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ECONOMIC

REPORT TO THE

GOVERNOR

STATE OF UTAH
MICHAEL O. LEAVITT
GOVERNOR

* Preface

The *Economic Report to the Governor*, published annually since 1986, is the principal source for data, research, and analysis about the Utah economy. The report includes a national and state economic outlook, a summary of state government economic development activities, an analysis of economic activity based on the standard indicators, and a more detailed review of industries and issues of particular interest. The primary goal of the report is to improve understanding of the Utah economy. With an improved economic literacy, decision makers in the public and private sector will then be able to plan, budget, and make policy with an awareness of how their actions are both influenced by and impact economic activity.

Council of Economic Advisors. The Council of Economic Advisors (CEA) provides guidance for the contents of this report. The CEA is an advisory committee to the Governor and includes representatives from state government agencies, First Security Bank, Thredgold Economic Associates, Federal Reserve Bank of San Francisco, Utah Foundation, and the University of Utah. The mission of the CEA is to provide information and analysis that enhances economic decision-making in Utah. This report is the primary means of the CEA to communicate economic information to the general public.

Collaborative Effort/Contributors. Chapter authors, many of whom are special advisors to the CEA and who represent both public and private entities, devote a significant amount of time to this report, making sure that it contains the latest economic and demographic information. While this report is a collaborative effort which results in a consensus forecast for the next year, each chapter is the work of the contributing organization, with review and comment by the Governor's Office of Planning and Budget. More detailed information about the findings in each chapter can be obtained by contacting the authoring entity (see Contributors list).

Statistics Used in This Report. The statistical contents of this report are from a multitude of sources which are listed at the bottom of each Table and Figure. Statistics are generally for the most recent year or period available as of mid-December 1998. Since there is a quarter or more of lag time before economic data become final, the data for 1998 are preliminary estimates. Final estimates can be obtained later in 1998 from the

contributing entities. All of the data in this report are subject to error arising from a variety of factors, including sampling variability, reporting errors, incomplete coverage, non-response, imputations, and processing error. If there are questions about the sources, limitations, and appropriate use of the data included in this report, the relevant entity should be contacted.

Statistics for States and Counties. This report focuses on the state, multi-county, and county geographic level. Additional data at the metropolitan, city, and other sub-county level may be available. For information about data for a different level of geography than shown in this report, the contributing entity should be contacted.

New This Year. While the content of this report, other than introducing a new year of data and analysis, is similar to prior years, several updates and new data series or research efforts are worthy of highlighting. The Special Topics section of this report contains four chapters, including: a chapter on Envision Utah's four alternative growth scenarios for the Greater Wasatch Area; a chapter on the economic impacts of the current expansion project at the Salt Lake International Airport; an update on the economic issues associated with the reconstruction of I-15 and information about funding for mass transit and transportation funding in general; and a chapter on the level of expenditures by the federal government in the State of Utah.

Electronic Access. This report is available on the Governor's Office of Planning and Budget's Internet website at <http://www.governor.state.ut.us/dea>.

Glossary. Terms and definitions used in this report are available on the Governor's Office of Planning and Budget website at the address listed above.

Suggestions and Comments. Users of the *Economic Report to the Governor* are encouraged to write or call with suggestions that will improve future editions. Suggestions and comments for improving the coverage and presentation of data and quality of research and analysis should be sent to the Governor's Office of Planning and Budget, 116 State Capitol, Salt Lake City, Utah, 84114. The telephone number is (801) 538-1036. *

* Contents

Figures

Tables

Contributors

Map of Utah

Executive Summary

Economic Outlook

- * National Outlook
- *
- * Utah's Long-Term Projections

Economic Indicators

- *
- * Employment, Wages, Labor Force
Personal Income
- *
- * Gross Taxable Sales
Tax Collections
- *
- * Prices, Inflation, Cost of Living
Social Indicators
- *

Industry Focus

- *
- * Construction and Housing
- *
- * Energy and Minerals
High Technology
- *

Special Topics

- *
- * Envision Utah
Transportation Funding
- *

Executive Summary

- A. Job Growth by State
- B. Merchandise Exports
- C. Net Migration from California to Utah
- D. Economic Diversity
- E. Per Capita Personal Income as a % of US
- F. Housing Price Index
- G. Utah Net Migration
- H. Economic Indicators

National Outlook

- 1. U.S. Economic Indicators

Utah Outlook

- 2. Comparison of Utah and U.S. Economic Indicators
- 3. Utah Actual and Inflation-Adjusted Average Annual Pay
- 4. Utah and U.S. Job Growth Rates

Utah's Long-Term Projections

- 5. Decade Population Change—Utah and U.S.
- 6. Components of Change in Population
- 7. Utah Dependency Ratio
- 8. U.S. Dependency Ratio
- 9. Index of Economic Diversity
- 10. Industry Employment Ranked by Rates of Change
- 11. Industry Employment Ranked by Amount of Change

Demographics

- 12. Utah Population Change
- 13. Components of Population Change
- 14. Total Fertility for U.S. and Utah

Employment, Wages, Labor Force

- 15. U.S., California and Utah Unemployment Rates
- 16. Employment
- 17. Employment Change
- 18. Employment in Goods-Producing Industries
- 19. Percent Change in Employment by Industry
- 20. Utah and U.S. Employment by Industry
- 21. Annual Pay as a Percent of U.S.
- 22. Growth Rates in Average Annual Pay
- 23. Growth Rates in Total Wages and Salaries
- 24. Labor Force Participation Rates

Personal Income

- 25. Per Capita Personal Income as a Percent of U.S.

Gross State Product (GSP)

- 26. GSP—Share by Industry
- 27. U.S. GDP—Share by Industry
- 28. GSP—Percent Change

Gross Taxable Sales

- 29. Annual Change in Gross Taxable Sales
- 30. Shares of Utah's Sales Tax Base—Four Major Sectors

Tax Collections

- 31. Sales and Income Taxes as a Percent of Total Revenues
- 32. Tax Collections as a Percent of Unrestricted Revenues
- 33. Percent Change in Sales and Income Tax Collections
- 34. Collections Adjusted for Inflation, and Tax Rate Changes
- 35. Tax Elasticities

International Merchandise Exports

- 36. Merchandise Exports
- 37. Merchandise Exports by Selected Industry
- 38. Merchandise Exports to Selected Countries

Prices, Inflation, Cost of Living

- 39. Increase in Prices Measured by CPI
- 40. Cost of Living Comparisons
- 41. CPI-U and GDP Deflator Inflation

Regional / National Comparisons

- 42. Population Growth Rates
- 43. Per Capita Income
- 44. Median Household Income
- 45. Average Annual Pay
- 46. Employment Growth
- 47. Persons in Poverty

Agriculture

- 48. Agricultural Receipts by Sector
- 49. Farm Assets and Equity
- 50. Cash Receipt from Livestock by County
- 51. Farm Cash Receipts by County
- 52. Net Farm Income

Construction and Housing

- 53. Residential Construction Activity
- 54. Value of New Construction
- 55. Housing Price Index

Defense

- 56. Federal Defense-Related Spending in U.S.
- 57. Federal Defense-Related Spending in Utah

Energy and Minerals

- 58. Mineral Valuation—Gross Value Estimate
- 59. Value of Nonfuel Minerals

Tourism, Travel and Recreation

- 60. Travel-Related Employment
- 61. Hotel Room Rents
- 62. National Park and Skier Visits

* Tables

National Outlook

1. U.S. Economic Indicators

Utah Outlook

2. Economic Indicators for Utah and the U.S.
3. Income and Annual Pay

Utah's Long-Term Projections

4. Projections Summary
5. Employment Projections by Industry
6. Components of Population Change
7. Population Projections by Five Year Age Group
8. Population Projections by Selected Age Group
9. Population by Age as a Percent of Total
10. Dependency Ratios
11. Population Projections by County and District
12. Projections of Households by County and District
13. Household Size Projections
14. Employment Projections by County and District
15. Median Age Projections by County
16. Hachman Indices by County

Economic Development Activities

17. Unit Labor Cost
18. Educational Attainment by State
19. Business Taxes as a Share of GSP

Demographics

20. Population, Migration, Births and Deaths
21. Total Fertility Rates for Utah and U.S.
22. Life Expectancy for Utah and U.S.
23. Utah Population Estimates by County
24. Utah Net In-Migration by State
25. Ranking of States by Selected Age Groups
26. Dependency Ratios by State
27. Race and Hispanic Origin by County
28. Housing Units, Households and Size by State
29. Sub-County Population Estimates

Employment, Wages, Labor Force

30. Employment, Unemployment, and Employment by Industry
31. Employment by County and Industry
32. Wages by County and Industry
33. Utah Average Monthly Wage by Industry
34. Utah Labor Force and Jobs by Industry
35. Labor Force and Components: District & County
36. Largest Employers
37. Job Openings by Occupational Category

Personal Income

38. Components of Total Personal Income
39. Personal Income and Growth for Utah and U.S.
40. Per Capita Income by County and District

Gross State Product (GSP)

41. GSP by Industry (Current Dollars)
42. GSP by Industry (Real Chained Dollars)
43. GSP by Industry (Real Fixed Weight Dollars)

Gross Taxable Sales

44. Gross Taxable Sales By Component
45. Gross Taxable Retail Sales by Sector
46. Gross Taxable Retail Sales by County

Tax Collections

47. Tax Increases and Decreases in Recent Sessions

International Merchandise Exports

48. Merchandise Exports by Industry
49. Merchandise Exports to Selected Countries
50. U.S. Exports by State
51. Top Five Export Markets by Top Five Industries

Prices, Inflation, Cost of Living

52. U.S. Consumer Price Index
53. Gross Domestic Product Deflators
54. Cost-of-Living Comparisons for Selected Areas

Social Indicators

55. Crime and Education
56. Vital Statistics and Health
57. Poverty/Public Assistance

Regional / National Comparisons

58. Population and Households
59. Total Personal Income
60. Per Capita Personal Income
61. Total Personal Income per Household
62. Median Income of Households
63. Average Annual Pay
64. Employees on Nonagricultural Payrolls
65. Unemployment Rates
66. Percent of People in Poverty

Agriculture

67. Utah Farm Balance Sheet
68. Percent of Cash Receipts by Sector
69. Cash Receipts by Source and County
70. Cash Receipts from Livestock as a Percent of Total

Construction and Housing

71. Construction Activity
72. Construction Activity by County
73. Rates on 30-Year Mortgages
74. Housing Price Index for Utah

Defense

75. Federal Defense-related Spending for U.S.
76. Federal Defense-related Spending in Utah
77. Federal Defense-related Spending by County

Energy and Minerals

78. Supply and Disposition of Crude Oil
79. Supply and Consumption of Petroleum Products
80. Supply and Consumption of Natural Gas
81. Supply and Consumption of Coal
82. Supply and Consumption of Electricity
83. Energy Prices

Tourism, Travel and Recreation

84. Profile of the Utah Travel Industry
85. Utah Tourism Indicators

Federal Government Expenditures in Utah

86. Federal Expenditures in Utah and Other States
87. Federal Expenditures in Utah and U.S. by Category
88. Federal Expenditures in Utah and U.S. as a % of Total

Envision Utah

89. Selected Characteristics of the Greater Wasatch Area

Transportation Funding

90. 1997 Legislature's Funding Option
91. 1998 Legislature's Funding Option
92. Summary of Funding Option

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* Executive Summary

As expected, Utah's economy returned to modest rates of growth in 1998. The rate of job growth dropped to 3.0%, after five consecutive years of rates higher than 4.0%. Lower job growth was accompanied by higher unemployment, significantly less net immigration, and a smaller increase in personal income than the prior year. Utah's economy still experienced strong and stable growth, but it appears the economy has reached the tail-end of a prolonged period of rapid growth. Rates of job, population, and income growth are now below the average annual rates experienced over the past three decades. Utah's economy, in essence, has made a smooth transition from the booming economic conditions seen earlier this decade to a more sustainable pace of economic expansion.

The moderation in economic activity over the past year has occurred within a relevant international, national, and regional context. The primary causes of the slowdown are lower exports and the continued economic recovery of California. The slowdown includes several positive characteristics, but also illuminates several potentially challenging issues and trends. All of these points are elaborated on in the 1999 *Economic Report to the Governor*.

International, National, and Regional Context

The performance of the state's economy over the past year has occurred within the context of a troubled world economy; robust, but slowing national economy; and a prosperous regional economy that is also slowing.

International Economic Distress. World economic problems continue to deepen with an estimated 45% of the global economy in recession.¹ These problems are centered in Asia where a serious financial crisis exists. Japan, which comprises 70% of the gross domestic product in the Asian economy, is in its worst recession since 1974. Japan's unemployment rate reached a record high in 1998 and real gross domestic product declined just like it did in Thailand, South Korea, Malaysia, and Indonesia. Other countries, most notably Russia, are in serious economic distress. An estimated 700 Russian banks may collapse over the next few months and an estimated \$18 billion in foreign-debt payments will not be met.² Brazil, South Africa, Canada, and parts of Latin America are just a few of the other countries around the globe that are struggling or beginning to show signs of trouble. These global troubles are gradually spreading to the U.S. in the form of lower exports, reduced commodity prices, increased corporate layoffs, and reduced corporate profits.

National Economic Conditions Favorable, but Expected to Slow. Despite the international economic difficulties, national economic conditions, while slowing, continue to be very favorable. As of December 1998, the current expansion is the second longest in the nation's economic history, starting in April 1991 and continuing now for seven

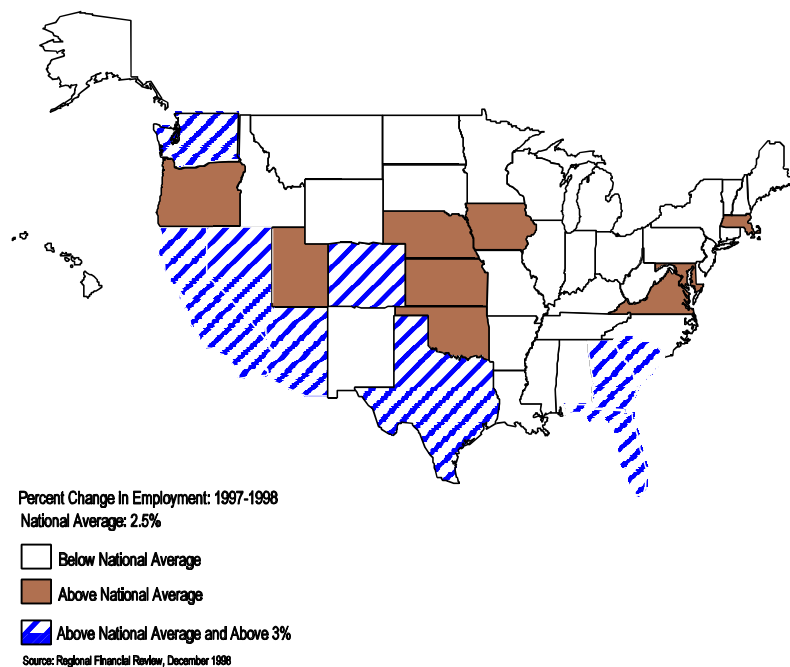
years and eight months. The economy's strength in 1998 is shown by:

- * Real gross domestic product growth of 3.6%
- * Employment growth of 2.5%
- * Unemployment rate of 4.5%
- * Inflation of 1.6% (U.S. CPI-U)
- * Mortgage rates of 6.7% (fixed)
- * S&P 500 index growth of 22.1%

Analysts, however, point out that the U.S. economy of the near future will not measure up to the economy of the recent past.³ The truly remarkable performance of the past is expected to change in 1999 because of falling exports and lower corporate profits. The chance of a national recession emerging in 1999 remains – currently pegged by Regional Financial Associates as one in four.

Western Economy Leading the Nation, but Also Slowing. The west continues to lead the nation in job growth, but like the nation, rates of job creation are slowing and unemployment appears to have started an upward trend. Arizona and Nevada led the nation in job growth during 1998. Three other western states (Colorado, California, and Washington) ranked among the top ten fastest growing job growth states. Utah's job growth ranking slipped to 11th, but still increased at a rate higher than the national average. The Asian turmoil is the single most important problem for the region. The crisis is reducing exports of copper, steel, semiconductors, lumber and paper, aircraft, electronic, agricultural and other products from the region. Exports from the West to Asia comprise a large share of gross state product, leaving the region quite exposed by the Asian economic downturn.

Figure A: Western and Southern States Lead the Nation in Job Growth



¹ Tea Leaf, Thredgold Economic Associates, December 16, 1998.

² WEFA, December 1998

³ Regional Financial Review, Regional Financial Associates, December 1998.

Factors Causing Reduced Rates of Growth in Utah

After so many years of very strong economic growth in Utah, a return to more sustainable rates of growth was inevitable. The state is fortunate that this return has occurred smoothly and without severe disruptions. The primary factors influencing this continued slowing are lower exports caused by world economic troubles and the continued strong performance of the California economy.

Lower Exports. In an increasingly global economy, Utah's economic performance has become more dependent on international exports. Utah's merchandise exports – which include manufactured goods and raw products, but exclude services such as software – have increased from 3.4% of gross state product in 1988 to 6.5% in 1998. If services were included, the contribution of exports would be even higher. As the world economy has struggled, most notably in Asia where Utah has large export markets, Utah's exports have fallen. Utah's merchandise exports declined from \$3.6 billion in 1997 to \$3.3 billion in 1998, an 8.3% reduction. Exports to Asia, which comprised 50% of Utah's total exports in 1994, comprised approximately 29% in 1998. Because of Asia and other parts of the world's troubling economic circumstances, exports are not expected to be a source of new economic growth in 1999.

California's Continued Recovery. The single most important state to the overall performance of the West, and Utah, is California. California has approximately half of the region's population and more than half of the region's gross state product. Although job growth in California has dropped in recent months (particularly in manufacturing), the pace of job creation in 1998 of 3.1% is still above the national average and higher than that of Utah's. Many western states, including Utah, benefitted from business relocations during California's recent deep and prolonged recession. California's recovery is now four years old. As the California economy has improved, less job growth in and migration to Utah has occurred. Net migration from California to Utah has now dropped from a high of approximately 12,000 in 1994 to 5,000 in 1997 (the most recent year available). Although over the long term California's economic performance benefits Utah, California's most recent recovery has dampened job and population growth in Utah and other western states.

Positive Economic Characteristics Still Present in Utah

Utah's economic slowdown has been accompanied by several positive characteristics. Foremost is that the underlying fundamentals propelling economic growth in Utah remain. Also, despite slower job growth, wage growth for Utah workers remains strong and the challenging trends of rapidly rising housing prices and shortages of labor are showing the first signs of reversal. Finally, to many residents and service providers, the slower growth of 1998 helps alleviate some of the challenges that accompany many years of very rapid job and population growth.

Figure B: A Struggling World Economy Results in Lower Merchandise Exports from Utah

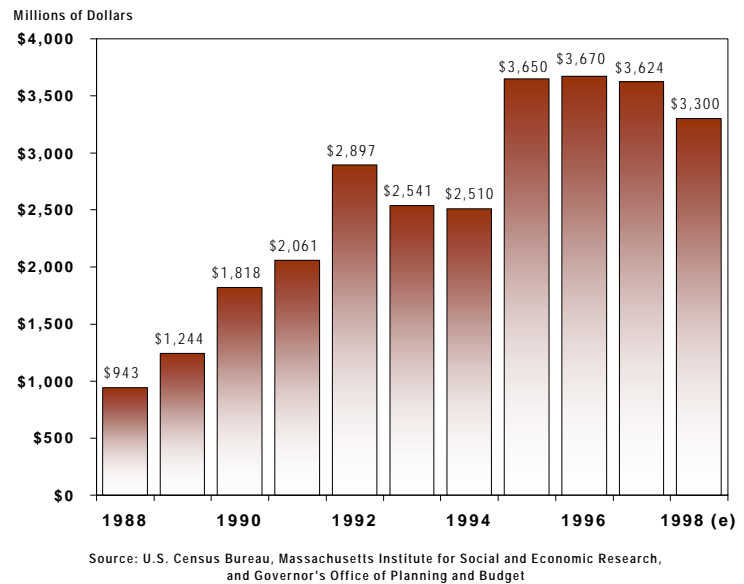
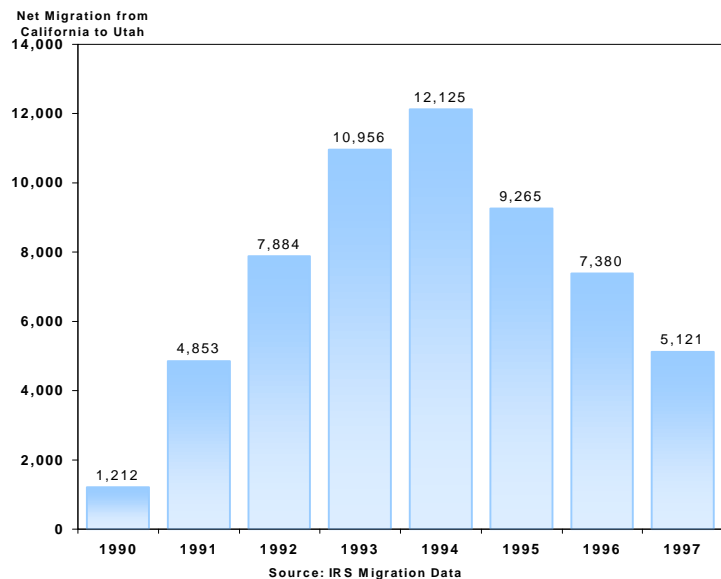


Figure C: Continued Improvement in the California Economy Means Less Net Migration from California



Economic Fundamentals Remain. Utah continues to possess good economic fundamentals. These fundamentals include a high quality work force, an attractive business climate, and a well-diversified economic structure. These strengths combine with record-setting investments in the transportation infrastructure necessary to sustain the economy well into the next century, and suggest that Utah's current slowdown is not a precursor to a recession. Future economic conditions in Utah continue to be promising.

Quality Work Force. Utah's population is young, healthy, and well-educated. The median age in the state is 26.9, eight years younger than the national average and the lowest of all states. The workforce is also healthy. The life expectancy of Utahns at birth of 77.7, is longer than all but two states (Minnesota and Hawaii). Many companies find this young, healthy workforce attractive. Utah's population is relatively well-educated and computer literate. Utah ranks second among states in the percent of the population with a high school diploma and leads the nation at 64% in the percentage of homes with personal computers.¹ These and other data highlight that Utah's best economic asset continues to be its people.

Attractive Business Climate. Utah's business climate has been recognized over the past year for its favorable attributes. Utah ranked third in the *Development Report Card for the States*.² This report uses over 50 statistics to evaluate states economic performance, business vitality, and development capacity. *Fortune* ranked Salt Lake City third on its list of "Best Cities for Business". The ranking process considered factors such as job growth, cost of living, quality of life, and the amount of venture capital raised. These national rankings illustrate how outsiders view Utah's business environment. Businesses are also attracted to Utah because business taxes remain low with an overall burden that ranks sixth among the seven western states with comparable tax circumstances.³ Energy costs are also low in Utah, ranking 43rd among states and the District of Columbia.⁴

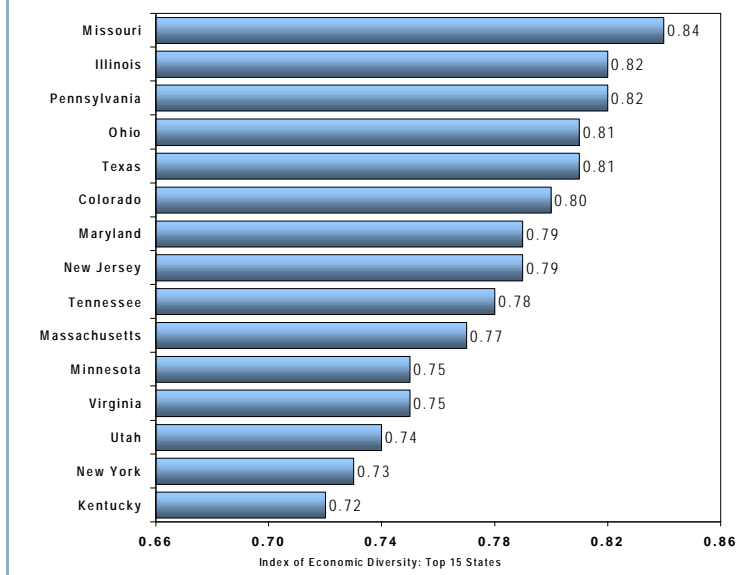
Well-Diversified Economy. Utah's economy remains very well-balanced with a broad base of industries contributing to the current economic prosperity. Utah currently ranks 13th among states in economic diversity.⁵ Colorado is the only other western state, including California, with a more diverse economic structure than Utah's. Utah's economic diversity has increased over time as the industries that the state used to specialize in (federal defense and natural resource extraction) have contracted, while new industries (computer hardware and software, biomedical, tourism, and manufacturing) have emerged. Utah's biomedical industry, for instance, now employs approximately 4,700 people and employment increased by 5% during 1998. Autoliv ASP (formerly Morton International), a designer and manufacturer of automotive safety products and Utah's largest manufacturer, employs 6,200 people. Gateway, a major manufacturer of personal computers, constructed a \$20 million manufacturing facility in Utah during 1998, contributing to

Utah's economic diversity by strengthening the contribution of the computer hardware manufacturing sector. The company plans to employ 1,000 to 1,500 Utahns by the end of 1999. These and many other industries have helped broaden Utah's economic base and make the economy less vulnerable to volatility in any one industry, now and in the future.

The Utah economy's adaptation to federal defense cutbacks and the demise of WordPerfect are two good examples of the resiliency of the Utah economy and the underlying economic diversity. Utah has lost more than two-thirds of a billion dollars in federal expenditures from 1990 through 1997. In addition, Utah lost a premier software company with Corel's decision to close its Utah-based operations. This resulted in the loss of 340 jobs in 1998 and ended Utah's association with the once dominant WordPerfect software. WordPerfect once employed 4,500 people in Utah. Nevertheless, throughout this period, the Utah economy experienced a vibrant and prolonged economic expansion. Utah's recent prosperity could not have occurred without the underlying diversity that has emerged in recent years.

Investing in Transportation. Investment in transportation infrastructure is critical to the long term viability of the Utah economy. Utah is currently in the midst of a massive highway rebuilding project with the reconstruction of Interstate 15 through the Salt Lake Valley. This \$1.6 billion project is ahead of schedule and within budget. It is accompanied by the construction of TRAX, a \$312.5 million, 15-mile light rail line through Salt Lake Valley. TRAX is 75% complete and scheduled to be operational by March 2000. The construction of these projects is good for the long term competitiveness of the Utah economy. It also provides a short term economic stimulus because of the federal money that is spent in the state. In fact, the anticipated federal funding for the north-south

Figure D: Utah's Economy is Among the Most Diversified in the Country



TRAX (\$241.4 million), for reconstruction of I-15 (\$450 million), for discretionary Olympics-related projects (\$90 million), and additional money from the Transportation Equity Act for the 21st Century may represent the largest injection of federal transportation funds in Utah's history.

The Transportation Equity Act for the 21st Century authorizes federal expenditures for transportation projects through 2003. Congress has authorized \$640 million for transit investment in Utah providing that local operating funds are available and projects are operational prior to the 2002 Olympic Winter Games. In addition, the Salt Lake City International Airport, which

currently serves 21.1 million passengers and 253 thousand tons of air cargo, is planning a \$994.0 million expansion program. A significant portion of the funds for this expansion may come from federal sources.

¹ *Newsweek*, "America's Best High Tech Cities," November 2, 1998.

² *Development Report Card for States*, Corporation for Enterprise Development, 1998.

³ Utah State Tax Commission, unpublished study on tax burdens for selected western states, May 15, 1997.

⁴ "The Cost of Doing Business", Regional Financial Associates, December 18, 1998.

⁵ Calculated by Regional Financial Associates using 3-digit standard industrial classification codes for all states. The measure used is the Hachman Index.

Wages and Incomes Continue to Improve.

Utahns' incomes have improved steadily in recent years. Three useful income measures are median household income, per capita income, and inflation-adjusted wage per job. Utah's 1997 median household income of \$42,775 ranks ninth in the nation and is about \$5,700 higher than the national average. Household incomes are high in Utah partially because of the number of two or more income households present.

Utah's per capita income, while substantially lower than the U.S. average because of the young population, has shown steady growth relative to the U.S. for the past nine years. In 1989, Utah's per capita income of \$20,246 was 72.9% of the U.S. average, but by 1998 had increased to 80%. The state's per capita income ranking has improved from 48th among states in 1986 (higher than only West Virginia and Mississippi) to 43rd currently. Finally, Utah's inflation-adjusted wage has increased for four consecutive years, the strongest growth since 1977.

Growth in Housing Prices Moderating. Increases in Utah's housing prices exceeded the nation for the past eight years, but have now converged with national rates of increase. Less price appreciation, the lowest mortgage rates in 31 years, and rising wages improved home ownership conditions in Utah during the past year. Not surprisingly, 1998 reached an all-time record for the value of new residential construction in the state, topping \$2.1 billion.

Labor Shortages Less of a Constraint.

The lack of an adequate supply of labor has been a constraint to job growth in recent years. Companies are reluctant to expand in or relocate to Utah if there are concerns about finding enough employees. It now appears that 1997 was the peak year for labor shortages in Utah. Like 1998, Utah's labor shortage should be less of a concern in 1999 because of lower job growth and slightly higher unemployment. Consequently, labor shortages should be less of an impediment to growth in 1999.

Modest Growth Helps with Growth Challenges.

Net in-migration to the state has declined dramatically from the recent peak of approximately 23,000 in 1994 to just over 2,000 persons in 1998. Less migration results in lower population growth. Utah's population reached an estimated 2,083,238 persons in 1998, an increase of 34,485 or 1.7%. This is the lowest rate of population growth in eight years. To many, lower population growth is welcomed as the state rebuilds vital transportation infrastructure and continues to respond to the impact of several years of rapid job and population growth. Less population growth, in essence, relieves some congestion problems and allows service providers and infrastructure development to catch-up.

Figure E: Utah's Per Capita Income Has Shown Steady Growth Relative to the U.S. for the Past Nine Years

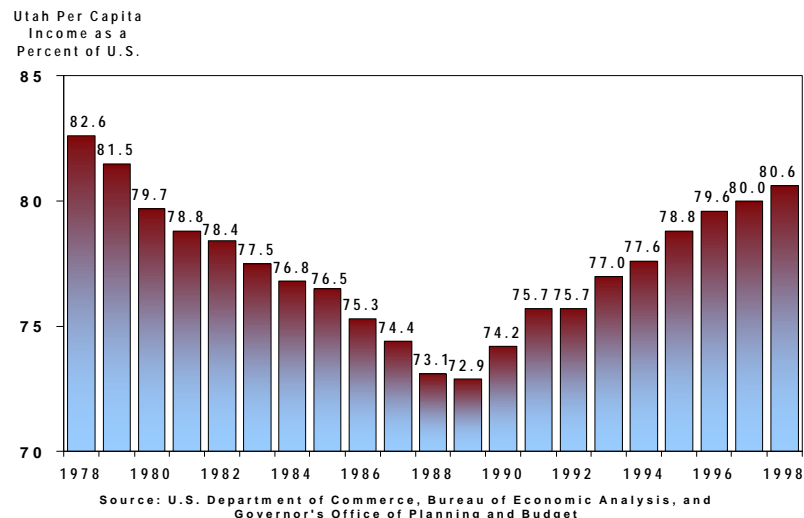


Figure F: Housing Prices Increased at a Rate Faster than the Nation for the Past Eight Years, but Rates Are Now Similar

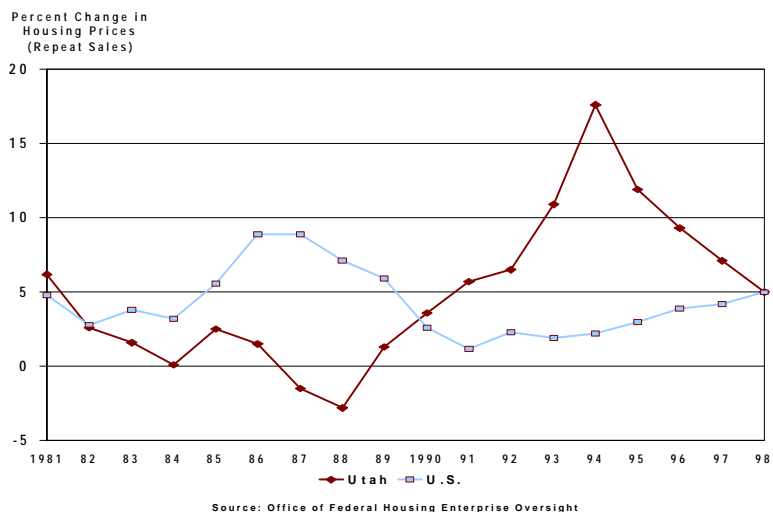
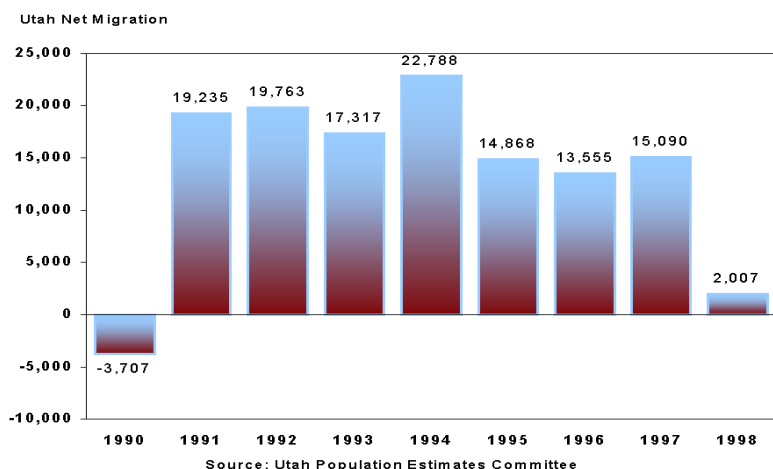


Figure G: Net In-Migration Has Declined Dramatically, Resulting in Lower Population Growth in Utah



Potentially Challenging Economic Issues and Trends

Several trends and issues will be watched carefully over the next year to assess the impact on the economy and to advise appropriate public policies. Foremost is the performance of the national economy vis-a-vis the world's economic troubles. Concerns about overbuilding and the continued strength of Hill Air Force Base will also be monitored.

Impact of World Economic Crisis Not Over. Asia and other countries' economic troubles remain a big concern nationally. The initial impacts from these global troubles to the U.S. economy have been beneficial. These include lower inflation, additional money invested in the U.S. stock market, and lower rates of interest. These positive impacts are now being followed by the troubling aspects of a potentially overvalued stock market, lower exports, increased layoffs, and reduced corporate earnings. Moreover, these disturbing impacts are occurring at a time when the president's international and domestic leadership to manage these problems is seriously compromised by a House of Representatives impeachment and a pending Senate trial. Historically, with some notable exceptions, Utah's economy follows the general trend of the national economy. If the U.S. economy falls into a recession in 1999, Utah will be negatively impacted.

In Utah, the world's economic problems are also being felt. Geneva Steel is the most vulnerable large employer in the state that is of concern. The low cost of import steel from Russia, Japan, and Brazil has hurt U.S. domestic producers like Geneva. Since January of 1998, Geneva has eliminated 811 jobs from its Utah plant. The company has now posted a net revenue loss for three consecutive years. Other companies as well are feeling the impact of low commodity and energy prices rippling through the state's economy.

Concern of Overbuilding. Overbuilding is always a concern at the tail-end of a rapid economic expansion. Some state economists believe that excess investing in retail and hotel facilities has or is in the process of occurring in portions of the state. Hotel occupancy in Utah, for instance, has fallen from 73% in 1996 to 63% in 1998. Since the beginning of 1997, 18 new hotel/motels have opened in the Salt Lake Valley, ten are under construction, and as many as 40 projects are in the proposal stage.

Similarly, office space is also a concern. The Salt Lake area office market's vacancy rate was 6.6% in June of 1998, compared with 9.2% nationally. With the potential disposition of the American Stores Tower, vacancies may increase in 1999.

Hill Air Force Base Lawsuit. The success of Hill Air Force Base continues to be a bellwether indicator for the state's economy. With approximately 9,000 jobs, Hill is the fourth largest employer in the state. Economic activity at the base fluctuates at the discretion of the federal government and Congress and is always watched closely by state economists. The phased in closure of McClellan Air Force Base in California and Kelly Air Force Base in Texas are expected to increase activity at Hill significantly. In September, Hill was awarded a nine-year \$1.6 billion contract to repair the A-10 attack jet and maintain other jet systems. This is expected to bring 750 new jobs to Utah. In addition, around 2,000 jobs for another contract will be added over the next three to four years. This is very positive news for the Utah economy.

Unfortunately, an Alabama firm's lawsuit protesting the relocation of activity to Hill continues to be a concern and will be monitored closely in coming months.

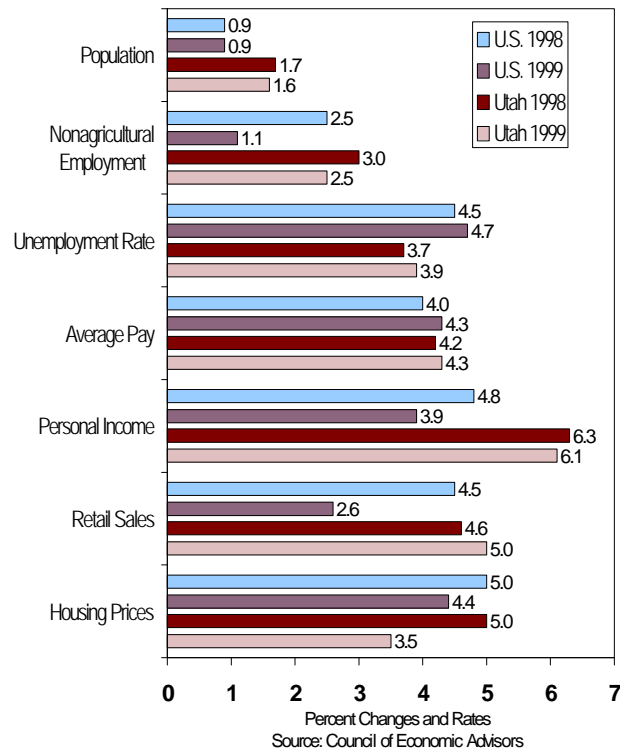
1999 Outlook

Although Utah's economy slowed in 1998, economic performance in 1999 is still expected to be stronger than that of the nation. The Council of Economic Advisors' 1999 consensus forecast calls for a job growth rate of 2.5% in Utah, compared with 1.1% nationally; an unemployment rate of 3.9%, compared with 4.7% nationally; and a population increase of 1.6%, compared with 0.9% nationally.

Growth in housing prices is expected to continue to moderate and the value of residential and nonresidential construction is expected to decline. These forecasts assume a loss of over 1,000 jobs in Utah at American Stores because of the Albertson's merger, and assume an increase in employment at Hill Air Force Base because of the closure of Kelly and McClellan Air Force Bases. The impact of a new Intel research and development facility is not included.

There are several upside issues and downside risks that economists will be monitoring carefully during 1999. On the downside these include the potential for an even deeper, prolonged global economic downturn; the possibility of a national recession emerging; the potential for overbuilding to cause disruptions in the local economy; and the pending lawsuit challenging contracting at Hill Air Force Base. On the upside, issues such as Intel's interest in locating a research and development campus in Utah; increased retail and construction spending stimulated by the 2002 Olympic Winter Games; and a nation's-best regional economic performance have the potential to augment economic activity in 1999. *

Figure H: Utah's Economy is Expected to Out-Perform the Nation's, but Continue to Moderate



Overview

The national economy should continue to be healthy but with slower growth through 1999. The current economic expansion in the U.S. is the second longest in history. Unemployment is lower than it has been since 1970 and consumer spending continues to be strong. Business investment remains high and government finances are in good shape. In 1999 the inflation rate should hold at approximately 2.1%, while the unemployment rate should hold at about 4.7%. This will continue the upward wage pressure and tight labor markets recently experienced. However, corporate profits could continue to suffer as labor markets remain tight and import prices remain low. The Asian economic crisis continues to cause concern for the U.S. economy.

1998 Summary

Exports weakened as a result of the Asian crisis. The global crisis lowered demand for U.S. exports abroad and thus widened the trade deficit. In particular, the manufacturing sector of the U.S. economy has faced increasing global competition because of the fallout from faltering economic growth in much of the world, particularly in the Asia/ Pacific region. Import growth in the United States has remained high as a result of a strong dollar and declining import prices. In spite of slowing growth, several factors may prevent a recession from occurring. These factors include low unemployment rates, rising real wages, high levels of consumer confidence, and historically low levels of inflation and interest rates. Regional Financial Associates currently rates the likelihood of a national recession in 1999 as one in four.

One sign of the continued expansion is found in strong inflation-adjusted growth in the Gross Domestic Product (GDP). The 1998 inflation-adjusted GDP was 3.6% higher than in 1997. A major contributor to this growth was strong consumer spending. The surge of private domestic demand offset the decline in net exports. Another factor contributing to growth was U.S. residential and commercial construction, which increased at rates of 11.3% and 1.4% respectively.

Labor markets remain tight. Job creation in the U.S. averaged 2.5% and U.S. unemployment was 4.5%. The tight labor market led to upward wage pressure. Business investment also continued to be a contributing factor to U.S. economic growth. However, this is expected to slow in 1999. Personal consumption increased by 4.7% in 1998, partly as a result of increased wages and partly as a result of lower price pressure. Corporate profits (before taxes) decreased by 0.9% for many of the same reasons consumer spending increased.

1999 Outlook

For 1999 the pro-growth forces still outweigh the downside risks to the economy. The strength in consumer spending and business equipment investment carries into 1999. However, growth in both areas is expected to slow. Residential and non-residential construction in the U.S. are expected to remain flat. Weak demand abroad will continue to reduce exports and the deterioration in net exports will most likely dampen growth. In spite of the fact that exports make up only about 13% of the U.S. GDP, they have been a big factor in economic growth in the 1990s. It is anticipated that the Federal Reserve will continue to cut interest rates and that inflation will remain low.

Significant Issues

Year 2000 Computer Problem. The potential effect from the Year 2000 problem continues to remain unknown. A negative impact could be seen in the coming year if consumers and investors feel that government and businesses are not making progress towards solving the problem. Business will continue to see rising labor costs as a result of the shortage in computer programmers. For certain businesses this could slow profit growth.

International Financial Crises. World economic problems continue to deepen with an estimated 45% of the global economy in recession.¹ These problems are centered in Asia where a serious financial crisis exists. Japan, which comprises 70% of the gross domestic product in the Asian economy, is in its worst recession since 1974. Japan's unemployment rate reached a record high in 1998 and real gross domestic product declined just like it did in Thailand, South Korea, Malaysia, and Indonesia. Other countries, most notably Russia, are in serious economic distress. An estimated 700 Russian banks may collapse over the next few months and an estimated \$18 billion in foreign-debt payments will not be met.² Brazil, South Africa, Canada, and parts of Latin America are just a few of the other countries around the globe that are struggling or beginning to show signs of trouble. These global troubles are gradually spreading to the U.S. in the form of lower exports, reduced commodity prices, increased corporate layoffs, and reduced corporate profits.

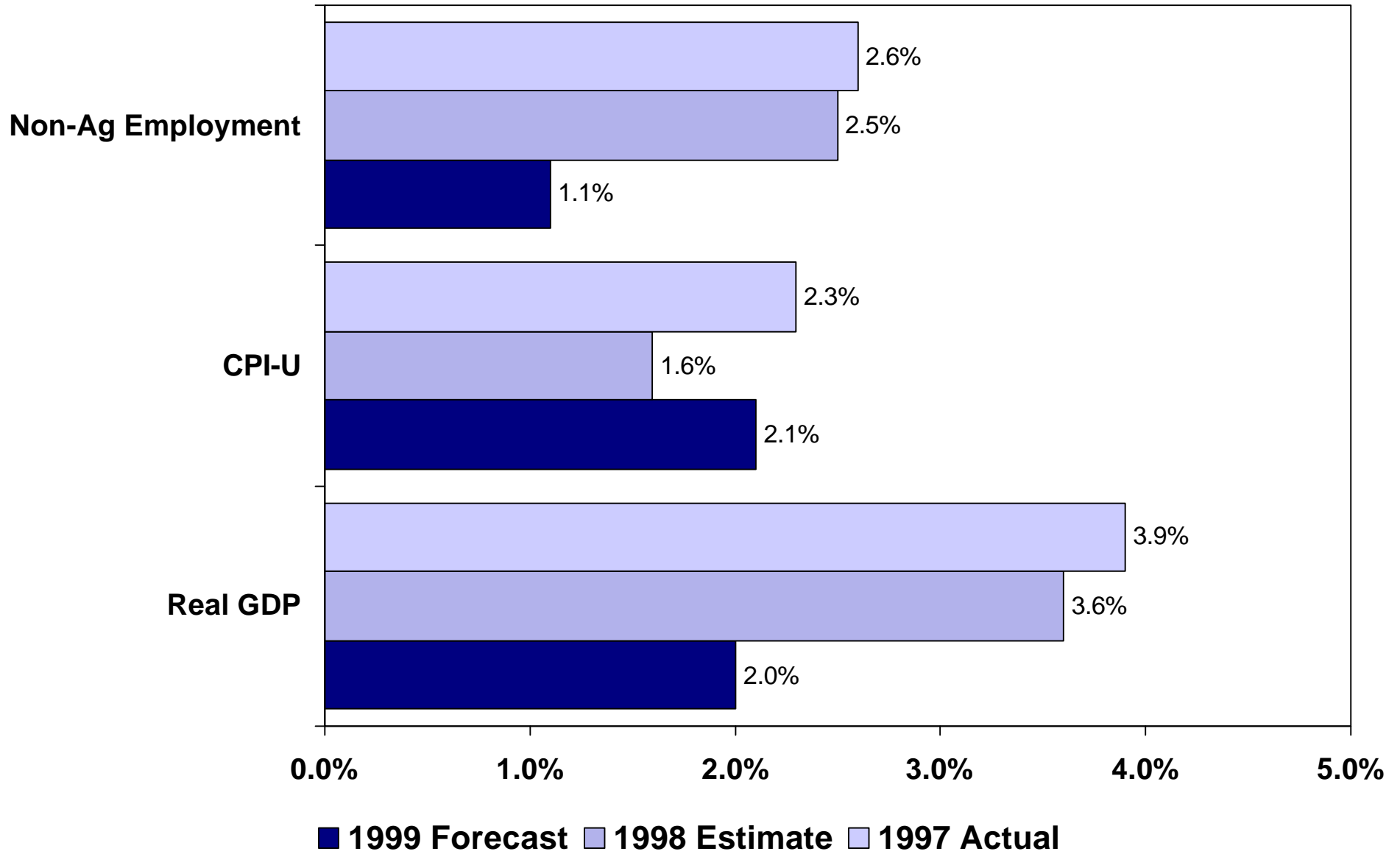
Conclusion

The eight year U.S. expansion should continue into 1999. The U.S. economy continues to operate with high utilization rates and low inflation. These factors are projected to continue through 1999. The Federal Reserve will continue to monitor inflation and adjust interest rates accordingly. However, the U.S. will continue to be affected by global markets as they struggle to recuperate. *

¹ Tea Leaf, Thredgold Economic Associates, December 16, 1998.

² WEFA, December 1998

U.S. Economic Indicators--Annual Percent Change: Actual, Estimate, and Forecast: Fiscal Years 1997 to 1999



Source: Council of Economic Advisors

Growth Rates for Selected U.S. Economic Indicators

Year	Non-Ag Employment	Inflation Adjusted GDP	Urban Consumers CPI	S&P 500 Stock Index
1980	0.7%	-0.3%	13.5%	15.2%
1981	0.8%	2.5%	10.3%	7.8%
1982	-1.8%	-2.1%	6.2%	-6.5%
1983	0.7%	4.0%	3.2%	34.0%
1984	4.7%	6.8%	4.3%	0.1%
1985	3.2%	3.7%	3.6%	16.4%
1986	2.0%	3.0%	1.9%	26.5%
1987	2.6%	2.9%	3.6%	13.8%
1988	3.2%	3.8%	4.1%	-1.1%
1989	2.5%	3.4%	4.8%	21.5%
1990	1.4%	1.3%	5.4%	3.7%
1991	-1.1%	-1.0%	4.2%	12.3%
1992	0.3%	2.7%	3.0%	10.3%
1993	1.9%	2.3%	3.0%	8.8%
1994	3.1%	3.5%	2.6%	2.0%
1995	2.7%	2.0%	2.8%	17.7%
1996	2.0%	2.8%	3.0%	24.4%
1997	2.6%	3.9%	2.3%	29.5%
1998(e)	2.5%	3.6%	1.6%	22.1%
1999(f)	1.1%	2.0%	2.1%	0.0%

Sources: U.S. Department of Commerce, Bureau of Labor Statistics, U.S. Statistical Abstract, Regional Financial Associates, Inc., and the Council of Economic Advisors.

Overview

Utah's economy has slowed to a sustainable level of moderate growth. The slower growth is attributable to the global economic crisis and improvements in economic activity in other states. Merchandise exports, net in-migration, housing price appreciation, and national job growth rankings slowed significantly in Utah in 1998. Still, Utah continues the trend of higher job growth rates and lower unemployment rates than the national average. Utah's 1999 employment growth is projected to double that of the nation and its unemployment rate is projected to be much lower. And, average annual pay is expected to continue strong growth through 1999 due to a tight labor market and low unemployment rates.

Economic Activity

Slower Growth. Growth in Utah's economy is slowing. This lower growth is largely due to the turmoil in the global economy and improvements in other state economies (especially California). Merchandise exports, net in-migration, housing price appreciation, and national job growth rankings slowed significantly in Utah in 1998. Utah ranked 11th in the nation for job growth for October 1998 compared to October 1997, according to Regional Financial Associates (RFA) a national economic research and consulting firm. By comparison, Utah ranked in first, second or third place in job growth in the last several years.

Still, RFA forecasts Utah to place seventh in job growth in 1999 even though it expects Utah to only rank 11th in job growth for all of 1998. And, despite slower job growth, average annual pay in Utah is increasing. When adjusted for inflation, average pay growth in Utah has been stronger over the past four year period than at anytime since 1977. This strong growth in inflation-adjusted pay is expected to continue through 1999 due to a tight labor market and low unemployment rates.

Utah also continues to experience positive net in-migration, but at much lower levels than in the last several years. Utah's net in-migration decreased from 15,000 in 1997 to 2,000 in 1998, and is projected to be around 1,000 in 1999. Also, Utah continues the trend of higher job growth rates and lower unemployment rates than the national average. Utah's 1999 employment growth will be double that of the nation and its unemployment rate will be much lower.

Lower Exports. Merchandise exports as reported by the Massachusetts Institute of Social and Economic Research (MISER) decreased significantly in Utah in 1998. Exports are down 7.5% for the first 9 months of 1998 compared to the same period in 1997. Exports to Asia are down 25.4%, while exports to non-Asia are up 1.8% for the first three quarters of 1998. Asian exports made up 34% of total exports in 1997, but for the first 9 months of 1998 they made up only 29% of the total.

Utah's exports are projected to be flat or slightly down in 1999. From 1995 through 1997, Utah's exports have been around \$3.6 billion. In 1998, however, Utah's exports fell to around \$3.3 billion. East Asia's economic recession has dampened Utah's export growth. If the Asian economies were as strong today as they were in the early 1990s, Utah's exports would likely be well over \$4.0 billion. Since 1994, the share of Utah's exports to Asia (mostly coal, copper, equipment, and chemicals) has fallen from 50% to 34% in

1997. Largely because of the Asian situation, Utah's exports will not be a force for growth during 1999.

Housing Prices and Home Ownership

Office of Federal Housing Enterprise Oversight. The average price of the same group of existing houses in Utah increased 59.5% in the 5-year period ending September 30, 1998 (the largest 5-year increase in the nation), according to the Office of Federal Housing Enterprise Oversight (OFHEO) [Housing Price Index](#). The OFHEO house price index measures the average price in repeat sales of the same single-family homes with Fannie Mae or Freddie Mac mortgages.

The price index starts at 100 in the first quarter of 1980. Thus, a home worth \$100,000 in the first quarter of 1980 is worth \$250,000 years later if it has an index of 250. In other words, it increased 2.5 times or 150%. The growth rate in housing prices as measured by the OFHEO index peaked at 19.2% in the second quarter of 1994 compared to second quarter 1993, and has since declined to 3.9% year-over growth in the third quarter of 1998. This 3.9% growth for the period ended September 1998 ranked Utah as 30th in the nation for house price appreciation. By comparison, Utah ranked second in the nation for the same period last year with 7.1% growth.

This lower ranking represents a significant softening of housing price appreciation in Utah. Utah continues to lead the nation with the largest rate of increase in existing housing price appreciation over the last five years at 59.5%, compared to 20.1% for the nation. Still, Utah's 72.5% home-ownership rate (versus 65.7% nationwide) was 11th highest in the nation in 1997. Housing prices are expected to increase 5.0% for all of 1998 and then decline to only 3.5% growth in 1999.

National Association of Realtors. Another housing price measure, the median-average home price in the Salt Lake City/Ogden area, increased to \$133,300 in the third quarter of 1998, according to the National Association of Realtors (NAR). Median-priced, existing homes in the Salt Lake/Ogden area in the third quarter of 1998 were \$600 more expensive than the \$132,700 national, median-average, existing home price. Housing price appreciation slowed to only 1.8% growth in third quarter 1998 compared to third quarter 1997 according to NAR. The median price is the average price above and below which half of all (old) existing homes sold.

Hotel, Office and Apartment Vacancies and Rents

Hotels. The overall hotel and motel occupancy rate in the Salt Lake metropolitan area fell 7.8% for the first half of 1998 over the same period in 1997.¹ It is also estimated that since January of 1997, 18 new hotel/motels have been opened in the Salt Lake valley, with ten more currently under construction, and with as many as 40 projects in the proposal stage.²

¹ PKF Consulting

² *The Enterprise*, "Hotel overbuilding may hurt suburban market; downtown could benefit", August 24, 1998

Overbuilding of hotels and motels may also be emerging as a problem.¹ The demand for rooms in the Salt Lake Valley seems to be growing at about 3% while the supply of rooms appears to be growing at 7.8%. According to Jim Hire, Utah hotel/motel occupancy rate would fall to 63%, and the Salt Lake Valley occupancy rate would drop to 69.1%, by year's end. Room rents throughout the State increased from \$70.2 in 1997 to \$72.3 in 1998; and, in Salt Lake Valley they increased from \$85.8 to \$87.9 for the same period.

The statewide occupancy rate was 68% in 1997, according to Hire. In 1999 it is projected that over 1,000 new rooms would be added, that the overall occupancy rate would fall to 61%, and that the Salt Lake Valley occupancy rate would decline to 65.7%. Occupancy levels of 65% are generally considered low enough to stop new development.

Offices. Metropolitan Salt Lake area office market vacancy was 6.6% for June of 1998.² The comparable national office vacancy rate for June was 9.2%. This rate was the 11th lowest in the nation for the cities included in the survey. The average cost of office space in the metropolitan Salt Lake area was \$18.61 a square foot, per annum. This was the 12th lowest average cost of the metropolitan areas included in the survey. In a 1998 national market forecast by Landauer Real Estate Counselors, Salt Lake ranked second in office "Market Quality Rating" among 60 major U.S. cities. Nonetheless, American Stores will soon merge with Albertson's, of Boise, Idaho. The merger will likely cause a reduction of American Stores personnel, which could leave a large portion of their newly completed headquarters vacant. This, in turn, should raise office vacancies in the downtown area.

Apartments. Apartment vacancies in the Greater Salt Lake Area were 6.4% at the end of second quarter 1998, while average rent was around \$609 per apartment.³ Monthly rental rates in June 1998 ranged from \$413 for a studio apartment to \$760 for a three bedroom, two bath apartment. Since 1993 apartment vacancy rates have been increasing. In 1996 vacancies were 4.3% and in 1997 they rose to 5.3%. A rate less than 5% is considered a fully occupied market.

Firm Openings and Closings in 1998

New Firm Openings and Expansions in 1998. New firm openings and major expansions of existing firms with 100 or more workers in 1998 included, but were not limited to the following:

TheraTech Inc.	Smead Manufacturing
Summo USA Corporation	Wholesome & Hearty Foods Inc
Gateway	Teletrust Inc.
Perot Systems	American Stores
Providian Financial Corp.	Nestle
Discover Brokerage Direct	Wasatch Constructors
FirstPlus Financial Group	Personal Wealth Advisors
OEA	Hill Air Force Base
MarketStar Corporation	Diversified Power Management
Sears	Pagenet
PowerQuest	

Contractions and Closures in 1998. Contractions or closures with 100 more workers in 1998 included, but were not limited to layoffs at the following:

¹ Telephone conversation with Jim Hiire (Publisher of the *Rocky Mountain Lodging Report*) on December 7, 1998.

² Survey conducted by CB Richard Ellis, Inc.

³ Equimark Properties

Utah Test & Training Range	Bard Access Systems
Geneva Steel	Union Pacific
Utah Power	Coleman Company
Iomega Corporation	Citibank
Universal Card Services	Koret
Corel	Micron
Kennecott	FirstPlus Financial Group
Quanex Corporation	Daw Technologies.

Geneva Steel. Geneva has been hit hard by the international economic crisis. The low cost of import steel from Russia, Japan and Brazil has hurt U.S. domestic producers. Since January 1998 the company has cut back 811 jobs from its plant in Vineyard, Utah. As of December 1998 Geneva was firing only one of its three blast furnaces.

Iomega. The Roy-based company laid off 400 workers in June 1998 as part of a company wide effort to restore profitability. This followed the loss of 600 jobs in 1996 when the company moved its manufacturing operation to Malaysia. In November 1998, the company announced it would be opening a plant north of its Roy headquarters to manufacture Zip drives. The plant will employ 250 people by the third quarter of next year. Employment could reach 500 to 800 people by 2000.

