students. If the economy is moderately strong, growing at about 4.2 percent per year, and Utah maintains its average level of budget support for K-12 education, per-pupil funding from the state would increase at a rate comparable to recent growth since 1997. This is actually the rate of economic growth projected by the Governor's Office of Planning and Budget. However, if the economy grows slowly, at two percent per year, per-pupil funding begins to level out and then slowly declines. This is true even if the state commits to a higher budget effort—although starting at a higher level with the higher budget effort, the trend is level, then declining.

Appendix C shows the data from the graph, plus additional possible outcomes for strong or slow economic growth and varying rates of in-migration and budget effort. It is clear that with slow economic growth, education funding will struggle to keep up with enrollment growth, even with increased budget efforts.

Even if the economy grows at a healthy rate and funding is able to keep pace with enrollment growth, new federal rules will place additional strain on Utah's public education system. The new law will require a greater focus on measuring performance, and in light of changing demographics, Utah will have a particularly difficult time succeeding.

No Child Left Behind

On January 8, 2002, President Bush signed into law a significant number of revisions to the Elementary and Secondary Education Act of 1965 (ESEA). They make up the No Child Left Behind Act of 2001 (NCLB). It codifies and strengthens many of the principles that have driven education reform since the publication of "A Nation at Risk" in 1983. NCLB aims to increase accountability through emphasis on standards and assessments.

Furthermore, it penalizes schools that do not make adequate yearly progress on those assessments. The following are some key requirements of NCLB:

- All teachers must be teaching in their area of study.
- All teachers must be certified to teach according to state certification guidelines.
- By 2005-2006 all third through eighth graders must be tested annually in math and reading. By 2007-2008 science tests must be administered at least once in grades three through five; six through nine, and ten through twelve.
- All states must participate in the National Assessment of Educational Progress (NAEP).[2]
- Student testing results must be disaggregated according to membership in various socio-economic groups.
- All student groups must make adequate yearly progress on those tests.
- Schools that fail to make adequate yearly progress in *any* group will be labeled as schools in need of improvement. These schools are required to improve within a specified amount of time; if they do not, they will be subject to various levels of restructuring according to a specified time table, which can be found in Figure 23.

States are allowed some flexibility under this law. For example, they are allowed to choose the state-level tests that will be administered to students. Additionally, they are allowed to define adequate yearly progress. While states must prove that these mechanisms exist, neither of them will be influenced nor manipulated by the federal government.

All other areas of the law are compulsory. For example, the federal government has determined which student groups should be tracked. The consequences for failing schools have been determined, and while states have some room for creativity in solving problems in failing schools, they are obligated to include the aforementioned changes.

NCLB was designed as top-down legislation. In other words, the law assumes a strong state board of education that can effectively regulate schools, and mandate change. Utah's State Board of Education has traditionally been more of an oversight agency than a regulatory one. Take, for example, the State Board's mission statement, which says:

"The Utah State Board of Education will fulfill its constitutional and statutory responsibilities by establishing policies that promote excellence in learning for all students. The Board will provide leadership, vision, advocacy, and support for school districts, other policymakers,

Figure 23

Consequences for not Making Adequate Yearly Progress Under NCLB

Length of Time Out of Compliance	Corrective Action Mandated:
2 Years	School identified as "needing school improvement."
	Must submit two-year plan of improvement.
	School officials will receive technical help and assistance.
	All students in school will be given the opportunity to transfer to a better public school, or charter school (using Title I funds).
3 Years	School remains in improvement status.
	District must continue to offer school choice to students.
	School must provide supplemental services to disadvantaged students remaining at the school.
	Parents can choose these services from a list of approved providers.
4 Years	District must implement corrective action, such as replacing staff, or fully implementing new curriculum.
	Continue to offer school choice and supplemental services.
5 Years	School will be identified for restructuring.
	Local officials will make the necessary arrangements to implement plans such as: state takeover, the hiring of a private management contractor, or converting school to a charter school.
	Significant staff restructuring.

Source: Federal Department of Education.

and citizens to enable all students to be successful lifelong learners and contributing citizens."

Utah's State Code section 53A-1a-107(c) further states that: "The State Board of Education shall: Develop and disseminate a state model curriculum, structured to incorporate the concepts of quality versus quantity, depth versus breadth, subject integration and application, applied thinking skills, character development, and a global perspective, *which districts and schools may use* to assist teachers in helping students acquire the competencies and skills required to advance through the public education system, and periodically review and, if appropriate, revise the curriculum" (emphasis added).[3] Additionally, Utah Code section 53A-1-401(b)(2), which enumerates the powers of the State Board of Education, states: "The board may not govern, manage, or operate school districts, institutions, and programs unless granted authority by statute."[4]

The statutory role of Utah's State Board of Education is intentionally weak. This reflects Utahns' preference for local control and administration of education. Historically, the state board has only developed recommendations regarding curricula and administration. The ability to control the ways those recommendations are practiced has ultimately been the decision of various school districts. This presents some serious organizational difficulties to overcome in order to effectively administer NCLB in Utah.

The Utah State Office of Education (USOE) will need to have the ability to regulate school districts and schools. In the event that a school fails for five consecutive years, it must undergo state restructuring (see Figure 23). This will require changes both on an administrative and legislative level.

Administratively, USOE will need to appoint individuals who will oversee the programs associated with NCLB and the disaggregation of data for the purpose of federal reporting. Both of these changes are currently taking place at USOE. Rather than establish a new unit within USOE, NCLB oversight and reporting will be integrated into the existing structure and programs.

Legislatively, the state may need to grant more power to the State Office of Education to regulate schools and districts. Under current law, USOE would have no authority to mandate structural changes at failing schools in order to ensure their federal funding. However, NCLB will require that it do just that if the school is failing for more than three years. While it is currently unclear how this tension will be resolved, it is apparent that it exists and will need to be dealt with in the near future.

While assessment and accountability procedures will need to be augmented slightly, the integration of Utah's current testing system into NCLB requirements is a significantly easier problem to overcome. This is because of numerous legislative changes over the last five years. States must implement state level

Figure 24

Utah State Tests and Their NCLB Implementation Status

Grade	CRT Language Arts/Reading	CRT Math	CRT Science	Direct Writing	UBSCT Reading, Writing & Math
1	Operational	Operational			
2	Operational	Operational			
3	Operational	Operational			
4	Operational	Operational	Operational		
5	Operational	Operational	Operational		
6	Operational	Operational	Operational	Operational	
7	Operational	Operational*	Operational		
8	Operational	Operational*	Operational		
9	Operational	Operational*	Operational*	Operational	
10	Operational	Operational*	Operational*		Spring 2004
11	Operational		Operational*		
12			Operational*		

Gray areas indicate no test is required.
*These tests are subject (not grade level) specific and need revision.

