

Report Number 661  
October 2003

### Highlights

- Federal sources show Utah state government expenditures were the fastest growing of any state during the 1990s. When adjusted in proportion to personal income growth, Utah still ranks fifth.
- State sources show a slower growth rate. In 1991, \$120.21 of every \$1,000 in personal income went to pay for state government expenditures. By 2002, that had increased to \$126.69.
- The drivers of growth were health, corrections, and transportation capital spending. Other budget areas either declined or stayed level relative to personal income.
- Since 1999, federal funds have brought almost as much revenue to the state as the state General Fund.
- Dedicated credits make up a larger portion of funding than they did in 1992.
- 55 of every 1,000 jobs in Utah are state government jobs. This is down slightly from 60 per 1,000 in 1992 and 1993.
- Federal employees receive high wages in Utah, while state employees are generally on par with the private sector, and local government employees are lower.

Utah Foundation is a nonprofit, non-advocacy research organization. Our mission is to encourage informed public policy making and to serve as Utah's trusted source for independent, objective research on crucial public policy issues.

4141 Highland Drive, Suite 102  
Salt Lake City, Utah 84124  
(801) 272-8824  
www.utahfoundation.org

## Utah State Government Growth: 1991 to 2002

### Introduction

Over the past decade, Utah Foundation has periodically reviewed state government growth in Utah and compared it to the growth in personal income for the state. The purpose of these reports was to address the questions: How fast is state government growing? And is state government growing faster than residents' ability to pay for it? Reports addressing these questions were published in 1995, 1997 and 1999.

The decade saw three events that changed the lens through which state government operations are viewed. The first was the reorganization of state government in 1996 to align itself with federal welfare reform. Utah state government departments from Economic Development to Health were affected by this reorganization. The second event was the 2002 Winter Games in Salt Lake, which predicated a large buildup in capital expenditures, such as highway construction. While some of the work done was backlog that had been delayed during the mid to late 1980s due to a weak economic situation in the state, much of the work was newly requested infrastructure. The third event to impact Utah governmental expenditures was that of the recession, dated from March 2001 and subsequent decline in revenue to state coffers. Tied to all three of these issues was the realignment of federal budgetary priorities, first with welfare reform and Medicaid funding then after the events of September 11, 2001, a focus on homeland security that benefited Utah during the Winter Games. Federal funds comprise approximately one quarter of Utah's budget and, in fiscal year 2002, brought nearly as much money to the state as was raised locally in the General Fund. Any changes in the allocation of these monies on the part of Congress are going to impact Utah greatly.

This report will update the work done previously by Utah Foundation on state government growth. The analysis will focus on budgetary concerns, comparing the growth in operating budgets and capital budgets for the state and its departments between fiscal years 1991 and 2002. Comparisons will also be made between state government employment and wages relative to private employment and other governmental sectors. This is the second in a series of three reports that Utah Foundation is producing this year on state government finances. The first report, released in May was entitled "Redistributing Utah's Tax Resources: Benefits and Burdens around the State." The third and final in the series will be released shortly and will provide a look at state bonding and indebtedness over the decade of the 1990s.

### Utah's Position Relative to Other States 1992-2001

The U.S. Census Bureau compiles state revenue and expenditure figures for all 50 states annually. This series provides a comparison of each state's finances during the decade. Figure 1 shows that Utah state governmental expenditures grew at the fastest rate of any state during the period 1992 to 2001, the first and last years of available data. In order to understand whether that growth was faster or slower than general economic growth for each state, Utah Foundation calculated the ratio of government spending per \$1,000 of personal income. If a state's government expenditures grew just enough to keep up

**Figure 1****A Comparison of State Government Expenditure Growth: All States**

Area	Compound Annual Growth Rate, 1992-2001			
	State Expenditures	Rank	Expend. per \$1,000 of PI	Rank
<b>United States</b>	<b>3.3%</b>	<b>NA</b>	<b>0.6%</b>	<b>NA</b>
Utah	6.3%	1	2.2%	5
Colorado	6.1%	2	1.0%	21
North Carolina	6.0%	3	2.8%	3
Mississippi	5.8%	4	3.4%	2
Idaho	5.2%	5	1.6%	10
Alaska	5.1%	6	4.4%	1
Nevada	4.9%	7	-0.9%	43
Arkansas	4.7%	8	2.6%	4
Texas	4.7%	9	0.8%	24
Georgia	4.7%	10	0.5%	34
Florida	4.6%	11	1.4%	15
South Carolina	4.3%	12	1.6%	11
Virginia	4.3%	13	1.3%	16
Montana	4.2%	14	2.2%	6
New Mexico	4.2%	15	1.5%	14
Missouri	4.2%	16	1.9%	8
Oregon	4.1%	17	1.0%	22
Minnesota	4.1%	18	0.8%	23
Kansas	3.9%	19	2.0%	7
California	3.8%	20	1.3%	18
Kentucky	3.7%	21	1.5%	12
Iowa	3.7%	22	1.9%	9
Arizona	3.6%	23	-1.5%	44
Wisconsin	3.5%	24	1.1%	20
Delaware	3.4%	25	0.8%	26
Tennessee	3.4%	26	0.6%	32
Maryland	3.2%	27	0.7%	28
Maine	3.2%	28	1.3%	19
Alabama	3.2%	29	1.3%	17
Washington	3.2%	30	-0.2%	40
Nebraska	3.1%	31	0.8%	27
South Dakota	3.1%	32	0.6%	30
Indiana	3.0%	33	0.8%	25
Vermont	2.9%	34	0.3%	37
Massachusetts	2.9%	35	-0.2%	42
Connecticut	2.9%	36	0.6%	29
Illinois	2.8%	37	0.5%	33
Michigan	2.8%	38	0.6%	31
West Virginia	2.6%	39	1.5%	13
Ohio	2.0%	40	0.4%	35
Pennsylvania	2.0%	41	0.4%	36
New York	2.0%	42	0.0%	39
North Dakota	1.7%	43	0.1%	38
Wyoming	1.2%	44	-1.7%	46
Louisiana	0.5%	45	-1.6%	45
New Hampshire	0.5%	46	-3.4%	50
New Jersey	0.4%	47	-2.2%	49
Rhode Island	0.3%	48	-1.8%	47
Oklahoma	0.2%	49	-2.2%	48
Hawaii	-0.1%	50	-0.2%	41

Source: US Census Bureau, State Government Finance Series; US Bureau of Labor Statistics, CPI Series; and US Bureau of Economic Analysis, Personal Income Series. Calculations by Utah Foundation.

with growth in its economy, this ratio would be the same across the years examined, and growth in the ratio would be zero. All but 12 states saw growth in this ratio from 1992 to 2001, meaning their government spending grew faster than their economies. Utah was near the top on this measure also, ranking fifth highest in the nation.

The ten states that had the highest growth in direct state government expenditures are mainly southern and western states that also experienced significant population growth during the 1990s. It makes intuitive sense that a burgeoning population is going to demand a greater level of governmental services. What is perhaps most interesting is comparing the rankings of the top ten states to their rankings in government expenditures per \$1,000 of personal income. The state that stands out the most when the two rankings are compared is Nevada. Even though its state government expenditures were growing at an average annual rate of 4.9 percent, government expenditures per \$1,000 of personal income were declining at an average annual rate of 0.9 percent. The economy was outpacing government at a rapid rate.