Corel. In June 1998, Corel Corporation (the manufacturer of WordPerfect software) announced the closure of its operations in Orem and the elimination of 340 jobs in Utah. By closing the Utah facilities and consolidating its operations at its corporate headquarters in Ottawa, Canada, the company plans to save \$33 million a year. WordPerfect was founded in Utah in 1980 and was for years the predominant wordprocessor in the industry. WordPerfect eventually lost dominant market share to Microsoft's Word software. Its departure marks the end of an important software legacy in Utah.

Firm Openings and Closings in 1999

Workforce Expansions and Contractions in 1999. Several companies have announced permanent workforce expansions and new firm openings of 100 or more jobs in 1999. These expansions and openings include, but are not limited to the following:

Sterling Truck of Utah	Dana Corporation
Reesebrothers Inc.	TheraTech Inc.
Select Comfort	Alliant Techsystems
Iomega Corporation	Gateway
Hill Air Force Base	MarketStar Corporation
Pagenet	Utility Trailer Company
Bureau of the Census	Specialized Bicycles

Entities that have announced workforce reductions of 100 or more jobs in 1999 include the following:

Utah Test & Training Range	American Stores
Nordstroms	Gull Laboratories (80 jobs)
International Home Foods Inc.	

Intel. In September of 1998 Intel was awarded a \$5 million industrial assistance loan from the State, contingent upon the company building a research and development facility in Riverton, Utah. The company will not have to repay the loan if it meets projections to hire 3,000 people with an average salary of \$50,000. Additionally, legislation was passed in the 1998 session that offers sales-tax credits to Intel and other companies that increase spending on research activities and research-related equipment. If the company does decide to locate in Utah it plans to employ up to

8,000 Utahns over a span of 10 to 15 years. A final decision is expected early next year (1999). The start-up project manager for Intel stated in mid-December that Utah "is our preferred site."

Gateway. Gateway (formerly Gateway 2000) completed its \$20 million Salt Lake computer manufacturing plant in August 1998. Gateway has hired 100 salespeople, and the company expects to hire 300 manufacturing employees by the end of 1998. By the end of 1999 the company plans to employ 1,000 to 1,500 Utahns. The plant will be equipped to produce up to 8,000 PC's per day. The Salt Lake plant is one of three in the United States.

American Stores. In June 1998 the company opened its new \$100 million headquarters in Salt Lake City. American Stores is the only Fortune 500 company currently headquartered in Utah. In August, the announcement was made that American Stores was merging with Albertson's in a \$11.7 billion deal. Albertson's, based in Boise, Idaho, plans to consolidate its administrative functions, which could mean a substantial reduction in the company's 1,900 Utah workforce in 1999.

Hill Air Force Base. In September 1998 the Air Force announced that HAFB had been awarded a nine-year \$1.6 billion repair and maintenance contract that will bring 750 new jobs to Utah. The new jobs could bring Hill back to 75 to 80% operating capacity. This in turn would reduce pressure to close the facility. In addition, around 2,000 jobs will be added in the next three to four years as Kelly Air Force Base in Texas, and McClellan Air Force in California are closed (by 2001). Pemco Aeroplex, an Alabama firm, had filed a lawsuit to protest the awarded contract. If a court does not overturn the award, the contract will remain.

Construction Activity in 1999

Construction Projects. Nonresidential construction projects of \$20 million or more that will begin or continue into 1999 include, but are not limited to, the following:

- Interstate-15 rebuild (\$1.6 billion)
- Cottonwood Corporation Center (\$150 million)
- University of Utah Biology building (\$24 million)
- Zermatt Swiss Resort (\$30 million)
- Little America Hotel (\$185 million)
- Light Rail (\$312 million)
- Snowbasin Resort (\$67 million)
- LDS Assembly Hall (\$240 million)
- Logan Canyon Highway (\$60 million)
- Park City Ski Resort Expansion (\$150 million)
- South Jordan elementary, middle and high schools (\$154 million)
- Deer Crest Resort (\$100 million)
- Salt Lake County Jail (\$134.5 million)
- Skaggs Catholic Center (\$50 million)
- U of U Olympic Village (\$120 million)
- Widtsoe Hall rebuild at USU (\$23.9 million)
- Marriot Hotel (\$35 million)
- Draper Women's Correction Facility (\$24 million)
- DDO Standard Examiner building (\$20 million)
- Hotel Monaco (\$32 million)
- Winter Sports Park Expansion (\$48 million)
- TAD Endeavor business park (\$56 million)
- Midas Creek Office Park (\$25 million)
- The Canyons Hotel and Village (\$202 million)
- The Bridges (\$20 million)
- Renaissance Square (\$20 million)
- Associated Food Stores warehouse (\$60 million)

- Salt Palace Expansion (\$47 million)
- Weston-Sherwood Hills expansion (\$32 million)
- Jordan Commons (\$85 million)
- Novell Campus Headquarters (\$80 million)
- Jordan Landing (\$450 million)
- Sunbest Farms egg plant (\$20 million)
- Weber County Jail (\$25 million)
- Solitude Resort expansion (\$100 million)
- Malt-O-Meal plant (\$90 million)
- Decker Lake complex (\$20 million)
- Salt Lake City Airport expansion (\$994 million)
- Salt Lake City Gateway infrastructure (\$83 million)
- Gateway Project (\$150 to \$300 million)
- Sandy Exhibition Hall (\$25 million)
- HAFB mobile hospital facility (\$31 million)
- McKay-Dee Hospital Complex (\$150 million)
- Inland Resources refinery (\$130 million)
- Oquirrh Park Speedskating Oval (\$29 million)
- Salt Lake Library complex (\$84 million)
- Layton Conference/Business Center (\$48 million)
- South Jordan South Gate Project (\$130 million)

I-15 Reconstruction. I-15 reconstruction, which began in May 1997 along 17 miles of highway, continues to move ahead of schedule. The \$1.59 billion project is 42% complete in just 32% of the scheduled time frame. Wasatch Constructors plans to complete the project by July 15, 2001, three months ahead of its contractual commitment to UDOT. The I-15 project is being constructed using design/build contracting. This means that the same contracting team that designs the project also builds it. This allows portions of I-15 to be under construction while other sections are in the final planning stages. Utilizing this type of planning reduces completion time from eight years to four-and-one-half years. In May 1998 Congress passed The Transportation Equity Act for the 21st Century. This Act gave Utah an additional \$75 million a year for six years (\$450 million) for highway construction. In addition, the White House granted Utah \$90 million in October 1998 for Olympic discretionary funds for transportation.

Light Rail. Construction of the north-south light rail line (began in April 1997) is well within its \$312 million budget. The line is 80% federally funded and is scheduled to begin operation in March 2000. In May 1998 Congress approved \$640 million for mass transit to help with the 2002 Winter Olympics, \$120 million of this money was for completion of the north-south line.

In May 1998, Congress approved money for the construction of another light rail line that would run 10.9 miles from the Salt Lake International Airport to the University of Utah. The estimated cost of this line is \$374 million. If built, it would incorporate an accelerated, design-build construction method similar to that used for I-15 reconstruction. This line must open in time for the 2002 Winter Olympics in order to receive 100% federal funding. Plans to build the line are on hold until \$5 million for annual operating expenses are secured. The federal money authorized for construction does not cover future operations and maintenance costs. If operating funds are not forthcoming the construction money reverts back to the federal government.

LDS Assembly Hall. Construction of the \$240 million LDS Church Assembly Hall in downtown Salt Lake City began in June 1997. The Hall is set to open in April of 2000 with a seating capacity of 21,000. The building will feature vegetation and fountains in an open-space plaza on its roof top.

Little America Hotel. This hotel will be Utah's first 5-star facility. Construction will be completed around mid 2001, just in time for the 2002 Winter Olympics. The \$185 million hotel will have 777 rooms, with 435 of the rooms composed of two-room suites. The owner has stated that the 2002 Olympics was a key factor in the decision to build the 5-star hotel.

Income Measures

Household Income. Median household and per capita income data was released recently by the U.S. Department of Commerce. This data shows that Utah continues to have median household income that is significantly above the national average. Utah's 1997 median household income of \$42,775 was more than 15% (or about \$5,700) higher than the national average of \$37,005. On the other hand, Utah's 1997 per capita income of \$20,246 was about \$5,000 less than the national average of \$25,298. The disparity in these income measures is due to the level of average pay in Utah; and the number of married couples with children in Utah compared to the nation.

Per Capita Income. Utah's per capita income is lower than the nation's per capita income for a couple of reasons. First, 1996 average pay (the latest data available) in Utah ranked 33rd in the nation at 84.9% of the U.S. average. Second, Utahns have more children in comparison with the other states. Utah ranked first in the nation for the percentage of the population under 18 at 33.9%, the U.S. average is 26.1%, according to the 1996 estimates by the U.S. Bureau of the Census. Utah's 1996 average household size also lead the nation with 3.08 persons per household compared to the U.S. average of 2.62. Statistics from the 1990 Census show Utah ranks first in the percent of the population in family households at 88.5%, compared to the U.S. at 83.7%.

Even though Utah's per capita income is lower than the national average, it has shown steady growth over the past eight years. Bureau of Economic Analysis data shows that in 1989 Utah's per capita income was 72.9% of the U.S. average, but by 1997 it had increased to 80%. This growth trend should continue through the year 2000.

While Utah's per capita income in 1997 ranked low (43rd in the nation), its median household income ranked ninth in the nation. Part of the disparity between the rankings for per capita income and median household income can be explained by Utah's high percentage of married couples with children. According to the 1990 census, Utah ranked first in the percent of married couple families at 64.8%, while the U.S. average was 55.1%. Many married couples earn two incomes and combine their resources. This, in turn, raises the median household income. See the tables on the

following pages for economic indicators, and income data by state.

Media Reporting and Rankings

Utah ranked third on the *Development Report Card For The States*, published by the Corporation for Enterprise Development. The *Report Card* uses over 50 statistics comparing states to arrive at letter grades in three categories: economic performance, business vitality, and development capacity.

In 1998 *Newsweek* magazine ranked Salt Lake City in its list of the top ten high-tech cities. The article also noticed Salt Lake's nation-leading percentage of homes with personal computers. And, *Money* magazine ranked Salt Lake City as the fifth most attractive city in which to live among Western metropolitan areas with populations of more than 1 million.

Fortune magazine ranked Salt Lake City third on its 1998 list of "Best Cities for Business". The rankings compared cities by measuring such factors as, the number of new business, jobs growth, the amount of venture capital raised, cost of living, quality of life, crime rates, and air quality.

In 1998 *U.S. News and World Report* ranked the University of Utah and Brigham Young University's law schools 39th and 29th in the nation, respectively. And, Brigham Young University School of Management ranked in *Business Week's* top 50 MBA programs. The rankings were based on teaching quality, program content, and career placement.

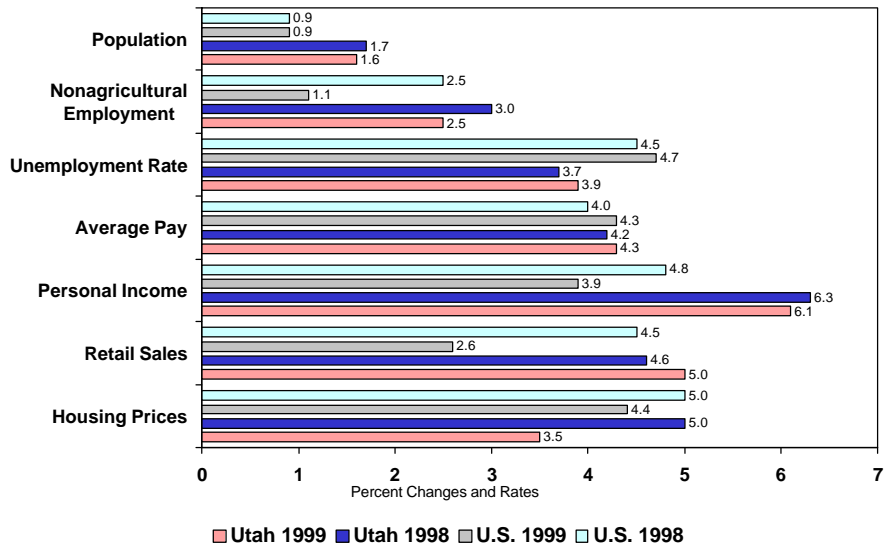
According to 1998 U.S. Census Bureau data, Utah has the third lowest poverty rate among the states. And, Utah ranks seventh in the nation in 10 categories measuring the health and well-being of children.¹

State Policy Reports ranked Utah sixth in the nation in January 1998 for the number of federal employees per thousand residents at 15.1. Nonetheless, Utah lost 24.5% of its federal employees (9,800 jobs) between 1989 and 1997. Utah ranked fourth in the nation for federal jobs losses during this period according to the Center for the Study of States.

State Policy Reports ranked Utah third in the nation in the percentage growth in state and local employment from January 1993 to January 1998 (at 16.8%); but, Utah ranked 19th (at 3.8%) after adjustments for population growth. Utah also ranked 15th among the states in January 1998 in state and local government employees per thousand residents at 70.1. *

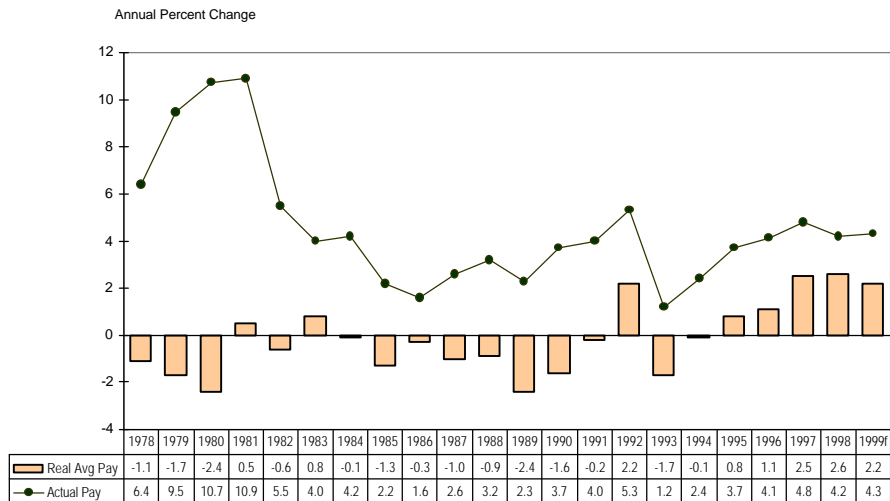
¹ 1998 *Kids Count Data Book*, Annie E. Casey Foundation.

**Comparison of Utah and U.S. Economic Indicators
1998 Estimates and 1999 Forecasts**



Source: Council of Economic Advisors

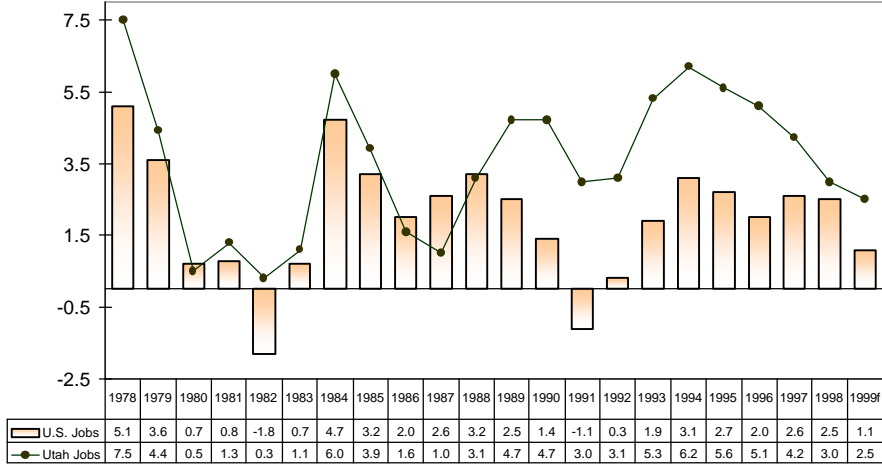
**Utah Actual and Inflation-Adjusted
Average Annual Pay**



Source: Utah Department of Workforce Services, Council of Economic Advisors

Utah and U.S. Job Growth Rates

Annual Percent Change



Source: Utah Department of Workforce Services, WEFA, Council of Economic Advisors

Actual and Estimated Economic Indicators for Utah and the U.S.: November 1998

ECONOMIC INDICATORS	UNITS	1996	1997	1998	1999	% CHG	% CHG	% CHG
		ACTUAL	ACTUAL	ESTIMATES	FORECAST	1996-97	1997-98	1998-99
PRODUCTION AND SPENDING								
U.S. Real Gross Domestic Product	Billion Chained \$92	6,995	7,270	7,532	7,682	3.9	3.6	2.0
U.S. Real Personal Consumption	Billion Chained \$92	4,752.4	4,913.5	5,144.4	5,267.9	3.4	4.7	2.4
U.S. Real Fixed Investment	Billion Chained \$92	1,050.6	1,138.0	1,259.8	1,285.0	8.3	10.7	2.0
U.S. Real Defense Spending	Billion Chained \$92	319.1	308.9	300.3	304.8	-3.2	-2.8	1.5
U.S. Real Exports	Billion Chained \$92	860.0	970.0	972.9	971.9	12.8	0.3	-0.1
Utah Coal Production	Million Tons	27.1	26.4	26.9	27.9	-2.4	1.8	3.9
Utah Oil Production Sales	Million Barrels	19.5	19.6	20.0	20.1	0.8	2.1	0.5
Utah Natural Gas Production Sales	Billion Cubic Feet	179.9	183.4	201.8	221.9	1.9	10.0	10.0
Utah Copper Mined Production	Million Pounds	656.3	672.6	618.0	649.0	2.5	-8.1	5.0
SALES AND CONSTRUCTION								
U.S. New Auto and Truck Sales	Millions	15.0	15.0	15.1	14.8	0.0	0.7	-2.0
U.S. Housing Starts	Millions	1.47	1.5	1.6	1.5	0.7	7.4	-8.2
U.S. Residential Construction	Billion Dollars	311.9	327.9	365.0	364.6	5.1	11.3	-0.1
U.S. Nonresidential Structures	Billion Dollars	217.0	240.2	243.6	242.3	10.7	1.4	-0.5
U.S. Repeat-Sales House Price Index	1980Q1=100	198.5	206.7	217.0	226.6	4.1	5.0	4.4
U.S. Existing S.F. Home Prices (NAR)	Thousand Dollars	118.2	124.1	131.5	137.3	5.0	6.0	4.4
U.S. Retail Sales	Billion Dollars	2,455.2	2,568.2	2,683.8	2,753.5	4.6	4.5	2.6
Utah New Auto and Truck Sales	Thousands	82.6	82.4	84.5	85.3	-0.2	2.5	1.0
Utah Dwelling Unit Permits	Thousands	23.7	20.7	21.5	19.0	-12.8	3.9	-11.6
Utah Residential Permit Value	Million Dollars	2,104.5	1,943.5	2,150.0	1,900.0	-7.7	10.6	-11.6
Utah Nonresidential Permit Value	Million Dollars	951.8	1,371.0	1,050.0	750.0	44.0	-23.4	-28.6
Utah Repeat-Sales House Price Index	1980Q1=100	213.3	228.5	239.9	248.3	7.1	5.0	3.5
Utah Existing S.F. Home Prices (NAR)	Thousand Dollars	122.7	128.6	133.7	138.4	4.8	4.0	3.5
Utah Taxable Retail Sales	Million Dollars	14,404	14,873	15,564	16,348	3.3	4.6	5.0
DEMOGRAPHICS AND SENTIMENT								
U.S. July 1st Population (CENSUS)	Millions	265.2	267.6	270.0	272.5	0.9	0.9	0.9
U.S. Consumer Sentiment of U.S.	1966=100	93.6	103.2	105.5	99.5	10.3	2.2	-5.7
Utah July 1st Population (UPEC)	Thousands	2,002.4	2,048.8	2,083.2	2,116.9	2.3	1.7	1.6
Utah July 1st Net Migration (UPEC)	Thousands	13.6	15.0	2.0	1.2	na	na	na
Utah July 1st Population (CENSUS)	Thousands	2,017.6	2,059.2	2,094.1	2,128.0	2.1	1.7	1.6
Utah July 1st Net Migration (CENSUS)	Thousands	13.8	10.5	2.4	1.4	na	na	na
Utah Consumer Sentiment of Utah	1966=100	105.3	106.6	108.9	102.7	1.2	2.2	-5.7
PROFITS AND RESOURCE PRICES								
U.S. Corporate Profits Before Tax	Billion Dollars	679.0	741.3	734.6	704.5	9.2	-0.9	-4.1
U.S. Domestic Profits Less Fed. Reserve	Billion Dollars	560.8	618.9	611.2	576.4	10.4	-1.2	-5.7
U.S. Oil Refinery Acquisition Cost	\$ Per Barrel	20.7	19.1	14.6	14.7	-7.6	-23.7	0.5
U.S. Coal Price Index	1982=100	94.5	96.3	94.0	92.9	1.9	-2.4	-1.2
Utah Coal Prices	\$ Per Short Ton	18.5	18.3	18.5	18.8	-0.9	0.9	1.5
Utah Oil Prices	\$ Per Barrel	21.1	19.2	13.0	14.0	-9.2	-32.0	7.5
Utah Natural Gas Prices	\$ Per MCF	1.39	1.9	1.9	2.0	33.8	3.8	4.1
Utah Copper Prices	\$ Per Pound	0.98	0.98	0.74	0.73	-0.3	-24.6	-1.0
INFLATION AND INTEREST RATES								
U.S. CPI Urban Consumers (BLS, NSA)	1982-84=100	156.9	160.5	163.1	166.5	2.3	1.6	2.1
U.S. GDP Chained Price Indexes	1992=100	109.5	111.6	112.7	114.3	1.9	1.0	1.4
U.S. Federal Funds Rate	Percent	5.30	5.5	5.3	4.5	na	na	na
U.S. 3-Month Treasury Bills	Percent	5.01	5.1	4.7	4.1	na	na	na
U.S. T-Bond Rate, 30-Year	Percent	6.70	6.6	5.6	5.0	na	na	na
U.S. Mortgage Rates, Fixed FHLMC	Percent	7.8	7.6	6.7	6.2	na	na	na
EMPLOYMENT AND WAGES								
U.S. Establishment Employment (BLS)	Millions	119.6	122.7	125.7	127.1	2.6	2.5	1.1
U.S. Average Annual Pay (BLS)	Dollars	28,945	30,219	31,442	32,801	4.4	4.0	4.3
U.S. Total Wages & Salaries (BLS)	Billion Dollars	3,462	3,707	3,952	4,169	7.1	6.6	5.5
Utah Nonagricultural Employment (WS)	Thousands	954.2	994.0	1,023.7	1,049.1	4.2	3.0	2.5
Utah Average Annual Pay (WS)	Dollars	24,198	25,367	26,434	27,581	4.8	4.2	4.3
Utah Total Nonagriculture Wages (WS)	Million Dollars	23,089	25,215	27,062	28,932	9.2	7.3	6.9
INCOME AND UNEMPLOYMENT								
U.S. Personal Income (BEA)	Billion Dollars	6,409	6,771	7,096	7,372	5.6	4.8	3.9
U.S. Unemployment Rate (BLS)	Percent	5.4	4.9	4.5	4.7	na	na	na
Utah Personal Income (BEA)	Million Dollars	38,825	41,689	44,316	47,019	7.4	6.3	6.1
Utah Adjusted Gross Income (UTC)	Million Dollars	29,389	32,136	34,167	36,296	9.3	6.3	6.2
Utah Unemployment Rate (WS)	Percent	3.5	3.1	3.7	3.9	na	na	na

Source: Council of Economic Advisors, Revenue Assumptions Committee

Median Household Income, Per Capita Income and Mean Average Pay

Area	1997 Median Average Income Per Household	Rank*	1997 Per Capita Income	Rank	1996 Mean Average Pay Per Job	Rank
UNITED STATES	\$37,005	-	\$25,298	-	\$28,945	-
Alabama	31,939	41	20,699	38	25,180	31
Alaska	47,994	2	24,945	19	32,461	5
Arizona	32,740	39	21,994	35	26,387	26
Arkansas	26,162	50	19,602	47	22,294	46
California	39,694	15	26,218	13	31,773	6
Colorado	43,233	6	27,015	9	28,520	14
Connecticut	43,985	5	35,954	1	36,579	2
Delaware	43,033	7	28,433	6	30,711	9
District of Columbia	31,860	-	35,290	-	44,458	-
Florida	32,455	40	24,795	20	25,640	29
Georgia	36,663	22	23,893	25	27,488	20
Hawaii	40,934	14	25,686	16	27,363	21
Idaho	33,404	36	20,393	42	23,353	42
Illinois	41,283	12	27,929	7	31,285	8
Indiana	38,889	17	23,183	29	26,477	25
Iowa	33,783	33	23,177	30	23,679	41
Kansas	36,471	24	24,014	23	24,609	32
Kentucky	33,452	34	20,599	40	24,462	36
Louisiana	33,260	37	20,473	41	24,528	34
Maine	32,772	38	21,928	36	23,850	39
Maryland	46,685	3	28,671	5	30,293	10
Massachusetts	42,023	11	31,207	3	33,940	4
Michigan	38,742	19	24,998	18	31,522	7
Minnesota	42,564	10	26,295	12	28,869	13
Mississippi	28,499	48	18,087	50	21,822	47
Missouri	36,553	23	23,723	26	26,608	24
Montana	29,212	47	19,704	46	21,146	49
Nebraska	34,692	31	23,656	27	23,291	44
Nevada	38,854	18	26,553	10	27,788	17
New Hampshire	40,998	13	27,806	8	27,691	19
New Jersey	48,021	1	32,233	2	35,928	3
New Mexico	30,086	45	19,249	49	23,716	40
New York	35,798	27	30,299	4	36,831	1
North Carolina	35,840	26	23,174	31	25,408	30
North Dakota	31,661	42	20,231	45	21,242	48
Ohio	36,134	25	24,203	21	27,775	18
Oklahoma	31,351	43	20,214	44	23,329	43
Oregon	37,247	21	23,984	24	27,027	23
Pennsylvania	37,517	20	25,678	17	28,973	11
Rhode Island	34,797	30	25,689	15	27,194	22
South Carolina	34,262	32	20,651	39	24,039	38
South Dakota	29,694	46	21,183	37	20,724	50
Tennessee	30,636	44	22,752	33	25,963	28
Texas	35,075	28	23,647	28	28,129	15
Utah	42,775	9	20,246	43	24,572	33
Vermont	35,053	29	23,018	32	24,480	35
Virginia	42,957	8	26,172	14	28,001	16
Washington	44,562	4	26,412	11	28,881	12
West Virginia	27,488	49	18,734	48	24,075	37
Wisconsin	39,595	16	24,199	22	26,021	27
Wyoming	33,423	35	22,611	34	22,870	45
Utah as a % of U.S.	115.6%		80.0%		84.9%	

* Utah's three year ranking for 1995 to 1997 is 15th in the nation. Year-to-Year rankings vary due to the small household sample size surveyed in Utah.

Sources:

1997 Median Average Income: U.S. Census Bureau; 1997 Per Capita Income: U.S. Bureau of Economic Analysis; 1996 Mean Average Pay Per Job

* Utah's Long-Term Projections

Overview

Utah's population surpassed 2.08 million in 1998 and is expected to reach 3.3 million by the year 2020— a 59% increase. This rate of population growth, which exceeds that of the nation, will be sustained by a rapid rate of natural increase and a strong and diversified economy. The state's employment growth rate is also expected to be more rapid than that of the nation. The most rapid rates of population growth are expected in southwestern Utah and Grand, Summit, and Wasatch Counties.

Long term demographic and economic projections for the state of Utah have been produced by the Demographic and Economic Analysis Section of the Governor's Office of Planning and Budget (GOPB). These projections represent the State's official view of Utah's future and inform a multitude of planning efforts. These county level baseline projections to the year 2020 were released in January 1997.¹

At present these projections provide the baseline for the Envision Utah scenario analysis effort. A new round of projections will be generated for the next *Economic Report to the Governor*.

Subsequent to the release of these numbers, median ages and household projections—including calculations of persons per household—have been revised. Rankings of median ages and Hachman Indices by county are other new data sets which have been organized. An extensive on-line database is available on the World Wide Web at www.qget.state.ut.us/projections. The system enables customized retrieval, analysis, and visualization of historical and projected demographic and economic information.

State Population and Employment Projections

Utah's population surpassed 2.08 million in 1998 and is expected to reach 3.3 million by the year 2020; a 59% increase. This rate of population growth, which exceeds that expected for the nation, will be sustained by: (1) a rapid rate of natural increase (i.e., births exceeding deaths) and, (2) a strong and diversified economy. The state's employment growth rate is also expected to be more rapid than that of the nation. If these rates of economic growth are obtained, Utah will experience a sustained net in-migration over nearly the entire projection period. This net-in-migration will occur because, even though the state's population is quite young and fertility rates are relatively high, there will not be adequate internal growth of the labor force to match the demand for labor. In absolute numbers, the majority of the 1.3 million new Utahns will reside on the Wasatch Front. The most rapid rates of growth are expected in southwestern Utah, Grand County, and the "Wasatch Back" (Summit and Wasatch Counties).

Population Growth Rates. The growth rate of Utah's population has historically exceeded that of the nation; this trend is expected to continue throughout the projection period. The average annual rate of growth of Utah's population over the projection period (1995 to 2020) is expected to be 2.1%. This rate compares with an average annual rate of growth of 2.3% in the historical period (1950 to 1995). Corresponding rates of growth for the nation are 1.2% in the historical period and 0.9% in the projected period.

Population growth rates fluctuate over time according to economic conditions, specific events, and population dynamics. Even when Utah experienced difficult economic times in the 1980s, the rate of growth of the population for the decade still exceeded that of the nation. The largest growth rate differential occurred in the 1970s, when Utah's average annual rate of population growth was 3.3% while that of the nation was 1.1%. A similar, yet smaller differential is projected for the first ten years of the next century, when Utah's annual average population growth rate is projected to be 2.4% while the nation's is projected to be 0.8%.

Population Increases. In the 1950-to-1998 period, total population of the state has consistently increased, although the amounts of annual increase have varied cyclically. Population increased an average of 40,800 persons per year throughout the decade of the 1970s, and 25,510 in the 1980s. Projections indicate that population will increase by an average amount of 44,341 in the 1990s, by 56,468 in the 2000s, and by 57,411 in the 2010s. So, while rates of population growth are expected to decelerate in the later years of the projection period, absolute amounts of growth are expected to be quite high relative to history.

Natural Increase. Utah's rapid rate of population growth is primarily attributable to natural increase rather than in-migration.² This rapid rate of natural increase has occurred because the population is quite young (with a greater share of the population in childbearing years) and fertility rates are quite high. In addition to births and deaths, the third component of population change is net migration. Net in-migration was quite small in the 1950s and net out-migration occurred in the 1960s and 1980s. Over the last 45 years, with only three exceptions (1954, 1964, and 1988), even in times of net out-migration (the 1980s), Utah's rate of population increase has consistently exceeded that of the nation. These projections indicate that natural increase will contribute 65% of the population increase over the next 25 years.

The relatively rapid rate of natural increase of the Utah population is mostly attributable to the state's young population in combination with a high fertility rate, although a relatively low death rate and high life expectancy have contributed to a lesser extent. Median age for the state has increased from 24 in 1980 to 27 in 1997, and is projected to increase to 31 by the year 2020. The national median age was 30 in 1980, 35 in 1997, and is projected to increase to 38 in the year 2020.

Age Structure. Age structure may be summarized by the dependency ratio, which is the number of people in the population not in the working age group per 100 working age persons (18 through 64 years old). Utah's dependency ratio is consistently among the highest in the nation. In 1970 it was 90 for Utah compared with 79 nationally. By 1997 it had fallen to 73 in Utah and 63 for the nation. By 2020, the projected dependency ratio for Utah is 70 and 67 for the nation.

The increasing national dependency ratio toward the end of the projection period is attributable to the aging of the Baby Boom generation. For the nation, the retirement component was 33% of the dependency group in 1997 and is projected to increase to 41%

¹ This means that the last year of historical data in these projections is 1995 for employment and 1996 for population.

² The amount of natural increase for a given population is the amount by which the number of births exceeds the number of deaths for a particular year. If deaths exceed births then there is a natural decrease.

by 2020. In the case of Utah, the retirement age component of the state's dependency ratio was about 21% in 1997 and is projected to increase to 26% in 2020. The school age (ages 5 through 17) portion of the population for the state is projected to decrease from 24% in 1997 to 22% in 2020.

Throughout the projection period, Utah's age structure will maintain its unique character as compared with the nation, although there will be slight tendency to converge. The median age of Utah's population will increase over the projection period, as will that of the nation. However, Utah's population will continue to be between 6.5 and 8 years younger than that of the nation by this measure.

Employment. Non-agricultural payroll employment is projected to increase by about 79% from around 908,000 in 1995 to 1,629,281 in the year 2020. Total employment for Utah is projected to increase from 1,100,273 in 1995 to 1,977,156 in 2020; an increase of 80%.¹

The employment growth rate of Utah has quite consistently out-paced that of the nation and this differential is projected to continue. The average annual rate of growth of non-agricultural payroll employment from 1950 to 1995 was 3.5% for Utah as compared to 2.1% for the nation. The projected rates for 1995 through 2020 are 2.4% and 1.0% respectively. The decade with the highest rate of employment growth for the state was the 1970s, when non-agricultural payroll employment increased at an average annual rate of 4.5%; this increase compares to the national rate of 2.7%. Over the projection period, the 1990s are expected to have an average annual rate of growth of 4.1% with rates decelerating over time.

While the rates of increase of employment are not projected to reach record levels, the numbers of jobs created are projected to reach record levels. The average annual amounts of increase of nonagricultural payroll employment peaked in the 1970s at 19,316 jobs. This number is projected to increase to 34,629 in the 1990s, 29,072 for the 2000s, and 26,827 for the 2010s.

Employment Growth by Sector. With the exception of agriculture, employment increases are projected for all major sectors of Utah's economy. Services, non-farm proprietors, TCPU (transportation, communication, and public utilities), trade, and FIRE (finance, insurance, and real estate) are projected to have the most rapid rates of increase (i.e., average annual rates of growth in excess of 2.0% in the years 1995 to 2020). Employment is projected to grow more rapidly (or in the case of agriculture decrease less rapidly) in every sector in the state than in the nation. Manufacturing employment is projected to increase in Utah while declining for the national economy. About one-third (31%) of all jobs created in Utah in the 1995 to 2020 period are projected to be service jobs, which is now and will continue to be the sector with the largest share of the state's employment. This compares to 46% at the national level. A greater share of employment will be created in trade, TCPU, manufacturing, construction, and government in the state as compared to the nation.

At the detailed industry level, the most rapidly growing sectors are business services, transportation services, agricultural services, professional services, medical and health services, repair services, and social services. These sectors have average annual rates of growth for the 1995 to 2020 projected period in excess of 3.1%. The industry that is projected to create the largest number of jobs in

¹ Total employment for projection purposes is non-agricultural payroll employment plus agriculture (payroll employment and proprietors) plus private household employment plus non-farm proprietors. The Bureau of Economic Analysis estimates the latter three.

the next 25 years is non-farm proprietors (156,821 jobs), followed by business services (75,238), medical and health services (73,872), and eating and drinking places (48,481).

Diversification. The state's economy has become more diverse (i.e., more similar to the economic structure of the nation) over time as employment has grown more rapidly in industries in which it was relatively unspecialized. This increasing diversification of the state's economy is evident at both the major industry and detailed industry levels as measured by the Hachman Index.² A value of one for the Hachman Index indicates an identical distribution of employment shares between the subject region (the state) and the reference region (the nation). The increase in the value of the index in the 1980 to 1995 period is primarily the result of the simultaneous occurrence of: (1) restructuring of mining and metals industries and the downsizing of the federal government, and (2) emergence and/or growth of service industries (e.g., computer software development / production, financial services, temporary services, telemarketing, etc.), tourism related industries (e.g., hotels and lodging, transportation by air, etc.), and particular types of manufacturing (e.g., motor vehicle parts (air bags), aircraft equipment, sporting goods, etc.).

This restructuring and diversification process has nearly run its course. The Hachman Index for the state is approaching one (its theoretical maximum) when calculated at the major industry level and approaching 0.95 at the two-digit detailed industry level. These projections indicate that the industrial structure of the state will become somewhat more diversified (i.e., more similar to that of the nation) over the next 25 years, although a differential as measured by the Hachman Index will be sustained.

County Population, Household, and Employment Projections

All 29 counties are expected to gain population, households, and employment in the years 1995 to 2020. The most rapid rates of growth are in southwest Utah, Grand County, and the "Wasatch Back" (Summit and Wasatch Counties). In terms of amounts of population, much of the increase is concentrated in the Wasatch Front counties.

Population. The population of the state is geographically concentrated in the Wasatch Front Multi-County District (Davis, Morgan, Salt Lake, Tooele, and Weber Counties). These counties have 63% of the state's population and 67% of the state's employment. These proportions are projected to decline somewhat in the next quarter century. The absolute number of persons in the Wasatch Front is projected to increase from 1,233,100 in 1995 to 2,010,354 in the year 2020, for an increase of 777,254 people or 63%.

The most rapidly growing counties (in terms of average annual rates of growth) in the state are projected to be Washington, Grand, Iron, Summit, Wasatch, and Kane. The counties with the largest projected absolute increases in the population from 1990 to 2020 are Salt Lake, Utah, Davis, Washington, Weber, and Cache.

Median Age. The median age of the population is projected to increase for all counties over the projection period except Piute county, which is ranked as the oldest county from 1990 to 2020. The counties with the youngest population in 1990 were San Juan, Utah, Cache, and Sanpete while the counties with the oldest

² "Diversification of the Utah Economy," pages 207 through 213, 1995 Economic Report to the Governor.

population were Beaver, Grand, and Piute. By 2020 the counties with the youngest population, as measured by median age, are projected to be Utah, Cache, Iron, and Wasatch, while those projected to have the highest median age are Daggett, Emery, and Piute.

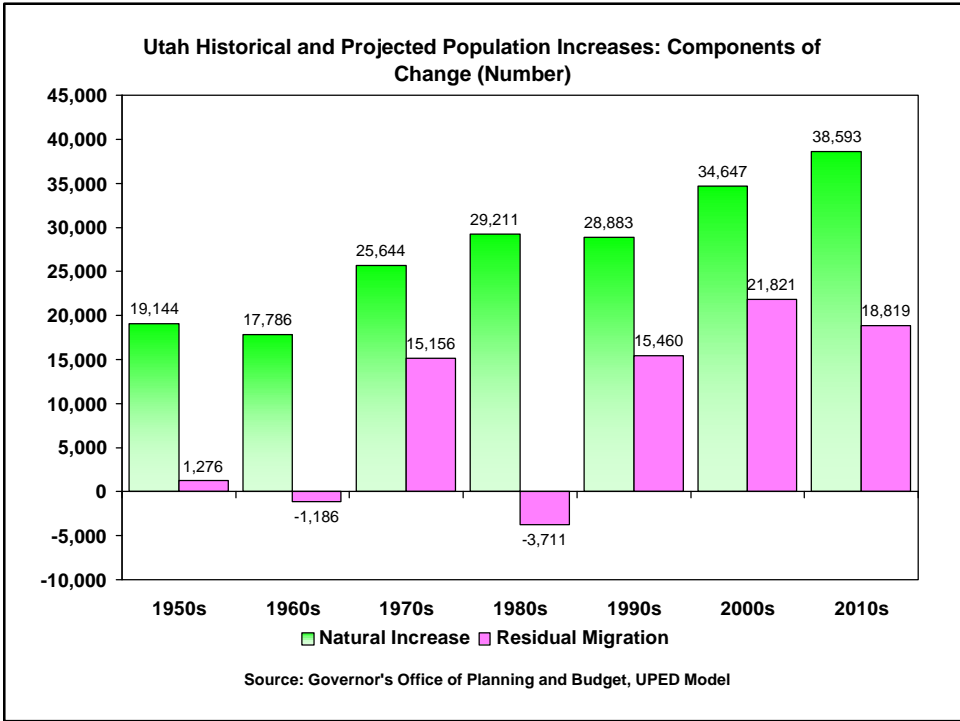
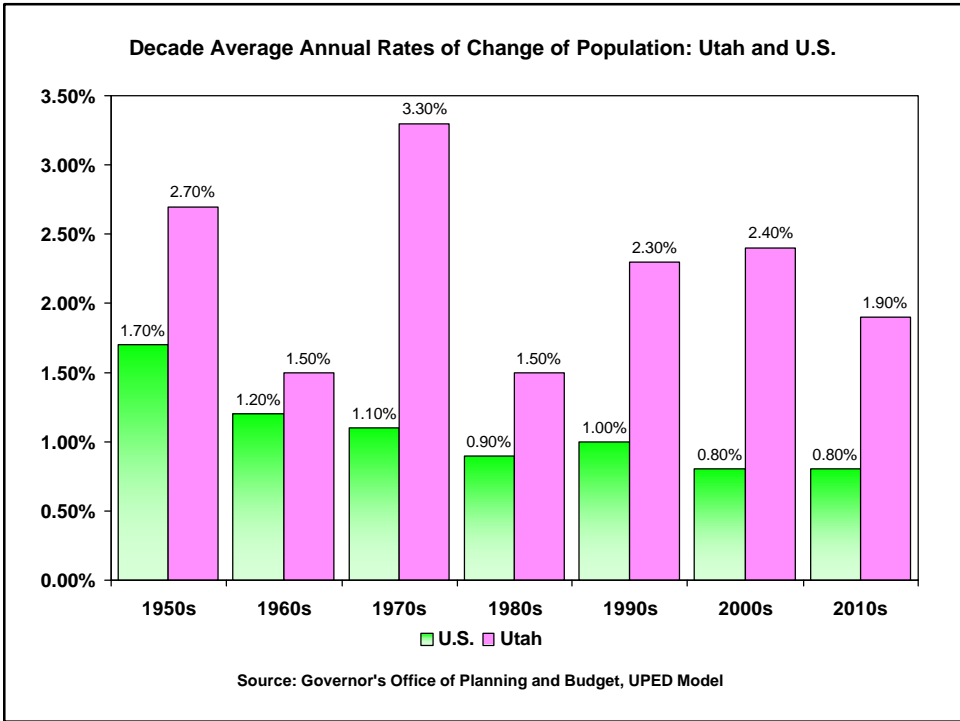
Households. Household growth is projected to be more rapid than population growth, although the growth rate differentials vary from county to county. The rankings of counties by growth rates of households in the 1990 to 2020 period differs slightly from that of population. In terms of rates of growth, the number of households is projected to grow most rapidly in Washington, Grand, Iron, Summit, Kane, and Wasatch. The average number of persons per household is projected to decline for all counties. In 1990, the counties with the highest number of persons per household were San Juan, Utah, Morgan, Davis, and Emery. By 2020, the counties with the highest projected number of persons per household are Utah, Box Elder, Wasatch, Cache, and Rich.

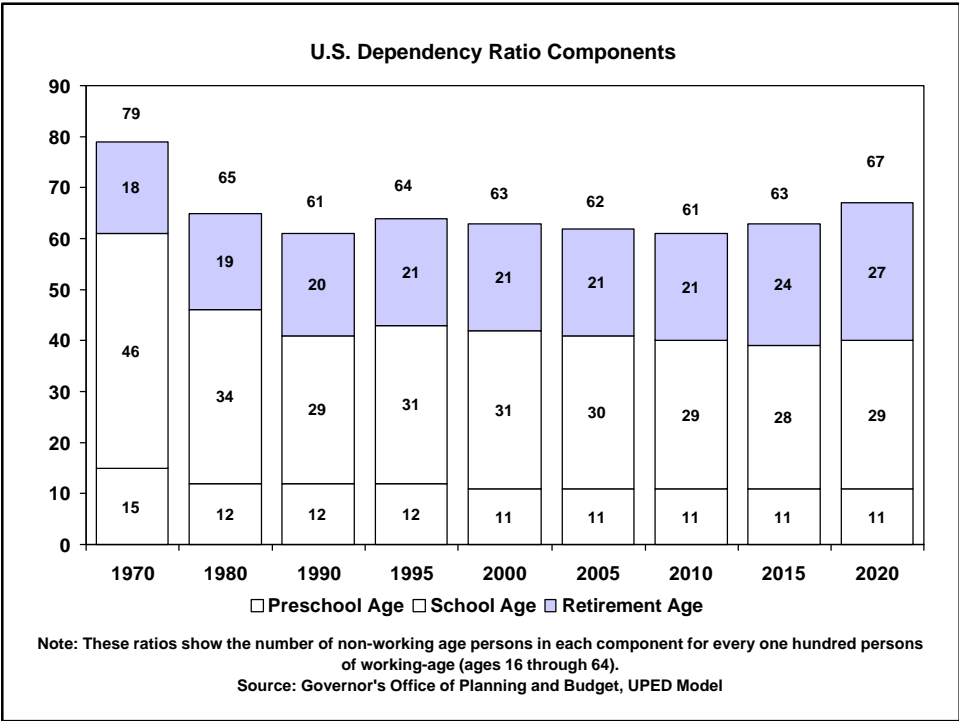
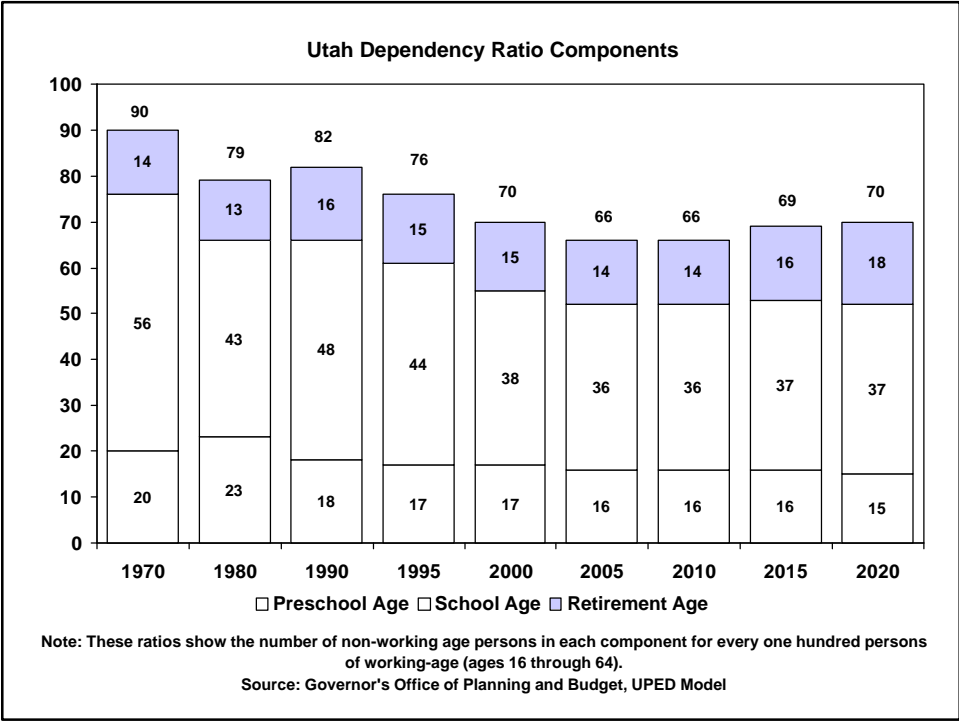
Employment. Employment growth is projected to be most rapid from 1990 to 2020 for Washington, Kane, Iron, Summit, Beaver, and Wasatch counties, while the largest number of jobs created in the 1990 to 2020 are projected for Salt Lake, Utah, Weber, Davis, and Washington counties.

For most counties the Hachman Index is projected to increase from 1980 to 2020. The exceptions are Cache, Box Elder, Beaver, and Piute. The state's largest counties have Hachman Indices closest to one: Salt Lake, Utah, and Weber. Emery county's Hachman Index indicates its sectoral distribution is most different from that of the nation; this is because of the specialization in coal mining and electric generation.

Additional Information

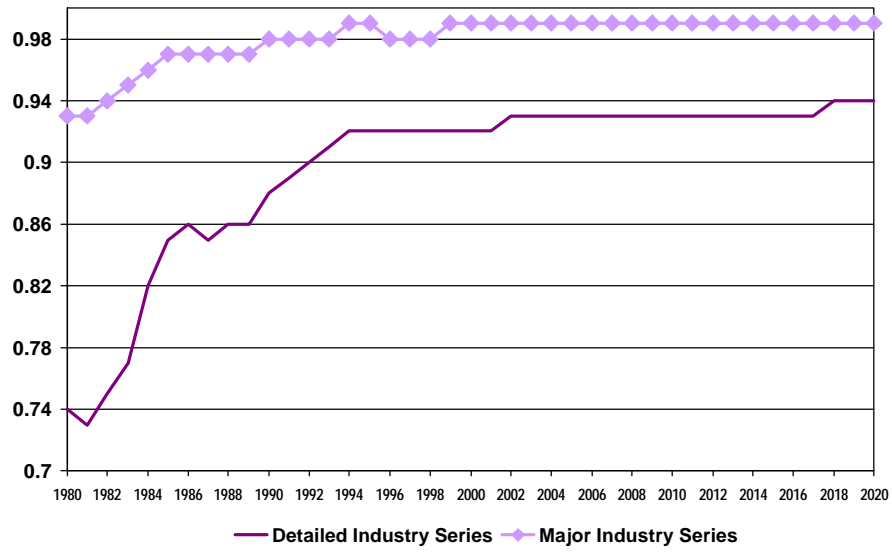
For additional historical and projected economic and demographic information, visit the web site: www.qget.state.ut.us/projections/.





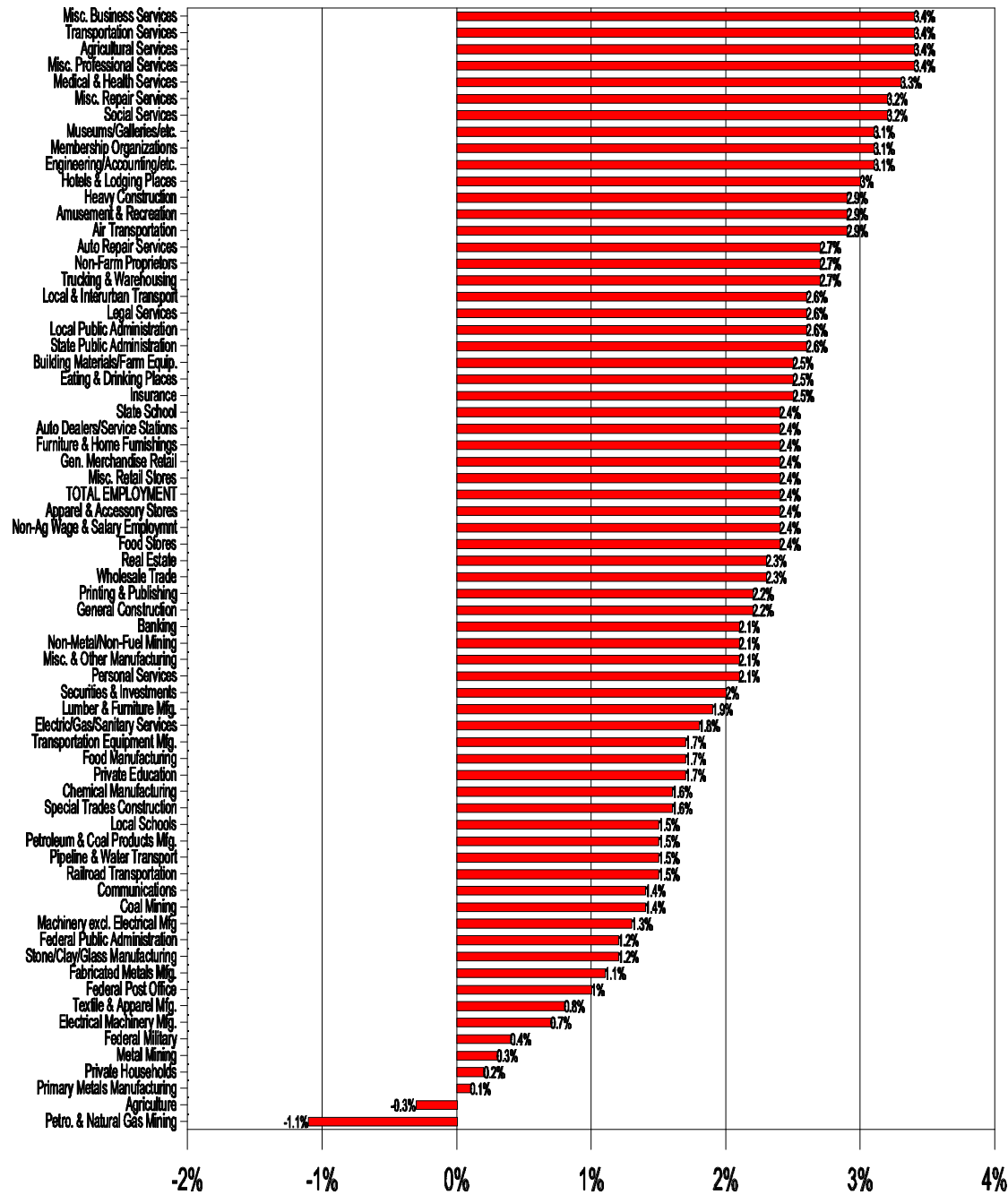
Index of Economic Diversity: Utah Relative to the Nation

Hachman Index



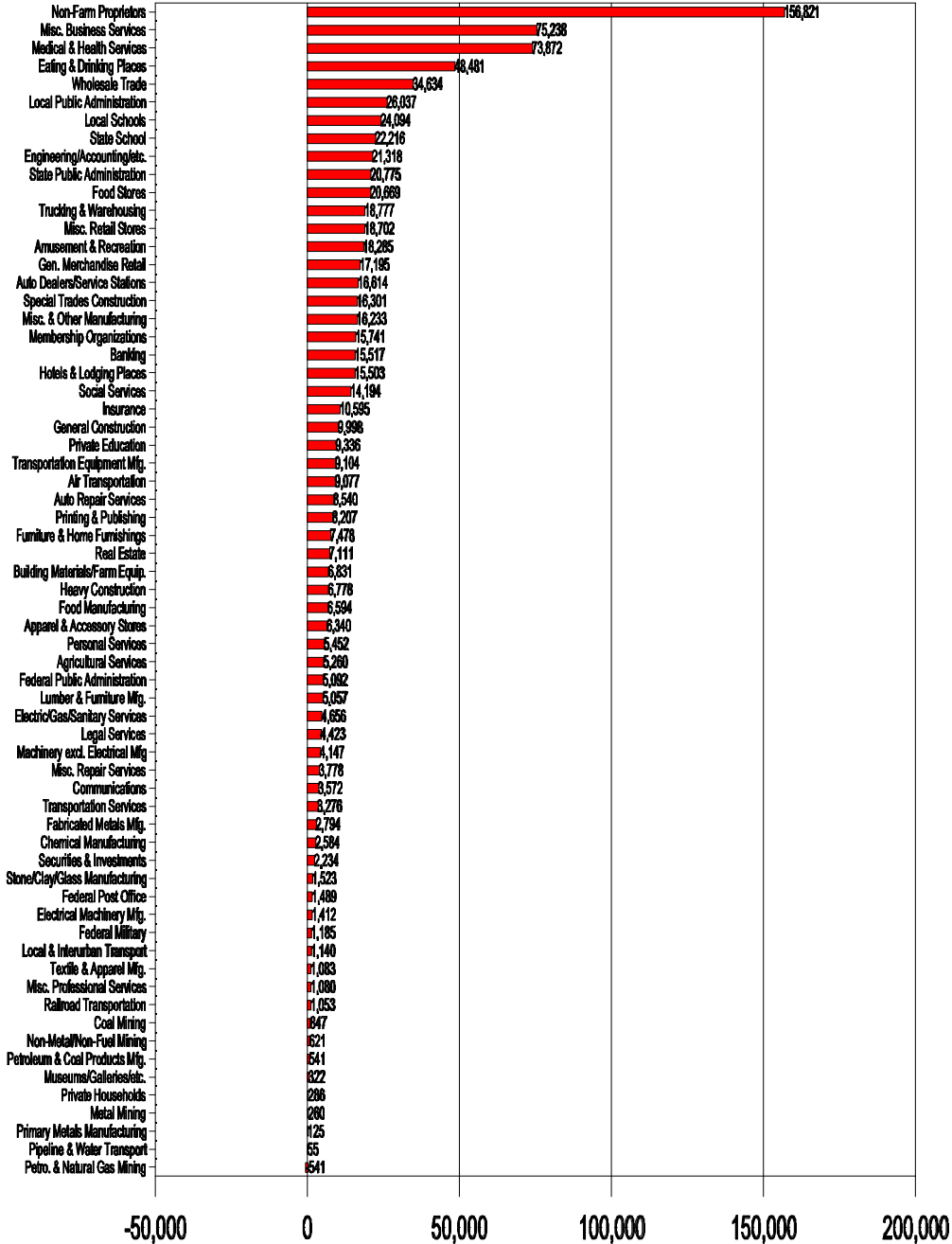
Source: Governor's Office of Planning and Budget, UPED Model

Utah Industry Employment Ranked by Average Annual Rates of Change: 1995 to 2020



Source: Governor's Office of Planning and Budget, UPED Model.

Utah Industry Employment Ranked by Absolute Amounts of Change: 1995 to 2020



Source: Governor's Office of Planning and Budget, UPED Model.