Source: Utah State Office of Education Consolidated Application for ESEA.

testing in math and reading by 2005-06 and test in science at least once in elementary, middle, and secondary school by 2007-08. The Utah Performance Assessment System for Students (U-PASS) already requires most of the tests that will be needed for NCLB purposes. As part of U-PASS, students take Core Assessments, which are criterion-referenced tests (CRTs) designed to measure how well the students learned a particular subject relative to the expectations set out in state curricula. These will be the primary vehicle for measuring educational progress for NCLB. Furthermore, U-PASS strengthened accountability to the state and the public by requiring results of the SAT-9 and the CRT tests be published on both a district and a state level. In short, Utah is ahead of the national curve in terms of measuring the performance of its students. Figure 24 shows Utah current position relative to compliance with NCLB testing standards.[5]

Utah's Test Scores in the Context of NCLB

Given Utah's low per pupil spending and large class sizes, our students appear to be doing quite well relative to national averages in those tests that provide national comparisons. However, when one disaggregates those scores in the context of NCLB they do not look nearly as promising. Figure 25 shows Utah's performance on NAEP disaggregated by race. The data show that on many tests, Utah students score at or above the national average as a group, but that most of Utah's racial groups perform below the level of the same racial groups nationally. For a variety of reasons, including test questions with socio-economic or cultural bias, English language proficiency, and income status, white students score much higher on most of these tests than the other racial groups. Further complicating this issue is a general limitation of financial resources at schools with high populations of low-income and minority students. Utah's average score is raised above national averages by the preponderance of white students in Utah. However, Utah's white students perform worse than national white students in every case except fourth grade science. Although Utah's Hispanic students score better than national Hispanic students in three of the seven tests shown, their scores remain well below white student scores, and Hispanic students are Utah's fastest growing student group. The growth in minority enrollment will create downward pressure on Utah's overall test scores unless the gap between minority achievement and white achievement is narrowed significantly. This downward pressure will make it very difficult to comply with NCLB.

Utah's ethnic composition is changing significantly. Pamela Perlich, the Senior Research Economist at the Bureau of Economic and Business Research, notes that in the 1990s Utah gained 500,000 people. Minorities accounted for 35% of this growth. Given Utah's relative homogeneity before the year 2000, this means that in ten years, Utah's minority

Figure 25

Utah & U.S. NAEP Scores, by Race

Math 2000 Grade 4

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	227	232	n/a	206	222	n/a
U.S.	226	236	205	212	n/a	216
UT % of U.S.	100.4%	98.3%	n/a	97.2%	n/a	n/a

Math 2000 Grade 8

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	275	279	n/a	249	281	n/a
US	274	286	247	253	289	255
UT % of U.S.	100.4%	97.6%	n/a	98.4%	97.2%	n/a

Reading 1998 Grade 4

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	220	222	n/a	189	208	190
US	215	227	194	196	225	202
UT % of U.S.	102.3%	97.8%	n/a	96.4%	92.4%	94.1%

Reading 1998 Grade 8

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	265	267	n/a	251	261	n/a
US	261	272	243	244	271	248
UT % of U.S.	101.5%	98.2%	n/a	102.9%	96.3%	n/a

Science 2000 Grade 4

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	155	160	n/a	135	147	138
US	148	160	124	129	n/a	140
UT % of U.S.	104.7%	100.0%	n/a	104.7%	n/a	98.6%

Science 2000 Grade 8

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	155	159	n/a	135	152	n/a
US	149	162	122	128	156	134
UT % of U.S.	104.0%	98.1%	n/a	105.5%	97.4%	n/a

Writing 1998 Grade 8

	Overall Score	White	Black	Hispanic	Asian/PI	American Indian
Utah	143	146	n/a	120	135	119
US	148	158	131	131	159	132
UT % of U.S.	96.6%	92.4%	n/a	91.6%	84.9%	90.2%

Source: NCES, "The Nation's Report Card," and Utah Foundation.

Figure 26

Utah Minority Students

Minority Enrollment as a Percent of District Population.

District	Grade			
	3rd	5th	8th	11th
Urban	**33.7%**	**31.2%**	**29.2%**	**24.2%**
Granite	28.7%	26.8%	24.1%	20.6%
Murray	18.8%	15.2%	15.8%	13.1%
Ogden	46.2%	43.4%	41.8%	33.4%
Provo	26.0%	23.9%	22.3%	19.0%
Salt Lake	48.3%	45.6%	46.6%	37.3%
Suburban	**9.9%**	**9.6%**	**8.7%**	**7.7%**
Alpine	11.0%	9.5%	8.9%	6.7%
Cache	8.3%	7.4%	7.1%	4.8%
Davis	9.9%	10.3%	9.3%	8.3%
Jordan	8.4%	8.4%	8.2%	7.6%
Logan	24.8%	23.4%	15.4%	17.3%
Nebo	7.9%	8.1%	7.4%	6.2%
Park City	16.9%	10.0%	10.1%	8.8%
Washington	11.1%	11.8%	8.9%	9.1%
Weber	8.6%	9.4%	8.2%	7.6%
Rural	**16.3%**	**15.8%**	**16.6%**	**13.9%**
Beaver	12.6%	12.4%	5.9%	5.1%
Box Elder	10.4%	10.3%	10.0%	7.4%
Carbon	11.0%	10.1%	15.0%	9.8%
Daggett	0.0%	0.0%	7.1%	0.0%
Duchesne	10.5%	10.4%	15.1%	10.0%
Emery	9.1%	7.3%	5.3%	3.3%
Garfield	6.9%	8.9%	6.7%	6.8%
Grand	19.1%	19.6%	10.6%	12.5%
Iron	9.3%	11.0%	6.3%	7.8%
Juab	2.8%	6.9%	2.2%	1.7%
Kane	4.6%	5.8%	5.3%	6.4%
Millard	13.4%	11.2%	8.4%	9.2%
Morgan	2.2%	2.8%	1.2%	2.0%
No. Sanpete	16.0%	12.3%	10.7%	6.6%
No. Summit	8.6%	5.8%	6.9%	3.8%
Piute	11.1%	9.1%	9.1%	4.0%
Rich	3.6%	5.3%	3.0%	2.0%
San Juan	61.6%	55.8%	63.7%	55.4%
Sevier	6.0%	4.5%	6.5%	4.9%
So. Sanpete	9.9%	6.9%	5.2%	6.3%
So. Summit	0.0%	7.1%	3.4%	3.9%
Tintic	0.0%	0.0%	3.1%	6.9%
Tooele	14.5%	16.4%	15.8%	14.4%
Uintah	17.6%	15.4%	13.7%	10.3%
Wasatch	9.3%	8.4%	5.1%	8.1%
Wayne	2.5%	9.8%	7.9%	2.2%