It is important to consider the tax structure of each state when comparing these growth rates. Again turning to Nevada, since the state imposes no personal or corporate income tax, revenues to state coffers are likely to grow more slowly, since sales taxes do not keep pace with economic growth as well as income taxes. In that same light, since Utah levies both a sales and an income tax, as the economy grows, revenues to the state are more likely to keep pace; and as revenues grow, so will expenditures.

Even in this light, Utah government expenditures appear to have grown at rates that require further in-depth analysis. What were the drivers of such an increase? Are certain sectors of state government demanding greater allocations of funding? The next sections will analyze these issues in further detail. It is important to note that in order to provide this more detailed analysis, it is necessary to change data sources. While the Census Bureau data is important for providing comparisons among the states on general budgetary items, it does not provide the detail needed for a comprehensive look at Utah's state government growth. This detail is found in the state's own budget documents from the Governor's Office of Planning and Budget (GOPB). All of the subsequent analysis in this report uses the GOPB budget documents.

### State Government Growth 1991-2002

Total state government expenditures grew rapidly in the early part of the decade and growth was evenly distributed between operations and capital. Figure 2 shows that operations expenditures grew at a compound annual rate of 5.6 percent between 1991 and 1996, while non-operations (capital and debt service) grew 5.3 percent annually. This was slightly faster than the growth of the economy in Utah. As measured by personal income, the economy in the state grew at a compound rate of 4.5 percent during the

same time period. During the later part of the time series, state government operations expenditures slowed to an average annual growth rate of 3.7 percent while non-operations expenditures grew at a rate of 7.4 percent, reflecting continued capital expenditure growth and increased debt service to pay for projects bonded during the early 1990s. The overall government compound annual growth rate from 1996 to 2002 was 4.1 percent, coinciding with the average annual growth rate of personal income. Since all of these figures are adjusted to account for inflation, these growth rates are indicative of growth in spending, not in the purchasing power of the dollar.

The last three columns in the table in Figure 2 help clarify how much a burden this increased government spending was on Utah's economy. In 1991, \$120.21 of every \$1,000 of economic activity in Utah paid for state government expenditures.<sup>1</sup> By 2002, that figure had increased to \$126.69. Operations expenditures peaked in 1996 at \$113.68, due to growth in Public Education, Law & Order and Health & Human Services. Non-operations peaked in 1998 at \$19.80 per \$1,000 of personal income. Total expenditures peaked in 1997 at \$129.99 per \$1,000 of personal income. Figure 2 also includes a pictorial expression of total operational and non-operational budgets.

Utah Foundation then divided these total budgetary figures into major categories: Public Education; Health and Human Services, including the Department of Environmental Quality; Higher Education; Transportation, both operations and capital; Law and Order, which includes Corrections, Courts, Public Safety and the National Guard; Capital, meaning non-transportation related capital expenditures and debt service; and Other Operations, which includes all other state departments not included in the above listed budgetary categories. Adding Human Services to the Health budgetary category is a departure for Utah Foundation from prior reports. This was done because the federal department charged with funding and

**Figure 2**

**Utah State Government Expenditures: Operations, Non-Operations, and Total Compared to Personal Income**

Fiscal Year*	Total Operations	Non-Operations	Total Expenditures	Personal Income (\$000s)	Per \$1,000 of Personal Income			
					Total Operations	Non-Operations	Total Expenditures	
1991	\$3,720,107,991	\$429,510,310	\$4,149,618,301	\$34,520,173	\$107.77	\$12.44	\$120.21	
1992	3,906,261,468	451,396,331	4,357,657,799	35,781,427	109.17	12.62	121.79	
1993	4,111,251,637	469,068,528	4,580,320,166	37,237,873	110.41	12.60	123.00	
1994	4,342,308,818	517,792,542	4,860,101,359	38,930,413	111.54	13.30	124.84	
1995	4,583,670,412	488,678,547	5,072,348,959	40,970,255	111.88	11.93	123.81	
1996	4,887,990,245	555,390,231	5,443,380,475	42,996,627	113.68	12.92	126.60	
1997	5,065,284,198	817,393,531	5,882,677,729	45,255,457	111.93	18.06	129.99	
1998	5,193,611,237	953,337,059	6,146,948,296	48,139,770	107.89	19.80	127.69	
1999	5,434,333,052	863,606,366	6,297,939,418	50,651,756	107.29	17.05	124.34	
2000	5,579,747,245	821,806,193	6,401,553,438	51,494,812	108.36	15.96	124.31	
2001	5,715,629,035	956,146,806	6,671,775,841	53,447,512	106.94	17.89	124.83	
2002	6,087,776,594	850,379,600	6,938,156,194	54,763,859	111.16	15.53	126.69	
CAGR 91-02**	4.6%	6.4%	4.8%	4.3%				
CAGR 91-96	5.6%	5.3%	5.6%	4.5%				
CAGR 96-02	3.7%	7.4%	4.1%	4.1%				
\$ Change from 1991 to 1996						\$5.92	\$0.47	\$6.39
\$ Change from 1996 to 2002						-\$2.52	\$2.61	\$0.09

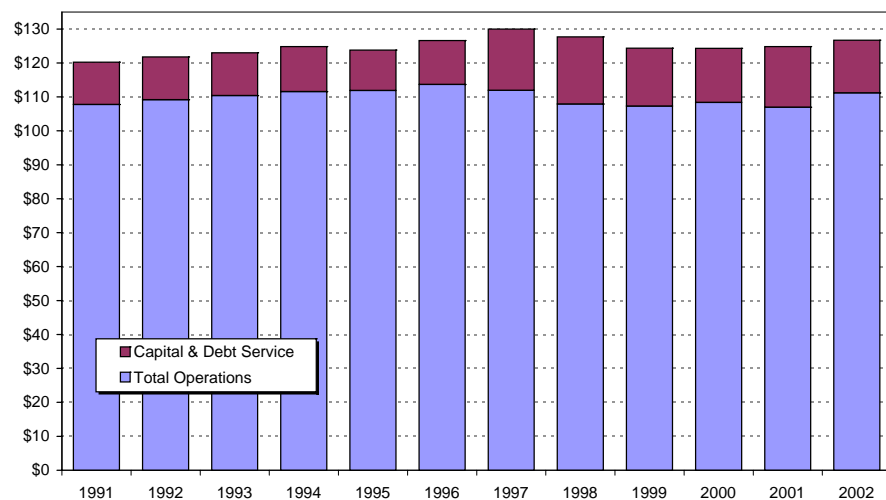
\* State Expenditures and Personal Income are in FY 2002 dollars.

\*\* CAGR 91-02 = Compound Annual Growth Rate for 11 years, 1991 to 2002.

CAGR 91-96 = Compound Annual Growth Rate, 1991 to 1996.

CAGR 96-02 = Compound Annual Growth Rate, 1996 to 2002.