State of Utah Economic and Demographic Summary: 1990, 1995, 2000 - 2020

Year	Population		School Age Population		Total Employment		Non-Ag Payroll Employment		Households		
	Total	Percent Change	Total	Percent Change	Total	Percent Change	Total	Percent Change	Total	Percent Change	Average Size
1990	1,729,100	--	456,783	--	889,573	--	723,998	--	538,371	--	3.16
1995	1,959,011	2.2	484,736	0.4	1,100,273	5.0	908,363	5.6	631,299	3.0	3.05
2000	2,172,513	1.7	488,630	0.5	1,295,534	2.4	1,070,286	2.4	723,692	2.4	2.95
2001	2,216,213	2.0	491,736	0.6	1,328,904	2.6	1,097,469	2.5	742,478	2.6	2.93
2002	2,279,828	2.9	500,966	1.9	1,373,068	3.3	1,134,306	3.4	768,386	3.5	2.91
2003	2,304,644	1.1	504,547	0.7	1,386,345	1.0	1,142,922	0.8	780,410	1.6	2.90
2004	2,361,467	2.5	515,246	2.1	1,422,865	2.6	1,172,702	2.6	803,306	2.9	2.89
2005	2,419,984	2.5	527,868	2.4	1,460,131	2.6	1,203,082	2.6	826,580	2.9	2.88
2006	2,478,252	2.4	540,735	2.4	1,497,050	2.5	1,233,167	2.5	849,499	2.8	2.87
2007	2,539,016	2.5	553,550	2.4	1,534,866	2.5	1,264,007	2.5	873,117	2.8	2.86
2008	2,603,784	2.6	567,029	2.4	1,574,006	2.6	1,295,984	2.5	898,048	2.9	2.85
2009	2,670,998	2.6	580,988	2.5	1,613,886	2.5	1,328,664	2.5	923,729	2.9	2.84
2010	2,737,190	2.5	595,035	2.4	1,653,224	2.4	1,361,008	2.4	948,918	2.7	2.83
2011	2,799,817	2.3	609,471	2.4	1,690,780	2.3	1,392,025	2.3	972,845	2.5	2.83
2012	2,864,473	2.3	624,173	2.4	1,728,170	2.2	1,422,896	2.2	997,597	2.5	2.82
2013	2,929,118	2.3	638,258	2.3	1,764,769	2.1	1,453,121	2.1	1,022,476	2.5	2.82
2014	2,989,426	2.1	651,481	2.1	1,799,138	1.9	1,481,530	2.0	1,045,990	2.3	2.81
2015	3,047,741	2.0	664,012	1.9	1,832,022	1.8	1,508,716	1.8	1,069,031	2.2	2.80
2016	3,104,106	1.8	675,720	1.8	1,863,316	1.7	1,534,633	1.7	1,091,602	2.1	2.79
2017	3,156,880	1.7	686,264	1.6	1,892,794	1.6	1,559,107	1.6	1,113,012	2.0	2.79
2018	3,210,365	1.7	696,676	1.5	1,921,952	1.5	1,583,304	1.6	1,134,781	2.0	2.78
2019	3,261,253	1.6	706,334	1.4	1,949,840	1.5	1,606,515	1.5	1,155,717	1.8	2.77
2020	3,311,302	1.5	715,362	1.3	1,977,156	1.4	1,629,281	1.4	1,176,490	1.8	2.77

Note: Populations are dated July 1.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State Of Utah Employment Projections by Major Industry: 1980 - 2020

Industry Name	1980	1990	1995	2000	2005	2010	2015	2020
Agriculture (4)	19,659	18,918	18,744	19,991	19,549	19,029	18,362	17,595
Mining	18,501	8,603	8,114	8,616	8,904	9,359	9,228	9,304
Construction	31,548	27,926	54,793	64,270	65,503	72,585	81,007	87,872
Manufacturing	87,702	107,100	123,867	144,505	152,451	162,112	172,788	183,273
TCPU (1)	34,126	42,283	51,493	61,176	69,319	77,822	85,774	93,093
Trade	128,688	172,391	220,025	259,360	293,528	332,394	367,727	396,981
FIRE (2)	25,767	34,134	47,678	55,762	62,241	69,949	77,272	83,132
Services (3)	105,836	185,896	244,054	302,872	355,557	414,817	470,657	516,690
Government	124,927	150,556	163,666	179,096	200,941	227,493	249,868	264,557
Non-Farm Proprietors (4)	86,526	141,766	167,839	199,889	232,134	267,665	299,340	324,660
TOTAL EMPLOYMENT	663,280	889,573	1,100,273	1,295,534	1,460,131	1,653,224	1,832,022	1,977,156
Non-Ag Payroll Emp (5)	551,816	723,998	908,363	1,070,286	1,203,082	1,361,008	1,508,716	1,629,281

(1) Transportation, Communications and Public Utilities

(2) Finance , Insurance and Real Estate

(3) Includes Private Household and Agricultural Services employment (SICs 88, 07, 08, and 09).

(4) U.S. Bureau of Economic Analysis definition.

(5) Excludes Agriculture, Private Household, and Non-Farm Proprietors employment.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State of Utah Components of Population Change: 1991 - 2020

Year	Beginning Population	Births	Deaths	Natural Increase	Residual Migration	Ending Population**	Percent Change
1991	1,729,100	36,194	9,424	26,770	19,589	1,775,460	2.68
1992	1,775,460	36,796	9,553	27,243	19,258	1,821,960	2.62
1993	1,821,960	36,738	10,053	26,685	17,810	1,866,454	2.44
1994	1,866,454	37,623	10,406	27,217	22,338	1,916,008	2.65
1995	1,916,008	39,064	10,577	28,487	14,520	1,959,011	2.24
1996-1999*	----	----	----	----	----	----	----
2000	2,135,253	43,995	12,281	31,714	5,547	2,172,513	1.74
2001	2,172,513	44,657	12,606	32,051	11,647	2,216,213	2.01
2002	2,216,213	45,556	12,948	32,608	31,006	2,279,828	2.87
2003	2,279,828	47,042	13,367	33,675	(8,858)	2,304,644	1.09
2004	2,304,644	47,291	13,657	33,634	23,194	2,361,467	2.47
2005	2,361,467	48,419	14,059	34,360	24,151	2,419,984	2.48
2006	2,419,984	49,493	14,450	35,043	23,230	2,478,252	2.41
2007	2,478,252	50,393	14,856	35,537	25,228	2,539,016	2.45
2008	2,539,016	51,276	15,266	36,010	28,752	2,603,784	2.55
2009	2,603,784	52,221	15,692	36,529	30,688	2,670,998	2.58
2010	2,670,998	53,165	16,147	37,018	29,172	2,737,190	2.48
2011	2,737,190	54,052	16,604	37,448	25,176	2,799,817	2.29
2012	2,799,817	54,796	17,030	37,766	26,897	2,864,473	2.31
2013	2,864,473	55,607	17,474	38,133	26,506	2,929,118	2.26
2014	2,929,118	56,388	17,939	38,449	21,868	2,989,426	2.06
2015	2,989,426	57,048	18,404	38,644	19,673	3,047,741	1.95
2016	3,047,741	57,662	18,868	38,794	17,567	3,104,106	1.85
2017	3,104,106	58,325	19,350	38,975	13,799	3,156,880	1.70
2018	3,156,880	58,924	19,812	39,112	14,378	3,210,365	1.69
2019	3,210,365	59,570	20,313	39,257	11,631	3,261,253	1.59
2020	3,261,253	60,185	20,836	39,349	10,695	3,311,302	1.53

*For short run outlook, see Table 2, U.S. and Utah Actual and Estimated Indicators.

**Populations are dated July 1.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State of Utah Population Projections by Five Year Age Group: 1980 - 2020

Age	1980	1990	1995	2000	2005	2010	2015	2020
0-4	189,962	172,252	190,058	211,906	236,059	262,441	282,447	296,693
5-9	146,187	183,402	178,734	193,621	216,671	245,234	270,156	286,166
10-18	125,681	182,953	189,036	181,987	198,344	225,061	252,080	273,407
15-19	138,903	152,885	190,631	194,618	188,838	209,243	234,303	258,347
20-24	155,676	138,216	172,762	207,711	216,662	216,484	235,198	254,357
25-29	135,087	137,009	146,558	171,454	206,374	224,162	223,029	234,264
30-34	105,688	137,815	145,299	148,496	174,122	214,140	230,553	223,125
35-39	79,178	123,377	146,091	150,242	154,105	183,798	221,631	234,101
40-44	63,628	100,585	129,226	149,668	155,688	162,604	189,934	223,677
45-49	57,021	76,405	104,075	131,113	152,788	162,087	167,043	191,014
50-54	55,845	61,285	78,004	104,554	132,386	156,602	164,828	166,974
55-59	52,701	54,672	62,182	77,821	104,737	134,106	157,467	163,452
60-64	46,260	52,512	54,814	61,278	77,031	104,689	132,768	153,809
65-69	38,183	48,517	51,577	53,061	59,505	75,433	101,594	127,021
70-74	29,637	39,443	45,879	48,009	49,592	56,061	70,481	93,686
75-79	20,242	29,268	34,805	39,706	41,751	43,499	48,832	60,659
80-84	12,306	18,811	23,018	26,942	30,862	32,732	33,855	37,586
85+	8,852	13,443	16,262	20,326	24,469	28,814	31,542	32,964
Total	1,461,037	1,722,850	1,959,011	2,172,513	2,419,984	2,737,190	3,047,741	3,311,302
Median	24	26	27	28	29	30	31	31

Note: 1980 and 1990 populations are April 1 U.S. Census Modified Age, Race and Sex (MARS) populations; all others are July 1 populations.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State of Utah Population Projections by Selected Age Groups: 1980 - 2020

Age	1980	1990	1995	2000	2005	2010	2015	2020
0-4	189,962	172,252	190,058	211,906	236,059	262,441	282,447	296,693
5-17	350,143	456,783	484,736	488,630	527,868	595,035	664,012	715,362
18-29	351,391	337,682	392,985	460,761	499,021	525,149	550,754	591,179
30-39	184,866	261,192	291,390	298,738	328,227	397,938	452,184	457,226
40-64	275,455	345,459	428,301	524,434	622,630	720,088	812,040	898,926
65+	109,220	149,482	171,541	188,044	206,179	236,539	286,304	351,916
15-44	678,160	789,887	930,567	1,022,189	1,095,789	1,210,431	1,334,648	1,427,871
16-64	864,989	1,003,330	1,189,247	1,360,180	1,523,995	1,725,399	1,908,715	2,050,431
Total	1,461,037	1,722,850	1,959,011	2,172,513	2,419,984	2,737,190	3,047,741	3,311,302
Median	24	26	27	28	29	30	31	31

Note: 1980 and 1990 populations are April 1 U.S. Census Modified Age, Race and Sex (MARS) populations; all others are July 1 populations.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State of Utah Population by Selected Age Groups as a Percent of the Total: 1980 - 2020

Age	1980	1990	1995	2000	2005	2010	2015	2020
0-4	13.0	10.0	9.7	9.8	9.8	9.6	9.3	9.0
5-17	24.0	26.5	24.7	22.5	21.8	21.7	21.8	21.6
18-29	24.1	19.6	20.1	21.2	20.6	19.2	18.1	17.9
30-39	12.7	15.2	14.9	13.8	13.6	14.5	14.8	13.8
40-64	18.9	20.1	21.9	24.1	25.7	26.3	26.6	27.1
65+	7.5	8.7	8.8	8.7	8.5	8.6	9.4	10.6
15-44	46.4	45.8	47.5	47.1	45.3	44.2	43.8	43.1
16-64	59.2	58.2	60.7	62.6	63.0	63.0	62.6	61.9
Total	100	100	100	100	100	100	100	100

Note: 1980 and 1990 populations are April 1 U.S. Census Modified Age, Race and Sex (MARS) populations; all others are July 1 populations.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State of Utah Dependency Ratios: 1980 - 2020

	1980	1990	1995	2000	2005	2010	2015	2020
Dependency Ratio	80	82	76	69	67	67	68	70
Pop 0-4 per 100 Pop age 18-64	23	18	17	17	16	16	16	15
Pop 5-17 per 100 Pop age 18-64	43	48	44	38	36	36	37	37
Pop 65+ per 100 Pop age 18-64	13	16	15	15	14	14	16	18

Note: 1980 and 1990 populations are April 1 U.S. Census Modified Age, Race and Sex (MARS) populations; all others are July 1 populations.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

State of Utah Population by County and Multi-County District: 1980-2020

MCD/County	1980*	1990*	1995	2000	2005	2010	2015	2020	AARC** 1990-2020
BEAR RIVER	92,498	108,393	120,901	137,964	150,648	167,691	183,969	195,605	1.99
Box Elder	33,222	36,485	38,900	42,667	47,016	52,467	57,579	61,290	1.74
Cache	57,176	70,183	80,201	93,418	101,666	113,128	124,180	132,047	2.13
Rich	2,100	1,725	1,800	1,879	1,966	2,096	2,210	2,268	0.92
WASATCH FRONT	941,172	1,104,356	1,233,099	1,340,966	1,480,984	1,667,557	1,855,658	2,010,354	2.02
Davis	146,540	187,941	216,000	235,610	262,170	295,187	328,208	355,041	2.14
Morgan	4,917	5,528	6,500	6,985	7,654	8,573	9,537	10,369	2.12
Salt Lake	619,066	725,956	805,999	872,375	959,002	1,079,237	1,200,812	1,301,094	1.96
Tooele	26,033	26,601	29,600	35,280	40,122	46,474	53,320	59,678	2.73
Weber	144,616	158,330	175,000	190,716	212,036	238,086	263,781	284,172	1.97
MOUNTAINLAND	236,827	289,197	342,599	387,832	441,448	503,540	558,195	611,787	2.53
Summit	10,198	15,518	22,400	27,509	31,578	37,798	44,467	50,728	4.03
Utah	218,106	263,590	307,999	345,906	392,725	445,499	490,629	535,047	2.39
Wasatch	8,523	10,089	12,200	14,417	17,145	20,243	23,099	26,012	3.21
CENTRAL	47,087	52,294	59,255	67,371	72,803	81,134	89,741	96,042	2.05
Juab	5,530	5,817	7,152	8,188	8,871	9,925	11,023	11,847	2.40
Millard	8,970	11,333	11,900	12,909	13,580	14,738	15,910	16,647	1.29
Piute	1,329	1,277	1,400	1,670	1,784	1,938	2,077	2,164	1.77
Sanpete	14,620	16,259	19,201	22,364	24,464	27,571	30,803	33,251	2.41
Sevier	14,727	15,431	17,302	19,619	21,253	23,754	26,342	28,249	2.04
Wayne	1,911	2,177	2,300	2,621	2,851	3,208	3,586	3,884	1.95
SOUTHWEST	55,489	83,263	110,955	139,763	167,194	199,426	231,887	261,113	3.88
Beaver	4,378	4,765	5,350	6,936	7,612	8,398	9,115	9,660	2.38
Garfield	3,673	3,980	4,300	4,748	5,200	5,730	6,201	6,539	1.67
Iron	17,349	20,789	26,901	34,373	39,008	44,459	49,719	54,149	3.24
Kane	4,024	5,169	5,900	7,484	8,780	10,310	11,837	13,195	3.17
Washington	26,065	48,560	68,504	86,222	106,594	130,529	155,015	177,570	4.42
UINTAH BASIN	33,840	35,546	38,550	40,183	42,403	46,564	51,282	54,705	1.45
Daggett	769	690	750	855	924	1,032	1,153	1,244	1.98
Duchesne	12,565	12,645	13,500	14,390	14,998	16,307	17,824	18,894	1.35
Uintah	20,506	22,211	24,300	24,938	26,481	29,225	32,305	34,567	1.49
SOUTHEAST	54,124	49,801	53,652	58,434	64,504	71,278	77,009	81,696	1.66
Carbon	22,179	20,228	21,100	22,699	24,328	26,031	27,536	28,683	1.17
Emery	11,451	10,332	10,700	11,211	12,060	12,888	13,140	13,343	0.86
Grand	8,241	6,620	8,352	10,989	13,758	16,846	19,795	22,397	4.15
San Juan	12,253	12,621	13,500	13,535	14,358	15,513	16,538	17,273	1.05
STATE OF UTAH	1,461,037	1,722,850	1,959,011	2,172,513	2,419,984	2,737,190	3,047,741	3,311,302	2.20

*1980 and 1990 populations are April 1 U.S. Census modified age, race and sex (MARS) populations; all others are July 1 populations.

**AARC is average annual rate of change.

Sources: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System, U.S. Bureau of the Census; Utah Population Estimates Committee.

State of Utah Households by County and Multi-County District: 1980-2020

MCD/County	1980*	1990*	1995	2000	2005	2010	2015	2020	AARC** 1990-2020
BEAR RIVER	28,020	32,638	37,297	43,932	48,864	54,840	60,316	64,753	2.31
Box Elder	9,808	11,060	12,081	13,918	15,624	17,298	18,710	20,032	2.00
Cache	17,558	21,055	24,629	29,358	32,535	36,791	40,844	43,964	2.48
Rich	654	523	587	656	705	751	762	757	1.24
WASATCH FRONT	298,700	357,257	410,892	461,651	524,127	599,913	675,853	741,693	2.46
Davis	39,994	53,643	66,186	76,290	88,492	102,059	115,033	126,272	2.89
Morgan	1,355	1,555	1,994	2,246	2,570	2,914	3,272	3,620	2.86
Salt Lake	201,742	240,367	273,133	304,258	343,373	392,978	443,120	486,574	2.38
Tooele	7,966	8,581	10,088	12,476	14,513	16,974	19,580	22,140	3.21
Weber	47,643	53,111	59,491	66,381	75,179	84,988	94,848	103,087	2.24
MOUNTAINLAND	64,491	78,499	96,696	111,946	129,529	149,703	168,171	186,771	2.93
Summit	3,381	5,296	8,014	10,119	11,663	14,064	16,657	19,253	4.40
Utah	58,515	70,011	84,653	96,924	112,044	128,877	143,866	158,808	2.77
Wasatch	2,595	3,192	4,029	4,903	5,822	6,762	7,648	8,710	3.40
CENTRAL	14,526	16,237	19,409	23,367	26,066	29,400	32,786	35,701	2.66
Juab	1,707	1,870	2,344	2,827	3,145	3,577	4,015	4,415	2.90
Millard	2,728	3,390	3,730	4,366	4,894	5,388	5,837	6,175	2.02
Piute	435	450	522	622	666	723	782	832	2.07
Sanpete	4,454	4,916	6,178	7,569	8,524	9,770	11,014	12,113	3.05
Sevier	4,587	4,911	5,839	7,035	7,778	8,760	9,807	10,702	2.63
Wayne	615	700	796	948	1,059	1,182	1,331	1,464	2.49
SOUTHWEST	16,879	26,138	37,233	48,751	59,219	71,117	83,081	94,473	4.38
Beaver	1,428	1,583	1,784	2,414	2,658	2,902	3,155	3,392	2.57
Garfield	1,196	1,321	1,489	1,709	1,892	2,073	2,227	2,360	1.95
Iron	5,168	6,258	8,432	11,193	12,881	14,888	16,887	18,677	3.71
Kane	1,286	1,728	2,084	2,753	3,246	3,788	4,349	4,875	3.52
Washington	7,801	15,248	23,444	30,682	38,542	47,466	56,463	65,169	4.96
UINTAH BASIN	9,692	10,633	12,242	13,743	15,324	17,385	19,549	21,311	2.34
Daggett	244	258	307	354	386	429	486	521	2.37
Duchesne	3,499	3,726	4,187	4,839	5,337	6,002	6,737	7,310	2.27
Uintah	5,949	6,649	7,748	8,550	9,601	10,954	12,326	13,480	2.38
SOUTHEAST	16,295	15,794	17,530	20,302	23,451	26,560	29,275	31,788	2.36
Carbon	7,242	6,863	7,340	8,203	9,024	9,695	10,337	10,915	1.56
Emery	3,276	3,002	3,265	3,734	4,311	4,758	4,953	5,185	1.84
Grand	2,759	2,536	3,252	4,375	5,560	6,869	8,138	9,339	4.44
San Juan	3,018	3,393	3,673	3,990	4,556	5,238	5,847	6,349	2.11
STATE OF UTAH	448,603	537,196	631,299	723,692	826,580	948,918	1,069,031	1,176,490	2.65

*1980 and 1990 populations are April 1 U.S. Census modified age, race and sex (MARS) populations; all others are July 1 populations.

**AARC is average annual rate of change.

Sources: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System, U.S. Bureau of the Census; Utah Population Estimates Committee.

State of Utah Average Household Size By County and Multi-County District: 1980-2020

MCD/County	1980*	1990*	1995	2000	2005	2010	2015	2020	AARC** 1990-2020
BEAR RIVER	3.21	3.28	3.20	3.10	3.05	3.02	3.02	2.99	(0.31)
Box Elder	3.31	3.29	3.20	3.05	2.99	3.02	3.06	3.04	(0.25)
Cache	3.16	3.28	3.21	3.13	3.08	3.03	3.00	2.96	(0.34)
Rich	3.21	3.25	3.00	2.79	2.72	2.74	2.84	2.93	(0.34)
WASATCH FRONT	3.11	3.05	2.96	2.86	2.78	2.74	2.71	2.67	(0.44)
Davis	3.58	3.44	3.20	3.03	2.91	2.84	2.80	2.76	(0.73)
Morgan	3.63	3.55	3.26	3.11	2.98	2.94	2.91	2.86	(0.72)
Salt Lake	3.03	2.98	2.91	2.83	2.75	2.71	2.67	2.64	(0.41)
Tooele	3.23	3.07	2.90	2.79	2.73	2.71	2.69	2.66	(0.47)
Weber	2.99	2.94	2.90	2.83	2.78	2.76	2.74	2.72	(0.26)
MOUNTAINLAND	3.54	3.57	3.43	3.36	3.31	3.26	3.22	3.18	(0.38)
Summit	3.02	2.90	2.76	2.69	2.67	2.65	2.64	2.60	(0.36)
Utah	3.59	3.64	3.51	3.45	3.40	3.35	3.30	3.26	(0.36)
Wasatch	3.26	3.14	3.01	2.92	2.93	2.98	3.00	2.97	(0.19)
CENTRAL	3.19	3.17	2.99	2.82	2.73	2.71	2.69	2.64	(0.60)
Juab	3.21	3.06	3.00	2.84	2.76	2.72	2.70	2.64	(0.50)
Millard	3.28	3.32	3.16	2.93	2.75	2.71	2.70	2.67	(0.72)
Piute	3.06	2.84	2.68	2.68	2.68	2.68	2.66	2.60	(0.30)
Sanpete	3.17	3.20	2.98	2.83	2.76	2.73	2.71	2.66	(0.62)
Sevier	3.19	3.11	2.92	2.75	2.70	2.68	2.66	2.61	(0.58)
Wayne	3.11	3.07	2.85	2.72	2.65	2.68	2.66	2.62	(0.53)
SOUTHWEST	3.23	3.13	2.92	2.81	2.77	2.75	2.74	2.72	(0.47)
Beaver	3.06	2.97	2.95	2.83	2.82	2.85	2.85	2.81	(0.19)
Garfield	3.00	2.99	2.87	2.76	2.73	2.74	2.77	2.75	(0.28)
Iron	3.28	3.21	3.08	2.97	2.93	2.89	2.85	2.81	(0.45)
Kane	3.12	2.98	2.81	2.70	2.68	2.70	2.70	2.69	(0.34)
Washington	3.28	3.14	2.88	2.77	2.72	2.71	2.71	2.69	(0.52)
UINTAH BASIN	3.48	3.33	3.13	2.91	2.75	2.66	2.61	2.55	(0.88)
Daggett	3.15	2.70	2.44	2.42	2.39	2.40	2.37	2.38	(0.42)
Duchesne	3.57	3.38	3.21	2.95	2.79	2.70	2.63	2.57	(0.91)
Uintah	3.44	3.33	3.12	2.90	2.74	2.65	2.60	2.55	(0.88)
SOUTHEAST	3.30	3.12	3.02	2.84	2.72	2.65	2.60	2.54	(0.69)
Carbon	3.03	2.91	2.82	2.72	2.65	2.64	2.63	2.59	(0.38)
Emery	3.48	3.43	3.25	2.98	2.78	2.69	2.63	2.55	(0.98)
Grand	2.98	2.59	2.54	2.48	2.45	2.43	2.41	2.37	(0.29)
San Juan	4.04	3.68	3.63	3.35	3.11	2.92	2.79	2.68	(1.05)
STATE OF UTAH	3.20	3.15	3.05	2.95	2.88	2.83	2.80	2.77	(0.44)

*1980 and 1990 populations are April 1 U.S. Census modified age, race and sex (MARS) populations; all others are July 1 populations.

**AARC is average annual rate of change.

Sources: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System, U.S. Bureau of the Census; Utah Population Estimates Committee.

State of Utah Employment Projections by County and Multi-County District: 1980-2020

MCD/County	AARC								
	1980	1990	1995	2000	2005	2010	2015	2020	1990-2020
BEAR RIVER	41,535	56,332	67,723	82,462	91,096	101,536	111,202	118,275	2.50
Box Elder	15,155	19,354	21,520	25,314	28,219	31,529	34,540	36,773	2.16
Cache	25,640	36,205	45,277	56,133	61,805	68,862	75,458	80,265	2.69
Rich	740	773	926	1,015	1,072	1,145	1,204	1,237	1.58
WASATCH FRONT	454,234	606,194	737,901	856,746	960,165	1,082,670	1,196,770	1,287,462	2.54
Davis	52,895	75,677	88,270	105,031	119,433	135,159	149,883	161,715	2.56
Morgan	1,787	1,912	2,377	2,612	2,825	3,089	3,321	3,487	2.02
Salt Lake	329,159	437,064	542,456	625,119	696,470	783,303	863,955	927,662	2.54
Tooele	11,520	12,434	12,091	15,255	16,991	19,000	20,863	22,329	1.97
Weber	58,873	79,107	92,707	108,729	124,446	142,119	158,748	172,269	2.63
MOUNTAINLAND	87,634	131,431	171,166	202,909	230,575	262,075	289,748	314,024	2.95
Summit	5,484	11,416	16,712	20,866	23,766	27,708	31,465	34,616	3.77
Utah	79,022	116,161	149,686	176,156	199,915	226,362	249,290	269,517	2.85
Wasatch	3,128	3,854	4,768	5,887	6,894	8,005	8,993	9,891	3.19
CENTRAL	19,293	21,909	25,815	30,200	33,454	37,530	41,440	44,361	2.38
Juab	2,402	2,391	2,898	3,364	3,717	4,165	4,592	4,908	2.43
Millard	3,746	5,246	5,569	6,333	6,849	7,501	8,100	8,496	1.62
Piute	508	412	408	472	516	563	607	631	1.43
Sanpete	5,512	6,207	7,757	9,272	10,420	11,845	13,236	14,322	2.83
Sevier	6,268	6,723	7,924	9,322	10,380	11,712	12,993	13,973	2.47
Wayne	857	930	1,259	1,437	1,572	1,744	1,912	2,031	2.64
SOUTHWEST	22,119	36,364	54,761	74,528	90,400	108,697	126,777	142,511	4.66
Beaver	1,804	1,953	2,553	3,959	4,370	4,816	5,210	5,488	3.50
Garfield	2,312	2,123	2,590	3,106	3,451	3,837	4,175	4,396	2.46
Iron	7,311	9,744	13,546	18,408	21,245	24,479	27,514	29,964	3.82
Kane	1,508	2,222	2,931	4,157	4,953	5,876	6,774	7,550	4.16
Washington	9,184	20,322	33,141	44,898	56,381	69,689	83,104	95,113	5.28
UINTAH BASIN	15,090	15,642	17,823	19,556	21,318	23,675	26,118	28,029	1.96
Daggett	404	430	493	568	638	720	808	878	2.41
Duchesne	5,918	5,759	6,583	7,200	7,753	8,529	9,336	9,957	1.84
Uintah	8,768	9,453	10,747	11,788	12,927	14,426	15,974	17,194	2.01
SOUTHEAST	23,375	21,701	25,084	29,139	33,094	37,021	39,954	42,474	2.26
Carbon	9,862	9,144	9,758	10,949	11,969	12,867	13,505	14,019	1.43
Emery	5,385	4,877	4,953	5,406	5,941	6,384	6,455	6,526	0.98
Grand	3,991	3,333	4,980	6,949	8,874	10,919	12,746	14,378	4.99
San Juan	4,137	4,347	5,393	5,835	6,310	6,851	7,248	7,551	1.86
STATE OF UTAH	663,280	889,573	1,100,273	1,295,540	1,460,102	1,653,204	1,832,009	1,977,136	2.70

* AARC is average annual rate of change.

Note: Total Employment includes Agriculture, Private Household and Non-Farm Proprietors employment.

Sources: U.S. Bureau of Economic Analysis; Utah Department of Work Force Services; 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

Median Ages by County : 1990-2020

County*	1990	1990 Rank	1995	2000	2005	2010	2015	2020	2020 Rank	Years Change in Median Age 1990 to 2020	Rank Change 1990 to 2020
San Juan	22.2	1	24.1	26.6	28.7	30.9	32.8	34.7	18	12.5	-17
Utah	22.4	2	23.0	23.2	23.8	24.1	24.2	24.4	1	2.0	1
Cache	23.6	3	24.1	24.5	25.0	25.7	25.9	26.2	2	2.7	1
Sanpete	24.1	4	25.0	27.2	28.6	30.2	31.5	32.6	9	8.5	-5
Iron	24.3	5	25.7	27.1	28.2	29.3	30.0	30.2	3	5.9	2
Davis	24.7	6	26.5	28.3	29.4	30.7	32.1	33.2	10	8.6	-4
Duchesne	24.9	7	25.8	27.7	29.5	31.5	33.6	35.6	21	10.8	-14
Emery	25.6	8	26.0	28.0	29.7	31.9	34.7	37.4	28	11.7	-20
Uintah	26.1	9	27.5	29.0	30.4	32.0	33.9	35.9	24	9.8	-15
Millard	26.3	10	27.0	28.1	29.8	31.4	33.3	35.2	20	8.9	-10
Morgan	26.7	11	27.8	28.6	29.8	31.1	32.6	34.0	15	7.3	-4
Box Elder	26.9	12	27.7	27.6	28.1	29.1	29.9	30.5	5	3.6	7
Rich	27.2	13	29.7	28.0	28.5	29.8	30.9	31.9	7	4.7	6
Wasatch	27.4	14	28.9	29.1	29.3	29.8	30.2	30.3	4	3.0	10
Salt Lake	27.8	15	28.6	29.5	30.1	30.9	31.9	32.6	8	4.8	7
Tooele	28.3	16	29.5	30.0	31.1	32.1	33.1	33.8	13	5.5	3
Washington	28.4	17	30.1	31.1	32.4	33.0	33.7	34.4	17	6.0	0
Weber	28.9	18	28.6	29.0	29.5	30.3	31.1	31.5	6	2.6	12
Juab	28.9	19	29.4	30.4	31.6	33.0	34.4	35.8	22	6.9	-3
Sevier	29.2	20	30.1	30.3	31.3	32.6	34.2	35.8	23	6.6	-3
Summit	30.0	21	31.5	32.7	32.7	33.3	34.1	34.9	19	4.8	2
Carbon	30.8	22	30.3	29.5	30.3	31.5	33.0	33.8	14	3.1	8
Wayne	30.8	23	32.2	31.6	32.0	33.5	34.8	36.3	25	5.5	-2
Kane	30.8	24	31.1	30.5	30.9	32.0	32.8	33.8	12	2.9	12
Garfield	31.2	25	32.1	31.3	31.5	32.1	32.9	34.1	16	2.8	9
Daggett	31.6	26	34.5	34.6	34.3	34.9	35.9	37.3	27	5.7	-1
Beaver	32.1	27	31.1	29.7	30.4	31.5	32.6	33.4	11	1.3	16
Grand	34.1	28	34.1	33.1	33.5	34.4	35.5	36.9	26	2.8	2
Piute	38.6	29	36.1	34.4	34.8	35.3	36.4	38.0	29	(0.6)	0

*Ranked by 1990 Median Age

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

Historical and Projected Hachman Indices for Utah's Counties: 1980 to 2020

County*	Index Value										Index Value		1980 Rank	2020 Rank	Rank Change 1980 to 2020
	1980	1985	1990	1995	2000	2005	2010	2015	2020	Change 1980 to 2020	Percent Change 1980 to 2020				
Salt Lake	0.94	0.95	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.02	2.6%	1	2	-1
Utah	0.92	0.92	0.91	0.92	0.93	0.94	0.94	0.94	0.94	0.94	0.02	2.5%	2	3	-1
Weber	0.91	0.93	0.92	0.94	0.95	0.96	0.96	0.96	0.96	0.96	0.05	5.2%	3	1	2
Cache	0.83	0.80	0.80	0.83	0.77	0.77	0.76	0.76	0.75	0.75	(0.08)	-9.6%	4	12	-8
Washington	0.82	0.85	0.89	0.85	0.86	0.89	0.90	0.90	0.90	0.90	0.08	9.9%	5	5	0
Iron	0.80	0.83	0.83	0.89	0.91	0.90	0.90	0.89	0.89	0.89	0.09	11.8%	6	6	0
Box Elder	0.72	0.58	0.56	0.53	0.51	0.52	0.52	0.52	0.51	0.51	(0.21)	-29.1%	7	23	-16
Kane	0.72	0.71	0.75	0.80	0.81	0.82	0.83	0.84	0.84	0.84	0.12	17.3%	8	9	-1
Davis	0.69	0.71	0.80	0.91	0.91	0.92	0.92	0.92	0.92	0.92	0.23	33.0%	9	4	5
Juab	0.67	0.56	0.55	0.72	0.75	0.78	0.81	0.83	0.85	0.85	0.17	26.0%	10	8	2
Sevier	0.61	0.66	0.61	0.64	0.64	0.64	0.63	0.66	0.67	0.67	0.05	8.7%	11	15	-4
Wasatch	0.60	0.57	0.65	0.68	0.71	0.75	0.77	0.78	0.79	0.79	0.19	31.9%	12	10	2
Beaver	0.50	0.50	0.46	0.50	0.25	0.25	0.27	0.29	0.31	0.31	(0.19)	-38.2%	13	26	-13
Sanpete	0.49	0.48	0.46	0.53	0.57	0.60	0.63	0.65	0.68	0.68	0.19	38.2%	14	14	0
Morgan	0.48	0.37	0.35	0.41	0.41	0.43	0.45	0.47	0.49	0.49	0.01	2.9%	15	24	-9
Summit	0.42	0.76	0.80	0.86	0.87	0.87	0.87	0.87	0.87	0.87	0.45	108.1%	16	7	9
Garfield	0.40	0.57	0.59	0.66	0.55	0.57	0.58	0.60	0.61	0.61	0.20	50.5%	17	17	0
Tooele	0.40	0.46	0.49	0.70	0.70	0.71	0.71	0.72	0.72	0.72	0.32	80.5%	18	13	5
Daggett	0.34	0.43	0.48	0.50	0.54	0.55	0.56	0.56	0.57	0.57	0.23	67.3%	19	19	0
Millard	0.33	0.31	0.42	0.43	0.44	0.46	0.48	0.51	0.52	0.52	0.20	60.4%	20	22	-2
Wayne	0.32	0.25	0.26	0.38	0.41	0.45	0.49	0.53	0.56	0.56	0.24	76.4%	21	20	1
Piute	0.25	0.17	0.15	0.13	0.15	0.17	0.18	0.20	0.21	0.21	(0.04)	-14.7%	22	27	-5
Rich	0.23	0.20	0.19	0.24	0.24	0.26	0.28	0.30	0.31	0.31	0.08	35.3%	23	25	-2
Grand	0.22	0.41	0.61	0.76	0.76	0.77	0.77	0.78	0.78	0.78	0.56	249.5%	24	11	13
Duchesne	0.21	0.32	0.33	0.33	0.38	0.44	0.50	0.55	0.58	0.58	0.37	171.4%	25	18	7
Uintah	0.21	0.27	0.26	0.27	0.32	0.37	0.43	0.49	0.53	0.53	0.32	147.7%	26	21	5
Carbon	0.15	0.23	0.20	0.28	0.23	0.19	0.18	0.20	0.21	0.21	0.05	34.6%	27	28	-1
San Juan	0.10	0.42	0.34	0.56	0.62	0.62	0.63	0.63	0.63	0.63	0.53	505.4%	28	16	12
Emery	0.06	0.12	0.11	0.11	0.09	0.08	0.06	0.07	0.07	0.07	0.01	21.3%	29	29	0

*Ranked by 1980 Index Value

Note: Hachman Indices with respect to the nation. Calculated on major industry (1 Digit SIC) aggregation.

Source: 1997 Baseline Projections, Governor's Office of Planning and Budget, UPED Model System.

* Economic Development Activities

Overview¹

There are a variety of factors that contribute to a state's business climate, that is, a state's desirability as a place for business expansion or re-location. They can be grouped into three broad areas. The first and most important is the quality and availability of workers. With labor accounting for an average of 58% of total business costs, the availability of an adequately skilled workforce is generally a company's primary concern. Second is the quality and availability of infrastructure, including such things as airports, highways, railroads, telecommunications, and even educational institutions. The third is a state's tax and regulatory environment, combined with its package of business incentives. When people try to gauge a state's business climate, the focus is too often on taxes and incentives. In reality, economic development policies which seek to improve a state's business climate will encourage a tax and regulatory environment that is fair, equitable, and broad-based, but sufficient to maintain a high quality labor force and infrastructure.

Business Climate

The rapid pace of change in the world's economy over the past 20 years has had a dramatic effect on both the national and state economies. These changes have largely been the result of dramatic technological changes over the last several decades; an increased globalization of the economy (partly driven by this rapid technological change); and the on-going deregulation of key sectors of the economy such as transportation, communications, financial services and utilities. While foreign trade is still only 15% of the Gross Domestic Product, it was less than 10% at the start of the decade and a little over 6% in 1970. This increasing rate of change leaves states and regions feeling exposed to the challenges of global competition. State governments feel they must act quickly to meet these economic challenges, and as a result look for ways to improve the state business climate.

The term "business climate" refers to the combination of factors that make up a state's relative attractiveness as a place to do business. Government has a major impact on business climate because of the tax and regulatory environment it creates and the services it provides. Unfortunately, when the public, the press, and even many in the economic development community discuss their state's business climate they focus almost exclusively on taxes, tax breaks, and related business incentives. This despite broad agreement, based on business surveys and academic research, that these are not the most important factors in a business' location decision or in its ability to operate profitably.

Although every industry has different requirements, there are usually three main components of business climate. The first comprises the major cost factors involved when opening, expanding or operating a business, particularly labor, plant, and land. By far the most important factor is the quality and availability of labor. This is not surprising since labor on average accounts for 58% of total business costs. In addition, labor costs are about 14 times that of state and local business taxes. Other factors such as natural

resources and proximity to markets and suppliers are clearly important, but in a technology driven economy, competitive advantage is based primarily on the education and skills of the labor force. As a result, a substantial investment in public and higher education is an absolute must for creating a positive business climate.

The second component is made up of those factors that come under the heading of infrastructure. These are the important public services, effectively and efficiently delivered, that affect the location and investment decisions of businesses. In addition to the funding and operation of schools and universities, and what is usually thought of as infrastructure (such as the repair and maintenance of highways) are services such as air and water quality, the safeguarding of public health and the prevention of crime. All are essential to a community's infrastructure and quality of life. The reduction of tax revenues to the point where these services can no longer be adequately provided signals the deterioration of a state or region's competitiveness.

The final area, taxes and incentives, also affects location decisions and the cost of doing business. There has been an increasing emphasis in recent years on tax competitiveness and tax rates. However, most studies suggest that in general taxes only become significant when moving from "must" to "desirable" factors. The danger is that this overemphasis on tax competitiveness and tax rates obscures the fact that there are other, equally important goals of a tax system. These goals include:

- * rates that are consistent and a stable revenue stream,
- * rates that are balanced across a range of tax sources without over-reliance on any one;
- * a fair system which shields subsistence income from high levels of taxation and imposes the same tax burden on households earning the same income; and
- * an efficient system with minimal compliance costs and simple administration.

Economic Development Efforts

States' growing concern with business climate and the competition for new industrial investment and jobs has been widely criticized as being "zero-sum", or even "negative-sum". That is, the competition provides no national, or even real state benefits, and is potentially harmful to economic growth because it distorts what should be rational market decisions and reduces the ability of state and local governments to finance investments in education, infrastructure, and other public services.

Unfortunately, there is growing evidence that, other factors being equal, incentives can make the difference in the choice between one location and another. The net result is that both relocating and new plants in the United States now regularly receive incentive packages consisting of various combinations of federal, state, and locally financed subsidies. These can include a mix of property tax abatements, tax credits, and tax exemptions for such things as investment in plant and machinery or research and development; job training credits and wage subsidies; road and other infrastructure improvement incentives; and various sorts of capital grants, loans and loan guarantees.

¹ Each year in this report the State's Department of Community and Economic Development focuses on an economic development topic of interest. This year Utah's business climate is considered. For general information about economic development programs in Utah, contact the Department at (801) 538-8700 or visit the website at www.dced.state.ut.us

The Corporation for Enterprise Development, a non-profit agency concerned with economic development issues, recommends that a state's economic development efforts (and accompanying incentive packages) be structured to meet strict criteria, states should:

Work to maintain the quality of their labor force and infrastructure.

Compete on public services because responsible companies are willing to pay their share for services (such as schools, roads, research and development, physical infrastructure, and utilities) that are worth the taxes.

Limit development incentives to strategic purposes. Incentives should be designed to help create significant numbers of jobs cost effectively and fit within the state's development priorities. Moreover, incentives that result in investments in training or physical infrastructure accrue to the broader community and remain in a community, whether a particular company stays or not.

Use defensible methodologies for calculating the costs of each job created or retained, and strengthen accountability and disclosure.

Not focus on tax competitiveness alone, but also on revenue adequacy, balance, equity, predictability, efficiency, and accountability.

In sum, a state's concern with business climate should not be narrow. The goal is to structure economic development activities so as to provide a net public good—high quality jobs that fit within the states identified industry clusters, infrastructure and services that provide a public benefit beyond the individual company, or employment opportunities in areas of traditionally high unemployment or underdevelopment.

Utah's Business Climate

The growth of Utah's economy, like that of the nation as a whole, is ultimately tied to the growth of the population and the productivity of the labor force. Utah's population growth rate has historically been one of the highest in the nation, and this trend is projected to continue. Also, Utah has a comparatively high labor force participation rate and, like the rest of the nation, a record share of the population is now at work.

While there are serious data quality and methodological problems in measuring relative worker productivity, Unit Labor Cost (Gross State Product per dollar of payroll) may be used to provide a general comparison. Utah ranks 32nd in productivity as measured by unit labor costs. Utah's relatively young labor force, and average annual wages about 85% of the national average, are important factors that tend to lower the state's ranking. However, if unit labor costs are adjusted for industry diversity (states whose economy is based on natural resources or are dominated by one industry have exaggerated output per dollar of payroll, for example), Utah moves to 23rd place. If GSP is further adjusted to account for the fact that company profits are assigned to the state in which the company is headquartered, Utah moves up to about 16th.

Although Utah has always ranked high in the educational attainment of its citizens, enhancing the educational skills of the population is an incremental and expensive undertaking. State and local

governments in Utah currently spend about 42% of total budget on public and higher education, more than any other state. Besides education, state comparisons of infrastructure are difficult to make, but Utah's significant investment in physical infrastructure and related quality of life factors is documented throughout this year's Economic Report to the Governor.

Tax burden comparisons between states are hindered by the wide variety of state taxes and differing rate structures. Taxes are not equitable across industries. Definitional problems also arise. Third, many taxes are local and extremely variable. Finally, taxes are often negotiable and used as part of a state's incentive packages. Nevertheless, a calculation of Utah's comparative business tax burden, using data from the Bureaus of Economic Analysis and Census shows that Utah ranked 37th in 1996 in business taxes as a share of Gross State Product. In addition, the Utah State Tax Commission calculates that businesses in Utah pay 31% of all taxes, compared to an average of 36% for the western states. Utah also ranks sixth among seven comparable western states in business tax burden.¹

Utah Tax Incentives. The major business Incentives available in Utah are local tax increment financing, Enterprise Zones, Custom-FIT training, the Industrial Assistance Fund, and the sales tax exemption on the purchase of manufacturing equipment.

Tax increment financing is by far the largest incentive available in Utah and is utilized by local areas that have been targeted for economic development. Portions of the property tax to be generated by new development projects are returned for a fixed period to project developers in the form of infrastructure development, land cost write down or other appropriate means.

The Custom Fit Program provides training for employees of new or expanding companies. A customized training plan to help provide necessary skills is developed to meet the specific training needs of a company if they are expanding or moving into Utah.

The Rural Redevelopment (Enterprise) Zone act provides tax credits for companies (except trade and construction) locating in rural areas that qualify for assistance. A tax credit is given for all new jobs created plus a credit for jobs paying at least 125% of the average wage for the industry. In addition, investment tax credits are available for all investment in new plant and equipment. Enterprise Zone benefits are only available in certain non-metro counties.

Finally, the State of Utah Industrial Assistance Fund may be used for relocation costs. This incentive loan can be repaid as credits for creating jobs in Utah that meet the IAF requirements, and as purchases from Utah suppliers merit enough earned credits to convert the loan to a grant. They are available for targeted industries or companies expanding or relocating to economically stressed areas of the state. *

¹ Utah State Tax Commission, unpublished study on tax burdens for selected western states, May 15, 1997.

Unit Labor Cost
Gross State Product per Dollar of Payroll
(Millions of Current Dollars): 1996

State	Gross State Product	Payroll	Unit Labor Cost (ULC)	ULC Rank
United States	7,631,022	4,532,632	1.68	
Alabama	99,190	59,315	1.67	30
Alaska	24,161	11,694	2.07	3
Arizona	111,520	64,996	1.72	18
Arkansas	56,417	32,987	1.71	21
California	962,696	567,591	1.70	25
Colorado	116,227	72,062	1.61	47
Connecticut	124,046	74,442	1.67	35
Delaware	28,331	15,319	1.85	6
Florida	360,496	207,298	1.74	11
Georgia	216,033	125,820	1.72	17
Hawaii	36,317	21,127	1.72	15
Idaho	27,898	16,648	1.68	29
Illinois	370,778	227,538	1.63	45
Indiana	155,797	93,892	1.66	39
Iowa	76,315	44,680	1.71	22
Kansas	68,014	40,813	1.67	34
Kentucky	95,410	52,910	1.80	7
Louisiana	121,143	58,167	2.08	2
Maine	28,894	17,028	1.70	24
Maryland	143,190	85,990	1.67	36
Massachusetts	208,591	130,377	1.60	48
Michigan	263,336	167,130	1.58	50
Minnesota	141,573	88,504	1.60	49
Mississippi	56,406	31,815	1.77	9
Missouri	145,123	87,043	1.67	33
Montana	18,509	10,808	1.71	20
Nebraska	47,187	28,063	1.68	27
Nevada	53,687	30,756	1.75	10
New Hampshire	34,108	19,727	1.73	13
New Jersey	276,377	162,702	1.70	23
New Mexico	42,698	21,906	1.95	4
New York	613,287	376,658	1.63	46
North Carolina	204,229	119,066	1.72	19
North Dakota	15,701	9,394	1.67	31
Ohio	304,353	183,775	1.66	40
Oklahoma	72,767	43,258	1.68	26
Oregon	86,967	52,342	1.66	38
Pennsylvania	328,540	198,601	1.65	41
Rhode Island	25,629	15,244	1.68	28
South Carolina	89,476	51,488	1.74	12
South Dakota	20,289	10,889	1.86	5
Tennessee	140,750	85,163	1.65	42
Texas	551,830	321,095	1.72	16
Utah	50,352	30,134	1.67	32
Vermont	14,611	8,872	1.65	43
Virginia	197,809	114,930	1.72	14
Washington	159,602	97,190	1.64	44
West Virginia	37,160	20,794	1.79	8
Wisconsin	139,160	83,612	1.66	37
Wyoming	16,847	6,939	2.43	1

Source: U.S. Bureau of Economic Analysis

Educational Attainment for States: 1990

Percent of the Population 25 Years and Older

	Population (thousands)	Not a high school graduate	High school graduate	Some college, but no degree	Associate degree	Bachelor degree	Advanced degree	Drop- outs *
United States	158,868	24.8	30.0	18.7	6.2	13.1	7.2	11.2
Alabama	2,546	33.1	29.4	16.8	5.0	10.1	5.5	12.6
Alaska	323	13.4	28.7	27.6	7.2	15.0	8.0	10.9
Arizona	2,301	21.3	26.1	25.4	6.8	13.3	7.0	14.4
Arkansas	1,496	33.7	32.7	16.6	3.7	8.9	4.5	11.4
California	18,695	23.8	22.3	22.6	7.9	15.3	8.1	14.2
Colorado	2,107	15.6	26.5	24.0	6.9	18.0	9.0	9.8
Connecticut	2,199	20.8	29.5	15.9	6.6	16.2	11.0	9.0
Delaware	428	22.5	32.7	16.9	6.5	13.7	7.7	10.4
District of Columbia	409	26.9	21.2	15.6	3.1	16.1	17.2	13.9
Florida	8,887	25.6	30.1	19.4	6.6	12.0	6.3	14.3
Georgia	4,023	29.1	29.6	17.0	5.0	12.9	6.4	14.1
Hawaii	710	19.9	28.7	20.1	8.3	15.8	7.1	7.5
Idaho	601	20.3	30.4	24.2	7.5	12.4	5.3	10.4
Illinois	7,294	23.8	30.0	19.4	5.8	13.6	7.5	10.6
Indiana	3,489	24.4	38.2	16.6	5.3	9.2	6.4	11.4
Iowa	1,777	19.9	38.5	17.0	7.7	11.7	5.2	6.6
Kansas	1,566	18.7	32.8	21.9	5.4	14.1	7.0	8.7
Kentucky	2,334	35.4	31.8	15.2	4.1	8.1	5.5	13.3
Louisiana	2,537	31.7	31.7	17.2	3.3	10.5	5.6	12.5
Maine	796	21.2	37.1	16.1	6.9	12.7	6.1	8.3
Maryland	3,123	21.6	28.1	18.6	5.2	15.6	10.9	10.9
Massachusetts	3,962	20.0	29.7	15.8	7.2	16.6	10.6	8.5
Michigan	5,843	23.2	32.3	20.4	6.7	10.9	6.4	10.0
Minnesota	2,771	17.6	33.0	19.0	8.6	15.6	6.3	6.4
Mississippi	1,539	35.7	27.5	16.9	5.2	9.7	5.1	11.8
Missouri	3,292	26.1	33.1	18.4	4.5	11.7	6.1	11.4
Montana	508	19.0	33.5	22.1	5.6	14.1	5.7	8.1
Nebraska	996	18.2	34.7	21.1	7.1	13.1	5.9	7.0
Nevada	790	21.2	31.5	25.8	6.2	10.1	5.2	15.2
New Hampshire	714	17.8	31.7	18.0	8.1	16.4	7.9	9.4
New Jersey	5,166	23.3	31.1	15.5	5.2	16.0	8.8	9.6
New Mexico	923	24.9	28.7	20.9	5.0	12.1	8.3	11.7
New York	11,819	25.2	29.5	15.7	6.5	13.2	9.9	9.9
North Carolina	4,253	30.0	29.0	16.8	6.8	12.0	5.4	12.5
North Dakota	397	23.3	28.0	20.5	10.0	13.5	4.5	4.6
Ohio	6,925	24.3	36.3	17.0	5.3	11.1	5.9	8.9
Oklahoma	1,995	25.4	30.5	21.3	5.0	11.8	6.0	10.4
Oregon	1,855	18.5	28.9	25.0	6.9	13.6	7.0	11.8
Pennsylvania	7,873	25.3	38.6	12.9	5.2	11.3	6.6	9.1
Rhode Island	659	28.0	29.5	15.0	6.3	13.5	7.8	11.1
South Carolina	2,168	31.7	29.5	15.8	6.3	11.2	5.4	11.7
South Dakota	431	22.9	33.7	18.8	7.4	12.3	4.9	7.7
Tennessee	3,139	32.9	30.0	16.9	4.2	10.5	5.4	13.4
Texas	10,311	27.9	25.6	21.1	5.2	13.9	6.5	12.9
Utah	897	14.9	27.2	27.9	7.8	15.4	6.8	8.7
Vermont	357	19.2	34.6	14.7	7.2	15.4	8.9	8.0
Virginia	3,975	24.8	26.6	18.5	5.5	15.4	9.1	10.0
Washington	3,126	16.2	27.9	25.0	7.9	15.9	7.0	10.6
West Virginia	1,172	34.0	36.6	13.2	3.8	7.5	4.8	10.9
Wisconsin	3,094	21.4	37.1	16.7	7.1	12.1	5.6	7.1
Wyoming	278	17.0	33.2	24.2	6.9	13.1	5.7	6.9

*For persons 16 to 19 years old. A dropout is a person who is not in regular school and who has not completed the 12th grade or received a general equivalency degree.

Source: U.S. Bureau of the Census, 1990 Census of Population

Business Taxes as a Share of Gross State Product (Millions of Dollars): 1996

	Private Sector GSP	Indirect Taxes	Income Taxes	Total Taxes	Percent GSP	Rank
United States	\$6,699,638	\$604,772	\$29,426	\$634,198	9.5%	
Alabama	\$83,795	\$6,901	\$218	\$7,119	8.5%	44
Alaska	19,433	2,093	327	2,420	12.5%	2
Arizona	97,014	8,865	448	9,313	9.6%	22
Arkansas	49,753	4,052	229	4,281	8.6%	41
California	851,796	70,405	5,831	76,236	9.0%	34
Colorado	100,996	8,434	206	8,640	8.6%	43
Connecticut	112,920	9,825	641	10,466	9.3%	26
Delaware	25,658	1,572	166	1,738	6.8%	50
Florida	315,800	37,343	1,008	38,351	12.1%	3
Georgia	189,014	15,583	719	16,302	8.6%	40
Hawaii	28,565	3,134	66	3,200	11.2%	7
Idaho	24,207	2,025	153	2,178	9.0%	29
Illinois	333,521	28,235	1,621	29,856	9.0%	32
Indiana	140,507	11,243	894	12,137	8.6%	39
Iowa	67,580	5,486	203	5,689	8.4%	45
Kansas	58,417	5,290	255	5,545	9.5%	23
Kentucky	82,466	8,114	285	8,399	10.2%	16
Louisiana	107,942	11,404	328	11,732	10.9%	10
Maine	24,979	2,651	71	2,722	10.9%	9
Maryland	117,638	10,199	331	10,530	9.0%	33
Massachusetts	189,318	13,146	1,228	14,374	7.6%	48
Michigan	235,645	22,885	2,190	25,075	10.6%	13
Minnesota	126,199	10,125	704	10,829	8.6%	42
Mississippi	47,997	4,681	203	4,884	10.2%	17
Missouri	128,877	10,237	375	10,612	8.2%	46
Montana	15,561	1,627	76	1,703	10.9%	8
Nebraska	40,518	3,505	127	3,632	9.0%	31
Nevada	48,349	4,714	Na	4,714	9.7%	21
New Hampshire	31,020	2,605	180	2,785	9.0%	30
New Jersey	246,604	26,731	1,155	27,886	11.3%	4
New Mexico	35,154	3,275	163	3,438	9.8%	20
New York	544,965	53,843	2,730	56,573	10.4%	14
North Carolina	177,261	15,302	939	16,241	9.2%	27
North Dakota	13,327	1,370	74	1,444	10.8%	11
Ohio	272,413	21,307	807	22,114	8.1%	47
Oklahoma	61,005	5,597	164	5,761	9.4%	24
Oregon	76,606	5,236	300	5,536	7.2%	49
Pennsylvania	294,202	23,812	1,706	25,518	8.7%	38
Rhode Island	22,523	2,232	87	2,319	10.3%	15
South Carolina	76,218	6,730	251	6,981	9.2%	28
South Dakota	17,915	1,549	38	1,587	8.9%	36
Tennessee	123,744	11,058	534	11,592	9.4%	25
Texas	487,399	46,813	1,668	48,481	9.9%	19
Utah	42,969	3,571	177	3,748	8.7%	37
Vermont	12,849	1,339	45	1,384	10.8%	12
Virginia	160,458	13,876	363	14,239	8.9%	35
Washington	135,779	15,240	Na	15,240	11.2%	6
West Virginia	32,031	3,378	235	3,613	11.3%	5
Wisconsin	124,046	12,038	580	12,618	10.2%	18
Wyoming	14,670	1,886	Na	1,886	12.9%	1

Na = not applicable

Source: U.S. Census Bureau and the U.S. Bureau of Economic Analysis

Overview

The State's July 1, 1998 population is estimated to be 2,083,238 persons. The 1.7% rate of annual increase represents a deceleration in the rate of growth of the state's population. It is, in fact, the slowest annual growth rate since 1990. The State's population growth rate continues to exceed that of the nation, with natural increase accounting for most of the growth. Utah also continues to have an unusual demographic profile, as compared to other states. Utah residents, on average, are younger, live longer, have higher fertility rates and more persons per household.

1998 Population Estimates

The Utah Population Estimates Committee has released its preliminary population estimates for July 1, 1998. State population reached 2,083,238 persons, a year over increase of 34,485 or 1.7%. This represents an absolute and relative reduction in state population growth. It is the smallest amount and slowest rate of increase since 1990. While the natural increase component (births minus deaths) of population increase exceeds that of last year, implied net migration has fallen off significantly to just over 2,000 persons.

Although the rate of population growth has moderated at the state level, ten of the State's 29 counties are estimated to have increased population by 3.0% or more in the July 1, 1997 to July 1, 1998 period. Six of these (Wasatch, Tooele, Summit, Juab, Morgan, and Utah Counties) are in the Greater Wasatch Area, the region that includes counties in and adjacent to Utah's northern metropolitan areas. Washington and Iron counties, located in southwestern portion of the state, are also among the most rapidly growing counties as are the central Utah counties Sanpete and Piute. Salt Lake County and Weber County, the largest and fourth largest counties in the state, had modest growth rates and are estimated to have had out-migration. The other two large counties of the Wasatch Front, Davis and Utah Counties, both had net in-migration over the last year. In all, 14 of the State's counties are estimated to have experienced net out-migration and nine of these are estimated to have had a reduction in population in the most recent year-over period.