Source: USOE. Calculations by Utah Foundation.

population grew 117%, while its White, Non-Hispanic population grew only 21%.[6]

This change is evident in looking at the school-age population as well. Figure 26 shows the percentage of minority students for each of Utah's 40 districts at the grade levels tested by the SAT 9 (third, fifth, eighth, and eleventh). In almost every instance, the younger grades have a higher percentage of minority students.

Figure 27 shows that ethnic and low-income students have difficulty performing as well as white, non low-income students on Utah's Core Assessments. It also shows that scores have consistently slipped in the later grades. This is particularly true for low-income and ethnic students who begin to lose ground to their counterparts in the third grade, and never quite seem to recover.

Dividing SAT 9 scores another way, we can see that two groups of students have continually struggled on standardized tests: urban and rural students. No Child Left Behind, and the categories it delineates for measuring adequate yearly progress deal mainly with problems faced by the first set of students. For example, urban student's aggregate scores have been trending downward as their percentage of minority students has increased (see Figure 28). This problem would be addressed by NCLB, first by allowing greater school choice, at the expense of the failing school, second by district-level restructuring, and, in the event that fails, by state-level restructuring.

Utah Foundation charted the progress of fifth, eighth, and eleventh grade students in urban, rural, and suburban school districts since 1997 and found that the gaps between these students have been persistent. Urban and rural students continually lag behind their suburban counterparts, with urban students facing the most difficulties in the fifth grade, rural and urban students performing fairly equally in the eighth grade, and rural students facing the most difficulties in the eleventh grade.

Additionally, while scores in the suburban districts have remained stable or increased in recent years, scores in urban districts have seen a decline at all grade levels, and rural districts have seen a similar decline. While the SAT 9 is not the test Utah will be using to comply with NCLB, this leads one to question what measures will be taken in rural districts to ensure their success?

NCLB is mute on the subject. In fact, some of the mandates of NCLB will be difficult, if not impossible, for rural schools to comply with, meaning they risk losing federal funding, which complicates a situation that is already dire. Figure 28, for example, shows the percentage of teachers vs. instructional staff at rural, urban and suburban school districts in Utah. It demonstrates a problem that has often been lamented in rural school districts, namely that there is a lack of certified teachers in those communities. While NCLB mandates that certified teachers be in the classroom, it is not clear how to entice those teachers to rural areas.

In order to address similar problems in the inner cities of the United States, national programs have offered fiscal incentives to teachers that teach in troubled urban schools. Similar programs on the rural level have not been tried nationally, but may be the most logical answer to the quandary created by NCLB. Enticements such as increased pay for rural teachers, or forgiveness of student loans in return for commitments to teach at rural

schools for a certain number of years could be quite effective. However, it is uncertain whether the state budget will be able to support such incentives. Furthermore, since the school-age population is decreasing in the rural areas and increasing in the urban and suburban areas, this could complicate the issue of school crowding along the Wasatch Front by diverting already limited resources from areas with increasing school age population to areas with decreasing population demands but increasing costs.

Conclusion

Utahns exert a significant funding effort for K-12 and higher education. This is largely why Utah's tax burden ranks ninth highest among the 50 states. For many years, Utah's budget effort, or the proportion of spending allocated to K-12 education, had been among the highest in the nation. However, that budget effort fell in the 1990s as the state dedicated more resources to capital projects, especially highway improvements.

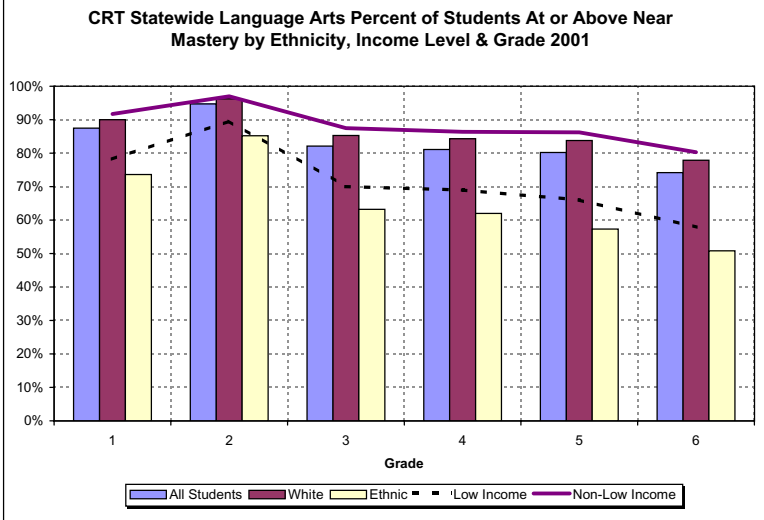
This emphasis on capital projects was intended to relieve traffic congestion caused by years of rapid population and economic growth. Since K-12 enrollment growth was flat for much of the 1990s, and economic growth brought strong revenue increases, this change in funding priorities did not harm per pupil funding, which increased at a healthy rate. Along with the rise in per-pupil spending, class sizes were reduced.