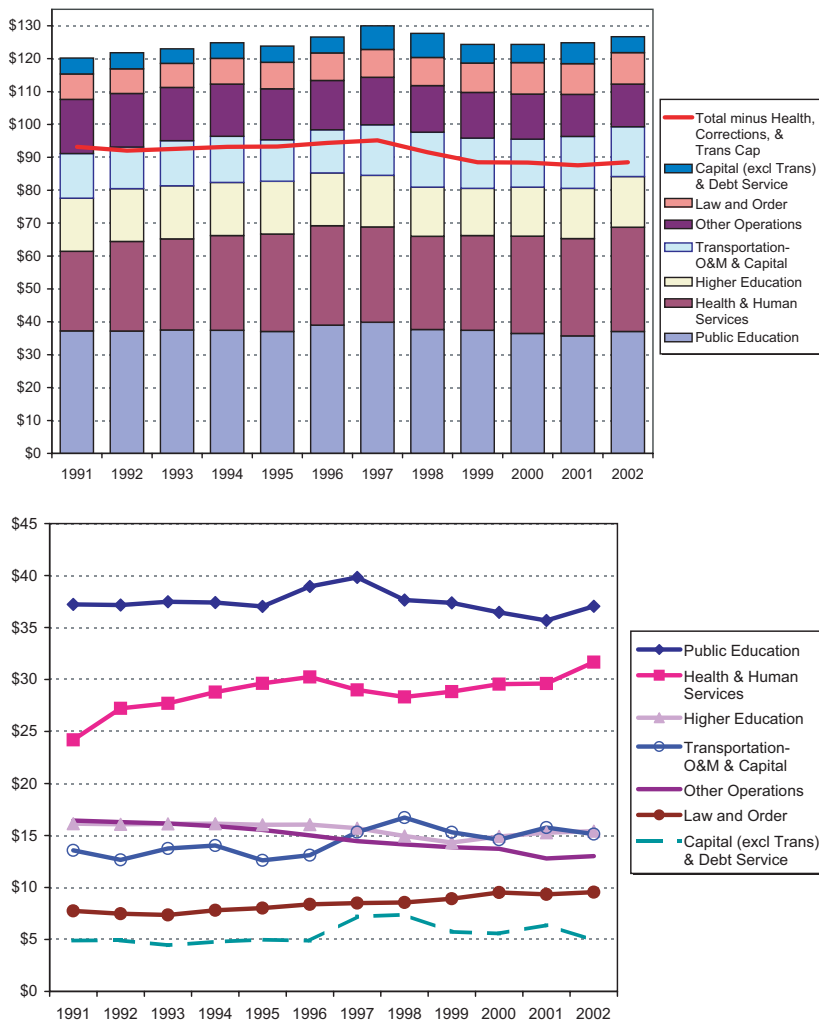
**Utah State Government Expenditures Per \$1,000 of Personal Income**



Source: Governor's Office of Planning and Budget, US BLS and BEA. Calculations by Utah Foundation.

**Figure 3**

**State Expenditures per \$1,000 of Personal Income by Major Budget Category: FY 1991 to 2002**



Source: Ibid.

**State public education funding was approximately the same per \$1,000 of personal income in 2002 as it was in 1991**

Departments, have changed radically. Although this report will not detail spending in individual divisions or offices, all background data and methodological changes are available from the author upon request.

Figure 3 breaks down funding allocations by the major budgetary categories listed above. The stacked bars list the categories from the largest to the smallest. Public education is Utah's largest budgetary expense, accounting for \$37.05 per \$1,000 of personal income in 2002. Health and Human Services follows this at \$31.66 and so forth. Capital is the smallest category, with \$4.89 per \$1,000 of personal income spent for non-transportation capital and all debt service in 2002. The line graph is included to provide a clearer illustration of each category's growth over time.

Examining each budgetary category over time helps understand how priorities change as demands diminish in one area and increase in other areas. State public education funding was approximately the same per

oversight of these agencies is the U.S. Department of Health and Human Services, therefore it was important for analysis to couple these agencies at the state level. Often, Medicaid funds are passed through the state Department of Health to Human Services. This relationship makes unraveling the funding for these two departments difficult and since they do have a complementary role to each other, it is important to examine them together. Another methodological concern was the reorganization of some departments with welfare reform legislation that led to the creation of the Department of Workforce Services (DWS). In order to ensure that departmental growth rates were an accurate reflection of actual growth, instead of a reflection of monies being moved between departments as responsibilities changed, Utah Foundation went back to 1991 and reallocated funding to the various departments involved in the change *as if* DWS had existed in 1991. Additionally, individual divisions and state offices were placed into the departments in which they reside currently, rather than in 1991. For example, individual offices and divisions in the old Business, Labor and Agriculture Department were assigned to their current departments of Natural Resources; Economic Development and Human Resources; and Commerce & Revenue, backdated to 1991. The downside to this methodological change is that this report cannot be compared to prior Utah Foundation work on this topic, since the units of measurement,

\$1,000 of personal income in 2002 as it was in 1991, \$37.05 in 2002 compared to \$37.22 in 1991. During the early 1990s while public school enrollments were growing, funding remained fairly flat. Funding peaked in 1997, with an infusion of one-time monies. Public Education funding declined during the latter part of the 1990s; however, enrollments were also declining, which was fortunate for policymakers, as this allowed them to focus on other pressing budget priorities, namely infrastructure and health care. Health and Human Services funding grew by \$7.46 from 1991 to 2002, the largest increase of any budgetary category. However, in 1991, within the Department of Human Services, the Division of Services for People with Disabilities was shown to have received most of its funding through dedicated credits. From 1992 forward, the division is shown to have received most of its funding from the General Fund. Analysts at the Governor's Office of Planning and Budget seemed to believe the dedicated credits counted in the 1991 budget were really federal Medicaid monies that passed through the Department of Health to the Department of Human Services. As this money was "dedicated" for use by Human Services it was accounted for in the dedicated credits column. Since 1992, transfers from the Department of Health have been accounted for in the "other" category. Because of this change, comparisons for Health and Human Services might be more accurate using 1992 as the base year. In so doing, this budget category increased by \$4.44 over the period. Throughout this report, Utah Foundation will provide growth rates for Health and Human Services using both 1991 and 1992 as the base year. 1992 data will be in parentheses () following the 1991 data.

Higher Education funding lost ground during decade, despite enrollment increasing by an average annual growth rate of 3.4 percent for in-state students. Funding for higher education began the decade at \$16.14 per \$1,000 of personal income, by 2002 that had dropped to \$15.41. Additionally, 1991 was the peak of higher education funding.

Transportation funding grew from \$13.56 to \$15.13 over the time period, however all of that growth was in capital spending; transportation operational budgets actually declined by \$1.53 from 1991 to 2002.

Departments within the "Other Operations" category also saw declines with funding at \$16.44 in 1991 compared to \$13.01 in 2002. For the departments in this category, 1991 was also the apex of their funding.

The budgetary category "Law and Order" saw a gain of \$1.81 during this time period. However, the gains were concentrated mainly in Corrections. Nominal gains were achieved in Public Safety and the National Guard while the Courts actually lost funding.

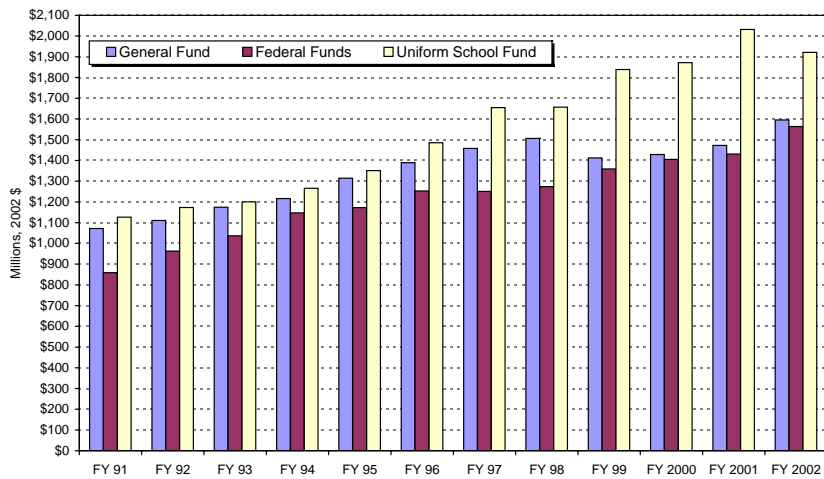
Finally, the "Capital" category in 2002 was at the same point it was in 1991, at approximately \$4.90 per \$1,000 of personal income. Capital had its peak in 1998 when it required \$7.37 of every \$1,000 of personal income (PI) to meet those obligations.