Utah's Young Population: Age Structure

Since 1940, Utah's rate of population growth has been about twice that of the nation. The State's population is younger, women tend to have more children, people on average live in larger households, and people tend to survive to older ages in comparison with the populations of other states. All of these factors lead to an age structure that is unique among states. According to the most recent estimates prepared by the Bureau of the Census, Utah has the lowest median age and the highest shares of its total population in the preschool age and school age groups. Only Alaska has a smaller share of its total population that is 65 years and older (retirement age) than does Utah. And, only Florida, which has the highest share of total population that is the retirement age group, has a smaller working age population as a share of total population than does Utah.

Another way to present this information is the so-called "Dependency Ratio," which is a calculation of the number of non-working age persons (those less than 18 years old plus those 65

years and older) per 100 persons of working age (ages 18 to 65 years old).¹ The total dependency ratio for Utah is estimated by the Census to be 73 in 1997, as compared to 75 in 1996. This reduction has occurred because the school age portion of the dependency ratio has fallen from 43 to 41. Utah has had the highest dependency ratio among all states for some time. In 1997, Florida has overtaken Utah as having the highest dependency ratio among states, although it is the retirement component rather than the school age and preschool age components contributing to Florida's high dependency ratio.

Accounting for Population Change: Natural Increase and Net In-Migration

If population increase is examined in isolation from the underlying economic growth and capital accumulation, annual population increase can be classified according to natural increase (annual births less annual deaths) and net in-migration (gross in-migration less gross out-migration measured over a year). Fluctuations in net migration are much more volatile and more difficult to forecast than are fluctuations in natural increase. This simple framework provides an accounting but not an explanation of annual population change.

Total population increased by 34,485 persons in the July 1, 1997 to July 1, 1998 period. Natural increase accounted for 32,478 (94%) while net in-migration account for 2007 (6%) of the increase. Annual births (44,126) and annual deaths (11,648) were both at record levels.

Fluctuations in the annual amount of natural increase may result from changes in the size, age structure, and vital rates (fertility and mortality) of the population. While vital rates do change over time, these changes are generally gradual, although extreme events (wars, famine, etc.) cause abrupt changes. Utah's total fertility rate (TFR) continues to be higher than that of the nation, although the differential has recently narrowed, particularly since 1977.² Similarly, mortality rates generally change quite slowly over time.³ The National Center for Health Statistics has recently released the 1989-1991 decennial life tables for all states. This allows for comparisons of life expectancy among states and across time. Life expectancy has increased for men and women over time in both Utah and the nation. Among states, Utah currently ranks third behind Hawaii and Minnesota for long life expectancy. From 1940 through 1998, natural increase has contributed about 80% of the cumulative population increase of the state. The young population in combination with high fertility and low mortality rates contribute to this growth.

In contrast, much more volatile non-demographic processes govern

¹ While it is questionable to classify wealthy retirees as "dependents" along with toddlers in day care and young people in school, the Dependency Ratio has become a fairly standard measure of age structure.

² The total fertility rate is the sum of observed age-specific fertility rates for a particular period of time. It is the total number of children a woman would have if she experiences at every age the observed fertility rate. It is a child per woman measure that is used to calculate completed family size.

³ Age specific mortality rates may be calculated from survival rates. These may be viewed as mutually exclusive and exhaustive probabilities. That is, the probability of surviving from age 70 to age 71 plus the probability of a 70 year old dying before their seventy first birthday is 100%. Either the person will or will not survive until their next birthday.

in-migration to and out-migration from the state, although the age structure certainly affects and is affected by migration itself. Regional differences in economic opportunity; quality of life; wages; cost of living; and access to goods, services, education, and amenities are factors that motivate people to migrate. Among these, fluctuations in economic opportunity— cyclical changes in the annual growth rate of jobs— is the most unpredictable and widely fluctuating. Employment related migration may be, and has historically been, positive or negative from one year to the next. The most recent cycle of in-migration to the state began in 1991, peaked in 1994, and continues at a decelerating rate through 1998. The most recent IRS data confirms this general cyclical pattern of migration flows.

County Race and Hispanic Origins Estimates, State Household, and City Population Estimates

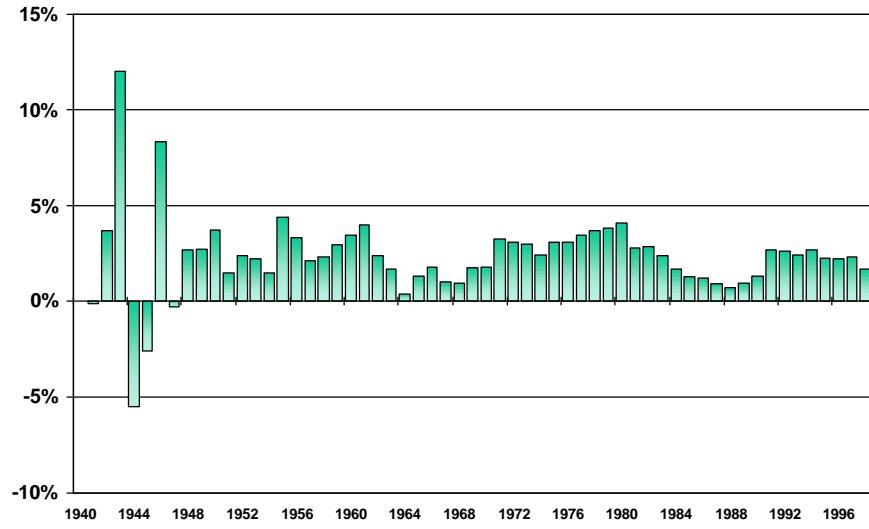
The most recent Census Bureau county level estimates of population, race and Hispanic origin are included in this chapter as

are Census Bureau state household estimates and city population estimates. Although Utah is less racially and ethnically diverse than the nation, it is, over time, becoming more diverse. Within the state, Carbon, Salt Lake, San Juan, Tooele, Uintah, and Weber are among the most diverse, according to these estimates.

Data Development Effort

Over the past year, analysts at the Utah Bureau of Vital Records, Department of Health and the Utah Population Database (partially funded by the Huntsman Cancer Institute) have worked with researchers in Utah's State Data Center and demographic analysts in the Demographic and Economic Analysis section of the Governor's Office of Planning and Budget. This collaboration has resulted in significant quality improvements to the State's county level components of change (births, deaths, implied net migration) historical series. These are available electronically at www.governor.state.ut.us/dea. *

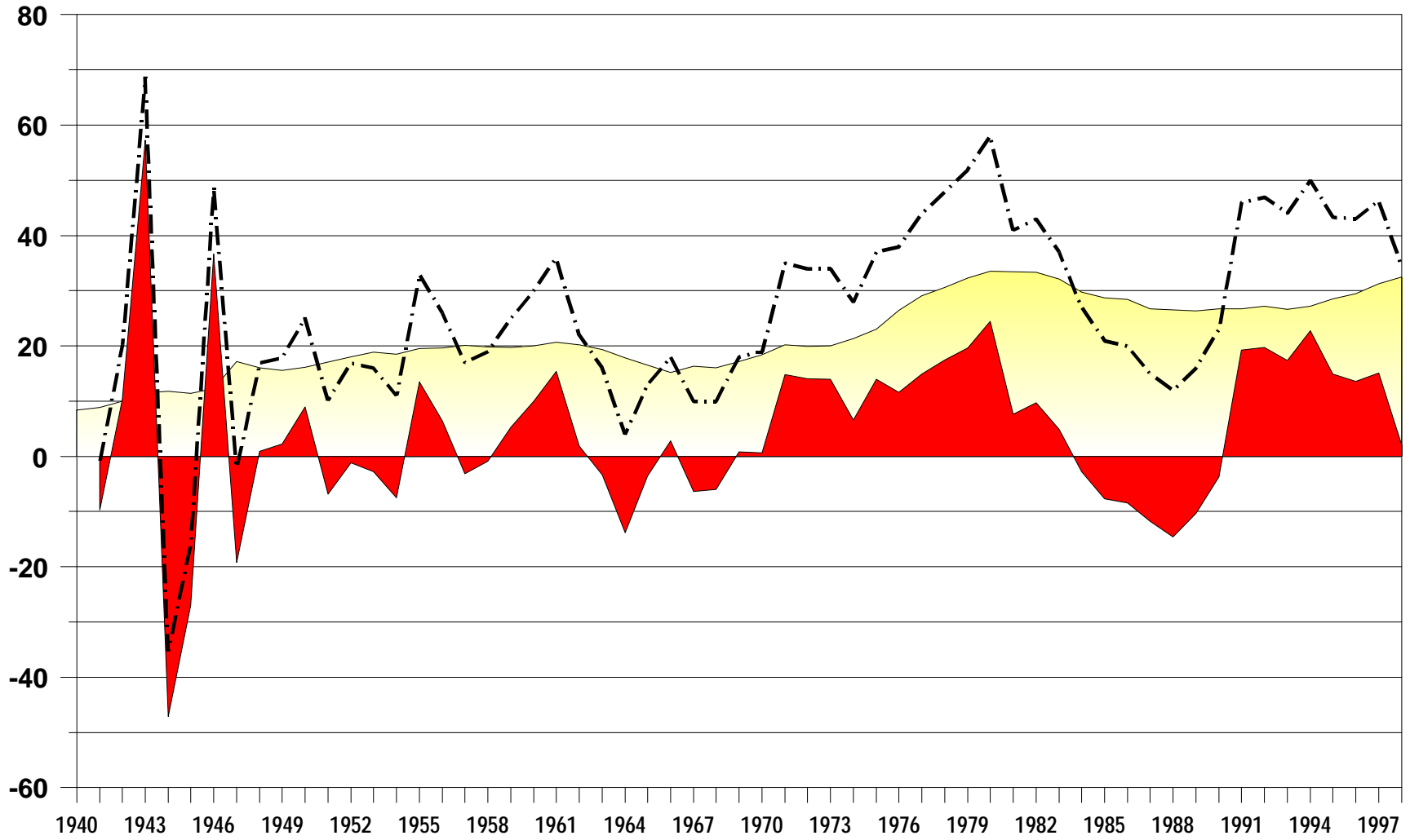
Utah Population--Annual Percent Change: 1940-1998



Source: Utah Population Estimates Committee

Utah Components of Population Change: 1940 to 1998

Thousands of Persons



Natural Increase

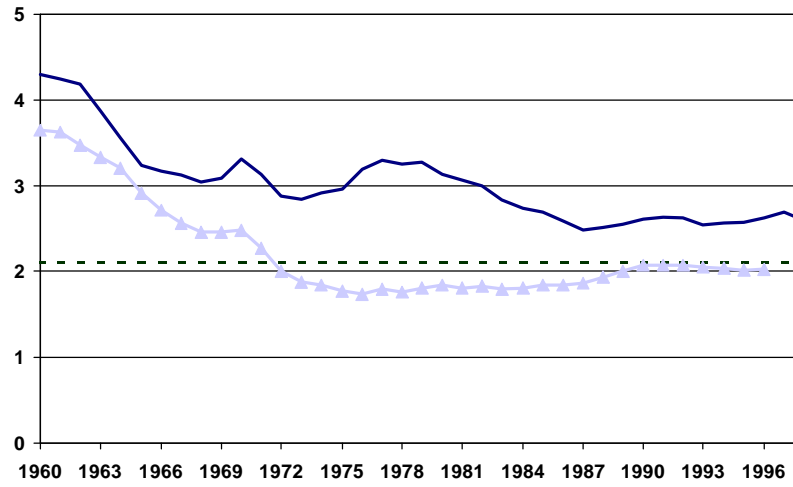


Net Migration



Total Population Increase

Total Fertility for Utah and the U.S.: 1960 to 1998



- - - Replacement Level * ▲ U.S. — Utah

*Fertility level at which current population is replaced

Source: National Center for Health Statistics, Governor's Office of Planning and Budget, UPED/CASA, Eileen Brown, "Fertility in Utah: 1960-1985"

Utah Population Estimates, Net Migration, Births and Deaths: 1940 to 1998

Year	July 1st Population	Percent Change	Increase	Net Migration** (r)	Net Migration as a Percent of Prev. Year's Population (r)	Natural Increase (r)	Fiscal Year Births (r)	Fiscal Year Deaths (r)
1940	551,800	---	---	---	---	8,419	13,038	4,619
1941	551,000	-0.14%	(800)	(9,631)	-1.75%	8,831	13,293	4,462
1942	571,200	3.67%	20,200	10,231	1.86%	9,969	14,357	4,388
1943	640,000	12.04%	68,800	57,284	10.03%	11,516	16,182	4,666
1944	604,700	-5.52%	(35,300)	(47,122)	-7.36%	11,822	16,536	4,714
1945	589,100	-2.58%	(15,600)	(26,992)	-4.46%	11,392	15,937	4,545
1946	638,000	8.30%	48,900	36,649	6.22%	12,251	16,955	4,704
1947	636,000	-0.31%	(2,000)	(19,178)	-3.01%	17,178	21,905	4,727
1948	653,000	2.67%	17,000	943	0.15%	16,057	20,856	4,799
1949	670,800	2.73%	17,800	2,207	0.34%	15,593	20,354	4,761
1950	695,900	3.74%	25,100	8,966	1.34%	16,134	21,027	4,893
1951	706,100	1.47%	10,200	(6,842)	-0.98%	17,042	21,801	4,759
1952	723,000	2.39%	16,900	(1,160)	-0.16%	18,060	23,116	5,056
1953	739,000	2.21%	16,000	(2,889)	-0.40%	18,889	23,573	4,684
1954	750,000	1.49%	11,000	(7,469)	-1.01%	18,469	23,439	4,970
1955	783,000	4.40%	33,000	13,484	1.80%	19,516	24,584	5,068
1956	809,000	3.32%	26,000	6,348	0.81%	19,652	24,975	5,323
1957	826,000	2.10%	17,000	(3,139)	-0.39%	20,139	25,443	5,304
1958	845,000	2.30%	19,000	(855)	-0.10%	19,855	25,760	5,905
1959	870,000	2.96%	25,000	5,259	0.62%	19,741	25,610	5,869
1960	900,000	3.45%	30,000	9,947	1.14%	20,053	26,011	5,958
1961	936,000	4.00%	36,000	15,371	1.71%	20,629	26,560	5,931
1962	958,000	2.35%	22,000	1,817	0.19%	20,183	26,431	6,248
1963	974,000	1.67%	16,000	(3,317)	-0.35%	19,317	25,648	6,331
1964	978,000	0.41%	4,000	(13,863)	-1.42%	17,863	24,461	6,598
1965	991,000	1.33%	13,000	(3,553)	-0.36%	16,553	23,082	6,529
1966	1,009,000	1.82%	18,000	2,810	0.28%	15,190	21,953	6,763
1967	1,019,000	0.99%	10,000	(6,350)	-0.63%	16,350	23,030	6,680
1968	1,029,000	0.98%	10,000	(6,029)	-0.59%	16,029	22,743	6,714
1969	1,047,000	1.75%	18,000	798	0.08%	17,202	24,033	6,831
1970	1,066,000	1.81%	19,000	612	0.06%	18,388	25,281	6,893
1971	1,101,000	3.28%	35,000	14,816	1.39%	20,184	27,400	7,216
1972	1,135,000	3.09%	34,000	14,096	1.28%	19,904	27,146	7,242
1973	1,169,000	3.00%	34,000	13,960	1.23%	20,040	27,562	7,522
1974	1,197,000	2.40%	28,000	6,621	0.57%	21,379	28,876	7,497
1975	1,234,000	3.09%	37,000	13,947	1.17%	23,053	30,566	7,513
1976	1,272,000	3.08%	38,000	11,611	0.94%	26,389	33,773	7,384
1977	1,316,000	3.46%	44,000	14,924	1.17%	29,076	36,707	7,631
1978	1,364,000	3.65%	48,000	17,420	1.32%	30,580	38,289	7,709
1979	1,416,000	3.81%	52,000	19,668	1.44%	32,332	40,216	7,884
1980	1,474,000	4.10%	58,000	24,486	1.73%	33,514	41,645	8,131
1981	1,515,000	2.78%	41,000	7,612	0.52%	33,388	41,509	8,121
1982	1,558,000	2.84%	43,000	9,662	0.64%	33,338	41,773	8,435
1983	1,595,000	2.37%	37,000	4,914	0.32%	32,086	40,555	8,469
1984	1,622,000	1.69%	27,000	(2,793)	-0.18%	29,793	38,643	8,850
1985	1,643,000	1.29%	21,000	(7,714)	-0.48%	28,714	37,664	8,950
1986	1,663,000	1.22%	20,000	(8,408)	-0.51%	28,408	37,309	8,901
1987	1,678,000	0.90%	15,000	(11,713)	-0.70%	26,713	35,631	8,918
1988	1,690,000	0.72%	12,000	(14,557)	-0.87%	26,557	35,809	9,252
1989	1,706,000	0.95%	16,000	(10,355)	-0.61%	26,355	35,439	9,084
1990	1,729,000	1.35%	23,000	(3,707)	-0.22%	26,707	35,830	9,123
1991	1,775,000	2.66%	46,000	19,235	1.11%	26,765	36,194	9,429
1992	1,822,000	2.65%	47,000	19,763	1.11%	27,237	36,796	9,559
1993	1,866,000	2.41%	44,000	17,317	0.95%	26,683	36,738	10,055
1994	1,916,000	2.68%	50,000	22,788	1.22%	27,212	37,623	10,411
1995	1,959,351	2.26%	43,351	14,868	0.78%	28,483	39,064	10,581
1996	2,002,400	2.20%	43,049	13,555	0.69%	29,494	40,495	11,001
1997	2,048,753	2.31%	46,353	15,090	0.75%	31,263	42,512	11,249
1998	2,083,238	1.68%	34,485	2,007	0.10%	32,478	44,126	11,648

*In 1996, the Utah Population Estimates Committee changed its convention on rounded estimates so that it now publishes unrounded estimates. Accordingly, the estimates for 1995 and thereafter are not rounded.

**Previous to 1995, net migration figures are based on rounded population estimates to maintain consistency with the historical database. The migration estimates may differ from those found elsewhere in the report.

(r) = Components of Change have been revised. This includes Fiscal Year Births, Fiscal Year Deaths, Natural Increase, Net Migration and Net Migration Rates.

Sources:

Population: Utah Population Estimates Committee

Births: 1939-1949 and 1953-1972- Utah's Vital Statistics Reports, Utah Bureau of Vital Records; 1950-1952, 1973-1996- Birth Certificates held in the Utah Population Database, partially funded by the Huntsman Cancer Institute.

1997- Birth records file, Utah Bureau of Vital Records; 1998- Summary data file, Utah Bureau of Vital Records.

Deaths: 1939- Utah's Vital Statistics Reports, Utah Bureau of Vital Records; 1940-1996- Death Certificates held in the Utah Population Database, partially funded by the Huntsman Cancer Institute. 1997- Death records file, Utah Bureau of Vital Records; 1998- Summary data file, Utah Bureau of Vital Records

Total Fertility Rates for Utah and the U.S.: 1960 to 1998

Year	Utah	U.S.	Year	Utah	U.S.
1960	4.30	3.65	1979	3.28	1.81
1961	4.24	3.63	1980	3.14	1.84
1962	4.18	3.47	1981	3.06	1.81
1963	3.87	3.33	1982	2.99	1.83
1964	3.55	3.21	1983	2.83	1.80
1965	3.24	2.91	1984	2.74	1.81
1966	3.17	2.72	1985	2.69	1.84
1967	3.12	2.56	1986	2.59	1.84
1968	3.04	2.46	1987	2.48	1.87
1969	3.09	2.46	1988	2.52	1.93
1970	3.31	2.48	1989	2.55	2.01
1971	3.14	2.27	1990	2.61	2.08
1972	2.88	2.01	1991	2.63	2.07
1973	2.84	1.88	1992	2.62	2.07
1974	2.91	1.84	1993	2.54	2.05
1975	2.96	1.77	1994	2.56	2.04
1976	3.19	1.74	1995	2.57	2.02
1977	3.30	1.79	1996	2.62	2.03
1978	3.25	1.76	1997	2.69	na
			1998	2.60	na

na = not available

Sources: Eileen Brown, "Fertility in Utah: 1960-1985."
 The Governor's Office of Planning and Budget, UPED/CASA.
 Ventura SJ, et al. Monthly Vital Statistics Report; vol 46 no 11, supp.
 Hyattsville, Maryland: National Center for Health Statistics. 1998.

Life Expectancy at Birth for Utah and the U.S.: 1970, 1980, and 1990

Year	Utah			U.S.		
	Male	Female	Total	Male	Female	Total
1970	69.49	76.55	72.90	67.04	74.64	70.75
1980	72.38	79.18	75.76	70.11	77.62	73.88
1990	74.93	80.38	77.70	71.83	78.81	75.37

Source: National Center for Health Statistics, Vital Statistics of the United States, Decennial Life Tables.

Utah Population Estimates by County: 1980, 1985 to 1998

District/County	July 1, 1980	July 1, 1985	July 1, 1986	July 1, 1987	July 1, 1988	July 1, 1989	July 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996*	July 1, 1997	July 1, 1998(p)	Avg. Ann. Percent Change 1980-98	Percent Change 1997-98	1998 Percent of Total Population
Bear River	93,350	102,750	104,300	105,650	106,550	107,450	108,750	110,700	113,250	116,000	118,650	120,975	123,403	126,209	129,027	1.8	2.2	6.2
Box Elder	33,500	35,500	36,000	36,300	36,300	36,500	36,500	37,100	37,500	38,100	38,500	38,910	39,484	40,235	40,996	1.1	1.9	2.0
Cache	57,700	65,200	66,300	67,500	68,500	69,200	70,500	71,900	74,000	76,100	78,300	80,259	82,098	84,186	86,240	2.3	2.4	4.1
Rich	2,150	2,050	2,000	1,850	1,750	1,750	1,750	1,700	1,750	1,800	1,850	1,806	1,821	1,788	1,791	-1.0	0.2	0.1
Wasatch Front	949,150	1,053,550	1,069,250	1,077,450	1,085,850	1,095,950	1,107,250	1,136,850	1,165,650	1,186,250	1,211,650	1,233,620	1,253,756	1,274,851	1,290,399	1.7	1.2	61.9
Davis	148,000	170,000	175,000	179,000	184,000	186,000	188,000	195,000	201,000	206,000	212,000	216,020	219,644	224,307	229,529	2.5	2.3	11.0
Morgan	4,950	5,250	5,250	5,350	5,350	5,450	5,550	5,650	5,850	6,150	6,350	6,497	6,693	6,875	7,086	2.0	3.1	0.3
Weber	145,000	154,000	156,000	156,000	157,000	158,000	159,000	162,000	166,000	169,000	172,000	175,276	178,066	181,045	182,506	1.3	0.8	8.8
Salt Lake	625,000	697,000	706,000	710,000	713,000	720,000	728,000	747,000	765,000	777,000	792,000	806,280	818,860	830,627	837,710	1.6	0.9	40.2
Tooele	26,200	27,300	27,000	27,100	26,500	26,500	26,700	27,200	27,800	28,100	29,300	29,547	30,493	31,997	33,569	1.4	4.9	1.6
Mountainland	239,050	267,200	269,850	275,900	279,050	283,100	291,800	299,700	308,200	321,900	331,900	342,287	354,028	368,403	380,100	2.6	3.2	18.2
Summit	10,400	13,000	13,400	14,200	14,300	15,100	15,700	17,000	18,400	19,700	21,100	22,367	23,562	24,675	25,630	5.1	3.9	1.2
Utah	220,000	245,000	247,000	252,000	255,000	258,000	266,000	272,000	279,000	291,000	299,000	307,741	317,881	330,803	340,816	2.5	3.0	16.4
Wasatch	8,650	9,200	9,450	9,700	9,750	10,000	10,100	10,700	10,800	11,200	11,800	12,179	12,585	12,925	13,653	2.6	5.6	0.7
Central	47,600	54,900	52,700	51,950	52,000	52,100	52,200	53,750	54,850	55,950	58,150	59,299	60,981	62,563	63,926	1.7	2.2	3.1
Juab	5,550	6,300	5,900	5,800	5,800	5,900	5,800	6,000	6,150	6,200	6,800	7,149	7,444	7,702	7,978	2.0	3.6	0.4
Millard	9,050	12,900	12,200	11,400	11,300	11,300	11,300	11,600	11,700	11,700	11,900	11,931	11,958	12,068	12,054	1.6	-0.1	0.6
Piute	1,350	1,300	1,300	1,300	1,300	1,300	1,250	1,350	1,350	1,350	1,450	1,424	1,508	1,534	1,583	0.9	3.2	0.1
Sanpete	14,800	16,300	15,800	15,900	16,000	16,000	16,300	16,900	17,500	18,100	18,800	19,240	19,999	20,581	21,244	2.0	3.2	1.0
Sevier	14,900	15,900	15,300	15,400	15,400	15,400	15,400	15,700	16,000	16,400	16,900	17,257	17,682	18,238	18,629	1.2	2.1	0.9
Wayne	1,950	2,200	2,200	2,150	2,200	2,200	2,150	2,200	2,150	2,200	2,300	2,298	2,390	2,440	2,437	1.2	-0.1	0.1
Southwestern	56,050	70,900	75,050	77,550	79,100	81,650	83,900	87,600	91,750	97,150	103,650	110,883	116,874	121,992	125,435	4.6	2.8	6.0
Beaver	4,400	5,050	4,950	4,900	4,800	4,800	4,800	4,850	4,900	5,000	5,150	5,350	5,607	5,742	5,678	1.4	-1.1	0.3
Garfield	3,700	4,000	4,000	4,000	3,950	4,000	3,950	4,100	4,100	4,200	4,200	4,308	4,386	4,525	4,517	1.1	-0.2	0.2
Iron	17,500	20,100	20,300	20,300	20,100	20,400	20,900	21,500	22,400	23,800	25,200	26,866	28,032	29,338	30,477	3.1	3.9	1.5
Kane	4,050	4,950	5,100	5,150	5,250	5,250	5,150	5,250	5,350	5,450	5,700	5,884	5,957	6,039	6,155	2.4	1.9	0.3
Washington	26,400	36,800	40,700	43,200	45,000	47,200	49,100	51,900	55,000	58,700	63,400	68,475	72,892	76,348	78,605	6.2	3.0	3.8
Uintah Basin	34,150	40,300	39,000	37,400	36,500	35,650	35,500	36,600	37,200	37,500	38,950	38,652	39,111	39,792	39,525	0.8	-0.7	1.9
Daggett	750	700	700	700	700	650	700	700	700	700	750	768	803	753	713	-0.3	-5.3	0.0
Duchesne	12,700	14,700	14,300	13,700	13,100	12,800	12,600	12,800	12,900	13,200	13,500	13,549	14,032	14,402	14,376	0.7	-0.2	0.7
Uintah	20,700	24,900	24,000	23,000	22,700	22,200	22,200	23,100	23,600	23,600	24,700	24,335	24,276	24,637	24,436	0.9	-0.8	1.2
Southeastern	54,650	53,400	52,850	52,100	50,950	50,100	49,700	50,300	51,050	51,700	53,050	53,635	54,247	54,943	54,830	0.0	-0.2	2.6
Carbon	22,400	22,800	22,300	21,700	21,100	20,400	20,200	20,600	20,600	20,700	21,100	21,054	21,420	21,643	21,547	-0.2	-0.4	1.0
Emery	11,600	11,100	11,100	10,900	10,500	10,400	10,300	10,200	10,200	10,400	10,600	10,735	10,811	10,929	10,939	-0.3	0.1	0.5
Grand	8,250	7,200	7,050	6,900	6,750	6,700	6,600	6,800	7,150	7,500	7,950	8,352	8,801	8,830	8,887	0.4	0.6	0.4
San Juan	12,400	12,300	12,400	12,600	12,600	12,600	12,600	12,700	13,100	13,100	13,400	13,494	13,215	13,541	13,457	0.5	-0.6	0.6
State	1,474,000	1,643,000	1,663,000	1,678,000	1,690,000	1,706,000	1,729,000	1,775,000	1,822,000	1,866,000	1,916,000	1,959,351	2,002,400	2,048,753	2,083,238	1.9	1.7	100.0

(p)=preliminary

Note: Prior to 1995, totals may not add due to rounding.

*In 1996, the Utah Population Estimates Committee changed its convention on rounded estimates so that it now publishes unrounded estimates. Accordingly, the estimates for 1995 and thereafter are not rounded.

Utah Net In-Migration by State: 1981-1997

State	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1980-1997
Alabama	62	39	(136)	(101)	(20)	(107)	(65)	(209)	(71)	(94)	(62)	(81)	60	136	75	69	(60)	(565)
Alaska	(114)	(301)	(225)	(168)	(72)	33	355	130	47	(93)	(43)	(29)	15	128	71	46	24	(196)
Arizona	27	(111)	(698)	(1,792)	(2,403)	(2,544)	(3,112)	(2,366)	(1,112)	50	429	199	464	(44)	(978)	(742)	(220)	(14,953)
Arkansas	38	90	(132)	(33)	(25)	71	(314)	(106)	61	29	40	35	(22)	16	(17)	(64)	(67)	(400)
California	3,462	2,474	(860)	(1,774)	(4,277)	(3,821)	(5,003)	(4,094)	(2,109)	1,212	4,853	7,884	10,956	12,125	9,265	7,380	5,121	42,794
Colorado	(370)	(392)	233	(433)	(262)	(195)	(261)	(394)	(412)	25	(87)	153	(308)	186	(153)	(123)	(49)	(2,842)
Connecticut	55	49	(12)	(14)	(40)	(24)	(117)	(77)	(54)	73	81	137	123	150	104	39	80	553
Delaware	12	10	12	(3)	22	4	(76)	(47)	(65)	20	(1)	22	20	(5)	13	41	36	15
Dist. of Col.	(25)	2	(22)	(33)	(29)	(9)	(12)	(13)	(2)	(8)	(23)	(27)	1	11	(5)	3	(224)	
Florida	290	(24)	56	(336)	(366)	(372)	(508)	(567)	(280)	(297)	274	249	342	254	246	97	(45)	(987)
Georgia	69	89	(80)	(135)	(146)	(189)	(349)	(160)	(102)	(51)	144	(86)	(199)	(189)	(156)	(126)	(53)	(1,719)
Hawaii	168	129	255	173	27	174	3	(2)	39	(2)	217	180	291	413	146	327	289	2,827
Idaho	974	1,117	968	1,262	1,620	1,924	2,003	915	251	76	18	(429)	9	(186)	(270)	(248)	38	10,042
Illinois	449	466	365	103	77	95	(135)	(97)	48	(43)	145	98	248	261	393	43	253	2,769
Indiana	92	351	176	14	(40)	(28)	(12)	(226)	(105)	9	(12)	34	66	54	23	(68)	40	368
Iowa	117	182	136	157	196	99	96	(43)	40	(65)	(24)	(37)	(20)	(94)	(31)	(60)	(96)	553
Kansas	144	95	(33)	145	9	35	(39)	(66)	79	89	(69)	(52)	121	67	11	(56)	(3)	477
Kentucky	106	45	(136)	116	(1)	(7)	(126)	(98)	2	(82)	(64)	(25)	17	(5)	44	(106)	(48)	(368)
Louisiana	(44)	(103)	46	22	18	(7)	200	(27)	121	56	33	64	192	64	(38)	106	45	748
Maine	18	1	(26)	14	(27)	(72)	(68)	(90)	(17)	17	38	50	51	130	33	(54)	42	40
Maryland	49	84	(38)	46	(168)	(158)	(215)	(304)	(207)	102	41	223	139	155	90	125	51	15
Massachusetts	31	96	(80)	(63)	(160)	(112)	(251)	(307)	(182)	89	162	283	49	122	141	(58)	(65)	(305)
Michigan	528	472	252	91	0	(266)	(189)	(117)	(97)	(71)	29	65	160	84	(62)	128	5	1,012
Minnesota	145	144	282	100	(48)	(36)	(50)	(161)	(41)	(88)	154	68	(60)	(91)	(53)	(36)	115	344
Mississippi	61	6	79	(1)	(18)	(9)	(45)	31	40	12	(36)	(65)	38	(42)	(7)	81	(22)	103
Missouri	118	183	(73)	9	(110)	(205)	(214)	(171)	(153)	(60)	14	217	(127)	(59)	(308)	(200)	(229)	(1,368)
Montana	157	341	197	359	236	450	172	85	90	77	(29)	(78)	(61)	(111)	(170)	7	213	1,935
Nebraska	95	242	(15)	71	32	(13)	61	(153)	(32)	(221)	(4)	2	34	(21)	(23)	(6)	(37)	12
Nevada	(235)	(70)	221	(254)	(423)	(800)	(1,821)	(2,614)	(3,103)	(2,449)	(508)	419	837	(71)	67	(235)	(653)	(11,692)
New Hampshire	(7)	30	46	(44)	(27)	(15)	(31)	(67)	(70)	62	152	90	110	18	(17)	30	(138)	122
New Jersey	215	115	224	(2)	(88)	(61)	(64)	(150)	(25)	99	150	182	290	135	361	55	31	1,467
New Mexico	301	(107)	(197)	(373)	(244)	(444)	(187)	68	(433)	239	68	(45)	(386)	89	(97)	(142)	94	(1,796)
New York	215	187	445	(74)	(111)	(109)	(33)	(142)	(69)	133	256	288	386	303	143	376	255	2,449
North Carolina	109	89	(72)	(94)	(74)	9	(226)	(195)	(180)	95	86	(14)	(17)	(69)	72	(76)	(36)	(593)
North Dakota	65	10	117	(19)	71	104	112	92	93	143	100	50	57	97	15	(12)	60	1,155
Ohio	314	409	75	14	(88)	(137)	(120)	(159)	(232)	(167)	61	10	106	95	(14)	(70)	48	145
Oklahoma	(103)	(441)	(194)	(106)	16	(62)	261	141	(41)	28	5	(140)	62	7	30	(244)	(111)	(892)
Oregon	6	743	204	(352)	(162)	(162)	(449)	(809)	(790)	(864)	(397)	(87)	(406)	(152)	(217)	(584)	(504)	(4,982)
Pennsylvania	211	327	62	91	50	(128)	(238)	(323)	(12)	9	70	73	250	226	41	45	207	961
Rhode Island	(6)	(7)	(3)	16	10	(9)	(12)	(22)	(14)	(2)	15	27	10	36	(9)	4	(9)	25
South Carolina	145	(5)	(82)	(34)	(14)	(76)	(8)	(18)	(64)	(58)	54	94	218	82	33	(50)	(47)	170
South Dakota	20	172	21	(19)	19	(48)	11	46	86	52	28	15	(12)	3	(62)	(3)	136	465
Tennessee	124	56	3	3	(78)	(109)	(257)	(184)	(107)	(25)	26	(73)	(38)	(92)	(124)	(187)	29	(1,033)
Texas	(575)	(954)	(1,099)	(1,129)	(934)	(773)	(201)	(395)	(423)	(295)	(109)	289	24	187	(93)	(269)	(49)	(6,798)
Vermont	(2)	(18)	(12)	(1)	0	(10)	(37)	(68)	9	(2)	41	74	12	40	30	1	23	80
Virginia	(37)	(62)	(37)	(260)	(239)	(251)	(317)	(408)	(197)	(188)	113	121	161	107	218	235	(2)	(1,043)
Washington	(164)	292	270	(225)	(550)	(818)	(968)	(1,204)	(1,605)	(1,801)	(806)	(585)	(53)	606	14	109	(367)	(7,855)
West Virginia	83	47	11	62	(1)	85	(30)	(45)	5	(38)	(29)	(16)	(15)	22	13	(29)	27	152
Wisconsin	117	142	131	118	99	52	(83)	(47)	(20)	75	(65)	(135)	19	(68)	(84)	(47)	(61)	143
Wyoming	(555)	(126)	575	502	350	642	962	375	58	187	27	88	239	(38)	96	272	288	3,942
Foreign	NA	NA	NA	NA	NA	(361)	(341)	(194)	272	192	906	1,725	1,728	922	1,038	779	692	7,358
Total	6,955	6,605	1,200	(4,384)	(8,397)	(8,790)	(12,345)	(15,055)	(11,096)	(3,808)	6,477	11,508	16,153	15,984	9,854	6,495	5,274	22,630

NA = Not Available

Source: IRS Area-to-Area Migration Data; Statistical Information Services, IRS

Rankings of States by Selected Age Groups as a Percent of Total Population: July 1, 1997

Rank	All Ages			Under Age 5			Ages 5-17			Ages 18-64			Ages 65+			Median Age	
	State	Population	Percent of Total	State	Population	Percent of Total	State	Population	Percent of Total	State	Population	Percent of Total	State	Population	Percent of Total		
	United States	267,636,061		United States	19,149,595	7.2%	United States	50,378,349	18.8%	United States	164,032,506	61.3%	United States	34,075,611	12.7%	United States	34.9
1	California	32,268,301		Utah	195,768	9.5%	Utah	492,309	23.9%	District of Columbia	348,385	65.9%	Florida	2,708,804	18.5%	Utah	26.9
2	Texas	19,439,337		Texas	1,608,579	8.3%	Alaska	138,924	22.8%	Virginia	4,334,064	64.4%	Pennsylvania	1,904,822	15.8%	Alaska	31.8
3	New York	18,137,226		California	2,661,078	8.2%	Idaho	259,657	21.5%	Alaska	388,941	63.8%	Rhode Island	156,103	15.8%	Texas	32.7
4	Florida	14,653,945		Arizona	373,790	8.2%	New Mexico	365,481	21.1%	Colorado	2,483,513	63.8%	West Virginia	274,333	15.1%	California	33.0
5	Pennsylvania	12,019,661		Alaska	49,405	8.1%	Wyoming	100,721	21.0%	Maryland	3,241,883	63.6%	Iowa	429,264	15.0%	Idaho	33.1
6	Illinois	11,895,849		Nevada	129,927	7.7%	Texas	3,968,556	20.4%	Georgia	4,760,277	63.6%	North Dakota	92,545	14.4%	Mississippi	33.2
7	Ohio	11,186,331		New Mexico	133,841	7.7%	Mississippi	551,309	20.2%	Vermont	371,246	63.0%	Connecticut	469,600	14.4%	Georgia	33.5
8	Michigan	9,773,892		Illinois	903,568	7.6%	Louisiana	877,178	20.2%	Kentucky	2,458,029	62.9%	Arkansas	359,909	14.3%	Louisiana	33.6
9	New Jersey	8,052,849		Idaho	91,695	7.6%	South Dakota	147,892	20.0%	Delaware	459,799	62.9%	South Dakota	105,198	14.3%	New Mexico	33.8
10	Georgia	7,486,242		Hawaii	88,472	7.5%	Minnesota	934,941	20.0%	Tennessee	3,373,267	62.8%	Massachusetts	862,493	14.1%	Arizona	34.0
11	North Carolina	7,425,183		Georgia	558,121	7.5%	Nebraska	330,497	19.9%	New Hampshire	735,165	62.7%	Maine	173,264	13.9%	Illinois	34.6
12	Virginia	6,733,996		Mississippi	201,689	7.4%	Montana	175,227	19.9%	Washington	3,508,360	62.5%	District of Columbia	73,375	13.9%	South Carolina	34.7
13	Massachusetts	6,117,520		New York	1,313,682	7.2%	Arizona	904,273	19.9%	South Carolina	2,350,715	62.5%	Nebraska	227,538	13.7%	Virginia	34.8
14	Indiana	5,864,108		Louisiana	313,700	7.2%	Oklahoma	652,211	19.7%	North Carolina	4,624,041	62.3%	New Jersey	1,105,688	13.7%	Minnesota	34.9
15	Washington	5,610,362		Colorado	273,557	7.0%	Kansas	508,652	19.6%	West Virginia	1,129,708	62.2%	Missouri	740,595	13.7%	Nevada	35.0
16	Missouri	5,402,058		Arkansas	176,754	7.0%	Wisconsin	1,011,134	19.6%	Alabama	2,686,472	62.2%	Kansas	351,599	13.5%	Kansas	35.0
17	Tennessee	5,368,198		North Carolina	518,861	7.0%	California	6,290,575	19.5%	Massachusetts	3,803,653	62.2%	Oklahoma	444,453	13.4%	North Carolina	35.0
18	Wisconsin	5,169,677		Indiana	407,103	6.9%	North Dakota	124,503	19.4%	Maine	771,521	62.1%	New York	2,427,365	13.4%	Washington	35.1
19	Maryland	5,094,289		New Jersey	556,867	6.9%	Arkansas	485,938	19.3%	Nevada	1,041,308	62.1%	Ohio	1,494,482	13.4%	Nebraska	35.1
20	Minnesota	4,685,549		Kansas	179,279	6.9%	Missouri	1,039,651	19.2%	Michigan	6,055,125	62.0%	Oregon	430,276	13.3%	Indiana	35.1
21	Arizona	4,554,966		Nebraska	114,184	6.9%	Georgia	1,429,690	19.1%	Indiana	3,632,806	61.9%	Arizona	602,409	13.2%	Oklahoma	35.2
22	Louisiana	4,351,769		Washington	386,181	6.9%	Illinois	2,270,655	19.1%	Oregon	2,002,512	61.7%	Wisconsin	683,357	13.2%	Wyoming	35.2
23	Alabama	4,319,154		Oklahoma	226,094	6.8%	Colorado	741,972	19.1%	New Jersey	4,960,037	61.6%	Montana	116,143	13.2%	Michigan	35.2
24	Kentucky	3,908,124		Maryland	346,948	6.8%	Washington	1,068,473	19.0%	New York	11,149,830	61.5%	Hawaii	156,701	13.2%	South Dakota	35.2
25	Colorado	3,892,644		Missouri	366,774	6.8%	Iowa	541,563	19.0%	Connecticut	2,008,097	61.4%	Alabama	560,974	13.0%	Colorado	35.3
26	South Carolina	3,760,181		Alabama	292,728	6.8%	New Hampshire	222,374	19.0%	Hawaii	727,309	61.3%	Delaware	94,371	12.9%	Delaware	35.3
27	Oklahoma	3,317,091		South Carolina	253,958	6.8%	Michigan	1,852,011	18.9%	Ohio	6,853,208	61.3%	Indiana	733,847	12.5%	Maryland	35.3
28	Connecticut	3,269,858		Tennessee	361,989	6.7%	Vermont	111,015	18.8%	Texas	11,902,480	61.2%	Kentucky	488,893	12.5%	Alabama	35.3
29	Oregon	3,243,487		Minnesota	315,744	6.7%	Ohio	2,089,975	18.7%	Louisiana	2,664,102	61.2%	North Carolina	927,739	12.5%	Wisconsin	35.3
30	Iowa	2,852,423		Delaware	49,207	6.7%	Nevada	312,929	18.7%	Wyoming	293,678	61.2%	Tennessee	670,142	12.5%	North Dakota	35.4
31	Mississippi	2,730,501		Virginia	452,650	6.7%	South Carolina	701,683	18.7%	California	19,744,684	61.2%	Illinois	1,481,303	12.5%	New Hampshire	35.4
32	Kansas	2,594,840		South Dakota	49,446	6.7%	Indiana	1,090,352	18.6%	Minnesota	2,857,120	61.0%	Michigan	1,214,010	12.4%	Arkansas	35.4
33	Arkansas	2,522,819		Ohio	748,666	6.7%	Oregon	597,996	18.4%	Illinois	7,240,323	60.9%	Minnesota	577,744	12.3%	Missouri	35.4
34	Utah	2,059,148		Michigan	652,746	6.7%	Maine	227,841	18.3%	Wisconsin	3,139,944	60.7%	Vermont	72,213	12.3%	Kentucky	35.5
35	West Virginia	1,815,787		Connecticut	216,680	6.6%	North Carolina	1,354,542	18.2%	Montana	533,137	60.7%	Mississippi	332,982	12.2%	New York	35.5
36	New Mexico	1,729,751		Kentucky	256,761	6.6%	Maryland	921,604	18.1%	Rhode Island	597,672	60.5%	South Carolina	453,825	12.1%	Ohio	35.6
37	Nevada	1,676,809		Oregon	212,703	6.6%	Hawaii	214,120	18.0%	Pennsylvania	7,250,757	60.3%	New Hampshire	141,454	12.1%	Tennessee	35.6
38	Nebraska	1,656,870		Massachusetts	399,217	6.5%	Alabama	778,980	18.0%	Missouri	3,255,038	60.3%	Washington	647,348	11.5%	Hawaii	35.7
39	Maine	1,242,051		Florida	951,273	6.5%	Kentucky	704,441	18.0%	Mississippi	1,644,521	60.2%	Nevada	192,645	11.5%	Massachusetts	35.8
40	Idaho	1,210,232		Wisconsin	335,242	6.5%	Tennessee	962,800	17.9%	Oklahoma	1,994,333	60.1%	Maryland	583,854	11.5%	District of Columbia	36.0
41	Hawaii	1,186,602		Wyoming	31,044	6.5%	New York	3,246,349	17.9%	New Mexico	1,037,488	60.0%	Louisiana	496,789	11.4%	Vermont	36.1
42	New Hampshire	1,172,709		Iowa	183,762	6.4%	New Jersey	1,430,257	17.8%	Kansas	1,555,314	59.9%	Wyoming	54,300	11.3%	Rhode Island	36.2
43	Rhode Island	987,429		North Dakota	40,705	6.4%	Virginia	1,191,736	17.7%	North Dakota	383,130	59.8%	Idaho	136,867	11.3%	Iowa	36.3
44	Montana	878,810		Rhode Island	62,212	6.3%	Pennsylvania	2,125,826	17.7%	Idaho	722,013	59.7%	Virginia	755,546	11.2%	New Jersey	36.4
45	South Dakota	737,973		New Hampshire	73,716	6.3%	Connecticut	575,481	17.6%	Iowa	1,697,834	59.5%	New Mexico	192,941	11.2%	Oregon	36.6
46	Delaware	731,581		District of Columbia	33,232	6.3%	Delaware	128,204	17.5%	Arkansas	1,500,218	59.5%	California	3,571,964	11.1%	Connecticut	36.6
47	North Dakota	640,883		Montana	54,303	6.2%	Rhode Island	171,442	17.4%	Nebraska	984,651	59.4%	Colorado	393,602	10.1%	Maine	36.9
48	Alaska	609,311		Pennsylvania	738,256	6.1%	Massachusetts	1,052,157	17.2%	South Dakota	435,437	59.0%	Texas	1,959,722	10.1%	Montana	36.9
49	Vermont	588,978		Vermont	34,504	5.9%	Florida	2,520,043	17.2%	Arizona	2,674,494	58.7%	Georgia	738,154	9.9%	Pennsylvania	37.3
50	District of Columbia	528,964		West Virginia	103,509	5.7%	West Virginia	308,237	17.0%	Utah	1,191,042	57.8%	Utah	180,029	8.7%	Florida	38.0
51	Wyoming	479,743		Maine	69,425	5.6%	District of Columbia	73,972	14.0%	Florida	8,473,825	57.8%	Alaska	32,041	5.3%	West Virginia	38.1

Source: U.S. Department of Commerce, Bureau of the Census, Population Estimates Branch

Dependency Ratios for States: July 1, 1997

Rank	Pre-School Age per 100 of Working Age		School Age per 100 of Working Age		Retirement Age per 100 of Working Age		Total Non-Working Age per 100 of Working Age	
	State		State		State			
	United States	11.7	United States	30.7	United States	20.8	United States	63.2
1	Utah	16.4	Utah	41.3	Florida	32.0	Florida	72.9
2	Arizona	14.0	Idaho	36.0	Pennsylvania	26.3	Utah	72.9
3	Texas	13.5	Alaska	35.7	Rhode Island	26.1	Arizona	70.3
4	California	13.5	New Mexico	35.2	Iowa	25.3	South Dakota	69.5
5	New Mexico	12.9	Wyoming	34.3	West Virginia	24.3	Nebraska	68.3
6	Alaska	12.7	South Dakota	34.0	South Dakota	24.2	Arkansas	68.2
7	Idaho	12.7	Arizona	33.8	North Dakota	24.2	Iowa	68.0
8	Illinois	12.5	Nebraska	33.6	Arkansas	24.0	Idaho	67.6
9	Nevada	12.5	Mississippi	33.5	Connecticut	23.4	North Dakota	67.3
10	Mississippi	12.3	Texas	33.3	Nebraska	23.1	Kansas	66.8
11	Hawaii	12.2	Louisiana	32.9	Missouri	22.8	New Mexico	66.7
12	New York	11.8	Montana	32.9	Massachusetts	22.7	Oklahoma	66.3
13	Arkansas	11.8	Minnesota	32.7	Kansas	22.6	Mississippi	66.0
14	Louisiana	11.8	Kansas	32.7	Arizona	22.5	Missouri	66.0
15	Georgia	11.7	Oklahoma	32.7	Maine	22.5	Pennsylvania	65.8
16	Nebraska	11.6	North Dakota	32.5	New Jersey	22.3	Rhode Island	65.2
17	Kansas	11.5	Arkansas	32.4	Oklahoma	22.3	Montana	64.8
18	South Dakota	11.4	Wisconsin	32.2	Ohio	21.8	Wisconsin	64.6
19	Oklahoma	11.3	Missouri	31.9	Montana	21.8	Illinois	64.3
20	Missouri	11.3	Iowa	31.9	New York	21.8	Minnesota	64.0
21	New Jersey	11.2	California	31.9	Wisconsin	21.8	California	63.4
22	Florida	11.2	Illinois	31.4	Hawaii	21.5	Wyoming	63.4
23	North Carolina	11.2	Michigan	30.6	Oregon	21.5	Louisiana	63.3
24	Indiana	11.2	Ohio	30.5	District of Columbia	21.1	Texas	63.3
25	Minnesota	11.1	Washington	30.5	Alabama	20.9	Ohio	63.2
26	Colorado	11.0	New Hampshire	30.2	Delaware	20.5	Hawaii	63.1
27	Washington	11.0	Nevada	30.1	Illinois	20.5	Connecticut	62.8
28	Ohio	10.9	Georgia	30.0	Mississippi	20.2	New York	62.7
29	Alabama	10.9	Indiana	30.0	Minnesota	20.2	New Jersey	62.4
30	Iowa	10.8	Vermont	29.9	Indiana	20.2	Oregon	62.0
31	South Carolina	10.8	Colorado	29.9	North Carolina	20.1	Indiana	61.4
32	Connecticut	10.8	Oregon	29.9	Michigan	20.0	Michigan	61.4
33	Michigan	10.8	South Carolina	29.8	Kentucky	19.9	Nevada	61.0
34	Tennessee	10.7	Florida	29.7	Tennessee	19.9	Maine	61.0
35	Maryland	10.7	Maine	29.5	Vermont	19.5	Massachusetts	60.8
36	Delaware	10.7	Hawaii	29.4	South Carolina	19.3	Alabama	60.8
37	Wisconsin	10.7	Pennsylvania	29.3	New Hampshire	19.2	West Virginia	60.7
38	North Dakota	10.6	North Carolina	29.3	Idaho	19.0	North Carolina	60.6
39	Oregon	10.6	New York	29.1	Louisiana	18.6	South Carolina	60.0
40	Wyoming	10.6	Alabama	29.0	New Mexico	18.6	Washington	59.9
41	Massachusetts	10.5	New Jersey	28.8	Nevada	18.5	New Hampshire	59.5
42	Kentucky	10.4	Rhode Island	28.7	Wyoming	18.5	Tennessee	59.1
43	Virginia	10.4	Kentucky	28.7	Washington	18.5	Delaware	59.1
44	Rhode Island	10.4	Connecticut	28.7	California	18.1	Kentucky	59.0
45	Montana	10.2	Tennessee	28.5	Maryland	18.0	Vermont	58.6
46	Pennsylvania	10.2	Maryland	28.4	Virginia	17.4	Georgia	57.3
47	New Hampshire	10.0	Delaware	27.9	Texas	16.5	Maryland	57.1
48	District of Columbia	9.5	Massachusetts	27.7	Colorado	15.8	Colorado	56.7
49	Vermont	9.3	Virginia	27.5	Georgia	15.5	Alaska	56.7
50	West Virginia	9.2	West Virginia	27.3	Utah	15.1	Virginia	55.4
51	Maine	9.0	District of Columbia	21.2	Alaska	8.2	District of Columbia	51.8

Note: Totals may not add up due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census, Population Estimates Branch

Race and Hispanic Origin by County: July 1, 1997

County	Total Population	Total Hispanic	Total White	White Hispanic	White Non-Hispanic	Black	American Indian	Asian & Pacific Islander	% of Total White Non-Hispanic
Beaver	5,861	203	5,781	195	5,586	6	44	30	95.3%
Box Elder	41,102	2,446	39,974	2,333	37,641	26	490	612	91.6%
Cache	84,818	2,893	80,894	2,713	78,181	327	654	2,943	92.2%
Carbon	20,932	3,083	20,458	2,963	17,495	107	204	163	83.6%
Daggett	754	21	734	13	721	0	13	7	95.6%
Davis	226,062	11,827	216,385	10,746	205,639	3,213	1,330	5,134	91.0%
Duchesne	14,442	559	13,554	444	13,110	26	798	64	90.8%
Emery	10,875	343	10,747	304	10,443	17	59	52	96.0%
Garfield	4,205	55	4,116	47	4,069	1	76	12	96.8%
Grand	8,118	502	7,820	470	7,350	18	238	42	90.5%
Iron	27,747	675	26,703	588	26,115	74	793	177	94.1%
Juab	7,248	130	7,112	119	6,993	7	109	20	96.5%
Kane	5,828	156	5,703	154	5,549	5	89	31	95.2%
Millard	12,320	605	11,948	562	11,386	10	218	144	92.4%
Morgan	6,905	141	6,855	138	6,717	12	11	27	97.3%
Piute	1,391	20	1,378	20	1,358	0	12	1	97.6%
Rich County	1,816	62	1,768	25	1,743	19	10	19	96.0%
Salt Lake	839,896	67,554	793,754	62,528	731,226	8,958	7,417	29,767	87.1%
San Juan	13,688	624	6,302	505	5,797	19	7,320	47	42.4%
Sanpete	20,893	1,160	20,069	943	19,126	72	362	390	91.5%
Sevier	18,064	496	17,626	457	17,169	23	373	42	95.0%
Summit	25,752	740	25,420	710	24,710	34	127	171	96.0%
Tooele	31,410	4,551	30,274	4,379	25,895	305	487	344	82.4%
Uintah	25,513	1,067	22,640	896	21,744	22	2,716	135	85.2%
Utah	328,142	14,013	318,814	13,260	305,554	578	2,397	6,353	93.1%
Wasatch	12,788	426	12,629	404	12,225	13	103	43	95.6%
Washington	78,614	1,887	76,723	1,737	74,986	128	1,116	647	95.4%
Wayne	2,368	54	2,316	42	2,274	12	38	2	96.0%
Weber	181,596	17,067	173,176	15,784	157,392	3,511	1,465	3,444	86.7%
State of Utah	2,059,148	133,360	1,961,673	123,479	1,838,194	17,543	29,069	50,863	89.3%

Note:

1. In the categories given above, American Indian includes Eskimo and Aleut.
2. The race and Hispanic origin categories used by the Census Bureau are mandated by the Office of Management and Budget (OMB). OMB requires the use of four race categories: White, Black, American Indian and Alaska Native, and Asian and Pacific Islander. OMB also requires the use of two ethnicity categories: Hispanic and non-Hispanic. This system treats race and ethnicity as separate and independent categories. Therefore, everyone is classified as both a member of one of the four race categories, and as either Hispanic or non-Hispanic.