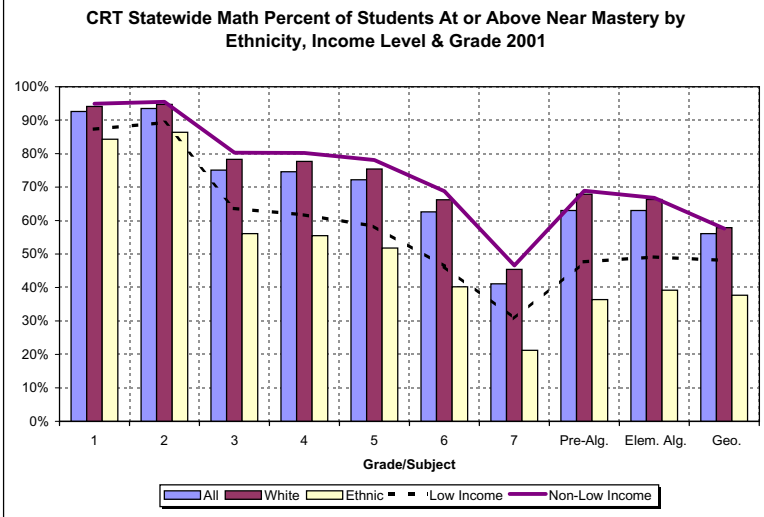
Now that enrollment growth is accelerating and the economy will likely grow at a slower pace, a reassessment of spending priorities may be needed to keep K-12 education funded at an adequate level. However, it appears that the most important factor in determining whether per-pupil funding will grow is the rate of economic growth. If the economy is reasonably strong and the state's K-12 budget effort is maintained at recent levels, per-pupil funding will increase even with rapid enrollment growth.

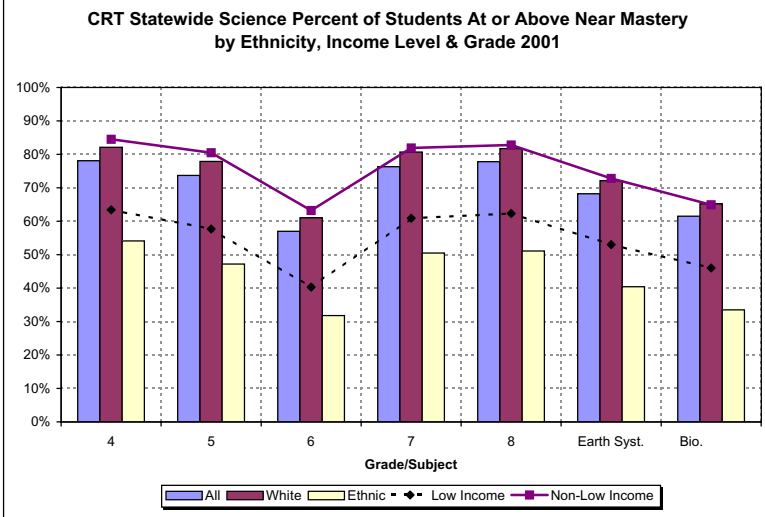
Utah stands in the middle of the pack in student performance on standardized tests. Results from the National Assessment of Educational Progress, the Stanford Achievement Test, and the American College Test show that, overall, Utah achieves an average level of performance. However, Utah would score below average were it not for favorable demographics. Increasing minority

Figure 27

Disaggregated Core Assessment Results





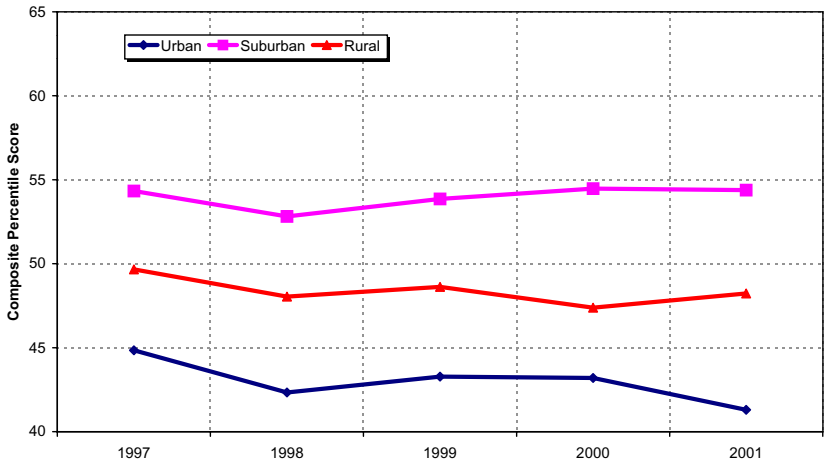


Source: USOE.

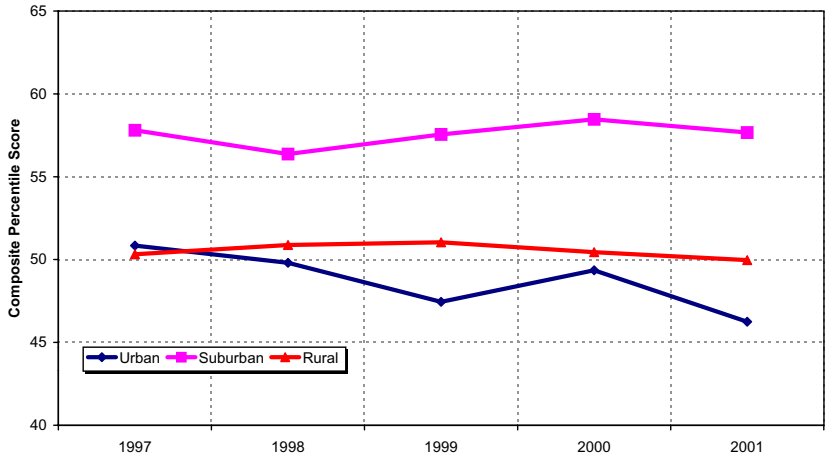
Figure 28

SAT 9 Results by Metro Status of School Districts.

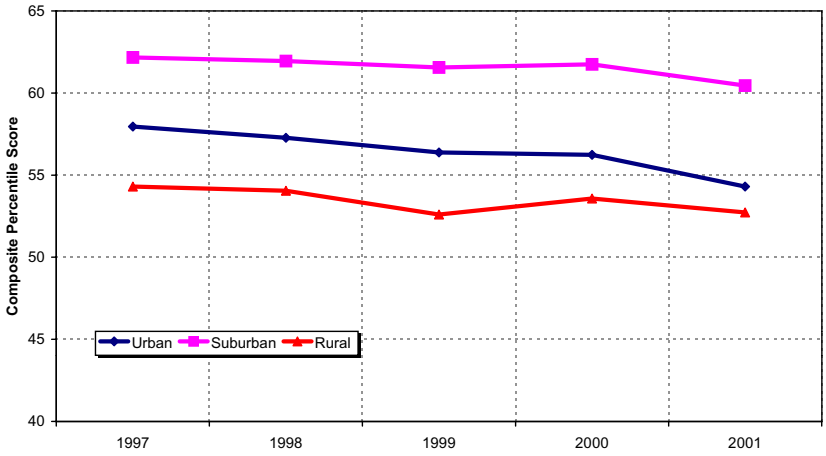
Comparison of 5th Grade Rural, Urban and Suburban Scores: SAT 9 Percentile Scores, 1997-2001



Comparison of 8th Grade Rural, Urban and Suburban Scores: SAT 9 Percentile Scores, 1997-2001



Comparison of 11th Grade Rural, Urban and Suburban Scores: SAT 9 Percentile Scores, 1997-2001



Source: USOE SAT 9 Data. Calculations by Utah Foundation.