Figure 3 shows that there were some "winners" and "losers" in the budgetary battle from year to year and that capital infrastructure did require a significant monetary effort on the part of the state. Overall for the 1990s, it can be said that if Health, Corrections and Transportation capital were removed from the budgetary process, state government funding demands on Utah's economy declined from \$93.19 to \$88.49 per \$1,000 of personal income, down \$4.70. It is important to stress that since fiscal year 2002 dates from July 1 2001 to June 30 2002, much of the decline happened prior to the recession of March 2001.

**Higher Education funding lost ground during decade, despite enrollment increasing by an average annual growth rate of 3.4 percent for in-state students**

**Figure 4**

### A Comparison of Revenue by Fund Type



Source: Ibid.

These data provide important insight into Utah's state government finances, but the picture is not yet complete. As was stated earlier, federal funding is a large component of the state's budget and federal funding now contributes almost as much money to state coffers as is collected in the General Fund.<sup>2</sup> This is a new phenomenon. In 1991, federal funds to Utah were approximately \$858 million compared to General Fund monies of \$1,072 million. Thus, federal funds were about 80 percent of the size of the General Fund. Federal funds made a jump in 1992, up to 86 percent and oscillated between 88 and 94 percent through much of the decade. However, since 1999, federal funds have been above 95 percent.

Figure 4 provides a graphic representation of this, comparing the dollar amount received by Utah in federal funds, in the General Fund and the Uniform School Fund, which is the largest revenue category.

**The largest portion of federal funding goes to Health and Human Services and... the fastest growing category of federal funds is Law and Order**

Figure 5 compares state funds with federal funds and dedicated credits. Dedicated credits are "user fees" paid by those that participate in government programs or utilize state services. An example would be the entrance fee paid at a state park. State funds, in this case, are calculated as all revenue minus federal funds and dedicated credits. Using the budget documents produced by the Governor's Office of Planning and Budget, Utah Foundation's description of state funds includes General Fund, Uniform School Fund, Restricted and Trust funds, and "Other" monies. Within the "Other" category, there are monies such as mineral lease revenue and the gasoline tax revenue earmarked for the Transportation Fund. Restricted and Trust funds include school trust lands monies and tobacco settlement funds used for the Children's Health Insurance Program (CHIP). Federal funds, dedicated credits and state funds will each be examined in the subsequent paragraphs.

Starting with an analysis of federal funds, Figure 5 shows that the largest portion of federal funding goes to Health and Human Services and that funding has grown at an average annual rate of 1.9 percent since 1991 (0.6 percent since 1992). Following Health, the next largest recipient of federal funds is Transportation. Federal transportation funds have grown at an annual rate of 1.8 percent since 1991. The fastest growing category of federal funds is Law and Order. Federal funds contributed \$0.42 per \$1,000 of PI to this budgetary category in 1991. By 2002, this had grown to \$1.15 per \$1,000, an average annual growth rate of 9.1 percent. Much of that growth was between 1999 and 2002. The National Guard and Public Safety were the main benefactors, although Corrections did also benefit somewhat from increased federal funding. The increase in federal funds to the National Guard and Public Safety were anticipated because of the 2002 Winter Games. Some additional funding may have been awarded in the aftermath of 9-11-01, but that would only be reflected in the 2002 budget.

The next graph in Figure 5 analyzes dedicated credit funding. The largest

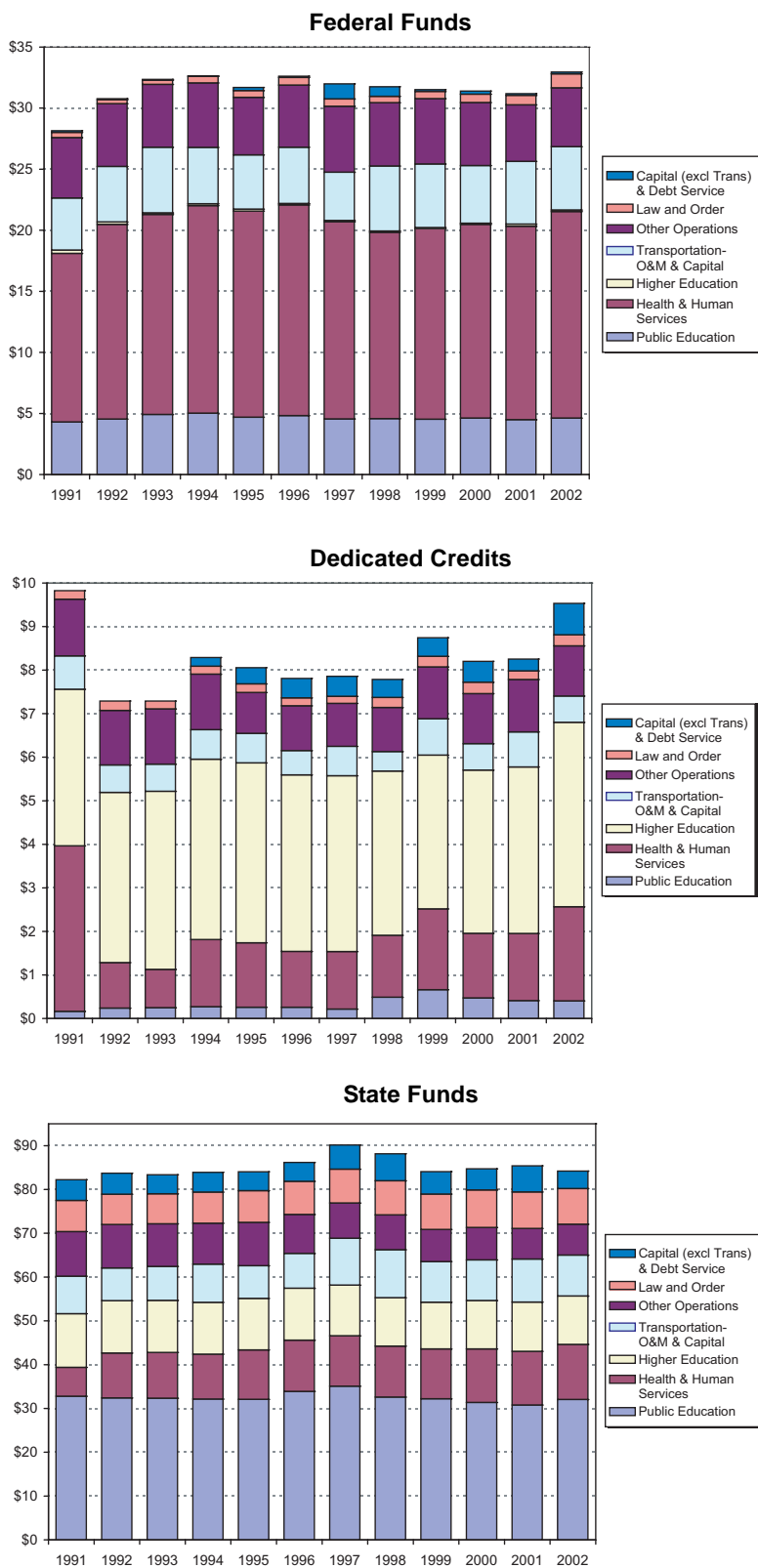
recipient of dedicated credits is Higher Education, where these funds come in the form of student tuition at the various schools. Funds from tuition have increased at an average annual rate of 1.5 percent. Within the Higher Education budgetary category, dedicated credits are the only funds that experienced growth during the 1990s. Despite shifting some Uniform School Fund revenues to Higher Education after the middle of the decade, state monies have declined at an average annual rate of 1.0 percent. Federal monies to Higher Education have declined more dramatically at a rate of 6.8 percent a year. Most of that decrease came in the early part of the 1990s. Starting in 1993, the only school to receive federal funds was Utah State University, mainly because of its role as a land-grant college and the federal programs, such as the agriculture experiment station, that are part of its status as a land-grant institution. This is not to say that the federal government doesn't have a monetary presence on Utah's campuses. Most students receive federally subsidized student loans and some qualify for federal aid in the form of Pell Grants and other assistance. However, direct federal spending at the college level has dwindled to almost negligible amounts.