Source: U.S. Bureau of the Census, Population Estimates Program, Population Division

Housing Units, Households, and Persons Per Household by State: April 1, 1990 and July 1, 1996 (in Thousands)

State	April 1, 1990 (census)				July 1, 1996				1990-96 Percent Change:		
	Total Housing Units	Total Households	Persons per Household	Persons per Household Ranking	Total Housing Units	Total Households	Persons per Household	Ranking Persons per Household	Total Housing Units	Total Households	Persons per Household
United States	102,262	91,946	2.63		109,800	98,751	2.62		7.4%	7.4%	-0.5%
Alabama	1,670	1,507	2.62	18	1,814	1,624	2.58	18	8.6%	7.8%	-1.5%
Alaska	233	189	2.80	3	242	214	2.75	4	3.9%	13.2%	-1.9%
Arizona	1,659	1,369	2.62	18	1,890	1,687	2.57	24	13.9%	23.2%	-1.9%
Arkansas	1,001	891	2.57	31	1,077	951	2.58	18	7.6%	6.7%	0.3%
California	11,183	10,381	2.79	4	11,827	11,101	2.81	3	5.8%	6.9%	0.6%
Colorado	1,477	1,282	2.51	49	1,640	1,502	2.49	49	11.0%	17.2%	-0.7%
Connecticut	1,321	1,230	2.59	26	1,365	1,231	2.59	16	3.3%	0.1%	0.0%
Delaware	290	247	2.61	21	318	276	2.56	26	9.7%	11.7%	-1.9%
District of Columbia	278	250	2.26	51	268	231	2.17	50	-3.6%	-7.6%	-4.2%
Florida	6,100	5,135	2.46	50	6,771	5,648	2.50	44	11.0%	10.0%	1.6%
Georgia	2,638	2,366	2.66	13	3,021	2,723	2.64	12	14.5%	15.1%	-0.9%
Hawaii	390	356	3.01	2	433	389	2.96	2	11.0%	9.3%	-1.5%
Idaho	413	361	2.73	7	481	430	2.72	5	16.5%	19.1%	-0.4%
Illinois	4,506	4,202	2.65	15	4,724	4,352	2.66	10	4.8%	3.6%	0.3%
Indiana	2,246	2,065	2.61	21	2,444	2,209	2.57	24	8.8%	7.0%	-1.4%
Iowa	1,144	1,064	2.52	47	1,197	1,103	2.50	44	4.6%	3.7%	-0.6%
Kansas	1,044	945	2.53	41	1,109	982	2.54	31	6.2%	3.9%	0.2%
Kentucky	1,507	1,380	2.60	25	1,638	1,478	2.56	26	8.7%	7.1%	-1.4%
Louisiana	1,716	1,499	2.74	6	1,780	1,572	2.69	9	3.7%	4.9%	-1.8%
Maine	587	465	2.56	34	630	483	2.50	44	7.3%	3.9%	-2.3%
Maryland	1,892	1,749	2.67	12	2,049	1,871	2.65	11	8.3%	7.0%	-0.7%
Massachusetts	2,473	2,247	2.58	29	2,547	2,322	2.53	38	3.0%	3.3%	-2.0%
Michigan	3,848	3,419	2.66	13	4,067	3,576	2.62	13	5.7%	4.6%	-1.4%
Minnesota	1,849	1,648	2.58	29	1,981	1,763	2.58	18	7.1%	7.0%	-0.1%
Mississippi	1,010	911	2.75	5	1,083	979	2.70	8	7.2%	7.5%	-1.7%
Missouri	2,199	1,961	2.53	41	2,374	2,052	2.54	31	8.0%	4.6%	0.2%
Montana	361	306	2.53	41	377	341	2.51	41	4.4%	11.4%	-0.9%
Nebraska	661	602	2.54	39	699	631	2.54	31	5.7%	4.8%	-0.1%
Nevada	519	466	2.53	41	691	619	2.54	31	33.1%	32.8%	0.6%
New Hampshire	504	411	2.62	18	531	439	2.58	18	5.4%	6.8%	-1.5%
New Jersey	3,075	2,795	2.70	10	3,186	2,889	2.71	7	3.6%	3.4%	0.2%
New Mexico	632	543	2.74	6	711	619	2.72	5	12.5%	14.0%	-0.7%
New York	7,227	6,639	2.63	16	7,392	6,737	2.62	13	2.3%	1.5%	-0.3%
North Carolina	2,818	2,517	2.54	39	3,197	2,796	2.54	31	13.4%	11.1%	-0.2%
North Dakota	276	241	2.55	36	291	247	2.51	41	5.4%	2.5%	-1.6%
Ohio	4,372	4,088	2.59	26	4,594	4,260	2.56	26	5.1%	4.2%	-1.1%
Oklahoma	1,406	1,206	2.53	41	1,453	1,265	2.54	31	3.3%	4.9%	0.4%
Oregon	1,194	1,103	2.52	47	1,343	1,249	2.51	41	12.5%	13.2%	-0.2%
Pennsylvania	4,938	4,496	2.57	31	5,163	4,594	2.55	30	4.6%	2.2%	-0.6%
Rhode Island	415	378	2.55	36	427	378	2.53	38	2.9%	0.0%	-0.9%
South Carolina	1,424	1,258	2.68	11	1,604	1,376	2.62	13	12.6%	9.4%	-2.2%
South Dakota	292	259	2.59	26	316	273	2.59	16	8.2%	5.4%	0.1%
Tennessee	2,026	1,854	2.56	34	2,240	2,041	2.54	31	10.6%	10.1%	-0.8%
Texas	7,009	6,071	2.73	7	7,556	6,894	2.71	7	7.8%	13.6%	-0.8%
Utah	598	537	3.15	1	692	639	3.08	1	15.7%	19.0%	-2.3%
Vermont	271	211	2.57	31	289	227	2.50	44	6.6%	7.6%	-2.7%
Virginia	2,497	2,292	2.61	21	2,752	2,511	2.58	18	10.2%	9.6%	-1.1%
Washington	2,032	1,872	2.53	41	2,304	2,139	2.53	38	13.4%	14.3%	-0.2%
West Virginia	781	689	2.55	36	793	714	2.50	44	1.5%	3.6%	-2.0%
Wisconsin	2,056	1,822	2.61	21	2,218	1,943	2.58	18	7.9%	6.6%	-1.2%
Wyoming	203	169	2.63	16	209	184	2.56	26	3.0%	8.9%	-2.5%

Note: Numbers may not sum due to rounding.

On August 21, 1997 the 1996 estimates were revised. The revisions included small changes to the estimates of housing units and the population per household. The household estimates were not affected.

Source: U.S. Department of Commerce, Bureau of the Census

Bureau of the Census Sub-County Population Estimates: 1990 to 1996

	July 1, 1995 to July 1, 1996							July 1, 1991 to July 1, 1996	
	April 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996	% Change	% Change
STATE OF UTAH	1,722,850	1,767,139	1,811,673	1,860,807	1,909,521	1,958,313	2,000,494	2.2	13.2
Metropolitan Areas	1,335,817	1,369,496	1,403,030	1,438,579	1,479,935	1,508,019	1,537,536	2.0	12.3
Non-Metropolitan Areas	387,033	397,643	408,643	422,228	429,586	450,294	462,958	2.8	16.4
Incorporated Areas	1,322,753	1,359,334	1,395,889	1,437,182	1,478,478	1,522,229	1,561,137	2.6	14.8
Unincorporated Areas	400,097	407,805	415,784	423,625	431,043	436,084	439,357	0.8	7.7
BEAVER COUNTY	4,765	4,802	4,939	5,015	5,081	5,301	5,591	5.5	16.4
Beaver	1,998	2,014	2,070	2,107	2,136	2,224	2,318	4.2	15.1
Milford	1,107	1,109	1,135	1,142	1,145	1,180	1,241	5.2	11.9
Minersville	608	616	639	647	655	682	710	4.1	15.3
Balance of Beaver	1,052	1,063	1,095	1,119	1,145	1,215	1,322	8.8	24.4
BOX ELDER COUNTY	36,485	36,920	37,437	38,072	37,987	38,483	39,177	1.8	6.1
Bear River City	700	703	711	715	707	703	715	1.7	1.7
Brigham City	15,644	15,826	16,029	16,294	16,229	16,324	16,398	0.5	3.6
Corinne	639	645	658	669	658	661	665	0.6	3.1
Deweyville	318	318	321	331	327	334	336	0.6	5.7
Elwood	575	583	594	607	604	616	632	2.6	8.4
Fielding	422	423	427	432	427	427	426	-0.2	0.7
Garland	1,639	1,654	1,669	1,681	1,666	1,693	1,757	3.8	6.2
Honeyville	1,112	1,129	1,144	1,171	1,172	1,194	1,215	1.8	7.6
Howell	237	239	242	244	245	252	262	4.0	9.6
Mantua	665	671	678	682	674	670	668	-0.3	-0.4
Perry	1,211	1,238	1,265	1,306	1,354	1,408	1,464	4.0	18.3
Plymouth	267	269	269	272	269	272	274	0.7	1.9
Portage	218	217	219	220	217	217	216	-0.5	-0.5
Snowville	251	253	256	259	256	259	261	0.8	3.2
Tremonton	4,262	4,303	4,358	4,422	4,423	4,503	4,680	3.9	8.8
Willard	1,298	1,319	1,339	1,372	1,364	1,407	1,437	2.1	8.9
Balance of Box Elder	7,027	7,130	7,258	7,395	7,395	7,543	7,771	3.0	9.0
CACHE COUNTY	70,183	71,695	73,327	74,619	74,358	82,451	83,710	1.5	16.8
Amalga	366	383	398	408	417	473	491	3.8	28.2
Clarkston	645	651	655	653	633	675	660	-2.2	1.4
Cornish	205	207	206	206	195	208	204	-1.9	-1.4
Hyde Park*	2,190	2,202	2,221	2,212	2,130	2,270	2,220	-2.2	0.8
Hyrum	4,829	4,884	4,939	4,947	4,886	5,399	5,429	0.6	11.2
Lewiston	1,532	1,546	1,559	1,549	1,488	1,578	1,538	-2.5	-0.5
Logan	32,771	33,358	34,200	34,862	34,829	38,905	39,276	1.0	17.7
Mendon	684	693	697	696	687	753	766	1.7	10.5
Millville	1,202	1,254	1,297	1,340	1,306	1,391	1,356	-2.5	8.1
Newton	659	668	679	685	661	707	706	-0.1	5.7
Nibley*	1,236	1,243	1,256	1,253	1,209	1,289	1,269	-1.6	2.1
North Logan	3,775	3,998	4,122	4,308	4,461	5,117	5,737	12.1	43.5
Paradise	561	585	605	624	633	715	743	3.9	27.0
Providence	3,344	3,479	3,596	3,668	3,653	3,992	4,009	0.4	15.2
Richmond	1,955	1,963	1,980	1,969	1,897	2,024	1,980	-2.2	0.9
River Heights	1,274	1,293	1,315	1,317	1,270	1,349	1,320	-2.1	2.1
Smithfield	5,566	5,598	5,642	5,750	5,720	6,249	6,320	1.1	12.9
Trenton	464	465	467	466	446	475	464	-2.3	-0.2
Wellsville	2,206	2,301	2,385	2,451	2,493	2,821	2,924	3.7	27.1
Balance of Cache	4,719	4,924	5,108	5,255	5,344	6,061	6,298	3.9	27.9
CARBON COUNTY	20,228	20,212	20,297	20,145	19,967	20,115	20,437	1.6	1.1
East Carbon	1,270	1,268	1,266	1,247	1,229	1,229	1,239	0.8	-2.3
Helper	2,148	2,135	2,128	2,091	2,061	2,057	2,078	1.0	-2.7
Price	8,712	8,699	8,764	8,726	8,610	8,626	8,711	1.0	0.1
Scofield	43	43	42	42	41	41	42	2.4	-2.3
Sunnyside	339	339	338	335	336	338	345	2.1	1.8
Wellington	1,632	1,636	1,641	1,623	1,615	1,631	1,660	1.8	1.5
Balance of Carbon	6,084	6,092	6,118	6,081	6,075	6,193	6,362	2.7	4.4

Source: U.S. Bureau of the Census

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	April 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996	July 1, 1995 to July 1, 1996 % Change	July 1, 1991 to July 1, 1996 % Change
DAGGETT COUNTY	690	725	714	707	716	725	752	3.7	3.7
Manila	207	218	215	212	215	220	231	5.0	6.0
Balance of Daggett	483	507	499	495	501	505	521	3.2	2.8
DAVIS COUNTY	187,941	193,963	199,538	205,463	206,265	209,883	214,990	2.4	10.8
Bountiful	37,544	38,379	39,173	39,932	39,423	39,406	39,595	0.5	3.2
Centerville	11,500	12,178	12,753	13,387	13,556	14,011	14,382	2.6	18.1
Clearfield*	21,435	21,765	22,022	22,215	21,867	21,658	22,153	2.3	1.8
Clinton	7,945	8,157	8,275	8,633	8,730	8,987	9,386	4.4	15.1
Farmington	9,049	9,429	9,789	10,118	10,155	10,306	10,462	1.5	11.0
Fruit Heights	3,903	3,987	4,085	4,269	4,404	4,627	4,771	3.1	19.7
Kaysville	13,961	14,648	15,249	16,029	16,595	17,200	17,781	3.4	21.4
Layton	41,784	43,555	45,217	47,016	47,810	49,141	50,906	3.6	16.9
North Salt Lake*	6,464	6,598	6,716	6,873	6,912	7,218	7,396	2.5	12.1
South Weber	2,863	3,014	3,155	3,288	3,358	3,462	3,539	2.2	17.4
Sunset	5,128	5,189	5,249	5,280	5,130	5,105	5,067	-0.7	-2.4
Syracuse	4,658	4,790	4,909	5,032	5,135	5,362	5,706	6.4	19.1
West Bountiful	4,477	4,577	4,642	4,726	4,662	4,712	4,773	1.3	4.3
West Point	4,258	4,472	4,664	4,898	4,973	5,146	5,481	6.5	22.6
Woods Cross	5,384	5,481	5,567	5,645	5,524	5,537	5,577	0.7	1.8
Balance of Davis	7,588	7,744	8,073	8,122	8,031	8,005	8,015	0.1	3.5
DUCHESNE COUNTY	12,645	12,743	13,046	13,296	13,354	13,522	13,778	1.9	8.1
Altamont	167	170	174	177	179	181	185	2.2	8.8
Duchesne	1,308	1,313	1,341	1,362	1,363	1,374	1,397	1.7	6.4
Myton	468	469	479	486	487	491	501	2.0	6.8
Roosevelt	3,915	3,943	4,031	4,092	4,089	4,104	4,144	1.0	5.1
Tabiona	120	121	124	128	127	129	132	2.3	9.1
Balance of Duchesne	6,667	6,727	6,897	7,051	7,109	7,243	7,419	2.4	10.3
EMERY COUNTY	10,332	10,348	10,247	10,397	10,318	10,308	10,402	0.9	0.5
Castle Dale	1,704	1,707	1,695	1,721	1,705	1,699	1,704	0.3	-0.2
Clawson	151	152	150	152	149	153	156	2.0	2.6
Cleveland	498	497	492	498	493	497	502	1.0	1.0
Elmo	267	274	276	286	289	298	311	4.4	13.5
Emery	300	299	294	298	295	294	295	0.3	-1.3
Ferron	1,606	1,606	1,588	1,613	1,599	1,599	1,629	1.9	1.4
Green River (pt.)	744	745	735	744	737	731	732	0.1	-1.7
Huntington	1,875	1,874	1,856	1,879	1,875	1,873	1,893	1.1	1.0
Orangeville	1,459	1,464	1,448	1,465	1,447	1,439	1,447	0.6	-1.2
Balance of Emery	1,728	1,730	1,713	1,741	1,729	1,725	1,733	0.5	0.2
GARFIELD COUNTY	3,980	3,992	4,063	3,998	3,974	4,033	4,076	1.1	2.1
Antimony	83	83	86	84	83	85	88	3.5	6.0
Boulder	126	125	127	125	128	131	135	3.1	8.0
Cannonville	131	133	136	133	134	138	141	2.2	6.0
Escalante	818	826	843	831	834	853	876	2.7	6.1
Hatch	103	102	104	100	101	101	101	0.0	-1.0
Henrieville	163	163	164	161	159	162	161	-0.6	-1.2
Panguitch	1,444	1,440	1,464	1,440	1,414	1,420	1,408	-0.8	-2.2
Tropic	374	377	384	380	380	389	397	2.1	5.3
Balance of Garfield	738	743	755	744	741	754	769	2.0	3.5
GRAND COUNTY	6,620	6,708	7,086	7,413	7,522	7,638	7,826	2.5	16.7
Castle Valley	211	214	228	241	248	253	262	3.6	22.4
Green River (pt.)	122	123	129	133	136	138	141	2.2	14.6
Moab	3,971	4,017	4,215	4,374	4,381	4,392	4,443	1.2	10.6
Balance of Grand	2,316	2,354	2,514	2,665	2,757	2,855	2,980	4.4	26.6
IRON COUNTY	20,789	21,360	22,009	23,282	24,571	26,062	26,875	3.1	25.8
Brian Head	109	110	110	111	107	106	102	-3.8	-7.3
Cedar City	13,443	13,832	14,278	15,275	16,355	17,360	17,811	2.6	28.8
Enoch	1,947	1,991	2,060	2,151	2,266	2,479	2,576	3.9	29.4
Kanarraville	228	229	234	238	249	254	252	-0.8	10.0
Paragonah	307	338	376	413	448	492	528	7.3	56.2
Parowan	1,873	1,895	1,920	1,966	1,983	2,045	2,068	1.1	9.1
Balance of Iron	2,882	2,965	3,031	3,128	3,163	3,326	3,538	6.4	19.3

Source: U.S. Bureau of the Census

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	April 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996	July 1, 1995 to July 1, 1996 % Change	July 1, 1991 to July 1, 1996 % Change
JUAB COUNTY	5,817	5,885	5,934	6,075	6,256	6,536	6,845	4.7	16.3
Eureka	562	564	566	573	584	599	612	2.2	8.5
Levan	416	418	420	432	440	450	456	1.3	9.1
Mona	584	593	599	629	664	742	796	7.3	34.2
Nephi	3,515	3,562	3,592	3,672	3,784	3,939	4,134	5.0	16.1
Balance of Juab	740	748	757	769	784	806	847	5.1	13.2
KANE COUNTY	5,169	5,111	5,196	5,678	5,679	5,858	5,751	-1.8	12.5
Alton	93	93	96	107	107	109	106	-2.8	14.0
Big Water	326	315	317	344	346	360	370	2.8	17.5
Glendale	282	284	292	324	328	339	333	-1.8	17.3
Kanab	3,289	3,251	3,302	3,598	3,582	3,698	3,616	-2.2	11.2
Orderville	422	408	410	442	440	443	430	-2.9	5.4
Balance of Kane	757	760	779	863	876	909	896	-1.4	17.9
MILLARD COUNTY	11,333	11,479	11,586	11,807	11,719	11,924	12,019	0.8	4.7
Delta	2,998	3,018	3,034	3,083	3,041	3,068	3,073	0.2	1.8
Fillmore	1,956	1,970	1,972	1,997	1,969	1,989	1,988	-0.1	0.9
Hinckley	658	661	665	675	672	684	687	0.4	3.9
Holden	402	411	416	427	425	436	442	1.4	7.5
Kanosh	386	394	399	409	409	419	425	1.4	7.9
Leamington	253	255	257	261	262	264	261	-1.1	2.4
Lynndyl	120	121	122	122	121	122	121	-0.8	0.0
Meadow	250	254	260	266	265	271	275	1.5	8.3
Oak City	587	590	593	598	588	592	592	0.0	0.3
Scipio	291	292	291	292	285	287	289	0.7	-1.0
Balance of Millard	3,432	3,513	3,577	3,677	3,682	3,792	3,866	2.0	10.0
MORGAN COUNTY	5,528	5,638	5,808	6,087	6,216	6,458	6,660	3.1	18.1
Morgan	2,023	2,050	2,108	2,210	2,237	2,310	2,371	2.6	15.7
Balance of Morgan	3,505	3,588	3,700	3,877	3,979	4,148	4,289	3.4	19.5
PIUTE COUNTY	1,277	1,280	1,283	1,394	1,371	1,391	1,404	0.9	9.7
Circleville	417	414	414	449	438	441	441	0.0	6.5
Junction	132	132	131	143	138	139	139	0.0	5.3
Kingston	134	135	138	150	150	157	160	1.9	18.5
Marysvale	364	366	365	394	387	386	388	0.5	6.0
Balance of Piute	230	233	235	258	258	268	276	3.0	18.5
RICH COUNTY	1,725	1,667	1,674	1,734	1,762	1,782	1,799	1.0	7.9
Garden City	193	186	186	193	207	217	222	2.3	19.4
Lake	261	252	253	261	265	263	263	0.0	4.4
Randolph	488	473	476	492	496	500	503	0.6	6.3
Woodruff	135	130	131	137	137	139	142	2.2	9.2
Balance of Rich	648	626	628	651	657	663	669	0.9	6.9
SALT LAKE COUNTY	725,956	745,006	763,081	781,075	802,672	815,529	827,818	1.5	11.1
Alta*	397	397	402	405	401	402	400	-0.5	0.8
Bluffdale	2,152	2,299	2,439	2,658	2,946	3,137	3,373	7.5	46.7
Draper (pt.)	7,143	7,300	7,573	7,938	8,662	9,847	11,758	19.4	61.1
Midvale ¹	11,886	12,025	12,131	12,178	12,164	12,056	11,867	-1.6	-1.3
Murray	31,274	31,914	32,506	33,014	33,267	33,178	33,089	-0.3	3.7
Riverton	11,261	11,708	12,032	12,899	14,432	16,119	17,924	11.2	53.1
Salt Lake City	159,928	163,412	166,697	169,162	171,055	171,492	172,575	0.6	5.6
Sandy	75,240	79,025	82,642	86,735	90,959	92,918	94,593	1.8	19.7
South Jordan	12,215	13,308	14,669	16,760	19,664	22,045	23,518	6.7	76.7
South Salt Lake	10,129	10,266	10,380	10,428	10,438	10,327	10,166	-1.6	-1.0
West Jordan	42,915	44,342	45,893	47,606	50,691	54,195	57,600	6.3	29.9
West Valley City	86,969	89,755	92,128	94,203	96,108	97,549	99,136	1.6	10.5
Balance of Salt Lake ²	274,447	279,255	283,589	287,089	291,885	292,264	291,819	-0.2	4.5
SAN JUAN COUNTY	12,621	12,107	12,699	13,104	13,263	13,498	13,221	-2.1	9.2
Blanding	3,162	3,039	3,182	3,283	3,320	3,436	3,378	-1.7	11.2
Monticello	1,806	1,732	1,813	1,866	1,879	1,889	1,835	-2.9	5.9
Balance of San Juan	7,653	7,336	7,704	7,955	8,064	8,173	8,008	-2.0	9.2

Source: U.S. Bureau of the Census

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	April 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996	July 1, 1995 to July 1, 1996 % Change
SANPETE COUNTY	16,259	17,162	17,723	18,261	18,487	19,047	19,883	4.4
Centerfield	766	779	799	814	813	830	861	3.7
Ephraim	3,363	3,434	3,525	3,588	3,557	3,604	3,699	2.6
Fairview	960	979	997	1,014	1,009	1,020	1,048	2.7
Fayette	183	190	197	210	224	239	261	9.2
Fountain Green	602	623	646	660	657	665	682	2.6
Gunnison	1,298	1,811	1,889	1,937	1,940	2,005	2,044	1.9
Manti	2,268	2,353	2,454	2,508	2,496	2,529	2,596	2.6
Mayfield	438	445	453	460	457	464	474	2.2
Moroni	1,115	1,153	1,195	1,276	1,357	1,454	1,583	8.9
Mount Pleasant	2,092	2,133	2,198	2,241	2,235	2,271	2,343	3.2
Spring City	715	725	741	752	750	762	785	3.0
Sterling	191	197	206	218	234	249	273	9.6
Wales	189	195	200	214	229	243	266	9.5
Balance of Sanpete	2,079	2,145	2,223	2,369	2,529	2,712	2,968	9.4
SEVIER COUNTY	15,431	15,626	15,919	16,257	16,390	16,745	17,156	2.5
Annabella	487	490	499	507	505	509	513	0.8
Aurora	911	919	935	955	951	958	965	0.7
Elsinore	608	610	619	630	632	637	642	0.8
Glenwood	437	442	447	458	456	459	459	0.0
Joseph	198	200	206	210	212	216	217	0.5
Koosharem	266	267	270	272	271	273	277	1.5
Monroe	1,472	1,503	1,532	1,572	1,579	1,596	1,610	0.9
Redmond	648	653	659	668	665	670	678	1.2
Richfield	5,593	5,652	5,755	5,875	5,957	6,018	6,057	0.6
Salina	1,943	1,959	1,991	2,026	2,019	2,035	2,050	0.7
Sigurd	385	393	403	413	420	451	492	9.1
Balance of Sevier	2,483	2,538	2,603	2,671	2,723	2,923	3,196	9.3
SUMMIT COUNTY	15,518	17,022	18,218	19,951	21,151	22,768	23,988	5.4
Coalville	1,065	1,123	1,163	1,223	1,228	1,263	1,262	-0.1
Francis	381	426	465	527	578	635	679	6.9
Henefer	554	586	607	636	640	659	664	0.8
Kamas	1,061	1,122	1,166	1,220	1,267	1,396	1,432	2.6
Oakley	522	561	590	626	670	754	827	9.7
Park City (pt.)	4,468	4,875	5,170	5,484	5,590	5,852	6,104	4.3
Balance of Summit	7,467	8,329	9,057	10,235	11,178	12,209	13,020	6.6
TOOELE COUNTY	26,601	27,087	27,496	28,045	28,251	28,754	29,558	2.8
Grantsville	4,500	4,637	4,733	4,834	4,832	4,901	5,105	4.2
Ophir	25	25	25	27	27	28	29	3.6
Rush Valley	339	348	350	353	350	357	360	0.8
Stockton	426	434	439	446	449	451	459	1.8
Tooele	13,887	14,104	14,301	14,493	14,455	14,548	14,728	1.2
Vernon	181	186	187	191	193	195	195	0.0
Wendover	1,127	1,123	1,126	1,148	1,147	1,156	1,169	1.1
Balance of Tooele	6,116	6,230	6,335	6,553	6,798	7,118	7,513	5.5
UINTAH COUNTY	22,211	22,988	23,459	24,048	23,989	24,377	24,472	0.4
Ballard	644	671	686	705	706	724	734	1.4
Naples	1,334	1,392	1,418	1,454	1,452	1,464	1,465	0.1
Vernal	6,640	6,793	6,916	7,075	7,035	7,099	7,105	0.1
Balance of Uintah	13,593	14,132	14,439	14,814	14,796	15,090	15,168	0.5
UTAH COUNTY	263,590	269,278	275,673	283,578	302,052	310,642	319,694	2.9
Alpine	3,492	3,702	3,922	4,193	4,634	4,932	5,161	4.6
American Fork	15,722	16,035	16,511	17,218	18,222	18,569	19,451	4.7
Cedar Fort	284	285	286	282	288	282	276	-2.1
Cedar Hills*	769	791	808	825	874	886	883	-0.3
Draper (pt.)	0	17	52	106	229	418	720	72.2
Elk Ridge	771	774	864	980	1,186	1,370	1,522	11.1

Note:

A "(pt.*)" next to any city name means the city crosses a county boundary.

1. Effective December 30, 1997, Midvale City's boundaries changed dramatically due to a large annexation. The population effect of this annexation is not reflected in these estimates. The Utah Population Estimates Committee has estimated Midvale's July 1, 1996 population with the annexation to be 26,778.

2. The city of Taylorsville incorporated on July 1, 1996. The Utah Population Estimates Committee estimated Taylorsville's 1994 population to be 53,876 and the 1996 population to be 56,523.

Source: U.S. Bureau of the Census

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	April 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996	July 1, 1995 to July 1, 1996 % Change	July 1, 1991 to July 1, 1996 % Change
Genola	803	814	826	836	859	868	868	0.0	6.6
Goshen	578	577	579	576	588	581	570	-1.9	-1.2
Highland	5,007	5,019	5,034	5,018	5,336	5,543	5,939	7.1	18.3
Lehi	8,475	8,660	8,880	9,454	11,069	12,473	13,810	10.7	59.5
Lindon	3,818	3,997	4,181	4,507	4,890	5,324	5,941	11.6	48.6
Mapleton	3,572	3,696	3,850	4,063	4,391	4,614	4,781	3.6	29.4
Orem	67,561	69,586	71,519	73,359	76,987	77,987	79,736	2.2	14.6
Payson	9,510	9,685	9,861	10,159	10,691	10,991	11,139	1.3	15.0
Pleasant Grove	13,476	13,821	14,201	14,798	16,381	17,901	19,357	8.1	40.1
Provo	86,835	88,618	90,619	92,682	98,244	99,288	99,606	0.3	12.4
Salem	2,284	2,335	2,391	2,499	2,838	3,086	3,240	5.0	38.8
Santaquin	2,386	2,425	2,470	2,493	2,595	2,668	2,685	0.6	10.7
Spanish Fork	11,272	11,417	11,632	11,959	12,902	13,727	14,854	8.2	30.1
Springville	13,950	14,104	14,294	14,675	15,542	15,755	15,855	0.6	12.4
Vineyard	151	152	152	148	150	152	152	0.0	0.0
Woodland Hills	301	333	371	500	747	1,007	1,244	23.5	273.6
Balance of Utah ³	12,573	12,435	12,370	12,248	12,409	12,220	11,904	-2.6	-4.3
WASATCH COUNTY	10,089	10,416	10,659	10,988	11,214	11,528	12,046	4.5	15.6
Charleston	336	352	365	379	387	402	416	3.5	18.2
Heber	4,782	4,865	4,924	5,004	5,019	5,059	5,299	4.7	8.9
Midway	1,554	1,630	1,681	1,778	1,900	2,013	2,132	5.9	30.8
Park City (pt.)	0	2	4	7	7	9	13	44.4	550.0
Wallsburg	252	262	275	283	289	302	310	2.6	18.3
Balance of Wasatch	3,165	3,305	3,410	3,537	3,612	3,743	3,876	3.6	17.3
WASHINGTON COUNTY	48,560	52,474	55,692	59,633	63,770	68,706	73,161	6.5	39.4
Enterprise*	936	976	1,014	1,046	1,046	1,069	1,110	3.8	13.7
Hildale	1,325	1,467	1,578	1,710	1,833	1,951	2,049	5.0	39.7
Hurricane	3,915	4,181	4,393	4,593	4,918	5,313	5,821	9.6	39.2
Ivins	1,630	1,766	1,898	2,121	2,465	2,785	3,149	13.1	78.3
La Verkin*	1,771	1,868	1,920	2,031	2,190	2,430	2,684	10.5	43.7
Leeds	254	266	270	275	270	265	263	-0.8	-1.1
New Harmony	101	110	120	130	138	145	154	6.2	40.0
Rockville	182	201	215	233	248	263	277	5.3	37.8
St. George	28,572	30,945	32,898	35,204	37,520	40,466	42,763	5.7	38.2
Santa Clara	2,322	2,588	2,844	3,154	3,401	3,605	3,857	7.0	49.0
Springdale	275	297	309	325	323	323	324	0.3	9.1
Toquerville	488	521	547	582	629	670	724	8.1	39.0
Virgin	229	238	243	247	254	266	271	1.9	13.9
Washington	4,198	4,448	4,656	4,960	5,314	5,730	6,121	6.8	37.6
Balance of Washington	2,362	2,602	2,787	3,022	3,221	3,425	3,594	4.9	38.1
WAYNE COUNTY	2,177	2,196	2,132	2,222	2,220	2,284	2,371	3.8	8.0
Bicknell	327	323	309	316	310	316	329	4.1	1.9
Loa	444	449	437	458	458	470	487	3.6	8.5
Lyman	198	200	196	204	203	207	217	4.8	8.5
Torrey	122	123	119	125	125	129	134	3.9	8.9
Balance of Wayne	1,086	1,101	1,071	1,119	1,124	1,162	1,204	3.6	9.4
WEBER COUNTY	158,330	161,249	164,738	168,463	168,946	171,965	175,034	1.8	8.5
Farr West	2,178	2,235	2,291	2,365	2,427	2,484	2,525	1.7	13.0
Harrisville	3,019	3,114	3,197	3,275	3,272	3,389	3,464	2.2	11.2
Huntsville	561	575	586	596	589	595	606	1.8	5.4
North Ogden	11,593	11,954	12,368	12,800	13,087	13,434	13,731	2.2	14.9
Ogden	63,943	64,398	65,240	65,972	65,192	65,271	65,720	0.7	2.1
Plain City	2,722	2,786	2,862	2,938	2,957	3,070	3,163	3.0	13.5
Pleasant View	3,597	3,676	3,776	3,957	4,109	4,417	4,631	4.8	26.0
Riverdale	6,419	6,492	6,609	6,736	6,722	6,771	6,868	1.4	5.8
Roy	24,595	25,315	26,013	26,798	27,101	27,752	28,517	2.8	12.6
South Ogden	12,105	12,479	12,860	13,177	13,244	13,811	14,272	3.3	14.4
Uintah	760	788	815	887	946	1,006	1,042	3.6	32.2
Washington Terrace	8,189	8,299	8,446	8,604	8,619	8,691	8,701	0.1	4.8
West Haven*	2,172	2,188	2,216	2,236	2,203	2,240	2,278	1.7	4.1
Balance of Weber	16,477	16,950	17,459	18,122	18,478	19,034	19,516	2.5	15.1

3. Eagle Mountain incorporated on December 4, 1996. The Utah Population Estimates Committee estimated the town's 1996 population to be 148 persons.

* Several cities challenged the July 1, 1996 U.S. Census Bureau estimates. Listed below are the new population estimates for the cities and towns whose challenges were accepted as of 12/12/98. Alta, 407; Cedar Hills, 1,649; Clearfield, 22,591; Enterprise, 1,493; Hyde Park, 2,693; LaVerkin, 3,000; Nibley, 1,480; North Salt Lake, 7,759; West Haven, 2,611.

Source: U.S. Bureau of the Census

Overview

Utah's employment growth rate slowed again in 1998. Expansion in the number of nonfarm jobs, at 3.0% in 1998, is down somewhat from the 1997 rate of 4.2%. During the recent expansion, Utah's annual employment expansion peaked at 6.2% in 1994. Last year (1998) is the eleventh in the series of consecutive annual job expansions of 3% or greater. The longest previous string since 1950 was only four years. In 1998, Utah added 29,400 net new jobs. Utah's unemployment rate climbed to 3.7% in 1998 from 3.1 in 1997. The average annual wage increase for Utah's nonfarm jobs in 1998 was 4.2%.

1998 Summary

Joblessness Jumps. Utah's unemployment rate climbed from 3.1% in 1997 to 3.7% in 1998. This is the same level recorded in 1994, the peak year for nonfarm job growth in the recent expansion. A review of the jobless rates from 1993 through 1998, which range from 3.9 in 1993 to 3.1 in 1997, suggests that 1997 was the peak year for labor shortages in Utah. Four previous years of rapid job growth coupled with declining in-migration and very high labor force participation had nearly exhausted the supply of available labor by 1997. In 1998, an average of 40,000 individuals were out of work, 24% more than in 1997.

Job Growth by Industry. On the heels of an economic expansion of unprecedented duration, 1998 saw the Utah economy achieve a "soft landing" by making the transition to sustainable rates of growth. The rate of job growth in Utah's major industrial divisions ranged from -2.4% in mining to 4.5% in construction. Industrial diversity, where Utah ranks 13th among states, is one of the factors enabling Utah's economy to prosper.¹

Construction Industry. After six consecutive years of double-digit job growth rates, Utah's construction industry slowed its expansion in 1997 to 6.9% and then to 4.5% in 1998. About 2,900 net new jobs were created in this industry in 1998. Residential building increased slightly, and many large nonresidential projects, including a major reconstruction of I-15 through the Salt Lake Valley, are ongoing.

Manufacturing. During the economic expansion, the manufacturing division grew rapidly, achieving 6.2% job growth in 1995. By 1998, growth was down to 0.9%, or 1,100 net new jobs. The production of certain durable goods, especially primary metals, has been hard-hit by the worldwide economic crisis, which has resulted in layoffs.

Transportation/Communications/Utilities.

Transportation/communications/utilities added 2,300 new jobs in 1998 for a growth rate of 4.1%. This division's component industries, with the exception of railroads and non-communications utilities, generally contributed to this expansion.

Trade. The trade division's job growth has slowed dramatically from its breakneck 7% pace of 1994 and 1995. Creation of 5,300 jobs in 1998 registered a growth rate of 2.2%. Robust expansion in this division is often followed by sluggish growth as new businesses

seek to sustain their viability in the face of a slowing economy and fierce competition. Wholesale and retail trade both grew at about the same pace.

Finance/Insurance/Real Estate. The component industries of the finance/insurance/real estate division have experienced peaks and slumps associated with the overall economic expansion, their own evolutionary changes, and new employment centers locating in Utah. In 1998 the division's employment increased by 2,200, a 4.2% expansion. Growth in 1997 was only slightly lower (4.0%).

Services. The services division created 11,400 new jobs during 1998 for a growth rate of 4.2%. The diverse industries in this category generally fall into two classes: some growing relatively rapidly, the others growing slowly. Industries expanding employment slowly include medical-related, private education/nonprofit membership organizations, and legal/miscellaneous services. In addition, a substantial number of jobs were eliminated in Utah's computer-services industry. On the other end of the scale, other business services (largely "help-supply" services and telemarketing firms) and engineering/management services each grew by roughly 6%.

Public Sector. Government employment in Utah increased slowly (a yearly average of 1.7%) from 1986 through 1996 due primarily to federal defense job cutbacks, which ended in 1997. Thus, 1997 and 1998 mark a new era in public employment, with job growth at about 3.2% and 2.5%, respectively. In 1998, federal jobs decreased by 1.3%; state government agencies' employment expanded by 3.1%; local government added about 3,000 positions, 3.5% growth.

Wages on the Upswing. In 1998, Utah's average annual nonagricultural pay was \$26,400—up 4.2% from the 1997 average, which increased by 4.8%. This is the fourth year in a row that average wage increases in Utah have outpaced increases in inflation, as measured by the U.S. Consumer Price Index (CPI-U). Since the early 1980s, growth in wages for Utahns covered under unemployment insurance laws lagged far behind national wage increases. Utah annual pay as a percentage of U.S. annual pay has declined from a high of 96.3% in 1981 to a low of 84.4% in 1993. Since then, Utah's annual pay has slowly been gaining some of the lost ground, increasing to 85.2% in 1997.

The loss of high paying goods-producing jobs in the early and mid-80s helped contribute to the decline. However, Utah's demographics may also play a part. Utah has a large percentage of young people in the labor market and a younger labor force. Young people are usually paid less than older workers. In addition, Utah also has a higher percentage of individuals working part-time than the U.S. in general, which also tends to pull the average wage down. Shortages of workers from 1996 through 1998 are thought to be a factor in the relatively rapid wage increases of those years.

Major Employers. With over 20,000 employees, the State of Utah ranks as the largest employer. Six of the next seven top employers provide educational services. The University of Utah (including the University Hospital) and Brigham Young University each have roughly 16,000 employees. Granite, Jordan, and Davis school

¹ Industrial diversity has been estimated by Regional Financial Associates by calculating the Hachman Index using three-digit SIC codes.

districts and Utah State University each have between 6,500 and 8,000 workers. Hill Air Force Base, with 9,000 jobs, occupies the number four rank. Autoliv ASP (formerly Morton International), a producer of automotive airbags, and the U.S. Postal Service round out the top ten largest employers. A multi-county telemarketing company (Convergys, formerly Matrixx Marketing), the Internal Revenue Service, Salt Lake County government, major retail chains, IHC (a large health-care organization), additional large school districts, Delta Airlines, United Parcel Service, and Icon Health and Fitness also occupy strong presence in Utah's economy.

Labor Force Composition. An average of 72% of Utah's civilian, noninstitutionalized population over the age of 15 participated in the labor force in 1997. This rate ranks significantly higher than the national average of 67%. Both Utah women and men take part in the labor market at higher rates than their national counterparts.

One reason for Utah's high labor force participation is its young population. Utah's teenagers and young adults are much more likely to work than their U.S. peers. Also, Utah's population age 55 and older accounts for a relatively small share of its adult population, and these older people are more likely to work than their U.S. peers. Other factors are: 1) Utah's large families and lower than average wages may influence families to have more than one wage earner, and 2) in recent years jobs have been readily available.

Roughly 97.5% of Utah workers are employed in nonagricultural industries. Agriculture thus accounts for about 2.5%. Of the nonagricultural workers, about 7.5% are self-employed, or private household, or unpaid family workers. Thus, about 90% of employed people are nonagricultural wage and salaried workers.

Unemployment. About 29% of Utah's 32,300 unemployed in 1997 had lost their jobs, compared to 37% in 1996. On the other hand, job leavers were more plentiful; 20% in 1997 compared to 15% in 1996 and 18% in 1995. The share of re-entrants drifted up to 46% from 42% in both 1996 and 1995. For the past three years this group, an important component of Utah's labor force growth, has numbered nearly 15,000. Of course, Utah's strong economy enables an unknown number of people to move directly from out-of-the-labor-force to employment without a period of unemployment. Only one-twentieth of unemployed workers were new entrants compared to one-fifteenth in 1995.

Occupational Composition of Utah Jobs. Occupational estimates and projections are produced for some 700 specific job titles. These are summarized, for 1998 and 2003, into eight job categories. The largest category, both in terms of employment and the number of job titles, is the production, operating, and maintenance group. Over 25% of all employment in Utah is accounted for by this category. These jobs are commonly called "blue collar" and contain all the skilled crafts along with many semi-skilled and unskilled occupations. The professional job group makes up about 16% of all employment. These occupations require training at a Bachelor's degree or higher. Accountants, engineers, teachers, and nurses are examples of titles in this group. Sales, clerical, and service job categories each claim a 13% to 15% share of the employment pie. The managerial and administrative group represents about 8% of total employment; the technical and agriculture-related categories are 5% and 3% respectively.

Employment Trends in Occupations. The future for occupations

in Utah can be viewed in two lights. First, by the growth rates for occupations and occupational categories, and second by the occupations' change in the "share" of total employment.

Professional, technical, managerial, and service jobs are growing at the fastest rate. Each of these job groups will enjoy a 2.9% to 3.2% per year rate of growth over the 1999-to-2003 period. The average for all occupations and industries for the same period is 2.5% per year. Clerical, agriculture-related, and production, operating and maintenance categories will fall well below the 2.5% average with rates of 1.7%, 1.3%, and 1.9% respectively. Important to note is that two (professional and technical) of the three categories with the fastest growth also require a substantial educational investment.

In terms of the share of total employment, managerial, professional, technical, sales, and service occupations will experience an increased share in total employment from 1999 to 2003. Those that will be "losing share" of total jobs are the clerical, agricultural-related, and the production, operating and maintenance job titles. These structural changes are gradual and account for less than a 1% change over the projections period, but they do reflect the changing structure of the labor market.

The Measure of Demand- Job Openings. The growth of employment in an occupation provides only a portion of the true measure of labor demand in the labor market. Job openings also result from the need to replace workers who leave current employment positions for another occupation or who leave the labor force. These two components comprise the demand for an occupation. An average of about 60,000 of these vacancies will occur each year over the 1999-to-2003 period. Of the 60,000, over one-half will be due to growth in the labor market with another 28,000 vacancies caused by the need to replace current workers.

The production, operating, and maintenance job category will provide the largest number—13,200—of job openings each year, followed closely by the professional, service, and sales occupational groups which will each add another 10,000 openings annually. These four categories will account for three out of every four job vacancies. The clerical group will contribute about 7,000, or 12%, of the total, with the technical adding another 2,800 and the agricultural group with about 1,100 vacancies.

Utah Jobs and Educational/Training Requirements. Of the roughly 138,000 vacant employment positions in 2003, about 22% will require a Bachelor's degree or higher. Those jobs that call for associate degrees or applied technology training will account for about 9% of the total, while another 9% of total jobs will need work-related experience. On-the-job training (including some formal classroom time) of one year or longer will account for about 11% of the total; jobs classified as moderate term (from one month to one year) on-the-job training add up to 12%. The largest group of all, containing semi-skilled and unskilled jobs (those that require less than a month of training), will claim 37% of total jobs.

The Utah Job Outlook, available from the Utah Department of Workforce Services, reports the projections of employment by occupation for Utah. Projections identify the occupations in demand over the 1998-2003 period in Utah and each of the nine districts.

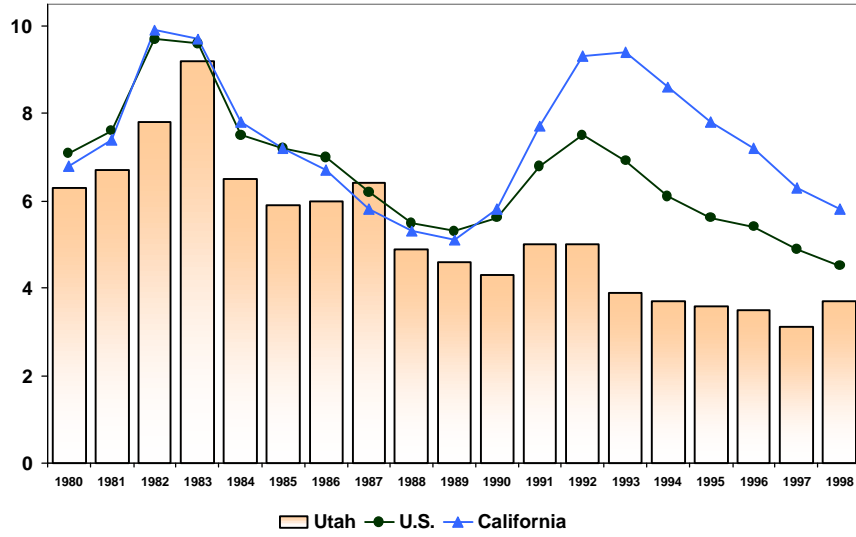
Significant Issues

Labor Shortages. With job growth in Utah slowing to slightly lower than the long-term average, and unemployment increasing somewhat from its very low 1997 level, labor shortages are a diminishing problem. In the metropolitan counties and in certain occupations spot shortages still exist, but this will probably not be a significant issue in 1999. In fact, labor shortages should no longer be an impediment to growth.

Conclusion

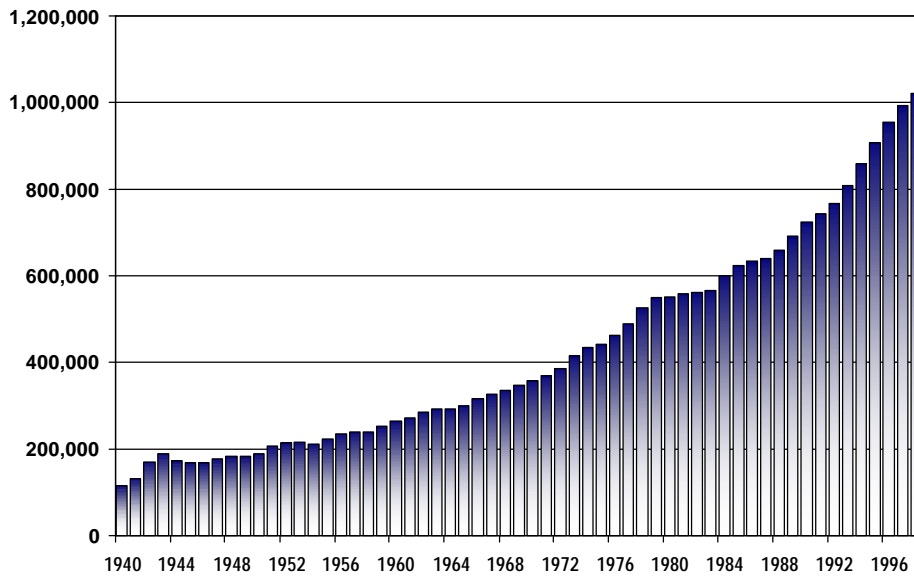
Utah's economy has achieved an orderly transition from robust growth to maintenance growth, but it is still thriving. Most industries are holding their own. Unemployment, while up from 1997, is stable and low. Moreover, wage increases continue to outpace inflation. *

Unemployment Rates for Utah, California, and the U.S.



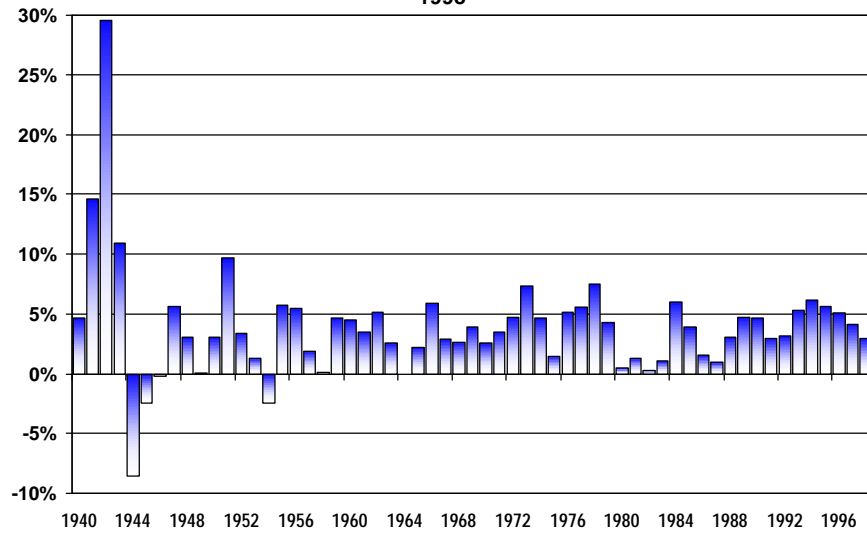
Source: Utah Department of Workforce Services, Regional Financial Associates, WEFA, Council of Economic Advisors

Utah Nonagricultural Employment: 1940 to 1998



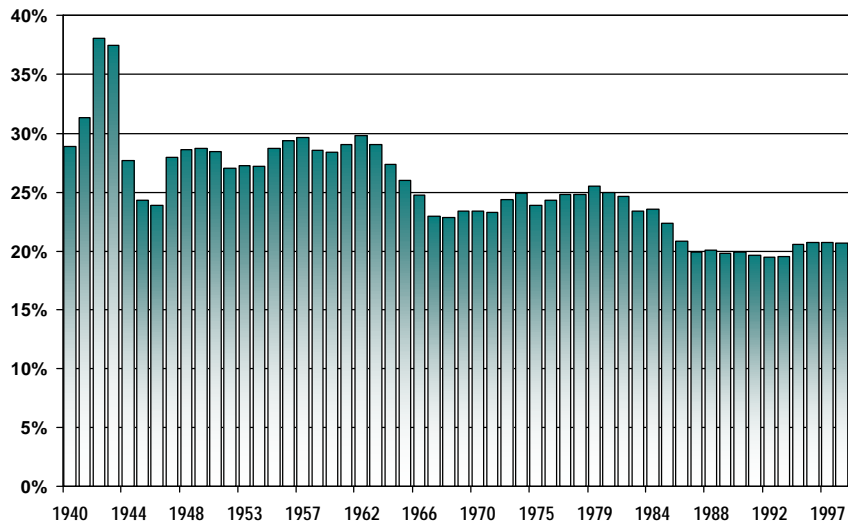
Source: Utah Department of Workforce Services

Utah Nonagricultural Employment--Annual Percent Change: 1940 to 1998



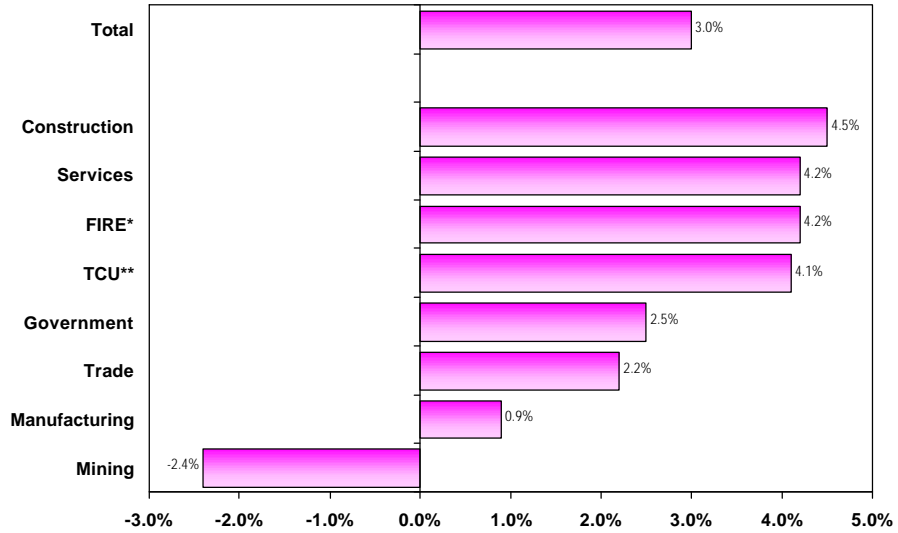
Source: Utah Department of Workforce Services

Percent of Utah Employment in Goods-Producing Industries: 1940 to 1998



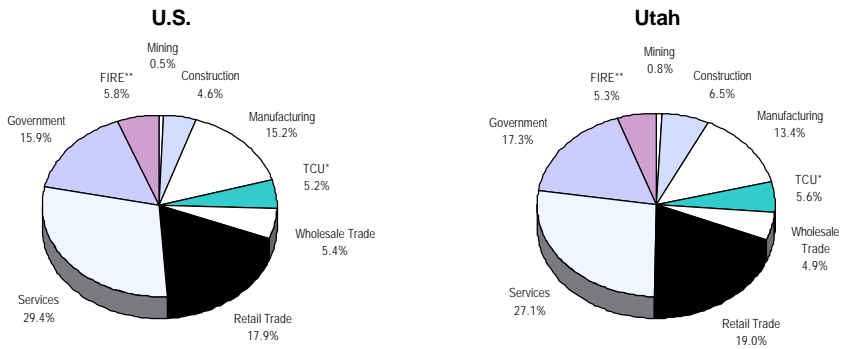
Source: Utah Department of Workforce Services

Utah Percent Change in Employment by Industry, 1997-1998



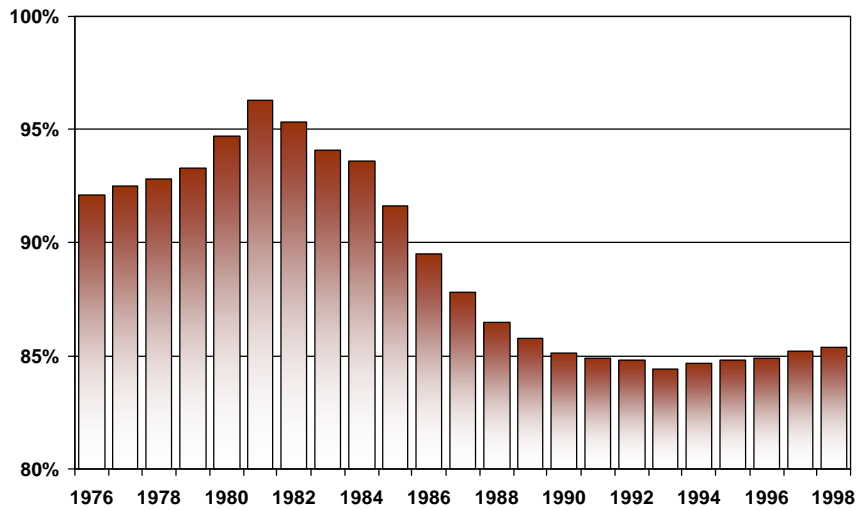
*Finance, Insurance and Real Estate
 **Transportation, Communication and Utilities
 Source: Utah Department of Workforce Services

U.S. and Utah Nonagricultural Employment by Industry: 1997



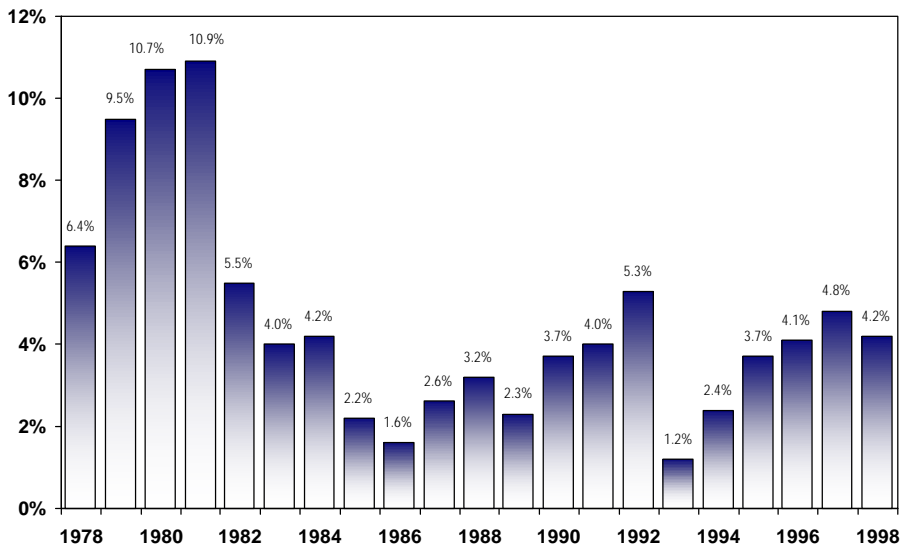
*Transportation, Communication and Utilities
 **Finance, Insurance and Real Estate
 Source: Utah Department of Workforce Services

Utah Average Annual Pay as a Percent of U.S.