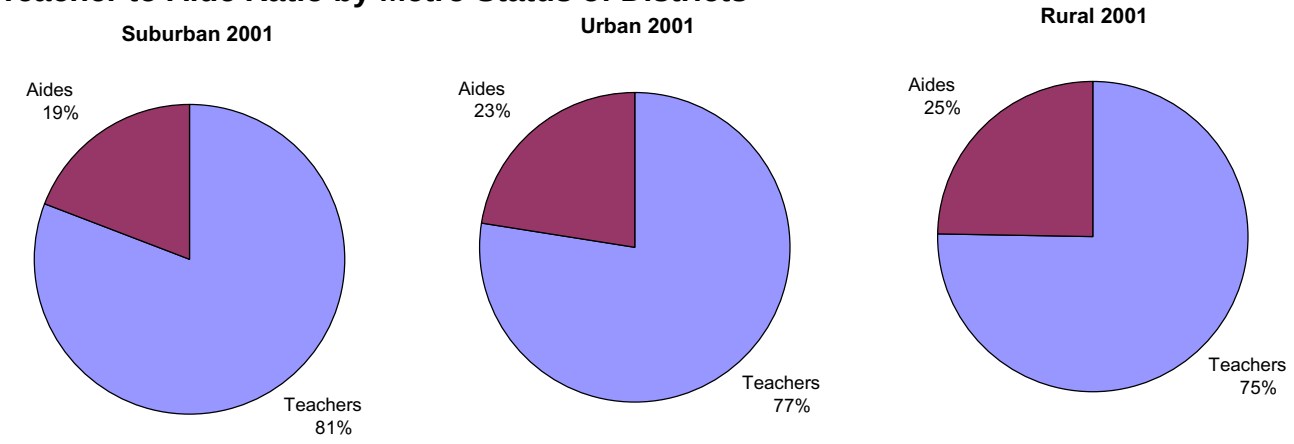
populations, which have greater prevalence of low income, lower levels of parental education, English language challenges, and other problems, will bring Utah's test scores below average unless educators can succeed in bridging the achievement gaps for minorities.

New federal requirements in the No Child Left Behind legislation will require extraordinary efforts by Utah's public education system to keep Utah schools from being classified as failing. It is not clear that Utah's public education system is prepared to succeed under the new law. Some structural changes may be needed, including strengthening the authority of the State Board of Education so that it can provide the oversight of local schools envisioned in the new federal law.

The challenges of the coming ten years will require the thoughtful attention of policymakers at all levels of government. This decade will not provide the favorable environment that existed in the 1990s, and concerted effort will be required to ensure Utah meets these challenges and succeeds.

Figure 29

Teacher to Aide Ratio by Metro Status of Districts



Source: U.S. Census Bureau Common Core of Data. Calculations by Utah Foundation.

Endnotes

[1] It is clear that the Bureau of the Census is overcounting higher education spending, because the percentage is too high to agree with state budget documents. However, this overcount appears to be consistent over time and consistently applied to other states as well as to Utah. The rankings are hopefully reasonably accurate, despite the error in absolute level of spending.

[2] Previously, participation in NAEP was voluntary in two ways. First, states could choose to not participate at all. Second, states could reject the use of certain schools as part of the sample of students being tested. This latter exception could lead to artificially high scores for some states.

[3] Utah Code section 53A-1a-107(1)(c).

[4] Utah Code section 53A-1-401(2).

[5] From the Utah State Office of Education consolidated Application for ESEA Programs.

[6] Perlich, Pamela S., Census Data Summary *Utah's Changing Face: Increasing Diversity in the 1990's;* Bureau of Economic and Business Research at the University of Utah, June 21, 2002.