Of all the budgetary categories, Public Education is the fastest growing, with an average annual rate of 8.5 percent. Dedicated credit funding within public education comes from participant fees in vocational rehabilitation and student fees at the state's schools for the deaf and blind. The State Office of Education also receives some dedicated credit funding.

When reviewing Health and Human Services dedicated credit funding, the anomaly of 1991 needs to be set aside; reviewing the data from 1992 onward presents a more complete picture. Dedicated credits contributed approximately 3.8 percent of total Health and Human Services funding in 1992. By 2002, dedicated credit funding had grown to 6.8 percent of the total. This growth is fueled by rapidly increasing health care costs and the flexibility given states to pass on these costs to Medicaid and CHIP participants. For example, Utah's CHIP program receives no General Fund revenue. The program is paid for entirely out of tobacco settlement funds, federal monies

**Figure 5**

**Federal Expenditures, Dedicated Credits, and State Government Funds per \$1,000 of Personal Income by Major Category**



Source: Ibid.

and the quarterly premiums and co-pays that enrollees contribute. Overall, dedicated credit funds grew at an average annual rate of 7.5 percent from 1992 to 2002.

For the rest of the budgetary categories, the 1990s were mixed in terms of dedicated credit funding. Transportation and Other Operations saw a decline in dedicated credit funding during the 1990s at an annual rate of 2.1 and 1.1 percent, respectively. Law and Order saw an average annual increase of 2.5 percent and Capital began the decade with no dedicated credit funding but by 2002 dedicated credits were \$0.72 per \$1,000 of PI.

Overall, if the anomaly of 1991 is excluded, dedicated credits grew at an average annual rate of 2.7 percent between 1992 and 2002. Dedicated credits also grew as a percentage of the total budget. In 1992, dedicated credits accounted for 6.0 percent of the total budget. By 2002, that percentage had grown to 7.5 percent. This is a little surprising in the face of conventional government financing. As dedicated credits are contributed directly by those that use a particular government service, it is to be expected during good economic times that user fee revenue decline as a percentage of total government budgets. Growing tax revenue during boom years can more easily absorb costs and lawmakers are usually loath to increase fees as it causes an almost immediate and vocal outcry. By the same token, during lean economic times, passing on the cost of government to those that utilize its services is a way to avoid tax increases. As the 1990s were some of the best fiscal times Utah has seen, that dedicated credit funding continued to grow and become a larger part of the budget goes against this convention wisdom. However, since universities and colleges were facing growing enrollments and health care costs were outpacing the ability of government to pay for those costs, perhaps the fact that dedicated credits grew is not remarkable.

**State funding looks very similar to overall funding, with public education as the largest component. The fastest growing budgetary category was Health and Human Services**

The final graph in Figure 5 details state funding of budgetary groups, removing the federal funds and dedicated credits discussed above. State funding looks very similar to overall funding, with public education as the largest component. The fastest growing budgetary category was Health and Human Services, which grew from \$6.60 in 1991, (\$10.54 in 1992) to \$12.60 per \$1,000 of PI in 2002. This was followed by Law and Order and Transportation, which grew by \$1.03 and \$0.80 per \$1,000 of PI, respectively.

Excluding these three categories, the remaining budget experienced declines. Other Operations saw the largest decline from \$10.18 per \$1,000 of PI in 1991 to \$7.04 in 2002. This was followed by Higher Education which experienced a decline in state funds of \$1.22 per \$1,000 of PI during this time and Capital and Public Education which saw declines around \$0.75 per \$1,000 of PI. These declines helped push the overall ratio of government spending to personal income down during the latter part of the decade. It is important to remember that decline is a relative term. State government still grew in the late 1990s, it just grew more slowly than it previously had and after growing slower than the economy in 1998 and 1999, it grew at roughly the same average annual rate as the economy thereafter. Earlier in the decade, government spending was growing more rapidly than personal income in Utah.

### **Employment and Wages**

State government employment and wages follow a similar pattern to overall spending, as to be expected, since employees are the largest cost item within any department's budget. Comparing state employment and



wages to that of the private sector and other governmental sectors provides insight into the importance of state jobs to the economy of Utah.

Figure 6 details employment in Utah during the period from fiscal year 1991 through fiscal year 2002. Figure 6 includes both the average employment by sector during each year as well as the ratio of each sector per 1,000 total workers in Utah. This is similar in function to dividing state government funding per \$1,000 of personal income. It addresses the question of whether state government employment is growing faster than total employment within the state. The bar graph in Figure 6 provides a pictorial view of each sector as a percentage of total non-farm employment within Utah.

As the data show, 2001 was the high point for total employment within Utah. During that year there were approximately 1.1 million jobs in Utah, 896,000 of which were in the private sector. Those figures declined somewhat in 2002; both because of the national economic downturn and the post-Olympics downsizing experienced in the service and construction sectors locally.<sup>3</sup> Overall, the private sector experienced annual growth of 3.8 percent during the decade, much of which came prior to 1996. Private sector jobs reached their relative peak in 1999 and 2000 when 828 out of every 1,000 workers in Utah were employed by the private sector, as shown in the last four columns of the chart.

State government saw similar overall growth, although not at quite the same rate. The average annual growth rate was 3.0 percent for state government during the decade. State government grew slightly from 2001 to 2002, adding 825 jobs. However, as a portion of total employment, state government reached its pinnacle in 1993, when Utah state government employed 60 of every 1,000 workers in the state. Since that time, state government employment has been on the decline, reaching a trough of 53 workers per 1,000 in 2000. It rebounded slightly in the last two years, the intersection of two forces. First, state government did add a few jobs during this time, as was stated above. Second, the decline in the private sector decreased the denominator, making state government jobs a larger part of the whole.