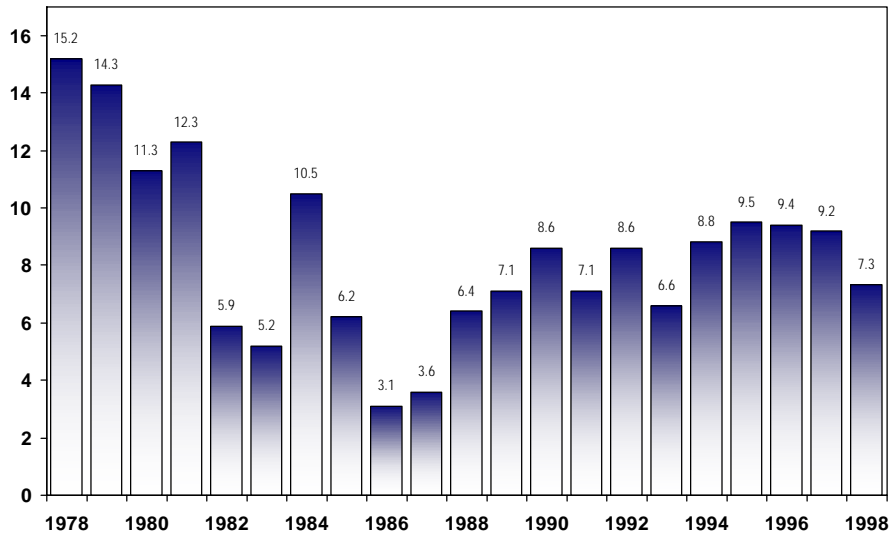
Note: For workers covered by unemployment insurance
 Source: Utah Department of Workforce Services

Percent Change: Utah Average Annual Pay Growth Rates



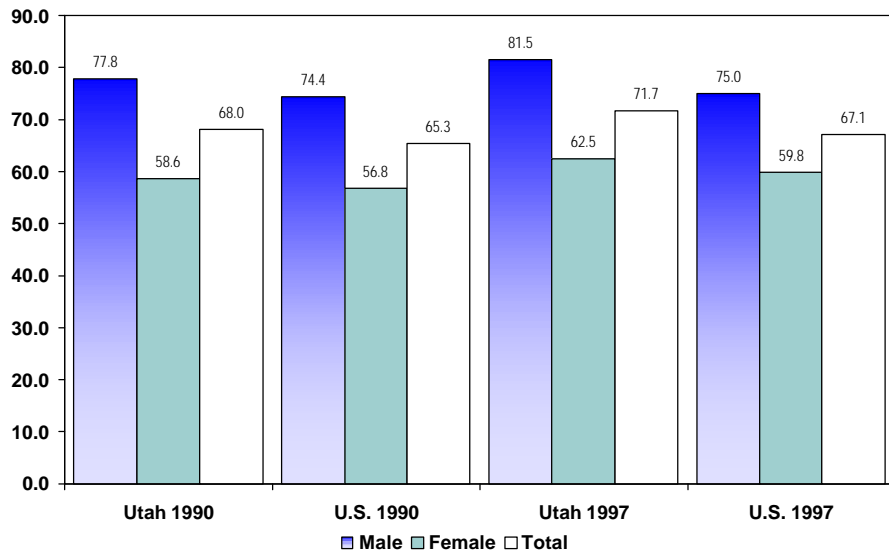
Source: Utah Department of Workforce Services, Council of Economic Advisors

Utah Total Nonagricultural Wages and Salaries Growth Rates



Source: Utah Department of Workforce Services, Council of Economic Advisors

Utah and U.S. Civilian Labor Force Participation Rate, Persons 16 Years and Older



Source: U.S. Bureau of the Census, U.S. Department of Labor, Bureau of Labor Statistics

**Utah Nonagricultural Payroll Employment, Industry Percent of Total, Unemployment Rates:
1940-1998 Annual Averages**

Year	Total Employment			Industry Percent of Total								Unemployment Rates
	Number	Percent Change	Increase	Mining	Constru.	Manufact.	Trans.Comm. Pub.Util.	Trade	Fin.Ins.& Real Est.	Services	Govt.	
1940	115,000	4.6	5,100	9.7	3.7	15.5	14.1	23.6	3.2	11.1	19.3	na
1941	131,800	14.6	16,800	9.0	7.1	15.3	13.6	22.3	3.0	10.2	19.9	na
1942	170,800	29.6	39,000	7.6	12.3	18.1	11.8	18.3	2.3	8.4	21.1	na
1943	189,400	10.9	18,600	7.0	12.4	18.1	11.8	16.6	2.2	7.4	24.7	na
1944	173,100	-8.6	(16,300)	7.2	5.7	14.8	13.1	18.2	2.3	8.2	30.7	na
1945	168,800	-2.5	(4,300)	6.7	3.3	14.3	13.7	19.1	2.5	9.0	31.5	na
1946	168,500	-0.2	(300)	5.9	4.5	13.5	13.4	22.8	3.0	10.9	26.3	na
1947	178,000	5.6	9,500	7.5	5.1	15.4	12.4	23.1	3.1	11.1	22.4	na
1948	183,400	3.0	5,400	7.0	6.1	15.6	11.8	22.8	3.1	10.8	22.8	na
1949	183,500	0.1	100	7.1	5.9	15.7	11.6	22.7	3.3	10.7	23.2	na
1950	189,153	3.1	5,653	6.6	6.4	15.7	11.3	22.4	3.4	10.9	23.3	5.5
1951	207,386	9.6	18,233	6.5	6.2	15.7	10.6	21.4	3.2	10.1	26.2	3.3
1952	214,409	3.4	7,023	6.4	5.5	15.1	10.8	21.6	3.3	10.1	27.2	3.2
1953	217,194	1.3	2,785	6.4	5.2	15.7	10.8	22.1	3.5	10.4	25.9	3.3
1954	211,864	-2.5	(5,330)	6.3	5.4	15.6	10.6	22.5	3.9	10.8	25.0	5.2
1955	224,007	5.7	12,143	6.5	6.4	15.9	10.3	22.1	4.1	10.8	24.0	4.1
1956	236,225	5.5	12,218	6.7	6.6	16.1	9.7	22.0	4.0	10.8	23.2	3.4
1957	240,577	1.8	4,352	6.9	6.2	16.6	9.6	22.1	4.0	11.1	23.4	3.7
1958	240,816	0.1	239	6.0	6.2	16.3	9.3	22.2	4.2	11.6	24.2	5.3
1959	251,940	4.6	11,124	5.1	6.2	17.0	8.9	22.4	4.3	12.0	23.9	4.6
1960	263,307	4.5	11,367	5.4	5.6	18.1	8.5	22.3	4.3	12.2	23.6	4.8
1961	272,355	3.4	9,048	5.2	5.7	18.5	8.1	22.0	4.2	12.4	23.9	5.3
1962	286,382	5.2	14,027	4.7	6.2	18.9	7.7	21.9	4.2	12.4	23.9	4.9
1963	293,758	2.6	7,376	4.1	6.0	18.9	7.4	22.1	4.2	12.9	24.4	5.4
1964	293,576	-0.1	(182)	3.7	5.8	17.9	7.4	22.3	4.3	13.4	25.1	6.0
1965	300,164	2.2	6,588	4.0	5.3	16.7	7.2	22.3	4.3	13.8	26.5	6.1
1966	317,771	5.9	17,607	3.8	4.9	16.1	6.9	21.8	4.1	13.9	28.5	4.9
1967	326,953	2.9	9,182	3.2	4.1	15.6	7.0	21.7	3.9	14.5	30.0	5.2
1968	335,527	2.6	8,574	3.3	4.1	15.5	6.9	21.9	4.0	15.0	29.4	5.4
1969	348,612	3.9	13,085	3.7	4.0	15.7	6.6	22.1	4.1	15.3	28.6	5.2
1970	357,435	2.5	8,823	3.6	4.1	15.7	6.5	22.2	4.2	15.8	28.0	6.1
1971	369,836	3.5	12,401	3.3	4.7	15.3	6.3	22.4	4.2	15.9	27.9	6.6
1972	387,271	4.7	17,435	3.1	5.4	15.6	6.2	23.3	4.4	16.3	27.2	6.3
1973	415,641	7.3	28,370	3.0	5.7	15.7	6.1	23.4	4.4	16.3	25.4	5.8
1974	434,793	4.6	19,152	3.1	5.6	16.2	6.1	23.3	4.5	16.3	24.9	6.1
1975	441,082	1.4	6,289	3.0	5.5	15.3	6.1	23.7	4.5	16.9	25.0	6.5
1976	463,658	5.1	22,576	3.0	6.0	15.3	6.1	24.2	4.4	16.9	24.2	5.7
1977	489,580	5.6	25,922	3.0	6.5	15.2	6.0	24.1	4.6	17.0	23.7	5.3
1978	526,400	7.5	36,820	3.0	6.6	15.2	6.0	24.1	4.6	17.4	23.0	3.8
1979	549,242	4.3	22,842	3.2	6.5	15.8	6.1	23.5	4.7	17.7	22.4	4.3
1980	551,889	0.5	2,647	3.4	5.7	15.9	6.2	23.3	4.7	18.2	22.7	6.3
1981	559,184	1.3	7,295	3.6	5.1	16.0	6.2	23.4	4.7	18.7	22.3	6.7
1982	560,981	0.3	1,797	3.2	4.8	15.3	6.3	23.5	4.7	19.6	22.5	7.8
1983	566,991	1.1	6,010	2.5	5.1	15.1	6.3	23.5	4.9	19.8	22.7	9.2
1984	601,068	6.0	34,077	2.1	5.8	15.6	6.1	23.4	4.9	20.1	21.9	6.5
1985	624,387	3.9	23,319	1.6	5.7	15.1	5.9	23.7	5.0	21.0	22.1	5.9
1986	634,138	1.6	9,751	1.2	5.1	14.5	5.9	24.0	5.2	21.7	22.3	6.0
1987	640,298	1.0	6,160	1.2	4.2	14.4	5.9	23.8	5.3	23.0	22.1	6.4
1988	660,075	3.1	19,777	1.2	3.8	15.0	6.0	23.7	5.1	23.6	21.6	4.9
1989	691,244	4.7	31,169	1.2	3.7	14.9	5.9	24.1	4.8	24.2	21.2	4.6
1990	723,629	4.7	32,385	1.2	3.8	14.8	5.8	23.8	4.7	25.0	20.8	4.3
1991	745,114	3.0	21,485	1.2	4.2	14.2	5.7	24.0	4.8	25.3	20.7	5.0
1992	768,602	3.2	23,488	1.1	4.5	13.8	5.7	24.0	4.9	25.6	20.4	5.0
1993	809,731	5.4	41,129	1.0	4.9	13.6	5.8	23.6	5.1	26.2	19.7	3.9
1994	859,626	6.2	49,895	1.0	5.6	13.6	5.7	23.9	5.3	26.1	18.8	3.7
1995	907,886	5.6	48,260	0.9	6.0	13.6	5.7	24.2	5.3	26.2	18.0	3.6
1996	954,183	5.1	46,297	0.8	6.3	13.5	5.7	24.1	5.3	26.8	17.4	3.5
1997	993,999	4.2	39,816	0.8	6.5	13.4	5.6	24.0	5.3	27.1	17.3	3.1
1998p	1,023,400	3.0	29,401	0.8	6.6	13.2	5.7	23.8	5.4	27.5	17.2	3.7

na = not available

Source: Utah Department of Workforce Services, Workforce Information.

Nonagricultural Payroll Employment in Utah by District, County and Major Industry: 1997

County	Mining	Construction	Manufacturing	Trans. Comm. & Pub. Util	Trade	Finance, Insurance & Real Estate	Services & Misc.	Government	1997 Total	1996 Total	1996-97 Percent Change
State Total	8,297	64,470	132,853	55,994	238,294	52,577	269,678	171,836	993,999	954,183	4.2%
Beaver	34	149	105	180	535	37	225	603	1,868	1,809	3.3%
Box Elder	38	820	9,458	489	3,238	305	1,857	2,212	18,417	17,488	5.3%
Cache	3	2,025	10,811	955	7,284	866	7,476	9,498	38,918	37,374	4.1%
Carbon	1,116	248	464	500	2,198	167	2,076	2,313	9,082	8,665	4.8%
Daggett	0	4	2	41	39	0	94	210	390	392	-0.5%
Davis	99	6,280	10,450	2,691	19,837	3,190	16,022	19,631	78,200	73,308	6.7%
Duchesne	526	221	216	472	964	121	493	1,649	4,662	4,446	4.9%
Emery	911	292	25	718	451	42	378	967	3,784	3,733	1.4%
Garfield	17	50	176	131	304	20	827	536	2,061	1,950	5.7%
Grand	85	217	46	102	1,536	90	1,170	735	3,981	3,803	4.7%
Iron	52	777	1,675	352	3,162	416	2,865	3,390	12,689	11,772	7.8%
Juab	25	86	354	53	666	38	521	608	2,351	2,306	2.0%
Kane	0	113	278	27	657	53	817	598	2,543	2,271	12.0%
Millard	105	90	250	664	928	54	575	1,010	3,676	3,651	0.7%
Morgan	0	275	311	12	449	28	75	378	1,528	1,462	4.5%
Piute	0	1	4	31	27	7	6	150	226	230	-1.7%
Rich	0	12	14	8	98	47	116	212	507	530	-4.3%
Salt Lake	2,868	31,570	57,043	38,980	123,532	37,247	140,396	72,822	504,458	485,985	3.8%
San Juan	244	198	315	267	697	43	812	1,530	4,106	4,222	-2.7%
Sanpete	2	324	985	254	1,260	146	890	2,355	6,216	5,901	5.3%
Sevier	321	359	588	585	1,825	129	1,356	1,530	6,693	6,396	4.6%
Summit	134	1,063	902	378	4,417	1,174	4,001	1,695	13,764	13,001	5.9%
Tooele	121	816	1,499	1,278	1,736	221	1,350	3,371	10,392	10,207	1.8%
Uintah	1,374	335	213	560	2,010	146	1,939	1,751	8,328	7,782	7.0%
Utah	58	9,192	19,601	2,240	30,503	3,878	51,307	18,382	135,161	129,912	4.0%
Wasatch	4	426	307	106	1,132	82	927	832	3,816	3,505	8.9%
Washington	152	3,192	2,208	1,476	9,153	1,059	7,355	4,256	28,851	27,901	3.4%
Wayne	0	61	33	19	196	10	301	303	923	867	6.5%
Weber	8	5,274	14,520	2,425	19,460	2,961	23,451	18,309	86,408	83,313	3.7%

Source: Utah Department of Workforce Services, Workforce Information .

Nonagricultural Payroll Wages in Utah by County and Major Industry: 1997

County	Mining	Construction	Manufacturing	Trans. Comm. & Pub. Util	Trade	Finance, Real Estate	Services & Misc.	Government	Total	Annual 1996 Total Wages	1996-97 Percent Change
State Total	\$377,967,172	\$1,703,858,824	\$4,174,250,282	\$1,938,675,038	\$4,485,497,158	\$1,670,844,193	\$6,278,753,100	\$4,584,905,069	\$25,214,750,836	\$23,089,027,638	9.2%
Beaver	956,175	2,473,143	1,936,803	9,257,972	4,621,544	636,665	2,886,984	11,707,097	34,476,383	32,968,533	4.6%
Box Elder	1,032,514	20,548,489	375,787,662	14,631,244	49,196,006	6,336,289	30,335,527	50,600,043	548,467,774	509,897,159	7.6%
Cache	51,280	42,579,198	257,047,324	25,351,370	91,237,099	17,909,629	130,973,780	205,565,122	770,714,802	711,030,930	8.4%
Carbon	58,874,287	6,863,590	11,292,390	20,749,028	34,069,315	3,685,682	34,385,745	47,692,425	217,612,462	198,078,894	9.9%
Daggett	0	58,369	32,600	1,067,168	332,741	0	1,757,532	5,693,442	8,941,852	8,672,540	3.1%
Davis	3,552,389	159,445,726	308,193,765	75,241,806	335,381,366	67,964,547	320,262,300	608,703,468	1,878,745,367	1,740,557,841	7.9%
Duchesne	18,916,343	4,764,591	6,797,921	14,097,357	12,983,669	2,107,488	7,319,929	32,335,393	99,322,691	89,070,394	11.5%
Emery	44,897,901	6,942,090	412,503	35,385,356	3,966,304	646,456	6,282,147	19,954,630	118,487,387	110,572,734	7.2%
Garfield	421,755	727,495	3,147,371	3,988,089	2,673,389	325,063	11,530,724	12,290,125	35,104,011	32,397,410	8.4%
Grand	2,955,679	4,784,075	654,833	3,610,135	18,690,106	1,376,248	15,163,976	18,180,710	65,415,762	61,505,319	6.4%
Iron	1,479,796	14,555,577	38,145,903	12,283,656	41,386,632	8,697,387	42,515,265	70,930,483	229,994,699	205,942,777	11.7%
Juab	860,126	1,375,258	10,259,342	1,318,772	6,739,908	714,530	11,134,519	11,292,098	43,694,553	39,918,698	9.5%
Kane	12,662	2,017,448	4,891,230	736,742	7,156,092	919,982	10,644,669	12,852,372	39,231,197	34,762,540	12.9%
Millard	4,258,169	1,776,780	5,426,507	30,626,494	8,684,744	1,146,030	10,223,653	22,100,615	84,242,992	83,858,639	0.5%
Morgan	0	6,639,490	9,948,977	298,281	8,777,317	654,638	1,325,542	7,620,249	35,264,494	33,986,505	3.8%
Piute	0	8,708	27,625	649,550	149,995	90,074	131,953	2,737,379	3,795,284	3,591,060	5.7%
Rich	0	184,672	94,016	246,186	842,989	472,415	1,252,384	4,085,867	7,178,529	7,280,296	-1.4%
Salt Lake	149,545,600	925,911,399	1,885,327,464	1,379,587,936	2,777,300,498	1,297,801,954	3,591,060,982	2,104,265,801	14,110,801,634	12,818,793,049	10.1%
San Juan	7,517,970	4,198,027	6,473,426	5,725,289	9,646,602	619,577	9,707,456	33,575,755	77,464,102	76,998,401	0.6%
Sanpete	110,193	5,880,123	17,737,065	6,962,806	11,276,260	2,607,210	11,521,065	43,037,923	99,132,645	91,786,729	8.0%
Sevier	14,137,930	6,847,042	12,453,856	18,920,665	22,416,818	2,964,013	20,481,550	33,570,877	131,792,751	122,786,400	7.3%
Summit	5,212,245	27,612,951	26,932,345	10,298,379	69,274,651	32,901,453	85,525,709	40,670,524	298,428,257	265,584,973	12.4%
Tooele	8,109,216	22,788,931	49,789,864	54,482,399	19,926,972	4,793,092	29,624,544	109,439,183	298,954,201	284,707,676	5.0%
Uintah	49,047,730	6,352,830	3,644,270	18,619,862	28,735,376	2,667,129	32,711,975	43,842,546	185,621,718	163,045,863	13.8%
Utah	1,333,732	226,064,865	570,448,227	72,019,759	466,456,486	96,140,457	1,229,092,389	431,053,360	3,092,609,275	2,878,685,260	7.4%
Wasatch	72,057	7,402,631	6,087,074	3,467,888	13,973,619	1,680,019	14,761,448	19,126,070	66,570,806	58,755,739	13.3%
Washington	4,304,453	62,830,653	54,046,313	41,168,807	138,269,670	25,610,380	140,651,734	98,699,699	565,581,709	523,335,873	8.1%
Wayne	0	1,096,535	450,456	485,953	1,343,699	124,720	5,190,815	6,373,651	15,065,829	12,225,668	23.2%
Weber	306,970	131,128,138	506,763,150	77,396,089	299,987,291	89,251,066	470,296,804	476,908,162	2,052,037,670	1,888,229,738	8.7%

Source: Utah Department of Workforce Services, Workforce Information.

Utah Average Monthly Wage by Industry: 1987 to 1997

Industry	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total Nonagricultural Jobs	\$1,501	\$1,549	\$1,585	\$1,644	\$1,710	\$1,801	\$1,823	\$1,867	\$1,936	\$2,016	\$2,114
Mining	2,708	2,820	2,905	2,976	3,002	3,217	3,283	3,318	3,484	3,662	3,796
Construction	1,665	1,742	1,799	1,843	1,917	1,878	1,875	1,934	2,042	2,092	2,202
Manufacturing	1,896	1,968	2,009	2,066	2,125	2,246	2,250	2,302	2,384	2,509	2,618
Trans., Comm., & Pub. Util.	2,175	2,270	2,355	2,424	2,552	2,613	2,643	2,699	2,703	2,757	2,885
Trade	1,063	1,103	1,133	1,173	1,231	1,264	1,288	1,351	1,414	1,484	1,569
Finance, Ins., & Real Estate	1,641	1,702	1,760	1,818	1,907	2,092	2,177	2,169	2,303	2,467	2,648
Services	1,315	1,350	1,385	1,458	1,534	1,682	1,690	1,717	1,789	1,852	1,940
Government	1,597	1,625	1,663	1,735	1,805	1,891	1,922	1,983	2,054	2,140	2,223

Industry	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Total Nonagricultural Jobs	3.2	2.3	3.7	4.0	5.3	1.2	2.4	3.7	4.1	4.8
Mining	4.1	3.0	2.4	0.9	7.2	2.1	1.1	5.0	5.1	3.7
Construction	4.6	3.3	2.4	4.0	-2.0	-0.2	3.1	5.6	2.4	5.3
Manufacturing	3.8	2.1	2.8	2.9	5.7	0.2	2.3	3.6	5.2	4.3
Trans., Comm., & Pub. Util.	4.4	3.7	2.9	5.3	2.4	1.1	2.1	0.1	2.0	4.6
Trade	3.8	2.7	3.5	4.9	2.7	1.9	4.9	4.7	5.0	5.7
Finance, Ins., & Real Estate	3.7	3.4	3.3	4.9	9.7	4.1	-0.4	6.2	7.1	7.3
Services	2.7	2.6	5.3	5.2	9.6	0.5	1.6	4.2	3.5	4.8
Government	1.8	2.3	4.3	4.0	4.8	1.6	3.2	3.6	4.2	3.9

Source: Utah Department of Workforce Services, Labor Market Information Services.

Utah Population, Nonagricultural Jobs and Wages: 1995-1999

	1995	1996(r)	1997(r)	1998(p)	1999(f)	Percentage change			
						95-96	96-97	97-98	98-99
Total Population	1,959,000	2,002,000	2,049,000	2,083,200	2,116,900	2.2	2.3	1.7	1.6
Civilian Labor Force	986,600	1,008,400	1,040,000	1,080,000	1,115,000	2.2	3.1	3.8	3.2
Employed Persons	951,400	973,400	1,007,700	1,040,000	1,071,000	2.3	3.5	3.2	3.0
Unemployed Persons	35,200	35,000	32,300	40,000	44,000	-0.6	-7.7	23.8	10.0
Unemployment Rate	3.6	3.5	3.1	3.7	3.9	-	-	-	-
Total Nonfarm Jobs	908,000	954,182	993,999	1,023,400	1,048,600	5.1	4.2	3.0	2.5
Mining	8,100	7,929	8,297	8,100	8,000	-2.1	4.6	-2.4	-1.2
Construction	54,800	60,283	64,470	67,400	68,500	10.0	6.9	4.5	1.6
Manufacturing	123,900	129,177	132,856	134,000	135,400	4.3	2.8	0.9	1.0
Durable	82,200	86,433	88,307	88,500	89,000	5.1	2.2	0.2	0.6
Nondurable	41,700	42,744	44,549	45,500	46,400	2.5	4.2	2.1	2.0
Transportation, Comm., and Utilities	51,500	54,045	55,995	58,300	60,200	4.9	3.6	4.1	3.3
Trade	220,100	230,229	238,290	243,600	248,400	4.6	3.5	2.2	2.0
Wholesale	45,800	48,234	49,066	50,100	50,800	5.3	1.7	2.1	1.4
Retail	174,300	181,995	189,224	193,500	197,600	4.4	4.0	2.3	2.1
Finance, Insurance, Real Estate	47,700	50,539	52,575	54,800	56,000	6.0	4.0	4.2	2.2
Services	238,300	255,509	269,680	281,100	291,000	7.2	5.5	4.2	3.5
Government	163,600	166,471	171,836	176,100	181,100	1.8	3.2	2.5	2.8
Federal	31,900	30,937	31,296	30,900	31,400	-3.0	1.2	-1.3	1.6
State	50,600	51,883	53,356	55,000	56,600	2.5	2.8	3.1	2.9
Local	81,100	83,651	87,184	90,200	93,100	3.1	4.2	3.5	3.2
Goods-producing	186,800	197,389	205,623	209,500	211,900	5.7	4.2	1.9	1.1
Service-producing	721,200	756,793	788,376	813,900	836,700	4.9	4.2	3.2	2.8
Percent Service-producing	79.4%	79.3%	79.3%	79.5%	79.8%				
Total Nonag Wages (millions)	\$21,096	\$23,089	\$25,215	\$27,062	\$28,932	9.4	9.2	7.3	6.9
Avg. Annual Wage	\$23,234	\$24,198	\$25,367	\$26,434	\$27,581	4.1	4.8	4.2	4.3
Avg. Monthly Wage	\$1,936	\$2,016	\$2,114	\$2,203	\$2,298	4.1	4.8	4.2	4.3

p = preliminary

r = revised

f = forecast

Source: Utah Department of Workforce Services, Workforce Information; December, 1998.

Utah's Civilian Labor Force and Components by Planning District and County: Annual Average 1997

District/County	Civilian Labor Force	Total Employed	Total Unemployed	Unemployment Rate
State Total	1,040,007	1,007,692	32,315	3.1
Bear River	60,885	59,118	1,767	2.9
Box Elder	18,149	17,471	678	3.7
Cache	41,823	40,763	1,060	2.5
Rich	913	884	29	3.2
Wasatch Front				
North	207,872	200,713	7,159	3.4
Davis	109,536	106,226	3,310	3.0
Morgan	3,548	3,415	133	3.7
Weber	94,788	91,072	3,716	3.9
South	476,955	463,805	13,150	2.8
Salt Lake	465,438	452,792	12,646	2.7
Tooele	11,517	11,013	504	4.4
Mountainland	172,655	168,001	4,654	2.7
Summit	12,984	12,540	444	3.4
Utah	153,912	149,924	3,988	2.6
Wasatch	5,759	5,537	222	3.9
Central	26,071	24,932	1,139	4.4
Juab	3,337	3,211	126	3.8
Millard	4,625	4,450	175	3.8
Piute	521	496	25	4.8
Sanpete	8,336	7,897	439	5.3
Sevier	7,900	7,593	307	3.9
Wayne	1,352	1,285	67	5.0
Southwestern	55,836	53,796	2,040	3.7
Beaver	2,486	2,368	118	4.7
Garfield	2,673	2,452	221	8.3
Iron	13,906	13,450	456	3.3
Kane	2,461	2,340	121	4.9
Washington	34,310	33,186	1,124	3.3
Uintah Basin	16,436	15,476	960	5.8
Daggett	396	380	16	4.0
Duchesne	5,740	5,368	372	6.5
Uintah	10,300	9,728	572	5.6
Southeastern	23,299	21,852	1,447	6.2
Carbon	9,387	8,920	467	5.0
Emery	4,076	3,814	262	6.4
Grand	5,107	4,792	315	6.2
San Juan	4,729	4,326	403	8.5
Salt Lake-Ogden MSA	669,761	650,089	19,672	2.9

Source: Utah Department of Workforce Services, Labor Market Information Division 3/98.

Utah's Largest Nonagricultural Employers: December 1997

Rank	Firm Name	Business	Approximate Employment
1	State of Utah	State Government	20,500
2	University of Utah (Inc. Hospital)	Higher Education	16,000
3	Brigham Young University	Higher Education	16,000
4	Hill Air Force Base	Military Installation	9,000
5	Granite School District	Public Education	8,000
6	Jordan School District	Public Education	7,500
7	Davis School District	Public Education	6,500
8	Morton International	Automotive Products Division	6,500
9	Utah State University	Higher Education	6,500
10	U.S. Post Office	Mail Distribution	6,000
11	Smith's Food & Drug Centers	Food Store	6,000
12	Matrixx Marketing	Telemarketing	5,500
13	Salt Lake County	County Government	5,000
14	Wal-Mart Stores	Drug & Variety Store	5,000
15	Alpine School District	Public Education	4,500
16	Delta Airlines	Air Transportation	4,500
17	Albertsons, Inc.	Food Store	4,500
18	ZCMI	Department Store	4,500
19	Internal Revenue Service Center	Federal Government	4,000
20	IHC Hospitals	Health Care Provider	4,000
21	Salt Lake School District	Public Education	4,000
22	Icon Health & Fitness	Sporting & Athletic Goods	3,500
23	LDS Hospital	Hospital	3,500
24	Thiokol Corporation	Aerospace	3,500
25	United Parcel Service	Air Courier	3,500
26	Salt Lake City Corporation	City Government	3,000
27	Weber School District	Public Education	3,000
28	K-Mart Stores	Drug & Variety Store	3,000
29	Pacific Corporation	Electricity	3,000
30	U.S. West Communications	Communications	3,000
31	Geneva Steel, Inc.	Steel Products	2,500
32	Unibase Data Entry	Data Entry Service	2,500
33	Zions First National Bank	Banking	2,500
34	Utah Valley Regional Medical Ctr.	Hospital	2,500
35	First Security Bank	Banking	2,500
36	Sears Roebuck & Co.	Department Store	2,500
37	Super Target Stores	Food/Department Store	2,500
38	Novell	Computer Equipment	2,500
39	Kennecott Copper	Copper Mining	2,500
40	J.C. Penney	Department Store	2,500
41	CR England & Sons	Trucking	2,000
42	Fred Meyer	Food/Department Store	2,000
43	Shopko	Drug & Variety Store	2,000
44	McKay-Dee Hospital	Hospital	2,000
45	Nebo School District	Public Education	2,000
46	Provo School District	Public Education	2,000
47	Primary Children's Medical Center	Hospital	2,000
48	Salt Lake Community College	Higher Education	2,000
49	Alliant Tech Systems	Aerospace	2,000
50	Pizza Hut	Restaurant	2,000

Source: Utah Department of Workforce Services, Labor Market Information Services.

Utah Employment and Job Openings Summary by Major Occupational Category: 1998 to 2003

Occupational Category	Employment		Annual Average Job Openings		
	1998	2003	Total	Due to Growth	Due to Replacement
Total - All Categories	1,229,680	1,381,700	58,810	30,390	28,420
Managerial & Administrative	95,330	109,190	4,620	2,770	1,850
Professional & Paraprofessional	196,320	228,080	9,760	6,350	3,410
Technical	55,340	63,700	2,790	1,670	1,120
Sales & Related	159,750	183,150	9,970	4,680	5,290
Clerical & Administrative Support	187,150	203,410	6,920	3,250	3,670
Service	176,320	202,060	10,450	5,140	5,310
Agriculture, Forestry, & Fishing	30,270	32,290	1,110	410	700
Production, Operating, & Maintenance	329,200	359,820	13,190	6,120	7,070

Source: Utah Department of Workforce Services, Labor Market Information Services, November 1997.

* Personal Income

Overview

Utah's 1998 total personal income of \$44.3 billion is up 6.3% from the 1997 total.¹ The state's 1998 total personal income increased considerably faster than the U.S. growth of 4.8%. Utah's 1998 per capita income is an estimated \$21,200, an increase of 4.7% over the 1997 estimate. Utah's 1997 per capita income ranks 43rd among the states. It is 80% of the U.S. average, a significant improvement from 73% in 1988 and 1989.

1997 Summary and 1998 Outlook

Utah's 1998 total personal income (TPI) is estimated at \$44.3 billion, up 6.3% from the 1997 total, which increased 7.4% from the 1996 level. Utah's 1998 TPI grew considerably faster than the forecasted national TPI growth of 4.8%. The relative strength of Utah's economy is clearly reflected in these TPI growth comparisons.

Per capita personal income is an area's annual total personal income divided by the total population as of July 1 of that year. Utah's 1998 per capita personal income (PCI) is approximately \$21,200, an increase of 4.7% over the 1997 estimate. From 1989 to 1998, Utah's percentage of the national PCI has increased by 8 points (from 73% to 81%).

The gradual slowing of the growth in Utah's nonfarm jobs will likely cause its TPI growth to correspondingly decelerate. Thus, TPI expansion is anticipated to be about 6.1% in 1999. Per capita personal income for 1999 will therefore be approximately \$22,100. This implies an additional percentage point gain (to 82%) with respect to the U.S. PCI.

Significant Issues

Composition of Total Personal Income. The largest single component of total personal income is "earnings by place of work." This portion consists of the total earnings from farm and nonfarm industries, including contributions for social insurance. In 1997, Utahns' earnings by place of work reached \$32.6 billion, representing 78% of TPI. Approximately 10% of this figure was proprietors' income, while 90% was wages, salaries, and other labor income. Nonfarm earnings (\$32.4 billion) was over 99% of total earnings; farm income comprised less than 1%. Private sector nonfarm industries accounted for 83% of nonfarm earnings, while earnings from public (government) industries made up 17%. Although earnings from government employment have been declining as a share of Utah's total earnings, it is still relatively more important than the U.S. share (16.4% to 14.8%, respectively).

The other components of TPI are dividends, interest, and rent (DIR), and transfer payments. In 1997, DIR amounted to \$5.5 billion, and transfer payments were \$5.7 billion. Some of the major differences between the economic compositions of Utah and the United States lie in these two parameters. Perhaps the most significant is that Utah DIR comprise a much smaller (13.7% versus 17.2%) share of TPI than the national figure. Transfer payments are also relatively smaller. Thus, Utahns must rely to a greater extent

on earnings. The problem with this is that Utah's average wage is only 85% (in 1996) of the U.S. average. Due to these two factors, Utah's TPI is relatively lower than the national total personal income.

The industrial composition of Utah's TPI has changed in recent years. In 1980, prior to the last two recessions, goods-producing industries (mining, construction, manufacturing) generated over 31% of Utah's total earnings. By 1992 that share had dropped to 22.9%, but it crept back to 24.2% by 1997. Interestingly, 24.3% of U.S. earnings are from goods-producing jobs.

Four major industry sectors generate over three-fourths of Utah's total earnings. Services is the leader, providing 27% of earnings; government (including military) pays 16%. Trade (wholesale plus retail) accounts for roughly 17% of Utah's total earnings, while manufacturing has slipped to 15%. Transportation/communications/utilities, construction, and finance/insurance/real estate are all between 7% and 8%, while mining generates 1.4% of earnings. Agriculture/agricultural services make up the remaining 1.0%.

Per Capita Personal Income. Utah's 1997 per capita personal income of \$20,246 ranked 43rd among the 50 states and D.C., a substantial improvement over the ranking of 48th in 1986. During the 1970s, Utah's PCI ranged between 81% and 83% of the United States' PCI. However, from 1977 to 1989, this parameter dropped ten percentage points--from 83% to 73%. All the following years--1990 through 1997--experienced improvements in this comparison--the 1997 ratio, at 80.0%, is the highest level since 1979.

County Personal and Per Capita Income. Five of Utah's 29 counties posted double-digit 1996-1997 growth in total personal income, a modest improvement over 1996 when three counties did so. This rapid growth is generally tied to rapid increases in nonagricultural wages, which is typically the largest component of total personal income. On the other end of the scale, another five counties suffered TPI expansion half or less of the state rate. This occurs because of the slow growth of nonfarm jobs.

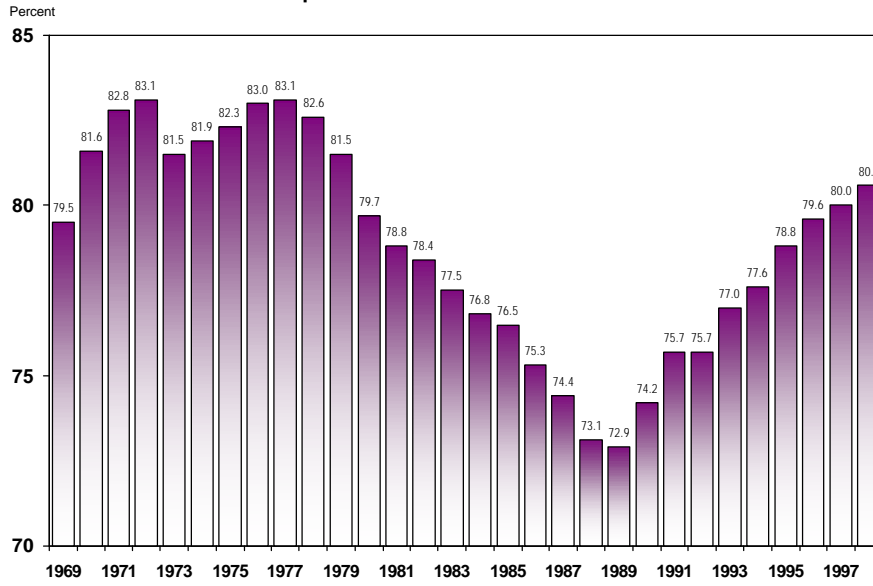
Only three counties, Summit, Salt Lake, and Weber, have 1997 PCI estimates higher than the state average. Summit County's \$36,900 is the highest in Utah; it exceeds the state average by a full 80%. San Juan County's \$11,000 is lowest; it is scarcely one-half the Utah average. The 1997 per capita income of the United States, at \$25,298, is higher than that of all of Utah's counties except Summit.

Conclusion

Utah's total and per capita personal income estimates for recent years comprise another important indicator of the strength of Utah's economy. Both of these parameters have been increasing at a more rapid rate than comparable national figures. However, Utahns are generally more dependent on earned income than the national average. And, since the average annual pay of Utah workers is somewhat lower than the U.S. average, Utah's total and per capita personal income are relatively lower. *

¹ Total personal income is defined as all income received by all residents of an area.

Utah Per Capita Personal Income as a Percent of U.S.



Source: U.S. Department of Commerce, Bureau of Economic Analysis, Governor's Office of Planning and Budget

Components of Utah's Total Personal Income: 1995-1997

Components	1995(r)	1996(r)	1997(p)	Percentage Change		1997 Percentage Distribution			
				1995-96	1996-97	Utah	U.S.	Utah	U.S.
Total Personal Income	\$35,897.4	\$38,825.2	\$41,689.3	8.2	7.4	100.0	100.0		
Earnings by place of work	27,896.4	30,134.4	32,612.7	8.0	8.2	78.2	71.2		
less: Personal contrib. for social insurance	1,847.8	1,988.6	2,159.7	7.6	8.6	5.2	4.8		
plus: Adjustment for residence	(5.2)	5.4	6.5	--	--	0.0	-0.1		
equals: Net earnings by place of residence	26,043.4	28,151.1	30,459.5	8.1	8.2	73.1	66.4		
plus: Dividends, interest, and rent	4,707.7	5,227.8	5,525.0	11.0	5.7	13.3	17.2		
plus: Transfer payments	5,146.4	5,446.3	5,704.8	5.8	4.7	13.7	16.4		
Components of earnings	27,896.4	30,134.3	32,612.7	8.0	8.2	78.2	71.2		
Wage and salary disbursements	22,416.9	24,461.0	26,649.9	9.1	8.9	63.9	57.4		
Other labor income	2,655.2	2,641.4	2,717.4	-0.5	2.9	6.5	5.8		
Proprietors' income	2,824.3	3,031.9	3,245.4	7.4	7.0	7.8	8.1		
Farm proprietors' income	78.6	80.3	90.3	2.2	12.5	0.2	0.4	1997 Industry Distribution	
Nonfarm proprietors' income	2,745.7	2,951.6	3,155.1	7.5	6.9	7.6	7.6	Utah	U.S.
Earnings by industry	27,896.5	30,134.4	32,612.6	8.0	8.2	78.2	71.2	100.0	100.0
Farm earnings	171.7	173.0	189.9	0.8	9.8	0.5	0.7	0.6	0.9
Nonfarm earnings	27,724.7	29,961.3	32,422.8	8.1	8.2	77.8	70.6	99.4	99.1
Private earnings	22,944.6	24,941.9	27,069.4	8.7	8.5	64.9	60.0	83.0	84.2
Ag. services, forestry, fishing & other	101.6	117.2	129.5	15.4	10.5	0.3	0.4	0.4	0.6
Mining	418.1	419.0	453.4	0.2	8.2	1.1	0.6	1.4	0.9
Construction	2,148.9	2,379.0	2,606.2	10.7	9.6	6.3	4.1	8.0	5.7
Manufacturing	4,213.9	4,525.7	4,836.7	7.4	6.9	11.6	12.6	14.8	17.7
Durable goods	3,026.5	3,238.4	3,410.4	7.0	5.3	8.2	7.8	10.5	10.9
Nondurable goods	1,187.5	1,287.4	1,426.4	8.4	10.8	3.4	4.9	4.4	6.8
Transportation and public utilities	2,125.2	2,253.7	2,423.7	6.0	7.5	5.8	4.9	7.4	6.9
Wholesale trade	1,580.9	1,747.3	1,871.6	10.5	7.1	4.5	4.5	5.7	6.3
Retail trade	2,985.8	3,234.8	3,548.5	8.3	9.7	8.5	6.5	10.9	9.1
Finance, insurance, and real estate	1,961.1	2,203.3	2,414.0	12.4	9.6	5.8	6.1	7.4	8.5
Services	7,409.1	8,061.8	8,785.8	8.8	9.0	21.1	20.3	26.9	28.5
Government and government enterprises	4,780.2	5,019.5	5,353.3	5.0	6.7	12.8	10.6	16.4	14.8
Federal, civilian	1,269.1	1,254.3	1,320.0	-1.2	5.2	3.2	2.0	4.0	2.8
Military	255.2	255.5	254.3	0.1	-0.5	0.6	0.7	0.8	1.0
State	1,375.7	1,496.3	1,611.7	8.8	7.7	3.9	2.3	4.9	3.2
Local	1,880.2	2,013.4	2,167.3	7.1	7.6	5.2	5.6	6.6	7.8
Population (thousands)	1,974.4	2,017.6	2,059.1	2.2	2.1				
Per capita personal income	\$18,182	\$19,244	\$20,246	5.8	5.2				

(r) = revised

(p) = preliminary

Source: Bureau of Economic Analysis; State Personal Income, September, 1998

Personal Income and Growth Rates- Utah and U.S.: 1960-1999

Year	Total Personal Income (millions of dollars)		Growth Rates		Per Capita Personal Income (dollars)		Utah as % of U.S.
	Utah	U.S.	Utah	U.S.	Utah	U.S.	
1960	\$1,826	\$409,630	6.9	4.2	\$2,029	\$2,276	89.1
1961	1,950	427,007	6.8	4.2	2,083	2,334	89.2
1962	2,117	453,820	8.6	6.3	2,210	2,443	90.5
1963	2,199	476,814	3.9	5.1	2,258	2,530	89.2
1964	2,308	510,875	5.0	7.1	2,360	2,674	88.3
1965	2,447	552,832	6.0	8.2	2,469	2,858	86.4
1966	2,601	600,945	6.3	8.7	2,577	3,074	83.8
1967	2,741	645,199	5.4	7.4	2,690	3,269	82.3
1968	2,944	708,257	7.4	9.8	2,861	3,554	80.5
1969	3,196	772,952	8.6	9.1	3,053	3,840	79.5
1970	3,546	830,848	10.9	7.5	3,327	4,077	81.6
1971	3,943	894,815	11.2	7.7	3,583	4,327	82.8
1972	4,432	983,311	12.4	9.9	3,906	4,699	83.1
1973	4,965	1,101,241	12.0	12.0	4,248	5,211	81.5
1974	5,575	1,210,981	12.3	10.0	4,651	5,676	81.9
1975	6,195	1,314,384	11.1	8.5	5,021	6,100	82.3
1976	7,070	1,455,441	14.1	10.7	5,556	6,690	83.0
1977	8,024	1,611,733	13.5	10.7	6,095	7,334	83.1
1978	9,240	1,820,240	15.2	12.9	6,773	8,196	82.6
1979	10,522	2,047,659	13.9	12.5	7,430	9,118	81.5
1980	11,812	2,286,358	12.3	11.7	8,021	10,062	79.7
1981	13,301	2,557,139	12.6	11.8	8,777	11,144	78.8
1982	14,309	2,714,034	7.6	6.1	9,182	11,715	78.4
1983	15,283	2,888,851	6.8	6.4	9,582	12,356	77.5
1984	16,919	3,200,479	10.7	10.8	10,429	13,571	76.8
1985	18,100	3,428,478	7.0	7.1	11,017	14,410	76.5
1986	18,924	3,627,522	4.5	5.8	11,380	15,106	75.3
1987	19,906	3,863,177	5.2	6.5	11,862	15,945	74.4
1988	21,032	4,165,890	5.7	7.8	12,450	17,038	73.1
1989	22,581	4,480,624	7.4	7.6	13,238	18,153	72.9
1990	24,586	4,778,306	8.9	6.6	14,213	19,156	74.2
1991	26,302	4,947,591	7.0	3.5	14,847	19,624	75.7
1992	28,303	5,239,364	7.6	5.9	15,546	20,546	75.7
1993	30,624	5,469,485	8.2	4.4	16,336	21,220	77.0
1994	33,021	5,741,050	7.8	5.0	17,122	22,056	77.6
1995	35,897	6,060,138	8.7	5.6	18,182	23,063	78.8
1996	38,825	6,408,990	8.2	5.8	19,244	24,169	79.6
1997	41,689	6,770,709	7.4	5.6	20,246	25,298	80.0
1998(p)	44,300	7,096,000	6.3	4.8	21,200	26,303	80.6
1999(f)	47,000	7,372,744	6.1	3.9	22,100	27,056	81.7

(p) = preliminary
(f) = forecast

Source: U.S. Department of Commerce, Bureau of Economic Analysis, and the Council of Economic Advisors' Revenue Assumptions Committee.

Per Capita Income by District and County: 1994-1997

County/MCD	1994(r)	1995(r)	1996(p)	1997(f)	Percent Change		1997
					1995-96	1996-97	Percent of State Average
State Total*	\$17,200	\$18,317	\$19,384	\$20,432	5.8	5.4	100
Bear River	15,294	15,847	16,723	17,600	5.5	5.2	86
Box Elder	16,656	17,338	18,281	19,400	5.4	6.1	95
Cache	14,663	15,168	16,022	16,800	5.6	4.9	82
Rich	13,968	14,428	14,667	14,600	1.7	-0.5	71
Wasatch Front	18,629	19,901	21,152	22,400	6.3	5.9	110
North	17,305	18,278	19,424	20,400	6.3	5.0	100
Davis	16,803	17,844	18,940	19,900	6.1	5.1	97
Morgan	14,894	15,619	16,816	17,100	7.7	1.7	84
Weber	18,007	18,909	20,121	21,100	6.4	4.9	103
South	19,249	20,665	21,970	23,400	6.3	6.5	115
Salt Lake	19,392	20,826	22,142	23,700	6.3	7.0	116
Tooele	15,266	16,180	17,262	17,200	6.7	-0.4	84
Mountainland	15,232	16,480	17,391	18,100	5.5	4.1	89
Summit	28,571	31,380	34,060	36,900	8.5	8.3	181
Utah	14,260	15,352	16,099	16,600	4.9	3.1	81
Wasatch	15,706	16,747	17,690	18,900	5.6	6.8	93
Central	12,960	13,381	13,931	14,400	4.1	3.4	70
Juab	13,101	13,433	13,731	14,000	2.2	2.0	69
Millard	13,742	14,101	14,806	14,700	5.0	-0.7	72
Piute	11,125	11,778	12,357	12,800	4.9	3.6	63
Sanpete	11,772	12,291	12,706	13,300	3.4	4.7	65
Sevier	13,962	14,251	14,965	15,500	5.0	3.6	76
Wayne	12,048	13,132	13,740	16,100	4.6	17.2	79
Southwestern	14,801	15,549	16,082	16,500	3.4	2.6	81
Beaver	13,014	13,090	13,359	13,500	2.1	1.1	66
Garfield	13,654	14,864	15,909	16,600	7.0	4.3	81
Iron	13,329	13,884	14,509	15,300	4.5	5.5	75
Kane	15,434	16,113	17,769	18,900	10.3	6.4	93
Washington	15,515	16,348	16,731	17,000	2.3	1.6	83
Uintah Basin	12,664	12,944	13,422	14,800	3.7	10.3	72
Daggett	14,581	14,754	14,493	16,000	-1.8	10.4	78
Duchesne	13,642	14,025	14,460	15,600	3.1	7.9	76
Uintah	12,062	12,291	12,804	14,300	4.2	11.7	70
Southeastern	13,679	14,315	15,065	15,800	5.2	4.9	77
Carbon	15,838	16,654	17,644	19,100	5.9	8.3	93
Emery	13,325	14,099	14,604	15,500	3.6	6.1	76
Grand	14,608	15,193	15,588	16,300	2.6	4.6	80
San Juan	10,182	10,505	11,170	11,000	6.3	-1.5	54
Salt Lake/Ogden	18,731	20,015	21,271	22,600	6.3	6.2	111
United States	22,056	23,063	24,169	25,298	4.8	4.7	124

(r) = revised
 (p) = preliminary
 (f) = forecast

* Totals differ in this table from other tables in this chapter due to different data sources.

Sources: 1994-1996: U.S. Dept. of Commerce, BEA, May 1998.
 1997: Utah Department of Workforce Services, WI, November 1998.

* Gross State Product

Overview

Gross State Product (GSP) is the market value of final goods and services produced by the labor and property located in a State. It is the regional counterpart to the national Gross Domestic Product (GDP). Conceptually, GSP is gross output less intermediate inputs. The Bureau of Economic Analysis (BEA) has recently released its estimates of GSP for 1995 and 1996 and revised estimates for 1977-1994.¹ In these estimates, Utah ranks first among states in the year over growth rate of real GSP from 1995 to 1996, with an 8.3% growth rate.

Estimates of Real and Nominal GSP

GSP is a measure of production, as distinguished from income or spending. It is the sum of the value added by each industry in the state's economy and is expressed in dollars. Changes in nominal (current dollar) GSP from one year to the next result from quantity changes in production and product price changes. BEA attempts to separate these by calculating real (constant dollar) GSP, which theoretically holds prices constant. Changes in real gross product for an industry reflect changes in the quantity of output, not the price of the product in the market. In order to calculate real GSP, price indices are constructed to account for the inflationary or deflationary prices. There are alternative approaches to the construction of price indices, and these have significant implications for the measurement of prices and quantity over time. When price indices are used to adjust current dollar GSP, the result is real GSP.

BEA has historically used a fixed weight approach to calculate real GSP. Observed relative prices in a base year are assumed constant over time. This introduces what is called "substitution bias," and tends to understate real growth in rapidly growing industries and overstate it in slower growth industries. An alternative is a chain-type index that reduces substitution bias but introduces additional complexities in interpretation and use.² The most recent BEA estimates include current dollar GSP, real GSP measured in chained 1992 dollars, and real GSP measured in fixed weight 1992 dollars.

Current Dollar GSP

Utah's current dollar GSP is estimated by BEA to be \$50.352 billion in 1996 and \$45.554 billion in 1995. Nationally the share of U.S. current dollar GSP accounted for by private services producing industries increased by 0.2 percentage point from 62.9% in 1995 to 63.1% in 1996. In Utah, this same share increased from 60.2% to

61.3%. Government's share of GSP declined nationally from 12.4% in 1996 to 12.2% in 1995. The share of production of government in the Utah economy is estimated to have dropped from 15.3% in 1995 to 14.7% in 1996. All of private industry accounted for 85.3% of Utah's GSP in 1996.

Real GSP

Utah's real GSP (measured both in chain-weighted 1992 dollars and fixed weight 1992 dollars) has been increasing since 1986. According to BEA, Utah led the nation in the growth of real GSP (measured in chain-weighted 1992 dollars) from 1995 to 1996. Utah's growth in 1996 was 8.3% compared to the national average of 3.2%. The fastest growing sectors in Utah were finance, insurance, real estate; services; and manufacturing. BEA estimates real GSP (measured in chained-weighted 1992 dollars) for Utah to be \$42.4 billion in 1995 and \$45.9 billion in 1996. Regional Financial Associate's estimate of real GSP for Utah in 1997 (measured in 1992 chained dollars) is \$48.3 billion.

1999 Outlook

Regional Financial Associates forecasts real GSP for Utah (measured in 1992 chained dollars) to be \$50.0 billion.

Significant Issues

Several major improvements have been incorporated into these new and revised estimates of GSP, released in June of 1998, including the following:

- * Data from BEA's 1992 benchmark input-output accounts were incorporated.
- * New Department of Energy data were used in estimates for transportation and public utilities.
- * New tax data improved the allocations of national commodity taxes.
- * Newly available mining data were incorporated.

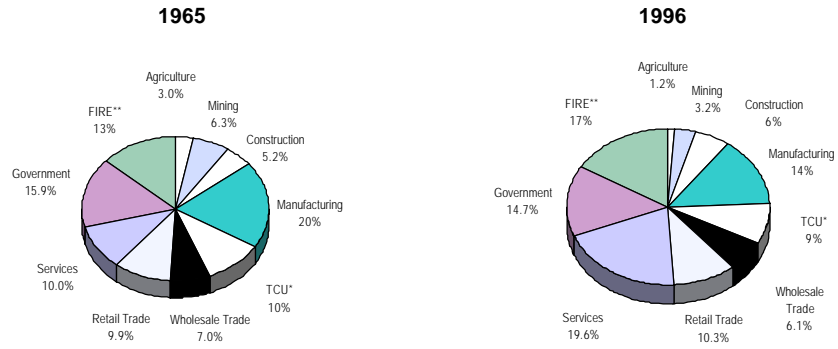
Conclusion

Gross State Product can be used to measure aggregate production in a state. For Utah this aggregate production has shown solid increases over the past ten years. This growth should continue at a somewhat slower pace in the future. GSP can also be utilized to show the change in industry composition over time and as such can prove useful in monitoring the diversity in the economic structure of Utah. *

¹ See Richard M. Beemiller and George K. Downey, "Gross State Product by Industry, 1977-96," *Survey of Current Business* 78 (June 1998): 15-37.

² See J. Stephen Landefeld and Robert P. Perker, "BEA's Chain Indexes, Times Series, and Measures of Long-Term Economic Growth," *Survey of Current Business* 77 (May 1997): 58-68; and Howard L. Friedenberg and Richard M. Beemiller, "Comprehensive Revision of Gross State Product by Industry, 1977-94," *Survey of Current Business* 77 (June 1997): 15-41.