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Appendix A

Demographic Indicators of Utah's School-Age Population

State	Median Age 4/1/2000	Rank Youngest to Oldest	Fertility Rate (# of live births per 1,000 women ages 15-44)	Rank Highest to Lowest	% of the Population 0-5 Years of Age	Rank Highest to Lowest	% of the Population 5-17 Years of Age	Rank Highest to Lowest	School-Age Dependency Ratio	Rank Highest to Lowest
Alabama	35.8	25	63.2	26	6.7%	26	18.6%	30	30.2	26
Alaska	32.4	3	73.1	5	7.6%	3	22.8%	2	35.7	2
Arizona	34.2	9	78.2	2	7.5%	5	19.1%	17	31.7	14
Arkansas	36.0	29	67.5	13	6.8%	18	18.6%	32	30.7	23
California	33.3	5	70.7	8	7.3%	6	20.0%	9	32.1	11
Colorado	34.3	10	67.2	14	6.9%	15	18.7%	28	28.9	40
Connecticut	37.4	44	61.3	33	6.6%	33	18.1%	38	29.5	32
Delaware	36.0	29	61.2	35	6.6%	32	18.2%	35	29.3	35
Florida	38.7	49	65.1	20	5.9%	47	16.9%	49	28.3	45
Georgia	33.4	6	67.2	14	7.3%	8	19.2%	16	30.1	27
Hawaii	36.2	34	69.6	9	6.5%	37	17.9%	44	28.8	42
Idaho	33.2	4	72.3	6	7.5%	4	21.0%	3	34.8	3
Illinois	34.7	12	68.3	11	7.1%	12	19.0%	20	30.8	22
Indiana	35.2	14	64.3	23	7.0%	14	18.9%	22	30.7	23
Iowa	36.6	40	61.4	32	6.4%	38	18.7%	29	31.1	19
Kansas	35.2	14	67.1	16	7.0%	13	19.5%	12	32.4	9
Kentucky	35.9	26	61.6	31	6.6%	31	18.0%	42	28.7	43
Louisiana	34.0	8	66.7	17	7.1%	11	20.2%	6	33.1	7
Maine	38.6	48	49.7	49	5.5%	50	18.1%	41	29.1	37
Maryland	36.0	29	60.1	39	6.7%	25	18.9%	23	30.0	29
Massachusetts	36.5	39	58.5	42	6.3%	41	17.3%	48	27.6	49
Michigan	35.5	21	60.4	38	6.8%	20	19.3%	15	31.4	16
Minnesota	35.4	19	61.8	30	6.7%	23	19.5%	11	31.6	15
Mississippi	33.8	7	68.3	11	7.2%	9	20.1%	7	33.2	6
Missouri	36.1	33	62.9	28	6.6%	28	18.9%	24	31.0	21
Montana	37.5	45	59.0	41	6.1%	45	19.4%	14	31.8	13
Nebraska	35.3	16	65.2	19	6.8%	17	19.5%	13	32.4	9
Nevada	35.0	13	77.9	3	7.3%	7	18.3%	34	28.9	40
New Hampshire	37.1	43	52.3	48	6.1%	43	18.9%	25	30.0	29
New Jersey	36.7	41	64.3	23	6.7%	22	18.1%	39	29.2	36
New Mexico	34.6	11	72.2	7	7.2%	10	20.8%	4	34.5	4
New York	35.9	26	63.9	25	6.5%	34	18.2%	37	29.1	37
North Carolina	35.3	16	66.6	18	6.7%	21	17.7%	46	27.8	48
North Dakota	36.2	34	58.3	44	6.1%	42	18.9%	26	31.3	17
Ohio	36.2	34	61.2	35	6.6%	27	18.8%	27	30.6	25
Oklahoma	35.5	21	69.0	10	6.8%	16	19.1%	19	31.3	17
Oregon	36.3	38	64.7	22	6.5%	36	18.2%	36	29.1	37
Pennsylvania	38.0	47	56.9	46	5.9%	46	17.9%	45	29.5	32
Rhode Island	36.7	41	57.5	45	6.1%	44	17.5%	47	28.3	45
South Carolina	35.4	19	61.3	33	6.6%	29	18.6%	33	29.7	31
South Dakota	35.6	23	65.1	20	6.8%	19	20.0%	8	34.0	5
Tennesse	35.9	26	63.1	27	6.6%	30	18.0%	43	28.6	44
Texas	32.3	2	76.2	4	7.8%	2	20.4%	5	33.0	8
Utah	**27.1**	**1**	**91.4**	**1**	**9.4%**	**1**	**22.8%**	**1**	**38.5**	**1**
Vermont	37.7	46	49.1	50	5.6%	49	18.6%	31	29.5	32
Virginia	35.7	24	59.1	40	6.5%	35	18.1%	40	28.2	47
Washington	35.3	16	62.3	29	6.7%	24	19.0%	21	30.1	27
West Virginia	38.9	50	53.7	47	5.6%	48	16.7%	50	26.7	50
Wisconsin	36.0	29	58.5	42	6.4%	39	19.1%	18	31.1	19
Wyoming	36.2	34	60.9	37	6.3%	40	19.8%	10	31.9	12

Source: Bureau of the Census.

Appendix B

Utah State Expenditures From State Sources

Adjusted for Inflation (2001 Dollars, in Thousands)

Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	$ Growth 1991-'95	% Growth 1991-'95	$ Growth 1995-'00	% Growth 1995-'00
Operations															
K-12 Education	$1,412,978	$1,477,147	$1,490,831	$1,548,536	$1,608,815	$1,695,766	$1,734,910	$1,852,613	$1,862,253	$1,931,018	$1,931,934	$282,788	20.0%	$236,168	13.9%
Higher Education	524,211	542,000	557,063	584,487	608,214	638,064	670,604	679,701	695,680	718,078	748,971	113,853	21.7%	110,908	17.4%
Transportation	156,663	167,130	146,290	170,544	152,997	161,234	161,921	160,898	162,847	163,630	169,013	4,571	2.9%	7,779	4.8%
Law and Order*	222,296	250,286	250,664	256,702	267,077	299,804	325,798	349,257	376,778	411,111	446,639	77,507	34.9%	146,835	49.0%
Health	145,152	160,649	179,478	188,278	213,848	243,533	266,779	265,457	292,515	319,917	336,871	98,382	67.8%	93,338	38.3%
All Other	566,225	587,046	612,374	634,284	652,048	718,338	673,610	691,623	720,818	743,497	771,660	152,114	26.9%	53,321	7.4%
Total Operations	**$3,027,524**	**$3,184,258**	**$3,236,699**	**$3,382,830**	**$3,502,999**	**$3,756,739**	**$3,833,621**	**$3,999,549**	**$4,110,892**	**$4,287,251**	**$4,405,089**	**$729,215**	**24.1%**	**$648,350**	**17.3%**
Capital Spending															
K-12 Education	$12,349	$9,299	$8,165	$10,816	$10,675	$32,163	$29,231	$28,928	$28,279	$32,600	$34,411	$19,814	160.5%	$2,248	7.0%
Higher Education	522	231	427	4,581	17,435	1,162	2,554	31,980	9,282	20,621	19,021	640	122.6%	17,859	1537.0%
Transportation	142,151	148,653	166,263	135,679	205,289	166,469	196,075	342,798	366,093	335,537	329,989	24,318	17.1%	163,520	98.2%
All Other	155,893	142,928	156,415	64,279	62,857	63,566	64,344	93,132	96,766	60,002	51,758	-92,327	-59.2%	-11,808	-18.6%
Total Capital Spending	**$310,914**	**$301,111**	**$331,270**	**$215,355**	**$296,256**	**$263,361**	**$292,204**	**$496,838**	**$500,420**	**$448,760**	**$435,179**	**-$47,554**	**-15.3%**	**$171,818**	**65.2%**
Debt Service	**$92,102**	**$80,649**	**$83,592**	**$80,007**	**$89,784**	**$100,591**	**$114,008**	**$110,466**	**$140,630**	**$162,206**	**$163,594**	**$8,489**	**9.2%**	**$63,003**	**62.6%**
Other	**$8,238**	**$8,866**	**$9,161**	**$6,764**	**$5,267**	**$185**	**$5,934**	**$0**	**$0**	**$0**	**$18,943**	**-$8,053**	**-97.8%**	**$18,758**	**10153.2%**
Total Spending	**$3,438,778**	**$3,574,884**	**$3,660,721**	**$3,684,957**	**$3,894,306**	**$4,120,876**	**$4,245,767**	**$4,606,854**	**$4,751,943**	**$4,898,217**	**$5,022,804**	**$682,097**	**19.8%**	**$901,929**	**21.9%**

* Law and Order includes Corrections, Courts, Public Safety, and National Guard.