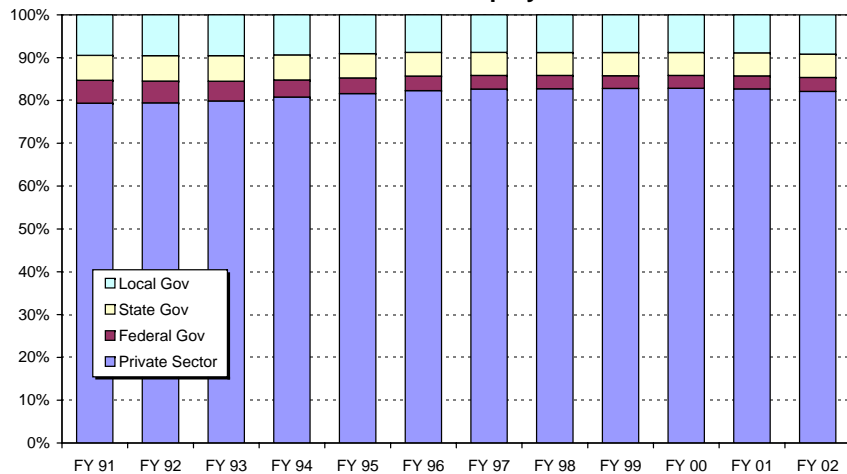
Federal employment in Utah declined during the decade, shedding jobs at an annual average rate of -1.1 percent, much of which happened between 1991 and 1996. Federal jobs reached their lowest point in 1999 with only 30,883 Utah residents employed by the federal government. This continues

**Figure 6**

**Utah Employment: Private Sector and Federal, State, and Local Government and as a Percentage of Total Non-Farm Employment**

Fiscal Year	Fiscal Year Average (000s)				Total Non-Farm	Employees per 1,000 of Non-Farm Employees			
	Private	Federal	State	Local		Private	Federal	State	Local
1991	584.06	39.40	42.82	69.73	736.01	794	54	58	95
1992	599.97	38.41	45.00	72.16	755.53	794	51	60	96
1993	628.29	36.40	46.90	75.14	786.73	799	46	60	96
1994	674.13	33.37	48.83	78.18	834.49	808	40	59	94
1995	721.17	32.38	50.20	80.14	883.88	816	37	57	91
1996	766.61	31.65	51.38	82.03	931.67	823	34	55	88
1997	805.90	31.33	52.44	85.68	975.36	826	32	54	88
1998	834.38	31.16	54.01	89.09	1008.64	827	31	54	88
1999	857.57	30.88	55.89	91.53	1035.87	828	30	54	88
2000	880.08	32.10	56.63	93.78	1062.58	828	30	53	88
2001	895.47	32.88	58.27	96.39	1083.01	827	30	54	89
2002	883.73	34.70	59.09	98.73	1076.26	821	32	55	92
CAGR 91-02	3.8%	-1.1%	3.0%	3.2%	3.5%				
CAGR 91-96	5.6%	-4.3%	3.7%	3.3%	4.8%				
CAGR 96-02	2.4%	1.5%	2.4%	3.1%	2.4%				
Change (000s) from 1991 to 1996						29	-20	-3	-7
Change (000s) from 1996 to 2002						-2	-2	0	4

**Public and Private Employment as a Percent of Total Utah Non-Farm Employment**



Source: US Bureau of Labor Statistics.

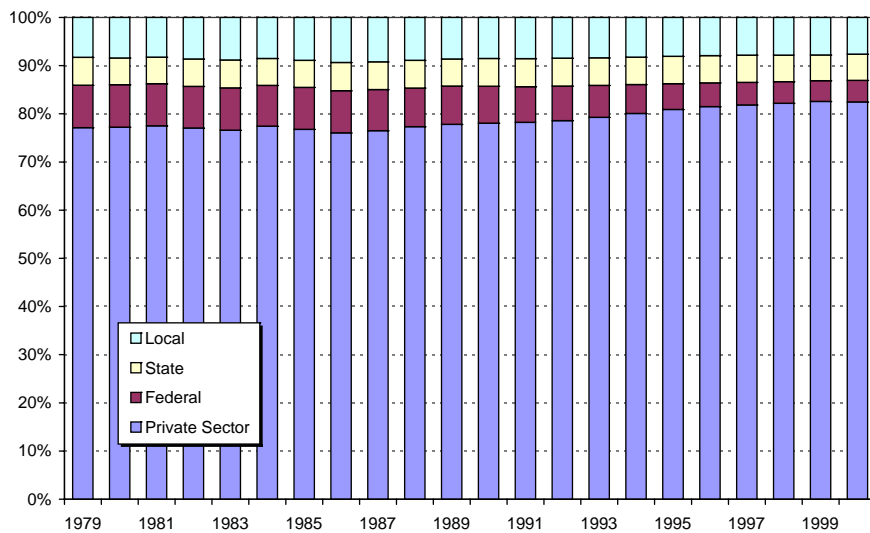
**State government reached its pinnacle in 1993, when Utah state government employed 60 of every 1,000 workers in the state. Since that time, state government employment has been on the decline**

**Figure 7**

**Private Sector, Federal, State, and Local Government Wages in Utah**

	Total Wages					Total Non-Farm	Average Monthly Wage				
	Private Sector	Federal	State	Local			Private Sector	Federal	State	Local	Total Non-Farm
1990	\$15,334,684,282	\$1,501,882,664	\$1,131,810,811	\$1,680,207,590	\$19,648,585,347		\$2,230	\$3,118	\$2,256	\$2,041	\$2,263
1991	15,796,183,073	1,492,550,116	1,178,043,328	1,734,124,080	20,200,900,597		2,227	3,210	2,231	2,029	2,259
1992	16,733,091,025	1,531,925,930	1,229,637,752	1,804,524,771	21,298,179,478		2,280	3,384	2,238	2,049	2,309
1993	17,471,733,877	1,467,348,146	1,258,047,829	1,854,371,504	22,049,501,357		2,238	3,517	2,175	2,019	2,270
1994	18,717,925,807	1,399,730,836	1,331,261,209	1,933,009,480	23,381,927,332		2,234	3,564	2,241	2,034	2,266
1995	20,141,602,969	1,334,609,510	1,412,447,644	2,014,133,343	24,902,793,466		2,256	3,483	2,325	2,069	2,285
1996	21,572,404,623	1,301,093,500	1,497,602,210	2,102,552,135	26,473,652,467		2,282	3,505	2,406	2,095	2,312
1997	23,120,059,523	1,328,850,115	1,593,430,220	2,216,812,637	28,262,515,112		2,344	3,539	2,488	2,118	2,370
1998	24,582,509,463	1,332,886,840	1,650,496,224	2,349,236,119	29,915,128,647		2,416	3,600	2,487	2,187	2,436
1999	25,692,747,389	1,342,707,107	1,667,818,206	2,425,832,477	31,129,105,287		2,461	3,590	2,488	2,209	2,474
2000	26,679,398,067	1,452,051,329	1,758,788,400	2,469,522,921	32,359,760,716		2,497	3,694	2,550	2,182	2,508
CAGR 90-00	5.7%	-0.3%	4.5%	3.9%	5.1%		1.1%	1.7%	1.2%	0.7%	1.0%
CAGR 90-95	5.6%	-2.3%	4.5%	3.7%	4.9%		0.2%	2.2%	0.6%	0.3%	0.2%
CAGR 95-00	5.8%	1.7%	4.5%	4.2%	5.4%		2.1%	1.2%	1.9%	1.1%	1.9%
			\$ Change 1990 to 1995				\$26	\$366	\$70	\$28	\$22
			\$ Change 1995 to 2000				\$241	\$211	\$225	\$113	\$223
			\$ Change from 1990 to 2000				\$267	\$576	\$294	\$141	\$246

**Utah Public and Private Sector Wages as a Percent of Total Non-Farm Wages**



Source: Utah Department of Workforce Services.