Utah Gross State Product-Percent Share by Industry: 1965 and 1996

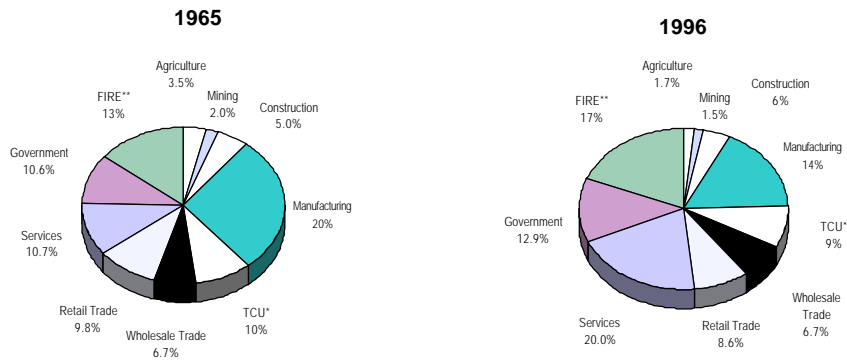


*Transportation, Communication and Utilities

**Finance, Insurance and Real Estate

Source: U.S. Department of Commerce, Bureau of Economic Analysis

U.S. Gross Domestic Product-Percent Share by Industry: 1965 and 1996

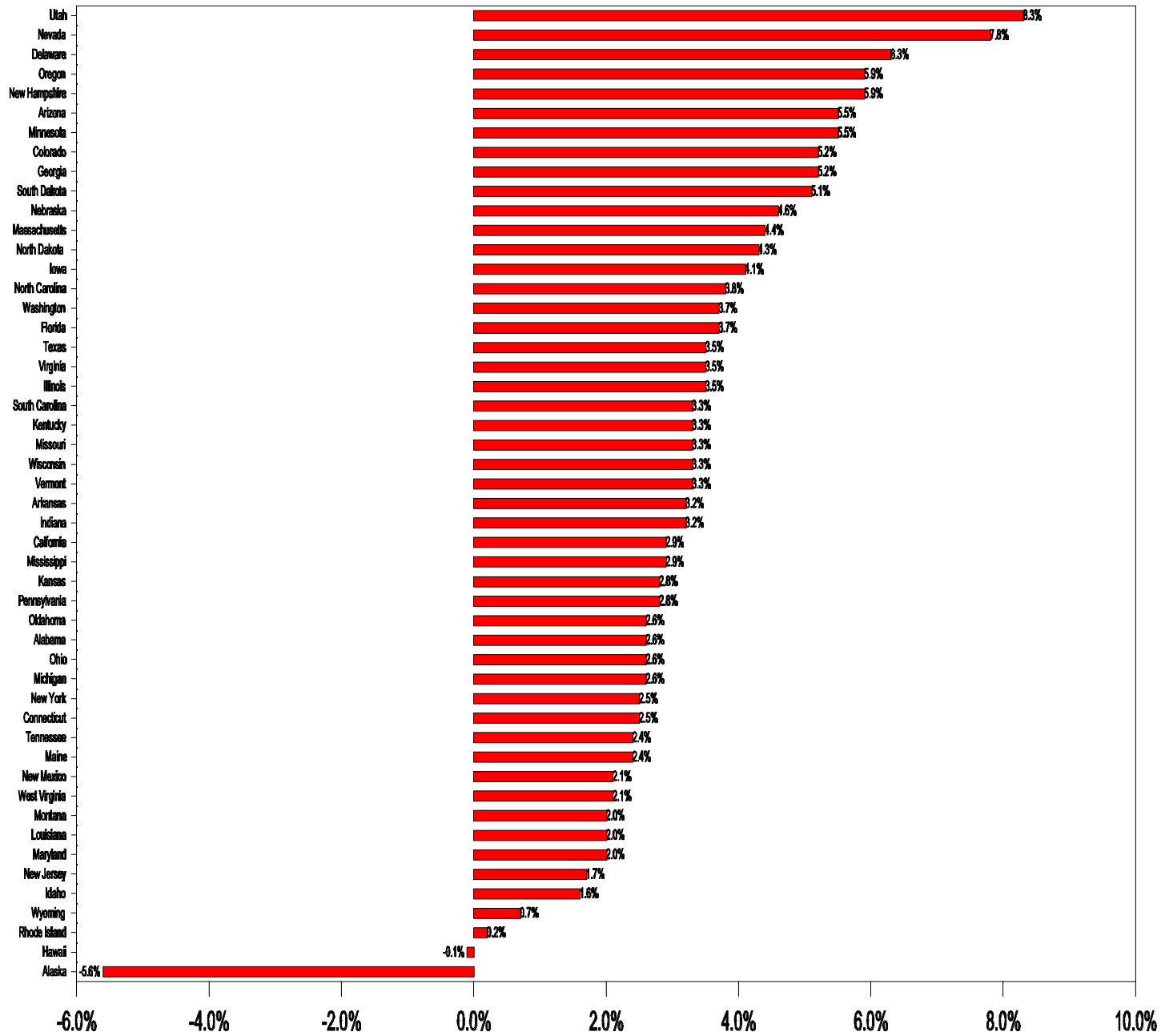


*Transportation, Communication and Utilities

**Finance, Insurance and Real Estate

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Chain type Inflation-Adjusted Gross State Product: Percent Change 1995 -1996



Source: U.S. Bureau of Economic Analysis

Utah Gross State Product by Industry (Millions of Current Dollars): Selected Years

Industry	1980	1985	1990	1991	1992	1993	1994	1995	1996
Total Gross State Product	\$15,457	\$24,401	\$31,061	\$33,283	\$35,193	\$38,129	\$42,007	\$45,554	\$50,352
Private Industries	12,962	20,131	25,631	27,458	29,090	31,746	35,357	38,590	42,969
Agriculture, forestry, and fisheries	270	348	502	473	553	563	533	520	583
Farms	238	283	427	388	455	456	412	383	419
Agricultural services, forestry and fisheries	32	65	75	85	98	108	121	138	164
Mining	1,137	1,262	1,539	1,422	1,265	1,449	1,537	1,636	1,620
Metal mining	351	124	348	352	360	508	614	755	684
Coal mining	258	218	246	306	300	293	293	290	313
Oil and Gas	492	906	861	677	542	611	586	556	594
Nonmetallic minerals	37	14	85	87	63	38	44	35	30
Construction	914	1,308	1,244	1,400	1,525	1,727	2,170	2,536	2,858
Manufacturing	2,342	3,570	4,588	4,971	5,004	5,205	5,877	6,468	7,051
Durable goods	1,696	2,597	3,166	3,349	3,264	3,287	3,762	4,196	4,578
Lumber and wood	78	73	144	147	106	130	168	170	185
Furniture and fixtures	28	61	79	98	95	103	124	136	152
Stone, clay, and glass products	126	186	127	110	134	140	181	215	244
Primary metals	329	283	502	564	427	515	603	572	569
Fabricated metals	163	209	294	292	332	349	418	454	518
Industrial machinery	439	935	433	406	429	409	401	611	740
Electronic equipment	178	217	362	374	398	264	374	300	339
Motor vehicles	29	46	126	140	192	311	382	522	525
Other transportation equipment	208	431	696	724	676	572	590	574	592
Instruments and related	66	69	211	273	272	243	232	324	332
Misc. manufacturing services	51	86	192	220	202	251	287	318	383
Nondurable goods	646	974	1,422	1,622	1,740	1,918	2,115	2,273	2,473
Food and kindred products	158	264	375	455	503	494	488	564	600
Tobacco products	0	0	0	0	0	0	0	0	0
Textile mill products	1	2	24	24	15	16	16	19	18
Apparel and other textile products	69	77	65	70	93	87	88	69	72
Paper products	16	57	92	90	84	159	218	234	236
Printing and publishing	128	231	304	302	345	364	447	436	487
Chemicals	97	136	203	288	249	259	349	456	527
Petroleum products	146	167	263	294	358	440	396	353	368
Rubber and plastics	30	39	95	97	91	97	110	137	159
Leather products	1	1	1	1	2	3	2	5	6
Transportation, communications and utilities	1,707	2,743	3,066	3,175	3,200	3,595	3,957	4,202	4,400
Transportation	706	1,007	1,383	1,446	1,539	1,700	1,868	1,996	2,068
Railroad transportation	209	289	214	251	271	239	268	285	293
Local and interurban	36	21	20	22	24	25	26	28	33
Trucking and warehousing	325	409	611	639	684	738	833	904	910
Water transportation	6	1	1	1	1	1	1	1	1
Transportation by air	75	208	454	442	458	577	639	668	718
Pipelines, except natural gas	36	35	15	15	17	20	20	21	17
Transportation services	19	44	69	77	85	101	80	88	96
Communications	365	516	665	687	706	811	873	941	1,016
Electric, gas and sanitary	635	1,121	1,017	1,042	955	1,084	1,216	1,265	1,316
Wholesale trade	1,086	1,540	1,842	2,057	2,074	2,274	2,591	2,772	3,094
Retail trade	1,405	2,469	2,928	3,115	3,498	3,842	4,382	4,751	5,167
Finance, insurance, and real estate	2,226	3,363	4,159	4,550	5,018	5,513	5,982	6,709	8,304
Depository institutions	255	479	836	965	1,070	1,032	1,095	1,277	2,339
Nondepository institutions	46	117	95	122	165	281	311	323	417
Security brokers	27	59	76	73	72	99	128	133	166
Insurance carriers	134	139	243	280	304	445	450	548	622
Insurance agents	60	81	171	195	205	231	273	303	338
Real estate	1,692	2,416	2,681	2,874	3,148	3,347	3,749	4,102	4,451
Holding and investment	12	72	57	41	54	79	(25)	24	(30)
Services	1,874	3,527	5,763	6,294	6,953	7,576	8,327	8,995	9,892
Hotels and lodging	120	195	246	276	294	325	352	364	401
Personal services	88	147	204	208	229	264	303	293	315
Business services	284	627	1,079	1,238	1,507	1,631	1,816	2,035	2,341
Auto repair and parking	135	249	312	322	352	390	447	485	536
Misc. repair services	70	95	124	114	115	128	140	154	169
Motion pictures	38	63	84	78	98	138	131	166	203
Amusement and recreation	69	134	199	220	261	253	283	317	356
Health services	542	906	1,590	1,760	1,953	2,112	2,254	2,397	2,565
Legal services	87	181	279	303	305	332	359	372	397
Educational services	122	207	329	356	349	373	418	427	447
Social services	32	51	97	113	130	152	169	189	218
Membership organization	105	377	583	620	617	656	715	740	762
Other services	169	275	609	659	713	790	907	1,019	1,145
Private households	12	19	28	27	30	33	34	37	37
Government	2,494	4,270	5,430	5,825	6,103	6,383	6,650	6,965	7,383
Federal civilian	908	1,390	1,707	1,836	1,927	1,926	1,882	1,871	1,886
Federal military	177	347	392	422	436	417	410	414	434
State and local	1,409	2,533	3,332	3,567	3,740	4,040	4,358	4,680	5,063

Source: U.S. Bureau of Economic Analysis

Real Utah Gross State Product by Industry (Millions of Chained 1992 Dollars): Selected Years

Industry	1980	1985	1990	1991	1992	1993	1994	1995	1996
Total Gross State Product	\$25,401	\$30,557	\$32,867	\$34,122	\$35,193	\$37,137	\$40,154	\$42,424	\$45,947
Private Industries	20,096	24,706	26,854	28,034	29,090	30,849	33,804	35,942	39,230
Agriculture, forestry, and fisheries	235	351	454	466	553	545	537	523	506
Farms	198	283	380	381	455	443	419	386	354
Agricultural services, forestry and fisheries	35	68	74	84	98	103	118	136	152
Mining	674	823	1,299	1,368	1,265	1,537	1,609	1,621	1,553
Metal mining	165	111	263	339	360	570	590	613	632
Coal mining	151	140	223	290	300	327	346	370	423
Oil and Gas	362	566	732	653	542	606	635	609	489
Nonmetallic minerals	43	16	84	87	63	39	44	34	29
Construction	1,527	1,642	1,256	1,401	1,525	1,669	2,017	2,250	2,468
Manufacturing	3,092	4,236	4,783	5,044	5,004	5,099	5,682	6,258	6,837
Durable goods	2,141	2,907	3,309	3,399	3,264	3,251	3,681	4,104	4,562
Lumber and wood	108	99	167	168	106	107	130	132	150
Furniture and fixtures	45	76	82	97	95	104	120	131	139
Stone, clay, and glass products	160	192	130	110	134	137	170	194	217
Primary metals	398	315	459	550	427	529	587	488	526
Fabricated metals	221	251	307	295	332	348	419	455	496
Industrial machinery	343	821	427	398	429	424	431	707	917
Electronic equipment	NA	NA	352	366	398	273	411	393	513
Motor vehicles	52	61	155	155	192	290	342	474	470
Other transportation equipment	437	588	795	746	676	560	568	535	529
Instruments and related	NA	NA	NA	NA	272	232	215	278	243
Misc. manufacturing services	66	106	210	229	202	245	279	299	363
Nondurable goods	940	1,314	1,474	1,645	1,740	1,847	2,001	2,156	2,282
Food and kindred products	244	356	411	470	503	497	474	574	553
Tobacco products	0	0	0	0	0	0	0	0	0
Textile mill products	1	3	25	25	15	16	18	20	19
Apparel and other textile products	90	87	69	72	93	86	88	72	73
Paper products	24	70	89	89	84	167	221	177	196
Printing and publishing	282	350	347	322	345	342	405	397	400
Chemicals	151	178	215	292	249	251	326	406	475
Petroleum products	131	255	227	280	358	390	360	376	413
Rubber and plastics	31	39	96	96	91	97	113	143	163
Leather products	2	1	1	1	2	2	2	5	5
Transportation, communications and utilities	2,715	3,032	3,116	3,177	3,200	3,522	3,875	4,003	4,174
Transportation	950	1,120	1,365	1,434	1,539	1,667	1,830	1,877	1,955
Railroad transportation	163	220	203	248	271	249	287	323	358
Local and interurban	70	31	23	23	24	24	25	28	30
Trucking and warehousing	625	594	594	644	684	731	779	811	793
Water transportation	10	1	1	1	1	1	1	1	1
Transportation by air	82	198	455	427	458	533	635	606	670
Pipelines, except natural gas	36	29	14	16	17	21	21	20	15
Transportation services	35	59	75	76	85	104	79	89	96
Communications	566	665	677	697	706	793	836	876	921
Electric, gas and sanitary	1,183	1,255	1,077	1,047	955	1,062	1,210	1,250	1,297
Wholesale trade	1,257	1,635	1,808	2,021	2,074	2,238	2,484	2,618	2,954
Retail trade	2,140	3,105	3,178	3,215	3,498	3,795	4,282	4,639	5,017
Finance, insurance, and real estate	4,653	4,778	4,547	4,675	5,018	5,138	5,580	5,923	7,050
Depository institutions	NA	NA	1,062	1,036	1,070	1,010	1,041	1,076	1,815
Nondepository institutions	NA	NA	113	136	165	241	293	270	296
Security brokers	40	67	79	75	72	101	135	137	170
Insurance carriers	299	255	247	252	304	382	378	455	501
Insurance agents	125	132	188	203	205	221	252	271	293
Real estate	3,160	3,164	2,820	2,931	3,148	3,249	3,541	3,775	3,984
Holding and investment	25	34	45	45	54	14	27	26	18
Services	3,985	5,192	6,421	6,661	6,953	7,321	7,755	8,120	8,639
Hotels and lodging	227	255	263	281	294	313	333	333	351
Personal services	181	209	223	216	229	254	281	267	278
Business services	NA	NA	1,173	1,318	1,507	1,637	1,753	1,949	2,174
Auto repair and parking	283	377	345	338	352	368	402	422	456
Misc. repair services	163	143	151	129	115	115	122	126	119
Motion pictures	72	91	91	81	98	136	124	152	178
Amusement and recreation	121	187	218	228	261	243	261	280	302
Health services	1,400	1,526	1,843	1,892	1,953	1,995	2,031	2,077	2,161
Legal services	252	290	316	321	305	316	329	330	338
Educational services	256	311	366	373	349	363	392	385	389
Social services	59	73	107	118	130	149	163	176	199
Membership organization	184	499	638	638	617	634	667	670	671
Other services	NA	NA	660	700	713	774	871	941	1,026
Private households	17	23	30	28	30	32	32	34	32
Government	5,465	5,880	6,021	6,089	6,103	6,287	6,345	6,478	6,713
Federal civilian	2,430	1,989	1,984	1,940	1,927	1,961	1,839	1,809	1,867
Federal military	358	439	439	455	436	414	407	400	389
State and local	2,764	3,457	3,602	3,694	3,740	3,911	4,091	4,257	4,443

NA = Not Available

Source: U.S. Bureau of Economic Analysis

Real Dollar Gross State Product Utah (Millions of Fixed Weight 1992 Dollars): Selected Years

Industry	1980	1985	1990	1991	1992	1993	1994	1995	1996
Total Gross State Product	\$25,691	\$30,485	\$32,857	\$34,111	\$35,193	\$37,227	\$40,196	\$42,503	\$46,136
Private Industries	20,127	24,592	26,831	28,021	29,090	30,941	33,857	36,035	39,432
Agriculture, forestry, and fisheries	251	366	470	462	553	544	534	523	500
Farms	216	299	396	377	455	441	416	387	347
Agricultural services, forestry & fisheries	35	67	74	84	98	103	118	137	153
Mining	633	806	1,284	1,367	1,265	1,536	1,605	1,616	1,569
Metal mining	103	108	249	339	360	568	591	618	641
Coal mining	143	131	221	289	300	325	343	365	414
Oil and Gas	343	550	731	652	542	604	628	599	484
Nonmetallic minerals	44	16	83	87	63	39	44	34	29
Construction	1,496	1,620	1,253	1,401	1,525	1,667	2,015	2,249	2,464
Manufacturing	3,078	4,137	4,783	5,053	5,004	5,087	5,673	6,290	7,037
Durable goods	2,224	2,766	3,295	3,411	3,264	3,247	3,687	4,157	4,780
Lumber and wood	109	98	167	167	106	106	129	132	151
Furniture and fixtures	45	76	81	97	95	103	120	130	139
Stone, clay, and glass products	160	187	130	110	134	137	170	193	215
Primary metals	401	311	456	550	427	527	584	483	522
Fabricated metals	229	248	307	295	332	348	419	452	493
Industrial machinery	456	845	432	400	429	426	441	747	1,054
Electronic equipment	NA	NA	358	367	398	274	423	470	726
Motor vehicles	50	59	153	155	192	291	343	473	461
Other transportation equipment	386	535	769	754	676	560	568	530	509
Instruments and related	NA	NA	233	288	272	231	211	251	154
Misc. manufacturing services	64	105	209	229	202	244	279	296	356
Nondurable goods	854	1,371	1,489	1,642	1,740	1,840	1,986	2,133	2,257
Food and kindred products	236	345	408	467	503	494	462	556	535
Tobacco products	0	0	0	0	0	0	0	0	0
Textile mill products	1	3	25	24	15	16	17	20	19
Apparel and other textile products	90	87	68	72	93	86	88	72	73
Paper products	24	69	89	89	84	166	221	175	196
Printing and publishing	282	353	346	321	345	342	407	397	401
Chemicals	146	174	215	292	249	250	328	394	461
Petroleum products	41	300	241	279	358	386	349	372	407
Rubber and plastics	32	39	96	96	91	97	113	142	160
Leather products	2	1	1	1	2	2	2	5	5
Transportation, communications & utilities	2,739	3,002	3,106	3,175	3,200	3,517	3,846	3,961	4,126
Transportation	1,004	1,121	1,356	1,432	1,539	1,664	1,822	1,868	1,953
Railroad transportation	163	221	202	248	271	249	286	322	355
Local and interurban	77	32	23	23	24	24	25	28	30
Trucking and warehousing	604	582	591	643	684	731	777	808	786
Water transportation	10	1	1	1	1	1	1	1	1
Transportation by air	80	195	449	426	458	533	633	601	669
Pipelines, except natural gas	35	30	14	16	17	21	20	20	15
Transportation services	35	59	75	76	85	104	79	89	96
Communications	521	663	675	697	706	793	835	873	908
Electric, gas and sanitary	1,213	1,218	1,075	1,046	955	1,060	1,189	1,221	1,265
Wholesale trade	1,219	1,648	1,805	2,021	2,074	2,242	2,494	2,653	3,039
Retail trade	2,139	3,103	3,177	3,215	3,498	3,795	4,280	4,641	5,033
Finance, insurance, and real estate	4,574	4,763	4,542	4,672	5,018	5,226	5,654	5,978	7,035
Depository institutions	NA	NA	1,062	1,036	1,070	1,010	1,041	1,076	1,815
Nondepository institutions	NA	NA	113	136	165	241	293	270	296
Security brokers	37	66	79	75	72	101	132	134	168
Insurance carriers	233	214	241	251	304	341	316	373	397
Insurance agents	119	130	187	203	205	220	252	270	292
Real estate	3,141	3,152	2,814	2,927	3,148	3,253	3,548	3,783	3,996
Holding and investment	25	34	45	45	54	59	73	71	71
Services	3,999	5,147	6,412	6,656	6,953	7,327	7,757	8,123	8,630
Hotels and lodging	223	254	262	281	294	313	333	332	350
Personal services	180	206	222	216	229	254	281	266	277
Business services	NA	NA	1,173	1,318	1,507	1,637	1,753	1,949	2,174
Auto repair and parking	285	372	344	337	352	368	402	420	453
Misc. repair services	146	132	147	127	115	115	120	117	92
Motion pictures	73	92	91	81	98	136	124	152	177
Amusement and recreation	122	187	218	228	261	243	261	279	301
Health services	1,358	1,496	1,837	1,890	1,953	1,995	2,030	2,072	2,153
Legal services	244	288	316	321	305	316	329	330	337
Educational services	253	308	366	373	349	363	391	384	387
Social services	59	73	107	118	130	149	163	176	199
Membership organization	184	499	638	638	617	634	667	670	671
Other services	NA	NA	660	700	713	774	871	941	1,026
Private households	17	23	30	28	30	32	32	34	32
Government	5,564	5,892	6,026	6,090	6,103	6,286	6,339	6,468	6,704
Federal civilian	2,430	1,990	1,984	1,940	1,927	1,961	1,839	1,809	1,867
Federal military	361	442	439	455	436	414	407	400	389
State and local	2,773	3,461	3,603	3,695	3,740	3,911	4,092	4,259	4,448

NA = Not Available

Source: U.S. Bureau of Economic Analysis

* Gross Taxable Sales

Overview

In 1998, taxable sales rebounded as expected at a 7% clip.¹ Taxable sales in 1997 rose less than 4%, following four years of 10% to 12% yearly growth rates. Due to lower prices, nominal taxable sales will slow to around 5% in 1999. Taxable sales can be dissected into three major components:

- * Retail Trade at \$15.6 billion, which represents about 54% of taxable sales, increased by less than 5% in 1998, better than the 3.3% rate in 1997.
- * Taxable Business Investment and Utility Sales at \$7.8 billion, represents 27% of taxable sales, and grew just under 10% in 1998.
- * Taxable Services, which grew to \$4.1 billion in 1998 and represent 14% of taxable sales, rebounded over 9% in 1998.

Retail Trade

Retail trade sales rose in double-digits in four out of five years between 1992 and 1996. An end to the economic boom came in 1997 when retail trade sales slowed down to a 3.3% growth rate. Retail trade sales gained momentum in 1998 and are expected to end the year with a 4.6% gain. Although, year-to-date growth through September was 3.5%, recent sales tax receipts suggest that consumers went to their wallets and charge cards during the Christmas season.

Durable Goods. Near 9% gains in new residential construction through October will spur building and garden store sales to make a 5% gain in 1998, recovering from a 2% decline in 1997. Furniture and home furnishing store sales will make a 4% gain in 1998, following flat sales in 1997. Year-to-date furniture store sales were up by almost 2% through September. A 15% gain in computer and software store sales offset a 12% drop in radio, TV and electronic store sales. But the large furniture and home furnishing store sales were up just under 2% during the first nine months of the year.

Motor vehicle sales, at almost \$3 billion in 1998, will be greater than both the building and furniture sectors. Year-to-date new and used car sales were up more than 4%, and due to mild inflation and lower interest rates are expected to approach 5% by the end of the year. Unit sales of cars and trucks are expected to grow less than 3% in 1998, following a slight decline in 1997. Nationwide, the growth of unit sales prices fell from 4.3% in 1997 to 2.6% in 1998, due to beefed up incentives and the falling dollar. Declines in auto and home supply stores, as well as taxable gasoline store sales (gasoline is not subject to sales taxes), are limiting growth in this sector. More than 40% gains by recreation and utility dealers (baby boomers retiring) were toned down by flat sales at boat and motorcycle dealers.

Nondurable goods. Nondurable sales rose 4.6% in 1998 to \$9.9 billion. These sales represent 34% of the \$28.8 billion in total taxable sales. These goods generally last less than three years, and consist mainly of food, clothing and household nondurable goods. Year-to-date sales are rising at a 4% rate, but Christmas quarter

sales are expected to boost year-end sales one additional percentage point. General merchandise store sales grew 7% in 1998. Many of the large superstores built over the past three years appear to be cannibalizing sales from food stores. Food store sales will rise 4% in 1998, almost 2% below their long-run growth rate of 5.8%. Perhaps due to the off year in tourism, eating and drinking place sales will rise 3% or 4% in 1998. Fast food and family restaurant sales were flat in 1998, while sales were a bit better at theme restaurants and private clubs. Pizzerias and other eating places like ice cream and cookie store sales jumped 33% in 1998. Prices for food away from home along the Wasatch Front rose 2%.² Sales at apparel stores and miscellaneous shopping goods stores (sporting goods, cameras and toys) also rose near 4% in 1998. Since clothing prices fell 2%, the real dollar percentage gain is 6%.

Business Investment and Utility Sales. Following a 2.4% gain in 1997, these sales and purchases will rise 9.5% in 1998. Flat mining and modest construction gains were more than offset by 10% increases in the manufacturing, transportation, communication and wholesale durable goods sectors.³ The downturn in residential construction, in addition to a legislative exemption for replacement parts to manufacturers, combined to limit wholesale sales to zero growth in 1997. The same two factors have led to a 3% decline in manufacturing investment purchases that year.

Soft commodity prices discouraged taxable mining investment in 1998 for the metal, coal and nonmetallic mineral groups, but investment in oil and gas extraction surged 50% due to new, cheaper high tech drilling techniques and higher natural gas prices. The 4% rise in construction purchases was entirely due to a 23% gain in heavy construction, in large part due to reconstruction of I-15. General contractor sales were flat and special trade contractor purchases fell in 1998.

Despite the fact that the "normal operating replacement" equipment exemption phased up to 60% beginning July 1, 1997 and to 100% on July 1, 1998, taxable manufacturing purchases still rose 12% in 1998. Strong, double-digit growth occurred in the large fabricated metals, industrial machinery, and electronic equipment groups. Relatively low interest rates, a surge in stock prices, and the resultant increase in capital liquidity combined with increasing international competition to influence investment decisions in 1998. Tighter credit and lower commodity prices will inhibit growth in 1999.

In the transportation, communication and public utility sector, several groups exhibited brisk sales or purchases in 1998. Trucking and warehousing purchases were up 39% and air transportation purchases shot up 32%. The influx of new technology spurred the radiotelephone sector within communications to make a 32% gain. These sales include pagers, mobile phones, satellite dishes, fax machines and a host of other new inventions. Sales in this group will continue to grow rapidly until saturation levels are achieved.

² First Security Bank Cost of Living Index, Wasatch Front, September 1998.

³ While a large portion of these sales are sold by out-of-state vendors to Utah businesses and taxed under the use tax provisions, another significant share is sold to consumers in the form of a final retail sale. Significant consumer sales include truck (only) dealers and electrical goods store sales, which are categorized in the wholesale area.

¹ Gross taxable sales consist of final sales of most tangible personal property in the state. Taxable sales of selected services such as hotel and lodging; leases, rents and repairs to tangible personal property; and admissions to most amusements and recreation activities are also taxable in Utah.

Despite warmer winter temperatures (Salt Lake Heating Degree Days were down 6%), the big electric services sector grew 3% to \$660 million in 1998. This may partially be due to an equalization in the requirements for winter and summer electricity expenses, a result of warm weather and more residential and businesses switching to air conditioning. Natural gas sales will make a 12% gain in 1998 and approach \$400 million in sales. Expansion to new areas and housing stock growth are two reasons for the strong gain here. Final taxable sales by wholesalers will climb 10% in 1998. This will be due to strong, double-digit gains by wholesale furniture, machinery and equipment and professional and commercial equipment dealers. Wholesale chemical and miscellaneous nondurable goods dealers also exhibited strong growth.

Some economists, who specialize in nonresidential business equipment, think the near-term outlook is brighter than consensus forecasts since the depreciable lives of much of the equipment has been rapidly narrowing in the past five years. Computer and data processing equipment has a life of between three to five years. Big microchip makers must replace about two-thirds of their equipment every three years.

Taxable Services

Taxable services, which rose at near break-neck speeds in the economic expansion between 1990 and 1996, paused to less than 4% growth in 1997. A 9.3% gain in 1998 will be very close to forecasts made last year. Another strong 8% increase is likely in 1999. The services sector cuts a wide swath over the tourism, business and consumer sectors.

The tourist industry fell shy of expectations in 1998. Hotel services were flat. After seven consecutive years of 10% or more gains, amusement and recreation sales rose 4%. Restaurants will be lucky to grow 4% in 1998. In contrast to all these weaker sales, auto rentals recorded a 15% gain.

Rebounding from a 1% drop in 1997 to a 20% gain in 1998 were business services. Computer and data processing (hardware leases and software development) services jumped more than 50% in 1998, close to \$300 million. The second largest group, miscellaneous equipment rentals and leasing, will report sales of \$250 million in 1998, a gain of 9% over 1997.

The largest services group is auto rentals, repair and other repair shop services. It will grow at a 10% rate in 1998. Following four consecutive years of double-digit growth, these sales rose 6% in 1997, and will improve 8% in 1998. Mentioned above, auto rentals, closely correlated to tourism, grew 15% in 1998. Auto repair, the largest group, which sometimes runs counter-cyclical to new car sales, recorded a 2% decline. Since buying new products is becoming cheaper than repair, sales in electrical, watch, clock, jewelry, furniture and reupholstery repairs shops also fell in 1998.

Following seven years of rapid double-digit growth, amusement and recreations sales appear headed for a 4% gain in 1998. Another successful professional basketball season and strong movie theater admissions were offset somewhat by soft sales at ski resorts and bowling centers. Almost half of the sales in this grouping were recorded in the miscellaneous group, which contains amusement park sales. This group recorded sales near 5%. Amusement and recreation sales should improve 6% in 1999.

Another Service sector, which has experienced strong growth in the early 1990s, is finance, insurance and real estate. For the most part, these taxable sales comprise automobile leasing (banking), rentals and leasing of large household durable items such as televisions and furniture (credit agencies), and leases of condominium (real estate). Taxable sales and leases in this sector have risen five-fold from \$79 million in 1990 to \$406 million in 1998. A good portion of this phenomenal increase is due to the continuing trend to lease rather than purchase motor vehicles. Nationally, automobile leasing has risen from 7.5% in 1990 to more than 32% of all vehicle sales in 1997. After a 20% rebound in 1998, this sector should continue to grow at its eight-year annual average rate of near 23% in 1999.

Outlook

The Utah Consumer in 1999. Since almost 70% of taxable sales are paid initially by the Utah consumer, their economic health must be considered before making a forecast of taxable sales. The most important economic "driver" of taxable sales and consumer spending in Utah is nonfarm wages and salaries. In 1998, wage growth rose 7.3%, almost 2% less than in 1997. This reduction was partially due to the slip in nonfarm employment growth from 4.2% in 1997 to 3% in 1998. Employment growth will slip from 3% in 1998 to 2.5% in 1999. While 2.5% growth will more than double the national job growth of 1.1%, it is important to note that it is more than 3% below the growth of only a few years ago due to a continued tight labor market. Average wages are expected to grow over 4% per year from 1998 through 1999.

Falling inflation appears to be having a significant effect on taxable sales growth. If prices fall from 4% to a 1% to 2% level, all other things being constant, current dollar taxable sales will fall commensurately. Only if the consumer spends their budget surplus on other items will taxable sales stay even or improve. The price effect will play a roll in the inability for taxable sales growth to keep up with wage growth of 6.8% in 1999.

Another consideration in judging the economic health of the Utah consumer is consumer confidence. Record highs in 1997 were surpassed in the second quarter of 1998. But the September 1998 dip in the stock market took a toll on confidence, which dropped from 109.1 in July to 101.4 in October (a reading of 100 or more indicates fairly strong confidence). Lower interest rates, very modest inflation, and continued low unemployment rates should keep the Utah consumer sentiment index in the 95 to 105 point range in 1999. In addition, lower interest rates have spawned a resurgence in refinancing that will increase disposable income into the consumers' pockets.

Finally, demographic trends also play an important role in Utah consumer spending behavior over the near term. Trends in population cohorts in this report document the coming of age of the 1976-79 baby boom. Between 1990 and the year 2000 the 18 to 29 year old cohort will increase from 337,682 to 460,761, a gain of 36%. Even more spectacular is the gain in the 20 to 24 year old cohort, which will increase from 138,000 in 1990 to 208,000 in 2000, an increase of 50%. The "echo baby boom" may not have an impact on overall spending, but will impact how that dollar gets spent. As soon as these young people get jobs they will start looking for automobiles, electronics and clothing. Once they break from their parents, they will start demanding apartment and condominiums. Five to seven years from now they will place

demands on new single family home construction.

Investment in Plant and Equipment. The outlook for plant and equipment investment is less bullish than it was last year. Following an 11% gain in 1998, U.S. business fixed investment will grow 2% in 1999. The National Association of Business Economists, a bit more optimistic, foresee a 6% gain in 1999. Half of the factors cited last year predicting strong taxable business investment for 1998 dropped off the table recently when international economic conditions worsened. Nevertheless, five factors remain which support the view for respectable 8% growth for Utah business investment in 1999:

- * A shortening of the depreciable lives of capital equipment (as computers become a larger share of investment) in the past five years forces companies to reinvest more frequently,
- * The upgrading of communications equipment, from coaxial cables to satellite dishes,
- * Continued globalization with its concomitant competitive pressures to reduce costs,
- * Relatively low wages in Utah tends to stimulate investment here rather than on the West and East Coasts.
- * Declining interest rates in 1998 lowers the cost of capital.

Next year there will be more negative factors at play. Corporate profits are forecast to drop 4% in 1999. Easy financing through stock market offerings and corporate paper have been negatively affected by increasing spreads for higher risk paper and a desire for liquidity. Lower equipment demand from Asia (and perhaps from Latin America in 1999) will also limit exports. Finally, the expansion of the manufacturing equipment exemption to 100% on July 1, 1998 to exempt all normal operating replacements with at least a 3-year-life, will gradually be taken by more and more taxpayers (this exemption will phase back to 80% on July 1, 1999). This will not hurt Utah business investment itself, but will cut into taxable sales.

Tourism. After several years of brisk growth, tourism in Utah slowed down considerably in 1997 and 1998. Coincident economic indicators of Utah tourism were anemic. National and state park visitations fell 4% in 1999. Salt Lake International Airport passenger arrivals and departures also fell 4% in 1998. The 1997-98 ski season saw skier visits rise 3%. Hotel and motel occupancy rate dropped from 74% levels in 1994 through 1996 to 63% in 1998. Room night demand increased only 1% in 1998. The effects of this softening left its mark on taxable sales. Restaurant sales grew 4% in 1998, compared to average increases of 9% from 1991 to 1996. Following 12% gains in 1995 and 1996, and a 6% gain in 1997, hotel sales will be lucky to break even in 1998. After seven years of double-digit growth amusement and recreation sales settled for a 4% gain. The outlook for 1999 should be a bit brighter. Hotel sales should grow 4%. Eating and drinking place sales should approach 6% growth in 1998.

Construction. The impacts of the 1990s Utah construction boom have been well documented in this report. Notwithstanding, the effects of primarily residential construction and secondarily of nonresidential construction on taxable sales are difficult to overstate. Purchases by contractors, whether from vendors in or out of the state, are taxable. Secondary purchases by consumers, once the house or business site is completed, add to the impact. The rebound in residential construction and leveling of residential construction growth can be directly observed in the taxable sales of

the following economic sectors:

- * Construction– up 4% this year,
- * Manufacturing (stone, clay and glass products)– up 5% in 1998,
- * Wholesale Durable Goods– up 11% in 1998,
- * Building and Garden Stores – up nearly 5% in 1998, after more than doubling between 1991 and 1996,
- * Furniture and Home Furnishing Stores– up 4% in 1998, after rising 137% between 1991 and 1996,
- * Business Services (equipment rentals) – up 9%, after rising 55% between 1991 and 1996.

In the past few months, residential construction permit valuations have slowed, but are still expected to rise 11% in 1998. Lower interest rates over the next six months will continue to improve the outlook here. Declining nonresidential construction building from the \$1.37 billion level in 1997 to \$750 million in 1999 will tend to dampen taxable sales in 1999.

County Taxable Sales

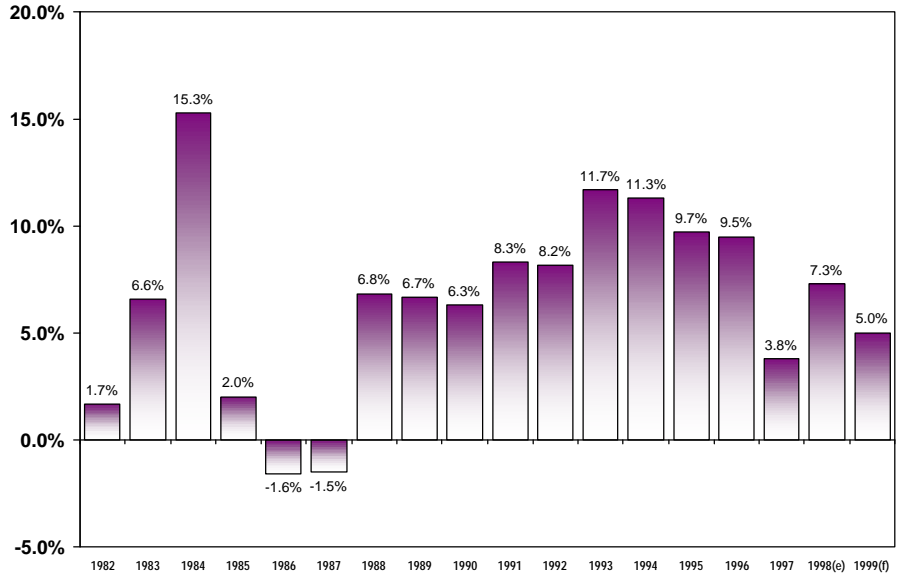
Taxable sales growth improved in 1998 for most of Utah's counties. Salt Lake County, whose growth rate sets the pace for much of Utah, will record sales growth of more than 10% in 1998. About 2.5% of this growth is attributable, however, to instructions from the Tax Commission to out-of-state vendors to allocate use taxes by county. This boosted most county taxable sales by 2.5% or more, depending on how much business is conducted with out-of-state vendors. Keeping this bit of inflation in mind, other counties along the Wasatch Front also did well. For the first time, Davis County with \$2.35 billion in taxable sales surpassed its northern neighbor, Weber County (\$2.29 billion) in total taxable sales dollars and growth during 1998. It recorded a 13% gain, compared to Weber County's 6% increase. The second largest county, Utah County, recorded a near 12% growth in 1998. Adjacent to the Wasatch Front several counties also experienced strong growth: Cache County sales were up almost 11%, Box Elder County sales were up almost 9%, Morgan County sales were up almost 24% and both Tooele and Summit County taxable sales rose nearly 10% in 1998. Purchases of mining equipment perhaps spurred growth in four counties: 1) San Juan County sales were up 23%, 2) Sevier County sales were up 28%, 3) Carbon County sales were up 13%, and 4) Uintah County taxable were sales up nearly 18% in 1998.

Slow tourism in 1998 moderated taxable sales in several counties. In the Southwestern corner of the state Washington County sales rose only 5.2%. Its northern neighbor, Iron County, will record sales of nearly 7%. In the Southeast, Grand County sales, home of red-rock mountain biking and other recreational activities, saw its sales rise less than 4% in 1998. Home of Bryce Canyon National Park, Garfield County sales will slow less than 3%.

In 1999, taxable sales along the Wasatch Front are expected to slow to between 5% and 6% in Salt Lake, Davis and Utah counties. Weber County may record only 2.4% growth in 1999. Summit County will see fairly strong 6.5% growth, but Tooele and Morgan county taxable sales may slow down from their rapid trends.

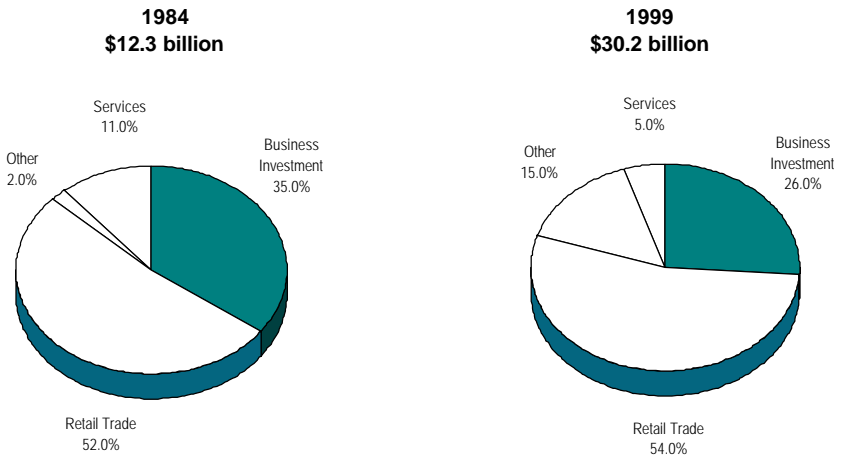
Washington County, with taxable sales at \$1.1 billion, will probably record another 5% gain. Iron and Grand counties may achieve 4% increases in taxable sales. *

Annual Percent Change in Gross Taxable Sales: 1982 to 1999



Source: Utah State Tax Commission

Shares of Utah's Sales Tax Base-Four Major Sectors: 1984 and 1999



Source: Utah State Tax Commission

Utah Gross Taxable Sales by Component: 1981 to 1999

Dollar Amounts (millions)

Calendar Year	Retail Sales	Business Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1981	\$4,901	\$3,821	\$919	\$217	\$9,857
1982	5,200	3,513	1,062	244	10,020
1983	5,638	3,648	1,138	262	10,686
1984	6,401	4,254	1,385	284	12,324
1985	6,708	4,122	1,440	304	12,574
1986	7,010	3,689	1,414	265	12,378
1987	6,951	3,398	1,587	252	12,188
1988	7,346	3,684	1,718	269	13,017
1989	8,048	3,675	1,849	320	13,892
1990	8,407	3,874	1,829	664	14,774
1991	8,918	4,355	2,040	685	15,998
1992	9,860	4,342	2,223	888	17,313
1993	10,994	4,956	2,499	892	19,341
1994	12,097	5,609	2,802	1,019	21,527
1995	13,080	6,231	3,205	1,093	23,609
1996	14,404	6,878	3,594	968	25,844
1997	14,873	7,044	3,724	1,188	26,828
1998(e)	15,564	7,713	4,069	1,439	28,785
1999(f)	16,348	7,992	4,388	1,489	30,217

Percent Change

Calendar Year	Retail Sales	Business Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1982	6.1%	-8.0%	15.6%	12.6%	1.7%
1983	8.4%	3.8%	7.2%	7.4%	6.6%
1984	13.5%	16.6%	21.7%	8.5%	15.3%
1985	4.8%	-3.1%	4.0%	7.0%	2.0%
1986	4.5%	-10.5%	-1.8%	-12.7%	-1.6%
1987	-0.8%	-7.9%	12.3%	-5.0%	-1.5%
1988	5.7%	8.4%	8.2%	6.7%	6.8%
1989	9.6%	-0.2%	7.6%	18.8%	6.7%
1990	4.5%	5.4%	-1.1%	107.8%	6.3%
1991	6.1%	12.4%	11.6%	3.2%	8.3%
1992	10.6%	-0.3%	9.0%	29.6%	8.2%
1993	11.5%	14.1%	12.4%	0.5%	11.7%
1994	10.0%	13.2%	12.1%	14.2%	11.3%
1995	8.1%	11.1%	14.4%	7.2%	9.7%
1996	10.1%	10.4%	12.1%	-11.4%	9.5%
1997	3.3%	2.4%	3.6%	22.7%	3.8%
1998(e)	4.6%	9.5%	9.3%	21.1%	7.3%
1999(f)	5.0%	3.6%	7.8%	3.5%	5.0%

(e) = estimate

(f) = forecast

Source: Utah State Tax Commission

Gross Taxable Retail Sales by Sector: 1990 to 1999

	Dollar Amounts (millions)										Percent Change
	1990	1991	1992	1993	1994	1995	1996	1997	1998 (e)	1999 (f)	Average 1990-98
Retail trade	8,407	8,918	9,860	10,994	12,097	13,080	14,404	14,873	15,564	16,348	
		6.1%	10.6%	11.5%	10.0%	8.1%	10.1%	3.3%	4.6%	5.0%	8.0%
Nondurables	5,757	6,144	6,657	7,140	7,656	8,295	9,047	9,481	9,928	10,395	
		6.7%	8.3%	7.3%	7.2%	8.3%	9.1%	4.8%	4.7%	4.7%	7.0%
General Merchandise	1,362	1,484	1,619	1,717	1,816	2,033	2,256	2,328	2,493	2,668	
		9.0%	9.1%	6.1%	5.8%	12.0%	11.0%	3.2%	7.1%	7.0%	7.9%
Apparel	415	452	506	581	591	614	665	693	719	741	
		8.9%	11.9%	14.8%	1.7%	3.9%	8.3%	4.2%	3.8%	3.1%	7.1%
Food Stores	2,161	2,226	2,374	2,496	2,677	2,784	3,050	3,261	3,397	3,512	
		3.0%	6.6%	5.1%	7.3%	4.0%	9.5%	6.9%	4.2%	3.4%	5.8%
Eating and Drinking	861	935	1,025	1,140	1,234	1,349	1,473	1,551	1,605	1,702	
		8.6%	9.6%	11.2%	8.2%	9.3%	9.2%	5.3%	3.5%	6.0%	8.1%
Miscellaneous Shopping Goods	958	1,047	1,133	1,206	1,338	1,515	1,603	1,648	1,713	1,771	
		9.3%	8.2%	6.4%	10.9%	13.2%	5.8%	2.8%	3.9%	3.4%	7.5%
Durables	2,650	2,774	3,203	3,854	4,441	4,785	5,357	5,392	5,636	5,953	
		4.7%	15.5%	20.3%	15.2%	7.7%	12.0%	0.7%	4.5%	5.6%	9.9%
Motor Vehicles	1,577	1,591	1,783	2,140	2,331	2,431	2,710	2,775	2,902	3,064	
		0.9%	12.1%	20.0%	8.9%	4.3%	11.5%	2.4%	4.6%	5.6%	7.9%
Building & Garden	575	630	764	941	1,160	1,241	1,337	1,310	1,371	1,454	
		9.6%	21.3%	23.2%	23.3%	7.0%	7.7%	-2.0%	4.7%	6.0%	11.5%
Furniture & Home Furnishings	498	553	656	773	950	1,112	1,310	1,307	1,363	1,435	
		11.0%	18.6%	17.8%	22.9%	17.1%	17.8%	-0.2%	4.3%	5.3%	13.4%
Business Investment	3,874	4,355	4,342	4,956	5,609	6,231	6,878	7,044	7,713	7,992	
		12.4%	-0.3%	14.1%	13.2%	11.1%	10.4%	2.4%	9.5%	3.6%	9.0%
Agriculture, Forestry & Fishing	10	10	13	23	19	13	17	26	24	23	
		0.0%	30.4%	72.9%	-17.4%	-31.6%	33.8%	48.3%	-6.2%	-6.2%	11.4%
Mining	150	186	153	142	149	176	174	245	247	229	
		24.0%	-17.7%	-7.2%	4.9%	18.1%	-0.9%	40.7%	0.8%	-7.3%	6.4%
Construction	203	207	228	247	290	343	371	389	405	394	
		2.0%	10.1%	8.3%	17.4%	18.3%	8.1%	4.8%	4.3%	-2.7%	9.0%
Manufacturing	889	936	1,000	1,083	1,155	1,368	1,513	1,464	1,640	1,685	
		5.3%	6.8%	8.3%	6.6%	18.4%	10.6%	-3.2%	12.0%	2.8%	8.0%
Transportation, Comm. & Public Utilities	1,351	1,644	1,407	1,552	1,657	1,776	1,935	2,062	2,251	2,435	
		21.7%	-14.4%	10.3%	6.8%	7.2%	8.9%	6.6%	9.1%	8.2%	6.6%
Wholesale Trade	1,271	1,372	1,541	1,909	2,339	2,555	2,869	2,858	3,146	3,226	
		7.9%	12.3%	23.9%	22.5%	9.2%	12.3%	-0.4%	10.1%	2.6%	12.0%
Services	1,829	2,040	2,223	2,499	2,802	3,206	3,594	3,724	4,069	4,388	
		11.5%	9.0%	12.4%	12.1%	14.4%	12.1%	3.6%	9.3%	7.9%	10.5%
Hotels & Lodging	307	351	373	400	423	473	528	557	557	579	
		14.3%	6.3%	7.2%	5.8%	11.8%	11.6%	5.5%	0.0%	4.0%	7.7%
Amusement & Recreation	194	228	256	303	378	451	495	544	567	601	
		17.5%	12.3%	18.4%	24.8%	19.4%	9.6%	9.9%	4.2%	5.9%	14.3%
Personal	91	99	110	130	146	167	178	177	185	198	
		8.8%	11.1%	18.2%	12.3%	14.4%	6.5%	-0.2%	4.4%	6.9%	9.3%
Health	76	68	77	85	84	91	90	92	85	79	
		-10.5%	13.2%	10.4%	-1.2%	8.0%	-1.2%	2.5%	-7.7%	-6.8%	1.4%
Education, Legal & Social	111	126	137	144	160	175	194	167	181	187	
		13.5%	8.7%	5.1%	11.1%	9.6%	10.6%	-13.8%	8.1%	3.7%	6.3%
Auto rental & repairs	525	572	601	677	763	901	1,012	1,073	1,158	1,223	
		9.0%	5.1%	12.6%	12.7%	18.1%	12.2%	6.1%	7.9%	5.6%	10.4%
Business	446	502	564	625	645	711	780	775	930	1,023	
		12.6%	12.4%	10.8%	3.2%	10.2%	9.7%	-0.6%	20.0%	10.0%	9.6%
Finance Insurance & Real Estate	79	94	105	135	203	236	318	339	406	499	
		19.0%	11.7%	28.6%	50.4%	16.2%	34.9%	6.5%	20.0%	22.7%	22.7%
All Other	664	685	888	892	1,019	1,092	968	1,188	1,439	1,489	
		3.2%	29.6%	0.5%	14.2%	7.2%	-11.4%	22.7%	21.1%	3.5%	10.2%
Grand Total Taxable Sales	14,774	15,998	17,313	19,341	21,527	23,609	25,844	26,828	28,784	30,217	
		8.3%	8.2%	11.7%	11.3%	9.7%	9.5%	3.8%	7.3%	5.0%	8.7%

(e) = estimate

(f) = forecast

Source: Utah State Tax Commission, Economic and Statistical Unit

Gross Taxable Sales by County: 1992 to 1999

County	Dollar Amount (millions)								Percent Change		
	1992	1993	1994	1995	1996	1997	1998(e)	1999(f)	1996-97	1997-98	1998-99
Beaver	\$30,013,775	\$30,298,695	\$34,626,306	\$36,412,579	\$41,936,668	\$45,761,964	\$51,143,094	50,366,733	9.1%	11.8%	-1.5%
Box Elder	243,149,974	248,357,092	270,086,492	255,311,338	313,399,510	341,801,574	370,980,307	381,136,907	9.1%	8.5%	2.7%
Cache	487,903,977	539,899,911	592,265,682	643,424,439	700,827,166	738,962,198	816,721,306	853,793,358	5.4%	10.5%	4.5%
Carbon	209,847,771	215,595,511	243,379,366	246,727,509	270,180,228	302,766,134	342,758,843	364,953,494	12.1%	13.2%	6.5%
Daggett	6,482,115	7,613,965	16,367,912	8,026,924	9,433,030	8,931,045	10,136,521	8,712,853	-5.3%	13.5%	-14.0%
Davis	1,276,871,404	1,471,114,865	1,628,953,240	1,792,686,798	1,948,114,497	2,082,404,482	2,352,769,653	2,496,474,461	6.9%	13.0%	6.1%
Duchesne	89,691,426	89,830,818	91,128,287	92,152,625	103,539,767	138,833,857	156,221,212	169,536,935	34.1%	12.5%	8.5%
Emery	56,229,040	52,994,187	68,117,764	59,567,320	63,933,988	85,273,673	100,550,296	109,674,843	33.4%	17.9%	9.1%
Garfield	40,308,276	45,108,556	46,588,854	53,989,631	59,463,916	64,208,586	65,921,794	72,274,379	8.0%	2.7%	9.6%
Grand	95,361,611	104,986,304	98,898,658	123,463,929	125,597,997	136,682,724	141,506,166	147,735,037	8.8%	3.5%	4.4%
Iron	212,829,215	241,813,092	269,104,272	296,098,117	328,599,441	334,517,242	357,379,213	372,542,650	1.8%	6.8%	4.2%
Juab	36,717,125	38,724,493	41,049,378	44,498,957	52,093,322	58,330,085	59,557,381	66,755,712	12.0%	2.1%	12.1%
Kane	58,111,416	61,479,124	68,713,093	79,603,840	85,348,929	91,571,511	91,915,152	95,218,752	7.3%	0.4%	3.6%
Millard	72,379,351	73,032,681	80,606,243	84,805,492	86,426,974	102,956,430	102,877,207	99,777,987	19.1%	-0.1%	-3.0%
Morgan	23,626,869	25,957,057	28,204,835	32,975,103	36,673,879	34,597,815	42,732,000	38,237,327	-5.7%	23.5%	-10.5%
Piute	2,868,595	3,086,021	4,153,237	5,737,337	5,549,494	4,647,900	5,033,936	5,126,312	-16.2%	8.3%	1.8%
Rich	8,544,492	10,923,445	11,515,077	10,252,664	10,848,221	12,425,163	13,096,139	13,207,641	14.5%	5.4%	0.9%
Salt Lake	8,460,915,867	9,516,302,745	10,526,443,225	11,456,330,532	12,495,049,840	13,279,889,848	14,682,405,894	15,469,847,052	6.3%	10.6%	5.4%
San Juan	51,385,811	64,729,156	65,840,801	73,747,605	83,951,301	79,420,183	97,541,316	94,328,294	-5.4%	22.8%	-3.3%
Sanpete	66,950,060	75,576,973	84,773,473	93,422,662	101,273,513	109,374,363	115,625,412	121,479,859	8.0%	5.7%	5.1%
Sevier	122,656,942	140,438,641	155,308,506	167,792,163	171,174,291	179,499,588	230,294,396	243,105,987	4.9%	28.3%	5.6%
Summit	327,820,116	376,790,969	424,263,835	481,055,880	532,065,605	585,960,819	642,231,682	683,680,244	10.1%	9.6%	6.5%
Tooele	164,825,252	162,867,836	189,412,717	204,822,816	229,458,354	247,597,886	271,445,763	280,674,235	7.9%	9.6%	3.4%
Uintah	228,469,094	217,434,884	225,274,014	238,265,849	249,885,277	300,310,299	356,951,158	372,502,130	20.2%	18.9%	4.4%
Utah	1,934,824,901	2,258,349,412	2,485,729,203	2,729,006,721	3,018,664,563	3,263,562,889	3,639,287,685	3,850,481,040	8.1%	11.5%	5.8%
Wasatch	62,516,307	70,176,331	77,853,975	91,141,976	104,349,093	118,482,941	131,907,646	142,824,174	13.5%	11.3%	8.3%
Washington	528,828,340	650,021,451	790,641,230	876,072,647	954,639,002	994,050,920	1,045,826,816	1,102,301,393	4.1%	5.2%	5.4%
Wayne	10,684,739	13,069,519	14,979,670	17,293,540	17,770,582	18,566,025	20,655,755	23,388,120	4.5%	11.3%	13.2%
Weber	1,427,573,350	1,556,831,699	1,716,143,480	1,871,898,257	2,039,495,130	2,151,273,281	2,285,644,468	2,339,814,086	5.5%	6.2%	2.4%
Subtotal	16,338,387,211	18,363,405,433	20,350,422,825	22,166,585,250	24,239,743,578	25,912,661,425	28,601,118,209	30,069,951,995	6.9%	10.4%	5.1%
Out-of-State Use Tax	974,222,785	977,667,517	1,176,245,745	1,442,191,794	1,604,193,876	916,001,490	183,200,298	146,560,238	-42.9%	-80.0%	-20.0%
Grand Total	17,312,609,996	19,341,072,950	21,526,668,570	23,608,777,044	25,843,937,454	26,828,662,915	28,784,318,507	30,216,512,234	3.8%	7.3%	5.0%

(e) = estimate

(f) = forecast

Source: Utah State Tax Commission

* Tax Collections

Overview

Tax collections experienced a net reduction of \$181.1 million (on an annualized basis) due to statutory changes that occurred over the past five years; and, the cumulative reduction in taxes during this period was \$949.9 million. Sales taxes and other unrestricted revenues have declined as a percent of total revenues, while income taxes (and the uniform school fund) have increased. Fiscal year 1998 was the first year in which income taxes (the uniform school fund) became larger than sales taxes (the general fund). In years past, the sales tax made up the largest portion of Utah's unrestricted revenues.

Revenue growth will slow in 1999. Reasons for the lower growth include: no tax rate increases, lower growth in capital gains and corporate profits, lower commodity prices and/or production, lower growth in fuel consumption, an increase in the sales tax manufacturing exemption, lower interest rates (interest income), higher cigarette prices, curtailment of inheritance and insurance rebate windfalls; and, increased sales over the Internet.

Outlook

Employment growth, construction, net migration, and overall economic activity should moderate in fiscal year 1999. Still, the outlook for fiscal year 1999 total unrestricted tax collections is for much lower growth of only 3.9% compared to 8.1% in fiscal 1998. This 3.9% growth rate is also lower than the average annual rate of 8.1% for fiscal years 1980 through 1998.

Reasons for the lower growth rate include: no tax rate increases, lower growth in capital gains and corporate profits, lower commodity prices and/or production, lower growth in fuel consumption, an increase in the sales tax manufacturing exemption, lower interest rates (interest income), higher cigarette prices, curtailment of inheritance and insurance rebate windfalls; and, increased sales over the Internet in fiscal 1999. In 1998, the inheritance tax revenue included \$15 million that will not recur. Also, in 1998 the state received a one-time rebate of health insurance premiums.

Turmoil in Asia and in global stock markets should lead to lower growth in capital gains and corporate profits in fiscal 1999. The global economic crisis has already contributed to lower commodity prices and/or production. This has decreased tax collections from steel, copper, and oil production. Motor fuels taxes are already significantly down (despite lower fuel prices) due to lower net migration, and less tourism traffic and better trip planning due to congestion brought on by the reconstruction of Interstate I-15. And, growth in cigarette tax revenues will decrease due to lower consumption brought on by higher cigarette prices. Cigarette prices were increased 45 cents a package in November 1998 in order to pay for the tobacco settlement between the states and tobacco companies. Cigarette tax revenues should drop around \$4 million per year due to the price hike.

Finally, sales tax revenues will decrease \$3.5 million due to Internet sales, and another \$11.2 million due to an increase in the manufacturing exemption from 60% to 100%, in fiscal 1999. Internet sales have been estimated at \$4 billion to \$8 billion nationwide in 1998 (or between \$15 and \$30 per capita). In Utah

that is \$26 million to \$63 million in sales. Car sales taxes will be enforced (collected) upon registration. Thus, the tax loss on Internet sales (excluding car sales) in fiscal 1998 is between \$1.2 million and \$2.4 million. Estimates of growth in Internet sales vary widely between \$37.5 billion and \$300 billion by 2002 or an increase of 75% to 147.5% per year. This places Utah's 1999 sales tax losses due to increased Internet sales between \$2.1 million and \$5.9 million. Losses should grow much larger in future years. These losses all assume that consumers will not comply with paying the Use Tax.

Recent Tax Changes

Tax collections experienced a net reduction of \$181.1 million (on an annualized basis) due to statutory changes that occurred over the past five years. The cumulative reduction in tax collections from fiscal year 1995 through fiscal year 2000 is \$949.9 million. The 1994 general legislative session enacted a net reduction of \$18.8 million in taxes. Additional cuts during the 1995 general legislative session reduced taxes another \$141.9 million. Taxes were reduced another \$109.6 million during the 1996 general and special legislative sessions. Taxes, fines, and fees, were raised a net \$89.7 million during the 1997 legislative session primarily to fund reconstruction of Interstate 15 and other roadways. During the 1998 legislative session, taxes were reduced \$0.5 million.

1994 Legislative Session Tax Changes. Tax reductions of \$18.8 million (in 1994 dollars) were enacted in the 1994 legislative session. The sales tax rate was reduced by 1/8th cent (\$23.6 million in 1994 dollars), and the property tax residential exemption was raised from 29.5% to 32% while the minimum school program property tax rate was lowered from .004275 to .00422 (\$8.5 million). Several sales tax exemptions were eliminated (which partially offset the tax cuts).

1995 Legislative Session Tax Changes. Another round of tax cuts during the 1995 general legislative session reduced taxes \$141.9 million (in 1995 dollars). The largest tax reduction was a \$150.1 million property tax cut. Property taxes were reduced \$141.4 million by raising the residential exemption from 32% to 45% and by lowering the minimum school program rate from .00422 to .00264. Property taxes were lowered another \$8.7 million due to newly imposed certified levy limits on state mandated property taxes. Gross receipts taxes increased \$9.4 million to offset the property tax decrease accruing to electric utilities.

1996 General and Special Legislative Session Tax Changes. The basic state minimum school program property tax rate was reduced for the third time (in as many years) from .00264 to .002138 to accommodate another property tax cut (\$30 million in 1996 dollars). Individual income taxes were decreased (\$45 million); and the 1995 general session gross receipts tax increase on electric utilities was partially reversed through a gross receipts tax reduction (\$4.8 million).

The November 1996 special legislative session modified a manufacturing sales tax exemption bill for normal operating replacements that was passed out of the 1995 general session. This exemption will be phased in over three years. The sales tax exemption for normal operating replacements is phased in as

follows (1) beginning July 1, 1996, 30% of the exemption is allowed; (2) beginning July 1, 1997, 60% of the exemption is allowed; and (3) beginning July 1, 1998 (fiscal year 1999), 100% of the exemption is allowed. The revenue loss from this exemption is estimated at \$28.6 million for fiscal year 1999 (when it will be fully implemented).

The 1996 general session also reduced general fund sales tax collections by \$36 million (1/8th cent) beginning in fiscal year 1998 (in 1998 dollars). This was done in order to earmark (redistribute) these taxes for water and local transportation projects. The earmarking was not a tax reduction since the 1/8th cent will be collected and deposited into a restricted account; however, the taxes are not available for general state appropriations.

1997 Legislative Session Tax Changes. Taxes, fines, and fees, were raised a net \$89.7 million during the 1997 legislative session primarily to fund reconstruction of Interstate 15 and other roadways. The diesel and gasoline tax was increased 5 cents a gallon and the 0.5 cent per gallon earmarked for underground storage tanks was redirected to fund highways (\$63.3 million in 1997 dollars); vehicle registration fees were increased (\$16.5 million); a 2.5% tax on rental cars was implemented to pay for transportation corridors (\$4.3 million); the diesel fuels tax collection point was changed from dealers to refineries (\$10 million); and, cigarette taxes were increased 25 cents per pack (\$21.8 million); Finally, sales taxes were reduced by 1/8th cent which partially offsets the tax and fee increases (\$34.3 million in 1997 dollars).