Source: State Budget Summaries, various years. Compilations by Utah Foundation.

Appendix C

Projected K-12 Funding Per Pupil From State Sources

Assuming a strong economy (4.2% average Personal Income growth)

	0% of Expected In-Migration				50% of Expected In-Migration				100% of Expected In-Migration			
		Budget Effort				Budget Effort				Budget Effort		
		Minimum*	Moderate*	Maximum*		Minimum*	Moderate*	Maximum*		Minimum*	Moderate*	Maximum*
Year	K-12 Enrollment	Spending Per Pupil	Spending Per Pupil	Spending Per Pupil	K-12 Enrollment	Spending Per Pupil	Spending Per Pupil	Spending Per Pupil	K-12 Enrollment	Spending Per Pupil	Spending Per Pupil	Spending Per Pupil
2001-02	477,160	$3,573	$3,573	$3,573	477,160	$3,573	$3,573	$3,573	477,160	$3,573	$3,573	$3,573
2002-03	475,508	3,480	3,480	3,480	478,071	3,461	3,461	3,461	480,635	3,442	3,442	3,442
2003-04	476,483	3,297	3,527	3,834	482,625	3,255	3,483	3,785	488,768	3,215	3,439	3,738
2004-05	480,283	3,397	3,634	3,949	488,956	3,336	3,569	3,879	497,629	3,278	3,507	3,812
2005-06	486,012	3,488	3,731	4,056	497,241	3,409	3,647	3,964	508,469	3,334	3,566	3,877
2006-07	494,543	3,571	3,820	4,153	506,677	3,486	3,729	4,053	518,810	3,404	3,642	3,958
2007-08	503,806	3,652	3,907	4,247	516,712	3,561	3,809	4,141	529,617	3,474	3,717	4,040
2008-09	513,562	3,742	4,003	4,351	526,928	3,647	3,902	4,241	540,294	3,557	3,805	4,136
2009-10	523,777	3,839	4,107	4,464	537,927	3,738	3,999	4,347	552,077	3,642	3,896	4,235
2010-11	535,208	3,934	4,209	4,575	549,988	3,829	4,096	4,452	564,767	3,728	3,988	4,335
2011-12	547,225	4,025	4,306	4,680	563,409	3,909	4,182	4,546	579,594	3,800	4,065	4,419
Change	70,065	$452	$732	$1,107	86,249	$336	$609	$972	102,434	$227	$492	$846
% Change	14.7%	12.6%	20.5%	31.0%	18.1%	9.4%	17.0%	27.2%	21.5%	6.4%	13.8%	23.7%

Assuming a slow economy (2% average Personal Income growth)

	0% of Expected In-Migration				50% of Expected In-Migration				100% of Expected In-Migration			
		Budget Effort				Budget Effort				Budget Effort		
		Minimum*	Moderate*	Maximum*		Minimum*	Moderate*	Maximum*		Minimum*	Moderate*	Maximum*
Year	K-12 Enrollment	Spending Per Pupil	Spending Per Pupil	Spending Per Pupil	K-12 Enrollment	Spending Per Pupil	Spending Per Pupil	Spending Per Pupil	K-12 Enrollment	Spending Per Pupil	Spending Per Pupil	Spending Per Pupil
2001-02	477,160	$3,573	$3,573	$3,573	477,160	$3,573	$3,573	$3,573	477,160	$3,573	$3,573	$3,573
2002-03	475,508	3,480	3,480	3,480	478,071	3,461	3,461	3,461	480,635	3,442	3,442	3,442
2003-04	476,483	3,230	3,455	3,755	482,625	3,189	3,411	3,708	488,768	3,148	3,368	3,661
2004-05	480,283	3,261	3,489	3,792	488,956	3,203	3,427	3,725	497,629	3,147	3,367	3,660
2005-06	486,012	3,280	3,509	3,814	497,241	3,206	3,430	3,728	508,469	3,135	3,354	3,646
2006-07	494,543	3,281	3,510	3,815	506,677	3,202	3,426	3,724	518,810	3,127	3,346	3,637
2007-08	503,806	3,278	3,507	3,811	516,712	3,196	3,419	3,716	529,617	3,118	3,336	3,626
2008-09	513,562	3,273	3,501	3,806	526,928	3,190	3,412	3,709	540,294	3,111	3,328	3,617
2009-10	523,777	3,266	3,494	3,798	537,927	3,180	3,402	3,698	552,077	3,099	3,315	3,603
2010-11	535,208	3,253	3,480	3,783	549,988	3,166	3,387	3,681	564,767	3,083	3,298	3,585
2011-12	547,225	3,238	3,464	3,766	563,409	3,145	3,365	3,657	579,594	3,058	3,271	3,555
Change	70,065	-$335	-$109	$193	86,249	-$428	-$208	$84	102,434	-$516	-$302	-$18
% Change	14.7%	-9.4%	-3.0%	5.4%	18.1%	-12.0%	-5.8%	2.4%	21.5%	-14.4%	-8.5%	-0.5%

Budget effort is the proportion of General Fund and Uniform School Fund revenues spent on K-12 Education. Minimum effort is 43% (the lowest amount seen in the past decade), moderate effort is 46%, and maximum effort is 50% (the highest in the past decade was 49.7%).

Appendix D

National Assessment of Educational Progress (NAEP)