**Growth in wages is more accelerated than in employment**

a trend within the federal government to downsize its employment and contract out much of the work to the private sector. Fiscal Year 2000 brought the first increase in federal employment, adding about 2,000 jobs to the state, probably due to temporary Census enumerators. 2001 saw a nominal increase and then in 2002, an additional 1,800 jobs were added in the federal sector. Although data on federal employment are not very detailed, it can be assumed these 1,800 jobs were due to homeland security concerns surrounding the Olympics and the federalization of airport security workers. Despite these increases, there were still only 34,700 federal workers in Utah during 2002.

Local government employment, including teachers, reached its height in 1993 when 96 out of every 1,000 employees worked for local government agencies. That declined through the

decade, reaching a low of 88 per 1,000 during 1996 through 2000. The last two years saw that climb slightly. Local government jobs grew at an average annual rate of 3.1 percent between 1996 and 2002, making this sector the fastest growing in the state during that time period and pushing its average annual growth rate during the decade above that of state government. Unfortunately, U.S. Bureau of Labor Statistics has changed how it calculates the data and no underlying detail is available as to which sectors were contributing to this growth in local government, whether it was an increase in public school teachers to meet increasing enrollment seen in Utah during the last few years, or if the expansion of cities and demands on city services has been the underlying factor in growth. It is probably a combination of the two, but the proportion of each remains unknown.

Wages tell a similar story, although growth in wages is more accelerated than in employment. The wage data provided here is from a different series than employment data above, therefore the time periods are not equal. However, the wage data does show a trend similar to employment data, making it a useful comparison. Figure 7 analyzes Utah total wages by sector from 1990 to 2000 and provides average monthly wage data for the same time period. Average monthly wage data gauges not only how total

wages have grown but also how wages have grown per employee. All wage data have been adjusted to remove the effects of inflation. The bar graph in Figure 7 provides an illustration of each sectors' contribution to total non-farm wages in Utah since 1979. Utah Foundation felt it was important to provide a longer time series to show the trend that state government wages as a percentage of total wages have essentially remained flat since 1979 and federal wages have shrunk dramatically. Local government wages as a percentage have varied within a two-percentage point spread over time.

The data in Figure 7 show that the annual growth rate of state and local government wages trailed that of the private sector throughout the decade. While aggregate private wages grew by 5.7 percent over the time period, state government wages grew by 4.5 and local government wages by 3.9 percent. Private and local government sectors grew more rapidly during the latter half of the decade, probably as a result of a tight job market, whereas state government wages grew steadily at 4.5 percent throughout the decade. Federal government overall wages declined during the decade and especially between 1990 and 1995. The sector experienced some gains from 1995 onward.

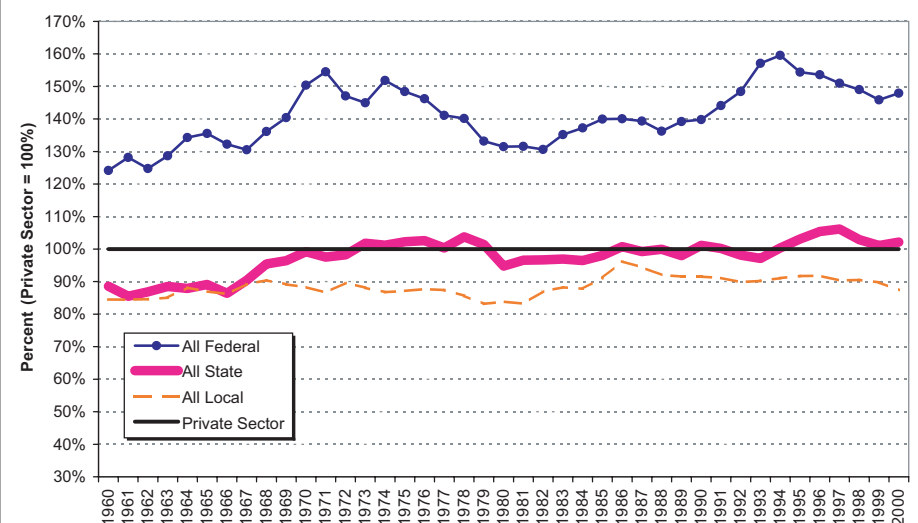
When examining average monthly wage data for each sector, another story emerges. Private sector wages saw a modest increase over the decade, gaining \$267 from 1990 to 2000, much of that growth coming in the latter half of the decade. This is opposite the growth in employment, which was strongest from fiscal year 1991-1996. This suggests that as the labor market got tighter from 1995 on, there was an upward pressure on wages as higher salaries were necessary to convince workers to change jobs or enter the labor force. What is interesting is that the same story was being told in state government. The average monthly salary for a state government worker grew by \$70 between 1990-95. Between 1995 and 2000, monthly salaries increased by \$294, higher than the dollar amount that private sector monthly wages increased during this time. State government wages were also extremely competitive with the private sector, the average wage meeting or exceeding private wages in nine of the eleven years shown. National studies have shown that state and local governments pay employees more than the private sector for the lower-paid occupations, but pay less than the private sector for professional and administrative occupations.<sup>4</sup>

Federal wages changed by the greatest numerical value of any sector. From 1990 to 1995, the average federal employee saw his/her wage increase by \$366 and from 1995 to 2000, by \$211. In 2000, the average monthly salary for federal workers in Utah was \$3,694- almost \$1,200 greater than the private sector. Local government workers are still struggling to keep pace with other governmental and private

**State government wages were also extremely competitive with the private sector, the average wage meeting or exceeding private wages in nine of the eleven years shown**

**Figure 8**

**Utah Public Sector Average Monthly Wages as a Percent of Average Monthly Private Sector Wages**



Source: Ibid.

sector workers. Local government average salaries started the decade at \$2,041 a month – \$215 behind state government employees. By 2000, the gap between local and state government average monthly salaries grew to \$368.

Local government wages have always lagged behind the other sectors in Utah. Figure 8 provides an analysis of government sector average monthly wages relative to the private sector. The data in this analysis go back to 1960 and all wages were adjusted for inflation. By setting private sector wages to an index of 1.00 across all years, it was possible to compare each of the three public sectors to that indexed rate and see how they have grown relative to private wages. This type of analysis assumes that the wages set by the private sector are what the private market will bear in terms of labor investment relative to profits, while government is less responsive to economic pressures, since it does not need to show “profits.” This analysis also gives some idea of the “buying power” of employees in each sector. For example, if a federal employee moves to Utah, the wage he or she is paid by the federal government will purchase a lot more relative to other Utah workers, which benefits the Utah economy.

**State government expanded during the decade of the 1990s at a rate that was slightly faster than that of the economy and much of that growth came prior to 1996**

As Figure 8 shows, federal employees enjoy the greatest wage margin in the state. The average monthly wage within the federal sector has always exceeded those in the private as well as state and local government sectors. In 2000, the average federal salary was almost 1.5 times that of the private sector. This had declined somewhat since the peak in 1994, when the ratio was 1.6 to 1.0. State government salaries started the time series at about 90 percent of the average private sector salaries. They climbed during the 1960s to about equal. Then in 1973, state government salaries exceeded private salaries. This was maintained until 1979. From 1980 through 1994, state and private sector salaries were about equal. From 1995 till 2000, state government wages again sustained a climb above private wages, which peaked in 1997 and started to decelerate until 2000, when they crept up again. It is important to caution here that averages hide a number of different factors that are not included in this analysis. The mix of jobs in the private and public sectors are different and the private sector also has a larger percentage of part-time workers than does the public sector. It would be impossible to conclude from this data whether the state is paying reasonable wages to employees compared to what those employees would earn in the private sector, although as mentioned above, national studies have shown that states usually pay more than the private sector for lower-paid job classes and less than the private sector for higher-paid professional employees.

Utah’s local governments show wages that have lagged behind both state government and the private sector. The average local government employee has only 87 percent of the buying power of the average private sector employee. Additionally, at no time since 1960 have local government average wages exceeded that of the private sector. The closest they came was in 1986, when average local government wages were 96 percent of the private sector average. Since 1986, wages have been declining relative to the private sector.

As employees are the single largest expenditure for any organization, whether public or private, wage and employment data are important gauges of the overall growth within a company or governmental agency. While employment and wages for state government grew during the 1990s, that growth was very similar to the experience within the private sector. In 2000, state government employees accounted for 5.5 percent of the total workforce in the state and 5.4 percent of the total wages down from 5.8

percent in both employees and wages in 1991.

## Conclusion

According to Utah's budget documents, state government expanded during the decade of the 1990s at a rate that was slightly faster than that of the economy and much of that growth came prior to 1996. This contrasts with the data and information provided by the US Census Bureau, in which it appears that growth occurred more rapidly and during the second half of the decade. This incongruence in the data happens often between federal and state sources.<sup>5</sup> When in doubt, it is always best to err on the side of caution. Since the budget documents are a primary source of data whereas the Census figures are a compilation of many sources, Utah Foundation feels confident that the growth shown by the state's own figures is correct.

Investments in infrastructure, such as roads and government buildings, were a significant factor in this growth as was the reorganization of state government in response to federal mandates for welfare reform. When examining the "burden" placed on Utah's economy by state government, the data show that in 1991, \$120.21 of every \$1,000 in personal income generated within the state went to pay for state government, operations and capital. By 2002, this had grown to \$126.69 per \$1,000, or by \$6.48 over the decade. In light of federal welfare reform, the increasing costs to the states for Medicaid, and rapid economic growth nationally, the fact that this increase was fairly small relative to Utah's economic growth is probably the result of two important factors. First, Utah does not have a very progressive tax structure. In states that do, revenue growth often exceeds economic growth during strong economic times. Unfortunately for many of those states, this rapid upswing in revenue growth led to a rapid upswing in spending on ongoing operations, without adequate consideration of the consequences if a recession were to dry up these new revenues, which is exactly what happened. Conversely, Utah used much of its increase in revenues on one-time capital projects, which is a fiscally conservative choice. This leads to the second important factor that restrained Utah state government growth during the 1990s: fiscal responsibility on the part of policymakers. By using caution and stocking the rainy day fund, Utah was able to ride out the economic downturn of 2001 better than most states.<sup>6</sup>

**By using caution and stocking the rainy day fund, Utah was able to ride out the economic downturn of 2001 better than most states**

There has been concern expressed by some observers that Utah incurred too much debt during the boom years of the 1990s, and especially in the past few years, burdening future taxpayers. The next Utah Foundation report on state government growth will analyze this issue and provide a framework for determining when issuing government bonds is a wise choice.

## Endnotes

<sup>1</sup> This is equivalent to stating that state government spending was 12.02% of personal income, although it is easier to discern small changes in the figure by using dollars per thousand of personal income. This can also be thought of as the proportion of the economy that is dedicated to operating state government.

<sup>2</sup> Unlike most states, Utah's General Fund is not the largest fund in the budget. Utah's General Fund does not include income taxes (corporate and personal), because those taxes are dedicated to public and higher education and are deposited into the Uniform School Fund.

<sup>3</sup> For more information, please see Utah Foundation's reports on the

economy at [www.utahfoundation.org](http://www.utahfoundation.org).

<sup>4</sup> For a review of several studies and an independent analysis, see Miller, Michael A., "The Public-Private Pay Debate: What do the Data Show?" *Monthly Labor Review*, Bureau of Labor Statistics, May 1996, pp. 18-29.

<sup>5</sup> For example, Utah Foundation has found in the past that Census dramatically overestimates the amount of spending in Utah for colleges and universities. After discussions with Census staff, it seems likely that Census is double-counting student financial aid by counting it as spending when disbursed to the student and counting the spending again that the student finances by paying his or her tuition. Similar errors may occur in other categories in the Census reports.

<sup>6</sup> See "Special report: Bad moves, not economy, behind busted state budgets ; Governors, legislators failed to act quickly when boom began to fade, analysis finds," *USA Today*, June 23, 2003, p. A1.

This Research Report was written by Janice Houston, Utah Foundation Director of Research. Ms. Houston is available for comments at (801) 272-8824. She may also be contacted by email at: [janice@utahfoundation.org](mailto:janice@utahfoundation.org). For more information about Utah Foundation, please visit our website: [www.utahfoundation.org](http://www.utahfoundation.org).

**Please visit our website at [www.utahfoundation.org](http://www.utahfoundation.org) for:**

- Online copies of Research Reports for the past four years
- FREE school lesson plans to help adapt Utah Foundation Research Reports for use in social studies courses
- A library of press releases, providing summaries of each Research Report
- Links to newspaper articles about Utah Foundation's work
- Data on the economy, taxes, and public spending from Utah Foundation's Statistical Review of Government in Utah
- Information on books and special reports published by Utah Foundation
- A description of Utah Foundation, its background, board members, and staff
- A membership form that may be printed and mailed to sign up for membership in Utah Foundation

## Recent Utah Foundation Research Reports

Each of these reports is available on our website: [www.utahfoundation.org](http://www.utahfoundation.org)

### 2003

- School Choice: Experiences With Vouchers and Tuition Tax Credits in Other States
- The National Recession: Its Impacts on Utah and the Mountain West
- Redistributing Utah's Tax Resources: Burdens and Benefits Around the State
- Utah Statewide School Testing Results: 2002, Including an Analysis of Technology in Utah Schools
- Utah's Children's Health Insurance Program (CHIP): How Well Are We Doing?
- Charter Schools: Can They Survive in Utah?

### 2002

- Economic Report to the Governor 2002: Executive Summary
- Creating an Oasis: Water Development and Funding in Utah
- Economic Recessions, Taxes, and Utah: Lessons Learned From the Past
- Utah Statewide School Testing Results: 2001
- Creating an Oasis, Part Two: Water Consumption, Pricing and Conservation in Utah
- The Status of Private Schools in Utah
- Welfare in Utah: What Programs are Available and How Have Federal Reforms Affected Them?
- Utah at the Crossroads: Challenges for K-12 Education in the Coming Ten Years
- Utah's Regional Competitiveness For Non-Resident Higher Education Students

### 2001

- 2001 Economic Report to the Governor Executive Summary
- Federal Expenditures in Utah: FY 1990 to 1999
- Utah's Statewide Testing Results: 2000
- Fiscal Summary of the 2001 Legislative Session
- How do Utah's Taxes and Fees Compare to Other States?
- Property Taxes in Utah and the 50 States
- Setting the Price of Higher Education in Utah

We have moved. Please note our new address below. Our new phone and fax numbers are as follows:

- Phone: (801) 272-8824
- Fax: (801) 272-7711



4141 Highland Dr., Suite 102  
Salt Lake City, UT 84124