Recent Results by State

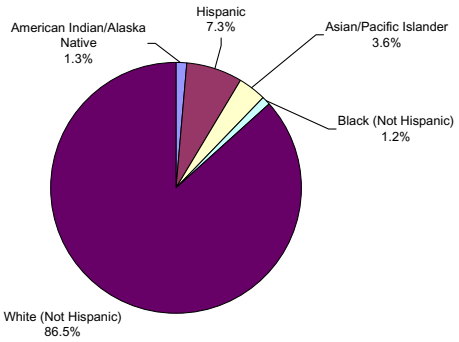
	4th Math 2000	Rank	8th Math 2000	Rank	4th Science 2000	Rank	8th Science 2000	Rank	8th Writing 2000	Rank	4th Reading 1998	Rank	8th Reading 1998	Rank
Nation	226		274		148		149		148		215		261	
Alabama	218	34	262	34	143	30	141	33	144	21	207	29	255	30
Arizona	219	33	271	27	141	33	146	26	143	24	209	27	261	23
Arkansas	217	36	261	36	144	29	143	30	137	32	211	23	256	28
California	214	38	262	34	131	39	132	37	141	28	202	32	253	32
Colorado	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	151	n/a	217	12	264	14
Connecticut	234	3	282	10	156	9	154	15	165	1	222	7	272	2
Delaware	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	144	n/a	213	17	256	28
Florida	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	142	n/a	208	28	253	32
Georgia	220	29	266	30	143	30	144	28	146	17	212	20	257	26
Hawaii	216	37	263	32	136	37	132	37	135	34	203	31	250	36
Idaho	227	18	278	14	153	16	159	8	n/a	n/a	n/a	n/a	268	5
Illinois	225	23	277	16	151	19	150	19	n/a	n/a	n/a	n/a	n/a	n/a
Indiana	234	3	283	5	155	12	156	11	n/a	n/a	n/a	n/a	n/a	n/a
Iowa	233	5	n/a	n/a	160	3	n/a	n/a	n/a	n/a	225	4	n/a	n/a
Kansas	232	7	284	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Kentucky	221	28	272	25	152	17	152	17	146	17	213	17	262	17
Louisiana	218	34	259	38	139	35	136	35	136	33	204	30	252	34
Maine	231	10	284	3	161	2	160	6	155	2	227	2	273	1
Maryland	222	27	276	19	146	28	149	22	147	16	211	23	262	17
Massachusetts	235	1	283	5	162	1	161	2	155	2	226	3	269	4
Michigan	231	10	278	14	154	14	156	11	n/a	n/a	216	14	n/a	n/a
Minnesota	235	1	288	1	157	8	160	6	148	12	221	8	267	6
Mississippi	211	40	254	39	133	38	134	36	134	35	199	33	251	35
Missouri	229	16	274	23	156	9	156	11	142	26	220	10	263	16
Montana	230	14	287	2	160	3	165	1	150	9	n/a	n/a	270	3
Nebraska	226	22	281	11	150	20	157	10	n/a	n/a	n/a	n/a	n/a	n/a
Nevada	220	29	268	29	142	32	143	30	140	30	n/a	n/a	257	26
New Hampshire	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	228	1	n/a	n/a
New Mexico	214	38	260	37	138	36	140	34	141	28	211	23	258	25
New York	227	18	276	19	149	23	149	22	146	17	215	16	266	7
North Carolina	232	7	280	13	148	24	147	25	150	9	212	20	264	14
North Dakota	231	10	283	5	160	3	161	2	n/a	n/a	n/a	n/a	n/a	n/a
Ohio	231	10	283	5	154	14	161	2	n/a	n/a	n/a	n/a	n/a	n/a
Oklahoma	225	23	272	25	152	17	149	22	152	7	n/a	n/a	265	11
Oregon	227	18	281	11	150	20	154	15	149	11	n/a	n/a	266	7
Rhode Island	225	23	273	24	148	24	150	19	148	12	217	12	262	17
South Carolina	220	29	266	30	141	33	142	32	140	30	210	26	255	30
Tennessee	220	29	263	32	147	26	146	26	148	12	212	20	259	24
Texas	233	5	275	21	147	26	144	28	154	4	213	17	262	17
Utah	**227**	**18**	**275**	**21**	**155**	**12**	**155**	**14**	**143**	**24**	**220**	**10**	**265**	**11**
Vermont	232	7	283	5	159	6	161	2	n/a	n/a	n/a	n/a	n/a	n/a
Virginia	230	14	277	16	156	9	152	17	153	5	221	8	266	7
Washington	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	148	n/a	n/a	n/a	265	11
West Virginia	225	23	271	27	150	20	150	19	144	21	216	14	262	17
Wisconsin	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	153	n/a	224	5	266	7
Wyoming	229	16	277	16	158	7	158	9	146	17	223	6	262	17

Source: Nation's Report Card, various years, National Center for Education Statistics (NCES).

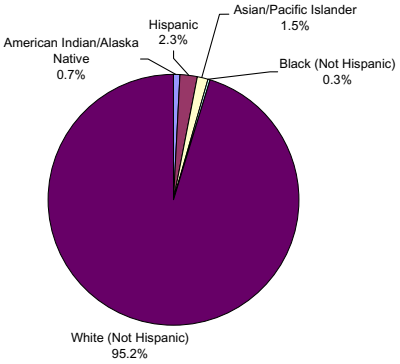
Appendix E

Racial Composition of Utah's Urban, Suburban, and Rural School Districts

Urban School Districts: 1991



Suburban School Districts: 1991



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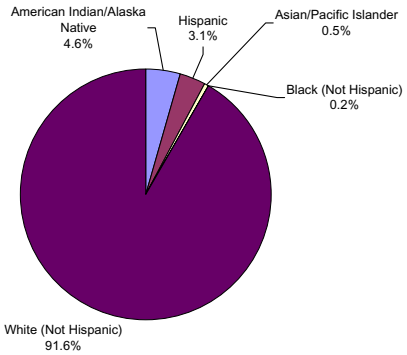

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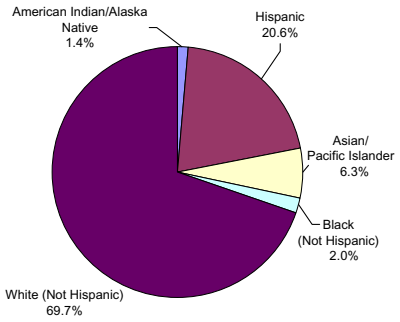

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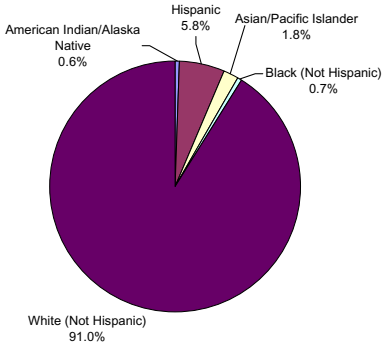
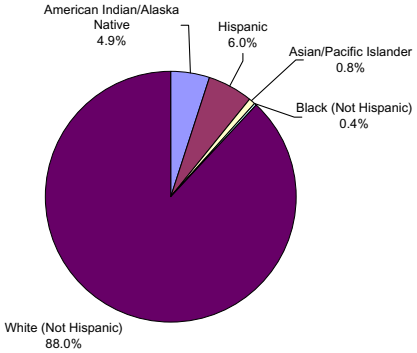


Rural School Districts: 2001



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