These tax changes led to a shift in the rankings of the major taxes that affect revenues. In 1997, sales tax accounted for 39.4% of unrestricted revenues followed by income 38.8%, corporate 5.6%, motor fuels 5.3%, special fuels 1.5%, and cigarette with 1.0%. In 1998, income taxes ranked 1st with 40.0% of total revenues followed by sales 36.4%, motor fuels 6.2%, corporate 5.0%, special fuels 2.2%, and cigarette taxes 1.3%.

1998 Legislative Session Tax Changes. The 1998 legislative session produced a tax reduction of \$0.5 million. A sales tax exemption was given to university athletic events which are subject to Title IX (a NCAA regulation). The repeal of the tax credit given to oil and gas workover credits and recompletions of oil wells was extended causing a \$3.6 million per year reduction in taxes from fiscal year 2001 to 2004. The legislature passed Senate Bill 185, Sales and Use Tax Exemption Amendments and Study in 1998. The bill reduces the manufacturing exemption to 80% beginning FY 2000 which will increase the General Fund by \$5.6 million. Reducing the exemption will be impacted by a study conducted this fall. If the exemption demonstrates an economic benefit to the state, the exemption may be changed back to 100%. In part, the legislature passed Senate Bill 185 to pay for Senate Bills 47 and 220. Both bills become effective in FY 2000. Senate Bill 47, Research Tax Credit, gives a 6.0% tax credit for qualified research activities conducted in the state. This will reduce revenue to the Uniform School Fund by \$3.2 million. Senate Bill 220, Research and Development Credit for Machinery and Equipment, also gives a 6.0% individual or corporate income tax credit on the purchase price of machinery and equipment used primarily for research. The reduction to the Uniform School Fund in FY 2000 is expected to be \$2.0 million. The implementation of the bill is phased in over three years. The full impact is \$6.0 million.

Bills from the 1998 Legislative Session. Some of the major or more widely followed tax bills that came out of the 1998 legislative session included:

Senate Bills:

S.B. 6 Enforcement of Penalties of Uninsured Motor Vehicle Violations– Steele, D.– Establishes a database to track uninsured vehicles, imposes a \$50 reinstatement fee, and a fine not less than \$600 for violations. The legislation also requires the internal audit unit of the Tax Commission to audit the database annually and increases the court fines for driving without insurance. Estimated gain of revenue is \$169,000.

S.B. 34 Sales Tax– Exemption for Higher Education Athletic Events– Hillyard, L.– Amounts paid for admission to an athletic event at an institution of higher education that is subject to the provisions of Title IX are exempt from sales and use tax. In addition, the legislation requires that a state institution of higher education shall annually use for Title IX purposes revenue in an amount equal to the sales and use tax revenue collected by that institution on amounts paid for admission to athletic events between July 1, 1997 and June 30, 1998. Estimated loss of revenues is \$402,000.

S.B. 39 Penalties for Sale of Tobacco to Youth– Montgomery, R. F.– Requires the cigarette and tobacco products license to be renewed every three years; provides for suspension and revocation of cigarette and tobacco products licenses for sales of cigarettes or tobacco products to underage youth; and provides fees for new licenses, license renewals, and license reinstatements for licenses suspended, revoked, or allowed to expire. Estimated gain of revenue is \$135,000.

S.B. 47 Research Tax Credit– Nielson, H.– Gives a 6% tax credit for qualified research activities conducted in the state. Estimated loss of revenue is \$3,200,000.

S.B. 50 Property Taxes-Uniform Fees and Certified Tax Rate– Mantes, G.– Establishes a flat, fixed per car fee system based on the age and weight of the vehicle. Luxury cars would receive tax decreases under this bill. For the 1999 calendar year, the certified revenue levy shall be adjusted by the amount necessary to offset any decrease in revenues from uniform fees on motor vehicles. Estimated gain of revenue is \$2,760,000.

S.B. 151 Property Tax Exemption for Disabled Veterans, Peterson, C.– Increases the disabled veteran's property tax exemption from \$30,000 to \$82,500 of taxable value of a residence owned by a person disabled in the line of duty during any war, international conflict, or military training. If the veteran is 100% disabled, the full \$82,500 exemption is allowed. If the percentage of disability is less than 100%, the exemption is that percentage of \$82,500 except no exemption is allowed for any disability below 10%. Revenue impact is neutral, but the bill results in a shift of \$1,500,000 in property taxes from properties owned by Veterans onto other properties.

S.B. 165 Property Taxes– Abatement for Indigent Persons– Hillyard, L.– Would shift property tax burdens approximately \$900,000 statewide among taxable properties resulting from the expansion of the indigent credit for low-income homeowners. Estimated loss of revenue is \$900,000.

S.B. 185 Sales and Use Tax Exemption Amendments and Study– Peterson, C. A.– Reduces the sales tax exemption for machinery and equipment from 100% in FY1999 to 80% in FY2000. After July 1, 1999, vendors shall collect sales tax on 20% of the sales price of normal operating replacements. Estimated gain of revenue is \$5,600,000.

S.B. 220 Research and Development Credit for Machinery and Equipment– Peterson, C.– Gives a 6% individual or corporate income tax credit on the purchase price of machinery, equipment or both. FY2000 is for only one-third of the full impact of \$6 million. Estimated loss of revenue is \$2,000,000.

S.B. 221 Emergency Services Telephone Charge– Steele, D.– This bill authorizes an increase of \$0.02 per month for each telephone access line. This could generate up to \$323,000 per year additional revenue for 911 systems throughout the State. The bill also levies a surcharge of \$0.08 per month per line to pay costs associated with the Poison Control Center at the University of Utah. Estimated gain of revenue is \$1,614,000.

House Bills:

H.B. 58 Oil and Gas Severance Tax Amendments– Evans, B.– Extends the repeal date for a tax credit for workover credits and recompletions of oil wells. Has a delayed impact. General Fund reductions for a full year are \$3.6 million for each year from FY2001 to FY2004. Initial estimated loss of revenue is \$900,000 (which is for one quarter only).

H.B. 150 County Option Sales Tax For Long Term Care Centers– Seitz, J.– Allows all but the largest of counties to impose a 1% general sales tax to be used to fund long term nursing care facilities. Expands the scope, and use, of the existing optional 1% general sales tax for funding rural hospitals. No fiscal impact.

H.B. 201 Property Tax– Circuit Breaker Amendments– Harper, W.– Allows individuals owing delinquent property taxes to qualify for a homeowner's credit. The credit may not exceed the claimant's property tax liability for the year in which credit is requested. No fiscal impact.

H.B. 287 Tax Increment Financing for Affordable Housing– Davis, G.– Increases the period for which the tax increment may be paid if an agency allocates 20% of the project area budget for housing to: (1) 100% of the annual tax increment for 15 years (up from 12 years); or (2) 75% of the annual tax increment for 24 years (up from 20 years). In addition, the bill provides that an agency's base year taxable value may decrease to a negative value under certain circumstances. No fiscal impact.

H.B. 360 Amendments to Tourism, Recreation, Cultural, and Convention Tax, Fox-Finlinson, C.– Authorizes an increase in the short-term car rental tax as of January 1, 1999 from 3% up to as much as 7%. Estimated gain of revenue is \$6,700,000 for local governments.

H.B. 370 Property Tax– Intangibles Exemption– Valentine, J.– Defines intangible property to exclude "goodwill" and "other intangibles," and includes only property capable of private ownership separate from tangible property (specifically, money, credits, bonds, stocks, representative property, franchises, trade names, copyrights, and patents). This would lessen the shift of

taxes onto noncentrally assessed properties from centrally assessed properties. Shift estimated at \$25 million. No fiscal impact (revenue neutral).

H.B. 371 Taxing Authority Amendments– Valentine, J.– Would make merchandise, hotel, car rental, and ticket sales by the Salt Lake Organizing Committee (a nonprofit 501(c)(3) entity) taxable. Prevents a loss in sales tax revenue of \$7,500,000.

H.B. 425 Property Valuations for the Poor– Short, R.– Allows an extra 20% homeowners exemption for people who qualify for the circuit breaker. Shifts \$3.9 million in property taxes onto other properties. No fiscal impact.

Historic Revenue Collections

Historic revenue collections are presented in figures and tables included with this chapter in adjusted and non-adjusted terms. Collections were adjusted for tax rate and base changes, windfalls and payment accelerations, transfers between revenue categories, and the occurrence of large construction projects in order to ascertain the true underlying trends in revenue collections when compared to general economic activity. Figures accompanying this chapter show the historic trend in sales taxes, income taxes and all other unrestricted taxes and fees as a percent of total unrestricted revenues. The "Other" category includes unrestricted fines and fees, investment income, liquor profits, mineral lease, school land income (ended in fiscal 1988), federal revenue sharing (ended in fiscal 1982); and, corporate, gross receipts, severance, beer, cigarette, insurance, inheritance and motor fuels taxes.

Sales taxes and other unrestricted revenues have declined as a percent of total revenues, while income taxes (and the uniform school fund) have increased. These revenue trends reflect stronger growth in sales tax-exempt services industries than in taxable goods industries; tax credits and exemptions; income tax bracket creep, capital gains, and expansion of the taxable base; increased fuel efficiency of vehicles; and, the transfer of unrestricted general fund and transportation fund monies to restricted accounts.

Fiscal year 1998 was the first in which income taxes (the uniform school fund) became larger than sales taxes (the general fund). Actual sales tax collections as a percent of total revenues have declined over time because as incomes rise consumers tend to spend a larger percentage of their disposable income on services rather than goods. Professional and business services are not sales taxable. Also the prices of most services rise faster than the prices of most goods.

Sales Taxes. Variations in tax collections reflect: 1) changes in economic activity, and 2) tax rate and tax base changes. Sales tax rate changes occurred July 1983 (from 4.0% to 4.125%), October 1983 (to 4.625%), July 1986 (to 4.59375%), April 1987 (to 5.09375%), January 1990 (to 5.0%), July 1994 (to 4.875%), and July 1997 (to 4.75%). A \$55.3 million acceleration of payments windfall also occurred in fiscal year 1984.

The current sales tax rate of 4.75% includes 0.125% restricted for water and roads, and .015625% restricted for the Olympics. Thus, the unrestricted sales tax rate is currently only 4.609375%. The tax rate was cut 1/8th% in fiscal year 1998; and, taxes were reduced another 1/8th percent (\$36 million) to earmark monies to local water and local transportation projects.

Changes in economic activity also explain much of the variation in sales tax collections. The mid-1980s were characterized by net out-migration, decreases in housing prices and sales, completion of the IPP construction project, and employment layoffs in mining and manufacturing. The late 1980s and early to mid-1990s was a period of strong employment and construction growth, net in-migration, and housing and car sales. Beginning in 1989 job growth rates in Utah exceeded those in California and the Nation.

Sales tax collections adjusted for inflation and tax rate and tax base changes show strong and steady growth occurred over the 1988 to 1998 period. By comparison, the prior ten years was a period of wide fluctuations in adjusted tax collections. This instability was due to national and state recessions during this time period.

Elasticities are the annual growth rates in sales tax collections divided by the annual growth rates in personal income. An elasticity of 1.0 means that the growth in taxes and income were identical for that year. An elasticity of 0.80 means that for every 10% growth in income there was an 8% growth in tax collections. The ratios of growth rates in sales taxes to growth rates in income vary over time for several reasons. First, changes in the tax rate or tax base change the ratios. Second, construction and business investment in equipment and supplies that are sales taxable will fluctuate over time independent of growth in personal income. Finally, consumers often change their spending habits for a variety of reasons.

Sales tax elasticities that have been adjusted for tax rate and tax base changes are shown in Figure 27. The tax rate and base adjusted, average-annual sales tax elasticity over the 1979 to 1998 period was 0.89. In other words, sales taxes grew 8.9% for every 10% increase in personal income during this period.

Income Taxes. The cycles and trends in actual income tax collections reflect 1) changes in economic activity, and 2) tax rate and tax base changes. Income tax rate changes occurred effective January 1981, 1988, 1989 and 1996. Federal tax reforms occurred in 1981, 1986, 1990, 1993 and 1997.

The 1986 federal reforms resulted in a windfall for Utah of over \$100 million in fiscal year 1987. In January 1988 the top rate was cut from 7.75% to 7.35%; and, 1/3 of the federal-taxes-paid deduction (which was eliminated in January 1987) was restored in 1988. A \$71 million rebate was also approved in 1988. Effective January 1989 the top rate was reduced to 7.2% and the federal deduction was increased to 50%. Effective January 1996 the top rate was reduced again from 7.2% to 7.0% and the minimum tax rate was reduced from 2.55% to 2.3%. This reduced fiscal year 1997 collections by around \$41 million.

Income tax collections have increased over time as a percent of total revenues due to 1) strong growth in capital gains, 2) bracket

creep (Utah does not index brackets to inflation), 3) expansions of federal taxable income (which Utah uses as its starting point of taxation), and 4) the withholding of taxes independent of spending patterns or other consumer behavior changes.

Annual income tax elasticities adjusted for tax rate and base changes have also been analyzed. The ratios of growth rates in taxes to growth rates in income vary over time for several reasons: 1) changes in the tax rate or tax base; 2) capital gains vary over time independent of the growth in personal income; 3) bracket creep (Utah does not index for inflation); and, 4) changes in federal taxable income (which Utah uses as its starting point of taxation) occur independent of growth in personal income.

The average-annual income tax elasticity over the 1979 to 1998 period was 1.29. In other words, income taxes grew 12.9% for every 10% increase in personal income. The income tax is the only major tax in Utah that has grown faster than personal income over time without tax rate increases.

Tax Collection Rankings

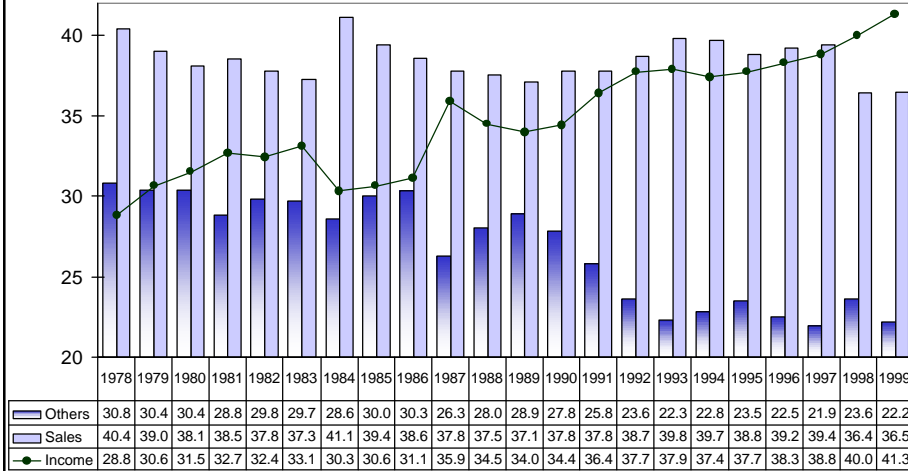
A shift occurred over the past two years in the percentage of total revenues contributed by major tax sources. Several factors contributed to this change in Utah's tax structure. In fiscal year 1998 the sales tax rate was cut by 1/8th percent; and, unrestricted sales taxes were reduced an additional 1/8th percent to earmark sales taxes to local water and local transportation projects. Also in fiscal year 1998 gasoline and diesel taxes were raised by 5 cents a gallon (the state rate is now 24.5 cents a gallon). Finally, the tax on cigarettes was raised by 25 cents a pack to 51.5 cents.

In years past, the sales tax made up the largest portion of Utah's unrestricted revenues. Beginning in 1998, the income tax became the largest portion of state revenues and the sales tax took second place. In 1998 motor fuels became the third largest unrestricted state tax; and, the corporate income tax fell behind to become the fourth largest source of unrestricted state revenues.

Periodic tax increases are necessary to keep motor fuels and cigarette tax collections from declining as a percent of personal income. Cigarette taxes decline over time as a percent of income due to anti-smoking legislation, increased public awareness and health warnings, higher prices, maturation of baby boomers, and restrictions on advertising. Motor fuels tax collections (adjusted for tax rate and tax base changes) also decline over time as a percent of personal income due to more efficient fuel consumption, federal and state fuel economy standards (regulations) and other conservation measures. And, adjusted diesel fuels tax collections decline over time as a percent of personal income due to more efficient fuel consumption and changes in truck hauling regulations and procedures. *

Sales Tax, Income Tax, and All Other Unrestricted Revenues as a Percent of Total State Unrestricted Revenues*

Percent of Total Revenue

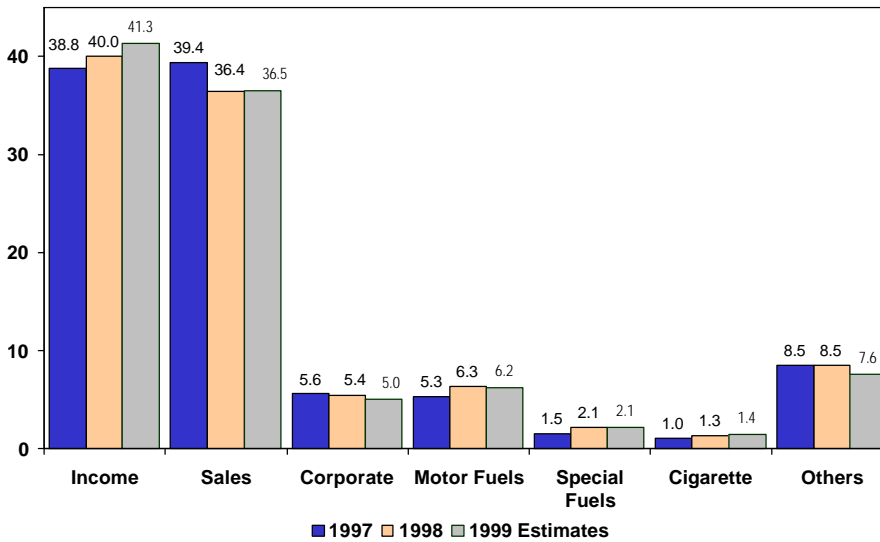


*The "Others" category includes unrestricted fines and fees, investment income, liquor profits, mineral lease, school land income (ended in fiscal 1988), federal revenue sharing (ended in fiscal 1982); and, corporate, gross receipts, severance, beer, cigarette, insurance, inheritance and motor fuels taxes.

Source: Utah State Tax Commission, Governor's Office of Planning and Budget

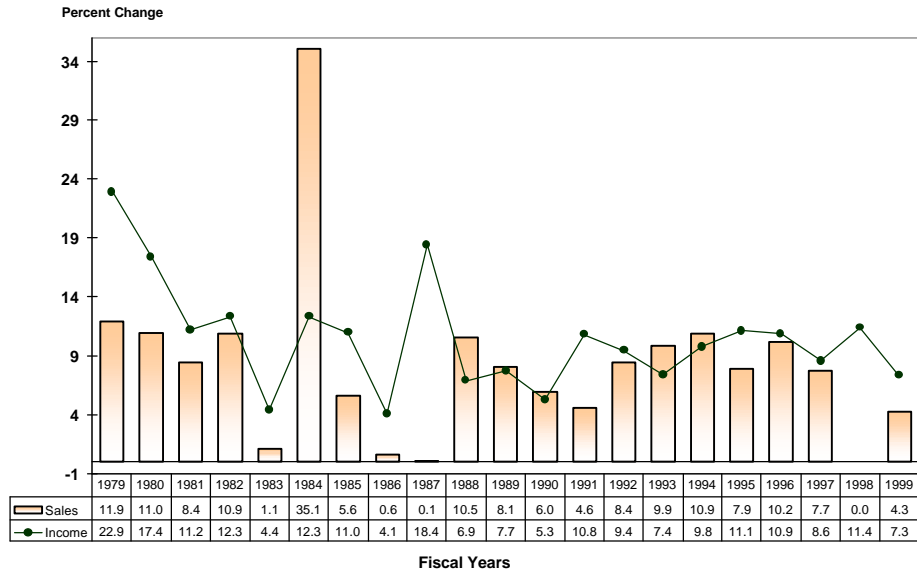
Tax Collections as a Percent of Total Unrestricted Revenues Fiscal Years 1997-1999

Percent of Total



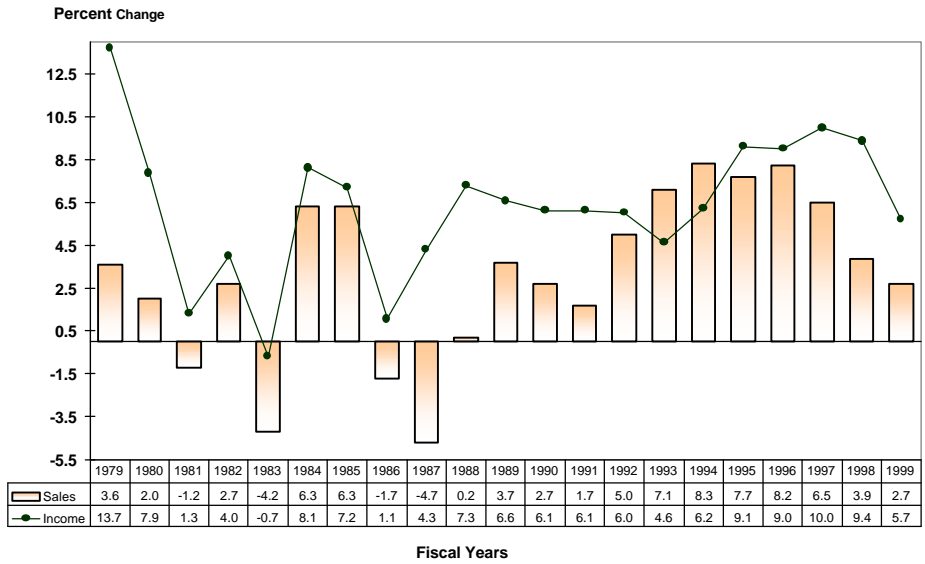
Source: Utah State Tax Commission, Governor's Office of Planning and Budget

Percent Change in Sales and Income Tax Collections



Source: Utah State Tax Commission, Governor's Office of Planning and Budget

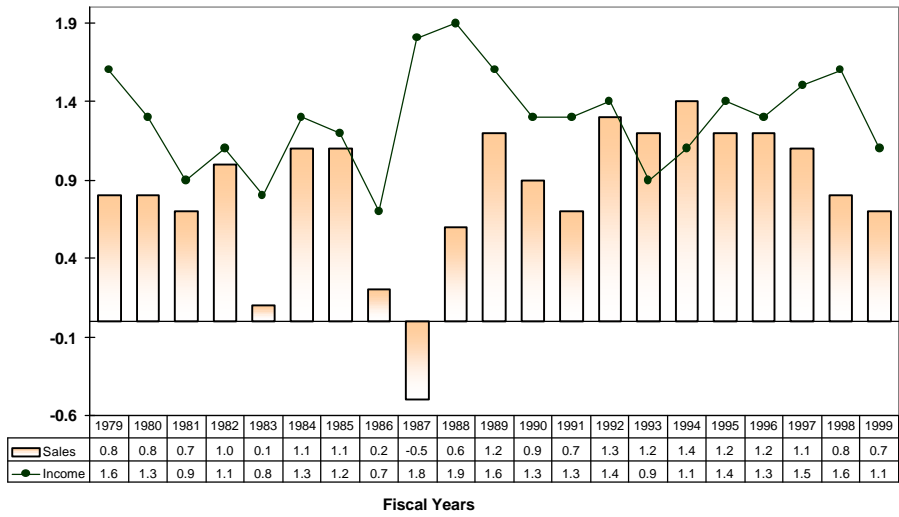
Percent Change in Sales and Income Tax Collections Adjusted for Inflation and Tax Rate and Base Changes



Source: Utah State Tax Commission, Governor's Office of Planning and Budget

Sales and Income Tax Elasticities (Adjusted for Tax Rate And Tax Base Changes)

Growth Rates Ratio



Source: Utah State Tax Commission, Governor's Office of Planning and Budget

State Tax and Fee Changes From the 1994, 1995, 1996, 1997 and 1998 Regular and Special Legislative Sessions (A)(B)

Bill Number and Effective Year	Bill Subject	Tax & Fee Changes	Cumulative to FY2000
FY 1995			
H.B. 145 (1994 Session)	Sales Tax Exemption - Replacement Parts for Steel Mills	(\$516,700)	
H.B. 162 (1994 Session)	Sales Tax - Repeal of Flood Tax Authorization	(23,600,000)	
H.B. 205 (1994 Session)	Tax Credit for Low-Income Housing	(226,600)	
Various Bills (1994 Session)	Sales Tax Exemptions Repealed	10,713,500	
S.B. 090 (1994 Session)	Property Tax Rate & Residence Exemption Changes	(8,500,000)	
S.B. 093 (1994 Session)	Corporate Tax Revisions	50,000	
S.B. 191 (1994 Session)	Treatment of Admission and User Fees	3,290,000	
	Subtotal FY 1995	(\$18,789,800)	(\$112,738,800)
FY 1996			
H.B. 020 (1995 Session)	Tax Incentives to Employ Persons with Disabilities	(\$64,400)	
Various Bills (1995 Session)	Sales Tax Exemptions Authorized	(3,613,000)	
S.B. 254 (1995 Session)	Gross Receipts Taxes	9,400,000	
S.B. 56 and 254 (1995 Session)	Property Taxes (1)	(141,440,833)	
S.B. 56 and 254 (1995 Session)	Income Taxes (1)	4,500,000	
	Subtotal FY 1996	(\$131,218,233)	(\$656,091,165)
FY 1997			
S.B. 56 and 254 (1995 Session)	Property Taxes (Restricted to New Growth, 1995 Session) (1)	(\$8,703,800)	
H.B. 274 (1995 Session)	Additional Sales Tax on Construction Projects (1995 Session)	(2,000,000)	
H.B. 58 (1996 Regular Session)	Driving Under the Influence - Repeat Offenders (2)	258,000	
Various Bills (1996 Session)	Reinstate Sales Tax Exemptions	(1,188,300)	
H.B. 349 (1996 Regular Session)	Gross Receipts Taxes - Modifications (3)	(4,750,000)	
H.B. 404 (1996 Regular Session)	Income Tax - Health Care Insurance Deduction (4)	(4,000,000)	
H.B. 405 (1996 Regular Session)	Minimum School Program Act (Property Taxes)	(30,000,000)	
H.B. 405 (1996 Regular Session)	Income Taxes (1)	1,500,000	
H.B. 1003 (1996 April Session)	College Savings Incentive Program (Tax Deduction, 1996 April Session)	(120,000)	
H.B. 3001 (1996 November Session)	Sales Tax - Manufacturing Exemption Modifications (1996 November Session) (5)	(\$8,700,000)	
S.B. 102 (1996 Regular Session)	Income Tax - Adoption Expenses Deduction	(140,000)	
S.B. 195 (1996 Regular Session)	Income Tax - Credit for Disabled Education Costs	(750,000)	
S.B. 237 (1996 Regular Session)	Income Tax Rate Reductions (6)	(41,000,000)	
S.B. 275 (1996 Regular Session)	Sales Tax - Ski Exemption (7)	(338,000)	
H.B. 27 (1997 Session)	Cigarettes Tax Increase and Regulation (8)	\$462,000	
	Subtotal FY 1997	(\$99,470,100)	(\$397,880,400)
FY 1998			
S.B. 218 (1996 Regular Session)	Reauthorization and Enhancement of Clean-Fuel Incentives (Tax Credits)	(\$10,000)	
S.B. 239 (1996 Regular Session)	Tax Credits for Rural Economic Resettlement Zones (Tax Credits)	(275,000)	
H.B. 249 (1996 Regular Session)	Recycling Market Development Zones (Tax Credits)	(20,000)	
H.B. 1003 (1996 April Session)	Additional College Savings Incentive Program (Tax Deduction, 1996 April Session)	(120,000)	
H.B. 3001 (1996 November Session)	Additional Sales Tax - Manufacturing Exemption Modifications (1996 November Session) (5)	(8,700,000)	
Various Bills (1997 Session)	Sales Tax Exemptions	(172,900)	
S.B. 161 (1997 Session)	Motor Vehicle Compliance With Insurance, Registration, And Sales Tax Requirements	870,000	
S.B. 252 (1997 Session)	Collection of Fuel Tax (9)	10,000,000	
S.B. 253 (1997 Session)	Fuels Taxes, and Repeal of Environmental Surcharge on Petroleum (10)	63,250,000	
S.B. 253 (1997 Session)	Sales Tax Reduction (10)	(34,300,000)	
H.B. 27 (1997 Session)	Cigarettes Tax Increase and Regulation (8)	21,800,000	
H.B. 111 (1997 Session)	Transportation Corridor Funding (11)	4,300,000	
H.B. 124 (1997 Session)	Licensing of Day Care Facilities	15,000	
H.B. 225 (1997 Session)	Assessment on Workers' Compensation (12)	6,100,000	
H.B. 359 (1997 Session)	Endangered Species Mitigation Fund (13)	400,000	
H.B. 414 (1997 Session)	Registration Fee on Vehicles (14)	16,500,000	
	Subtotals FY 1998	\$79,637,100	\$238,911,300
FY 1999			
H.B. 3001 (1996 November Session)	Additional Sales Tax - Manufacturing Exemption Modifications (1996 November Session) (5)	(\$11,200,000)	
Various Bills (1997 Session)	Additional Sales Tax Exemptions (1997 Session)	(142,800)	
S.B. 252 (1997 Session)	Additional Collection of Fuel Tax	300,000	
H.B. 154 (1997 Session)	Property Tax Circuit Breaker	(215,000)	
H.B. 414 (1997 Session)	Additional Registration Fee on Vehicles	495,000	
H.B. 65 (1998 Session)	Sales Tax Exemptions for Passenger Transportation	(25,000)	
S.B. 6 (1998 Session)	Enforcement and Penalties of Uninsured Motor Vehicle Violations	198,000	
S.B. 20 (1998 Session)	Penalties for Speeding in Construction Zones	52,900	
S.B. 34 (1998 Session)	Sales Tax Exemption for Higher Education Athletic Events (15)	(402,000)	
S.B. 39 (1998 Session)	Penalties for Sale of Tobacco to Youth	135,000	
S.B. 211 (1998 Session)	Sales Tax - Prepaid Calling Cards	\$24,000	
	Subtotals FY 1999	(\$10,779,900)	(\$21,559,800)
FY 2000			
H.B. 58 (1998 Session)	Oil and Gas Severance Tax Amendments (16)	(\$900,000)	
S.B. 47 (1998 Session)	Research Tax Credit (17)	(3,200,000)	
S.B. 185 (1998 Session)	Sales and Use Tax Exemption Amendments and Study (18)	5,600,000	
S.B. 220 (1998 Session)	Research and Development Credit for Machinery and Equipment (19)	(2,000,000)	
	Subtotals FY 2000	(\$500,000)	(\$500,000)
Grand Total for Taxes and Fees FY 1995 to FY 2000 (A)(B)		(181,120,933)	(949,858,865)

*See next page for footnotes

A) This table shows the fiscal notes for state tax and fee increases or decreases only. Changes in local taxes are not included. Extensions of existing exemptions are also not included. S.B. 36 (1997 Session) extends the tax credit for energy savings systems (at a cost of \$27,000), S.B. 41 (1997 Session) extends the coal tax credit exemption (at a cost of \$250,000); and, S.B. 139 (1997 Session) extends the tax credit for wood or pellet burning stoves (at a cost of \$35,000). The April 1996 Special Session of the Legislature passed SB1004 (Sales and Use Tax Exemption - Steel Mill Contracts and Orders) to partially extend the sales tax exemption for steel mills. The original exemption (H.B. 145, 1994 Session) expires in FY1997.

(B) This table does NOT include shifts within the total state budget due to earmarking or other diversions. For example, H.B. 393 (1996 Session) reduces General Fund sales tax revenues by \$36 million beginning in FY1998 in order to earmark sales taxes to local water and local transportation projects; but, total budget sales taxes were not reduced by this bill. H.B. 413 (Sales Tax Revenues to Transportation Funding, 1997 Session) diverts \$4,200,000 in FY 2001 in sales tax revenues currently earmarked for the Olympics to roads. Finally, H.B. 94 (1997 Session) shifts \$210,000 from unrestricted criminal surcharge funds to a restricted Guardian Ad Litem account.

(1) In 1995 the Legislature and Tax Commission increased the residential exemption from 32% to 45%, decreased the basic school rate from .00422 to .00264, and reduced the state assessing and collecting rate from .0003 to .000281. The 1995 Legislature also restricted the growth in taxable valuations to new growth only, effective in fiscal year 1997. In 1996 the Legislature further ordered the Tax Commission to reduce the basic school rate to a level sufficient to generate a \$30 million tax cut. Income tax collections will increase due to lower property tax deductions on income tax forms.

(2) Increased fines and surcharges.

(3) Effective January 1, 1996, reduced gross receipts tax rates 53 percent to benefit electric utilities.

(4) Effective January 1, 1996, allows 60 percent of health care insurance, not already deductible against federal taxes, to be deducted against state taxes owed.

(5) As of July 1996 (FY97) 30% of the exemption is allowed, as of July 1997 60% is allowed, and as of July 1998 100% is allowed. The original fiscal note for FY99 was \$28.6 million. The Tax Commission subsequently ruled that parts (in addition to equipment) were eligible for the exemption which raised the fiscal note for FY99 to \$71.3 million. In November 1996 a special session of the legislature meet to modify the law in order to restore the fiscal note to \$28.6 million in FY99.

(6) Reduced effective income tax rates as of January 1, 1996. Reduced top rate from 7.2 percent to 7.0 percent on taxable incomes over \$7,500. The minimum income tax rate will be reduced from 2.55% to 2.3%.

(7) This is a consensus estimate. The Fiscal Analyst's estimate is \$65,000.

(8) Increases the cigarette tax 25 cents per pack. FY1997 fiscal impact is from stocking up of inventories in order to partially avoid the July 1, 1997 tax increase.

(9) Changes the point of collection for the diesel fuels tax from dealers to refineries.

(10) Raises the diesel and gasoline tax 5 cents a gallon and reduces the sales tax by 1/8th cent. Enactment of this bill will generate \$63,250,000 in increased revenue to the Transportation Fund due to the increase in the diesel and gas tax and the ½ cent diversion from underground storage tanks to highways. There will be a decrease in General Fund sales taxes of \$34,300,000. The net tax change from this bill is \$28,950,000.

(11) Implements a 2.5 percent tax on rental cars to pay for transportation corridors.

(12) Permits the Department of Workforce Services to impose an assessment related to the Employers' Reinsurance Fund.

(13) Creates an Endangered Species Mitigation Fund and imposes a royalty tax on brine shrimp harvesting.

(14) Increases the vehicle registration fee by \$10 and trucking fees by about 10 percent. This restricted money goes into the Centennial Highway Trust Fund.

(15) Amounts paid for admission to an athletic event at an institution of higher education that is subject to the provisions of Title IX are exempt from sales and use tax.

(16) Extends the repeal date for a tax credit for workover credits and recompletions of oil wells.

(17) Gives a 6% tax credit for qualified research activities conducted in the state.

(18) Reduces the sales tax exemption for machinery and equipment from 100% in FY1999 to 80% in FY2000. After July 1, 1999, vendors shall collect sales tax on 20% of the sales price of normal operating replacements.

(19) Gives a 6% individual or corporate income tax credit on the purchase price of machinery, equipment or both.

* International Merchandise Exports

Overview

Utah's exports will be down in 1998. From 1995 through 1997, Utah's exports have been around \$3.6 billion. In 1998, however, Utah's exports fell to around \$3.3 billion. East Asia's recession is the main reason for Utah's slumping exports. If the Asian economies were as strong today as they were in the early 1990s, Utah's exports would likely be well over \$4.0 billion. From 1994 to 1998, the share of Utah's exports to Asia (mostly coal, copper, equipment, and chemicals) has fallen from 50% to 29%. Largely because of the Asian situation, Utah's exports will not be a force for growth during 1999.

1998 Summary

Value of Utah's Merchandise Exports. Utah ranked 33rd among the states in the value of merchandise exports during the first three quarters of 1998. Relative to the first three quarters of 1997, exports have declined for most states. For the nation as a whole, year to date exports in 1998 are down 1.1% compared to 1997. Utah's \$2.5 billion in exports year-to-date was less than 5% of California's \$77.4 billion. As the leading state, California accounted for about one-seventh of the nation's \$502.4 billion year-to-date exports during 1998. With \$64.7 billion in exports, second place Texas is not that far behind California, but at \$30.8 billion, third place New York has less than half California's exports. Though small relative to the leading states, Utah still has ten times the merchandise exports of last place Hawaii.

Although the merchandise export data prior to 1996 are not strictly comparable with the data after 1996, Utah has become more integrated into the world economy since the data became available for the years since 1988. Between 1988 and 1998, Utah's merchandise exports increased from \$943 million to \$3.3 billion, or 250%. Over this same period, Utah's gross state product (GSP), which is the broadest measure of economic activity, increased from \$27.0 billion to \$50.5 billion, or 84%. Thus, merchandise exports have increased from 3.4% of GSP in 1988 to 6.5% in 1998.

Utah's Merchandise Exports by Product. During the first three quarters of 1998, exports of primary metal products (copper and steel) were \$830.4 million, or one-third of the total. Other major export products include transportation equipment (\$318.7 million, or 12.8%), electronic machinery (\$317.8 million, or 12.8%), industrial machinery (\$201.4 million, or 8.1%), instruments (\$151.1 million, or 6.1%), coal (\$106.1 million, or 4.3%), and processed food (\$105.8 million, or 4.2%).

Destination of Utah's Merchandise Exports. Utah's largest markets for merchandise exports are in Europe, Canada, and East Asia. To third quarter 1998, the top five destination countries for Utah's merchandise exports accounted for \$1.6 billion of the \$2.5 billion total, or 65%. Utah's top five export markets during 1997 were the United Kingdom, Japan, Canada, Germany and Korea.

Significant Issues

Asia. The upside of the Asian crisis is that to this point neither Utah's or the nation's exports have been substantially diminished. For 1998, it appears Utah's exports will be down about 10% from previous highs, while the nation's will be down a percent or two.

Further on the positive side, most of Utah's largest Asian trading partners appear to have passed through their most difficult economic times. Though the Japanese economy may not be poised for growth, further contraction appears unlikely. Thus Utah's exports to Japan should remain in the \$400 million to \$500 million range for the time being, where they were in the mid-1990s. As the Japanese economy recovers over the next several years, Utah's exports there could move well above \$500 million. Utah's other major Asian trading partners--Korea, Taiwan, the Philippines, Thailand, Singapore, Malaysia, and China--are, to varying degrees, similar to Japan in that their economies should be capable of purchasing more of Utah's products in the coming years.

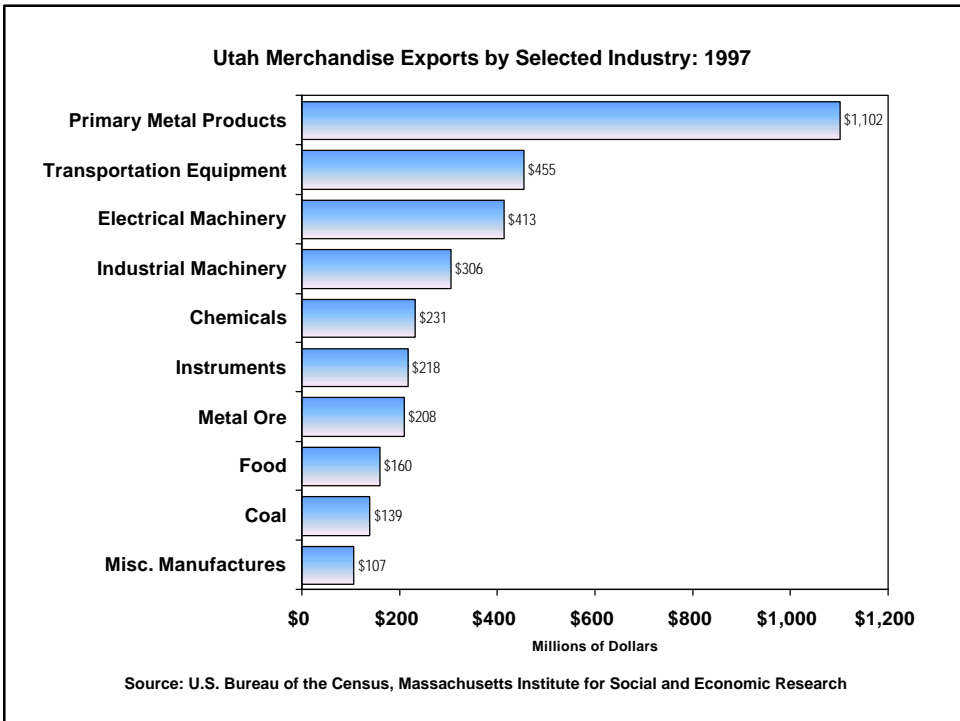
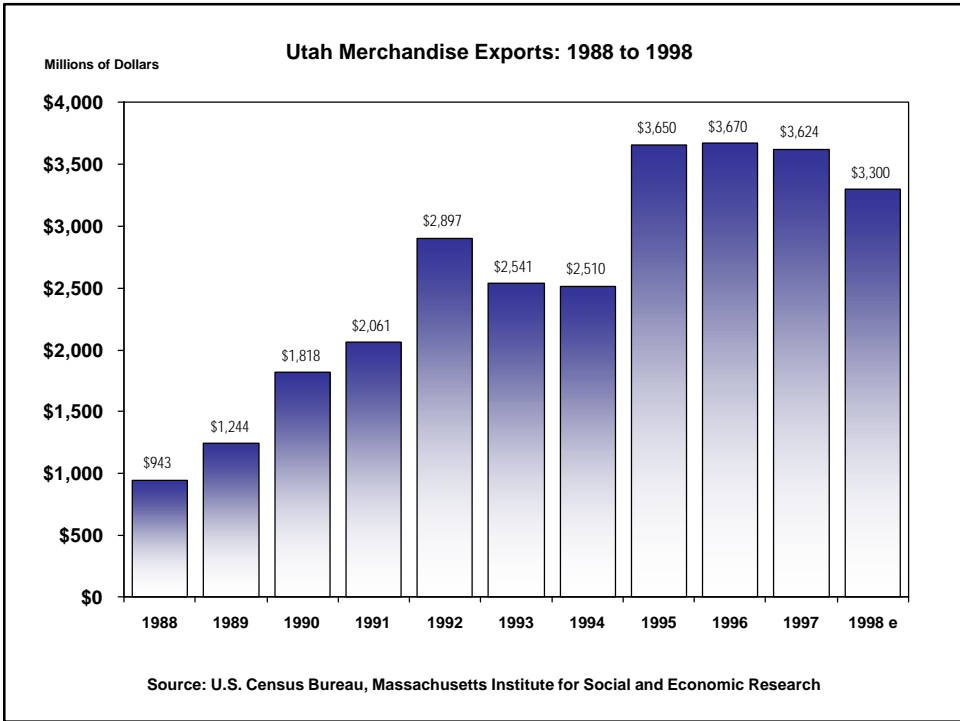
On the downside, although it appears now as if the Asian economies have bottomed out, if they continue to decline, then Utah's exports to Asia and elsewhere could fall below \$2 billion, where they were in 1990. If the Japanese economy contracts at an accelerating rate for the next several years, say 2% or 3% per year, then Utah's exports to Japan could fall to a level below \$200 million. If the Japanese economy contracts in such a fashion, it seems likely the other Asian economies, as well as economies elsewhere around the globe will contract. Such widespread economic contraction would dramatically lower Utah's exports.

Limitations of Data. The export data presented have been generated by the U.S. Census Bureau, Foreign Trade Division and have been adjusted by the Massachusetts Institute for Social and Economic Research (MISER). There are two main reasons why this data series, called "Origin of Movement," may substantially underestimate the magnitude of Utah exports. First, the data series is designed to measure the transportation origin of exports, and accounts for the value of merchandise exports but not service exports. This means that exports of business services (such as financial services or computer software), educational services (such as international students paying tuition to purchase Utah education), tourist services (such as purchases made by international travelers in Utah), and other services sold in international markets are not included in the value of these exports.

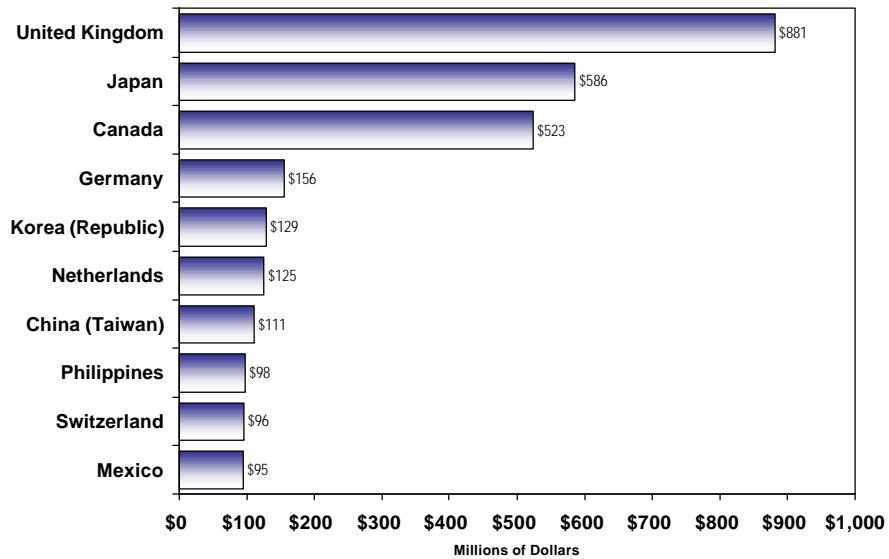
Second, the "Origin of Movement" series tracks the merchandise from where it begins its export journey. The Shipper's Export Declaration (SED) accompanies each commodity shipment of \$1,501 or more before 1990, and \$2,501 or more since, that leaves the United States and provides the basis for the export information. In other words, the exporter is not necessarily the producer or the manufacturer of the merchandise shipped. For these two reasons, one must exercise caution when comparing this data with other data published by the U.S. Department of Commerce.

Conclusion

Utah's exports have declined from around \$3.6 billion during the past few years to \$3.3 billion during 1998 because of the Asian economic contraction. Like most western states, Utah has substantial exposure in Asia and further contraction there will continue to diminish Utah's exports. Since the economies of Utah's major trading partners appear to have stabilized, however, Utah's exports may begin to increase in the next few years. *



Utah Merchandise Exports to Selected Countries: 1997



Source: U.S. Bureau of the Census, Massachusetts Institute for Social and Economic Research

Utah Merchandise Exports by Industry (Thousands of Dollars): 1990 to 1997

SIC Code	Industry									First 3	Industry	Percent Change	
		1990	1991	1992	1993	1994	1995	1996	1997	Quarters 1998	as a Percent of 1998 Total	1995-96	1996-97
1	Agricultural Products	\$1,864.1	\$1,477.2	\$1,057.6	\$2,900.1	\$4,229.1	\$1,992.7	\$6,126.3	\$20,386.1	16,095.22	0.6%	207.4%	232.8%
2	Livestock and Livestock Products	153.6	98.4	173.8	486.4	87.4	576.2	194.6	360.9	238.7	0.0%	-66.2%	85.4%
8	Forestry Products	52.5	5.0	74.2	23.3	43.3	48.6	61.2	463.1	283.6	0.0%	25.8%	657.2%
9	Fishing, Hunting, and Trapping	572.0	732.4	334.7	1,279.3	1,097.7	2,583.2	6,010.2	7,232.6	694.0	0.0%	132.7%	20.3%
10	Metallic Ores and Concentrates	209,220.6	196,613.3	282,205.1	224,861.2	283,769.2	424,845.9	218,327.4	208,140.4	39,459.6	1.6%	-48.6%	-4.7%
12	Bituminous Coal and Lignite	64,021.2	84,073.2	78,485.8	81,193.1	81,921.4	132,691.5	193,172.5	139,330.4	106,064.7	4.3%	45.6%	-27.9%
13	Crude Petroleum and Natural Gas	0.0	2.6	0.0	0.0	0.0	7.4	10.8	13.5	0.0	0.0%	46.3%	25.5%
14	Nonmetallic Minerals, Except Fuels	5,166.0	7,833.0	11,766.7	8,153.6	8,962.7	10,174.5	9,914.4	10,072.3	5,663.7	0.2%	-2.6%	1.6%
20	Food and Kindred Products	57,903.5	54,963.2	60,006.5	74,419.4	72,801.8	136,959.4	138,575.6	159,524.7	105,791.9	4.2%	1.2%	15.1%
21	Textile Mill Products	2,162.2	1,644.9	1,590.6	2,107.2	2,836.0	3,062.3	2,127.0	4,479.2	2,552.0	0.1%	-30.5%	110.6%
22	Apparel and Related Products	3,368.5	4,969.3	7,538.9	6,276.2	8,154.2	13,427.0	14,844.8	8,025.5	4,624.5	0.2%	10.6%	-45.9%
23	Lumber and Wood Products, Except Furniture	1,687.3	947.0	3,098.8	917.0	894.3	1,976.9	2,139.9	1,485.9	1,073.0	0.0%	8.2%	-30.6%
24	Furniture and Fixtures	1,806.4	2,964.6	6,742.7	3,766.4	2,845.8	3,630.1	6,729.6	5,000.9	5,133.7	0.2%	85.4%	-25.7%
25	Paper and Allied Products	12,563.5	6,650.0	3,175.0	9,241.3	3,184.0	3,794.4	5,470.7	8,797.3	7,097.9	0.3%	44.2%	60.8%
26	Printing, Publishing, and Allied Products	34,539.9	19,731.5	22,619.8	26,359.0	26,808.8	30,323.8	38,585.1	38,583.5	18,196.4	0.7%	27.2%	-0.0%
27	Chemicals and Allied Products	66,567.4	60,072.8	94,803.4	98,883.0	157,377.4	148,209.9	210,758.8	230,667.0	175,488.7	7.0%	42.2%	9.4%
28	Petroleum Refining and Related Products	3,925.5	758.8	289.5	454.7	108.4	253.4	319.7	98.4	766.7	0.0%	26.2%	-69.2%
29	Rubber and Misc. Plastic Products	9,675.8	23,318.5	8,724.5	11,544.2	14,732.0	30,061.9	27,580.8	43,735.5	25,799.1	1.0%	-8.3%	58.6%
30	Leather and Leather Products	1,404.0	2,413.5	3,902.0	2,709.8	3,965.3	4,905.8	6,054.0	6,169.1	5,394.2	0.2%	23.4%	1.9%
31	Stone, Clay, Glass, and Concrete Products	3,676.3	3,552.2	5,477.2	8,610.1	4,702.8	4,780.2	5,858.7	8,777.1	5,542.9	0.2%	22.6%	49.8%
32	Primary Metal Products	322,645.9	616,094.1	1,313,756.9	931,868.6	915,393.7	1,252,373.5	1,097,705.7	1,102,071.9	830,397.7	33.3%	-12.3%	0.4%
33	Fabricated Metal Products, Except Mach./Tran.	36,721.2	65,105.2	62,682.0	51,831.0	38,392.7	106,340.8	96,508.8	70,850.4	48,523.4	1.9%	-9.2%	-26.6%
34	Industrial Machinery, Except Electrical	202,848.0	195,040.1	153,313.0	214,509.6	204,532.0	308,919.6	427,352.7	305,923.7	201,356.6	8.1%	38.3%	-28.4%
35	Electrical/Electronic Machinery, Equip., and Supplies	446,497.0	402,726.3	325,596.4	329,298.6	228,041.7	323,976.5	368,227.1	412,868.0	317,886.4	12.8%	13.7%	12.1%
36	Transportation Equipment	144,321.3	140,653.5	277,191.4	253,965.1	214,563.0	248,791.5	393,312.8	455,364.3	318,741.4	12.8%	58.1%	15.8%
37	Instruments and Related Products	128,715.6	109,561.9	111,647.5	124,175.8	141,979.5	156,699.0	191,855.8	218,379.7	151,083.6	6.1%	22.4%	13.8%
38	Misc. Manufactured Commodities	22,642.4	31,033.1	39,975.9	47,299.8	67,586.0	77,294.2	78,697.3	107,277.8	66,281.5	2.7%	1.8%	36.3%
39	Scrap and Waste	20,099.5	14,665.8	8,700.7	12,598.5	10,622.1	208,184.3	86,135.2	6,895.7	2,899.6	0.1%	-58.6%	-92.0%
91	Used or Second-Hand Merchandise	4,653.4	2,871.5	1,001.9	1,871.5	1,608.1	4,594.5	3,754.1	6,527.4	4,256.3	0.2%	-18.3%	73.9%
	Miscellaneous	8,970.8	10,668.3	11,526.6	8,937.7	9,225.4	8,317.9	33,988.0	36,819.4	25,735.1	1.0%	308.6%	8.3%
	Total	\$1,818,445.4	\$2,061,241.3	\$2,897,458.8	\$2,540,541.4	\$2,510,465.8	\$3,649,796.8	\$3,670,399.6	\$3,624,321.7	\$2,493,122.3	100%	1%	-1%

Source: Massachusetts Institute for Social and Economic Research processing of U.S. Census Bureau data.

Utah Merchandise Exports by Selected Country (Millions of Dollars): 1992 to 1998

	Annual						1997 Percent of Total	Third Quarter			Year to Date Third Quarter		
	1992	1993	1994	1995	1996	1997		1997	1998	Percent Change	1997	1998	Percent Change
United Kingdom	450.7	79.7	63.4	459.8	651.8	880.9	24.3%	266.3	146.3	-45.1%	648.9	638.5	-1.6%
Japan	315.3	313.6	353.4	555.6	592.2	586.0	16.2%	138.5	105.6	-23.7%	463.0	327.4	-29.3%
Canada	361.4	362.1	360.7	410.6	436.2	523.4	14.4%	129.5	122.0	-5.8%	378.4	378.9	0.1%
Germany	103.2	166.3	197.8	201.1	238.1	156.1	4.3%	33.0	20.6	-37.5%	122.9	70.5	-42.7%
Korea, Republic of	114.5	63.5	94.5	167.6	366.9	128.9	3.6%	24.2	23.6	-2.5%	90.5	45.9	-49.3%
Netherlands	69.2	145.8	119.2	87.8	108.6	124.5	3.4%	26.1	29.5	13.0%	97.9	78.2	-20.1%
China, (Taiwan)	421.1	380.3	203.3	274.6	167.4	111.4	3.1%	17.6	10.8	-38.8%	84.1	42.3	-49.7%
Philippines	27.5	28.0	32.8	66.8	56.4	98.3	2.7%	27.7	21.5	-22.3%	58.7	84.4	43.8%
Switzerland	28.9	244.6	98.3	155.8	101.2	95.6	2.6%	77.7	72.3	-7.0%	89.1	202.3	127.1%
Mexico	26.6	51.3	112.4	71.7	77.2	94.9	2.6%	28.4	18.2	-36.1%	69.7	61.8	-11.3%
Thailand	104.2	71.5	51.7	72.1	64.3	81.7	2.3%	21.0	12.1	-42.3%	62.1	42.4	-31.8%
Belgium	25.5	34.2	85.1	134.1	62.8	77.4	2.1%	10.1	13.9	37.6%	60.3	32.7	-45.7%
Singapore	68.3	50.9	27.5	89.0	153.2	67.1	1.9%	22.3	9.0	-59.8%	54.3	32.6	-40.0%
Malaysia	37.6	66.9	14.8	9.6	27.9	60.4	1.7%	24.8	12.8	-48.4%	40.0	52.9	32.1%
Italy	20.3	12.6	13.0	17.3	29.5	53.0	1.5%	11.5	4.8	-58.3%	40.2	22.7	-43.5%
Ireland	7.5	16.5	22.3	24.8	23.9	50.2	1.4%	8.2	8.4	2.0%	28.3	44.0	55.2%
Hong Kong	417.5	224.0	463.7	267.6	73.0	49.7	1.4%	14.2	6.6	-53.4%	37.5	24.2	-35.4%
France	23.3	19.5	21.9	282.2	115.6	48.9	1.3%	9.3	7.9	-15.2%	37.3	36.2	-2.8%
Chile	12.2	17.8	18.0	69.0	53.0	38.0	1.0%	8.6	5.0	-41.9%	29.2	20.9	-28.5%
Australia	42.5	31.6	29.6	37.0	42.5	37.0	1.0%	9.8	15.1	54.9%	25.4	38.4	51.4%
China, (mainland)	49.7	87.5	17.2	33.1	26.0	28.3	0.8%	7.1	3.2	-55.7%	24.1	32.3	33.9%
Sweden	6.0	5.0	6.8	3.9	16.7	23.8	0.7%	2.1	2.4	11.2%	10.3	22.7	121.5%
Brazil	2.1	7.7	8.3	6.4	18.4	17.7	0.5%	5.1	3.3	-35.8%	12.6	9.2	-26.9%
Spain	27.3	8.6	6.3	6.7	19.7	17.5	0.5%	3.7	2.5	-31.8%	10.9	17.8	62.9%
New Zealand	7.9	6.5	7.8	3.4	10.3	14.2	0.4%	4.8	2.5	-48.5%	11.4	8.8	-22.6%
Israel	5.0	6.6	3.4	8.6	8.8	11.4	0.3%	3.4	3.0	-11.7%	9.1	8.5	-7.0%
India	1.4	4.1	2.2	7.2	4.3	9.1	0.3%	1.4	0.7	-49.7%	4.1	3.5	-13.1%
United Arab Emirates	2.1	2.6	2.1	0.5	2.0	9.0	0.2%	0.4	3.7	773.8%	1.5	5.7	264.8%
Indonesia	4.6	5.5	6.4	8.5	11.8	8.9	0.2%	2.8	0.5	-83.1%	6.9	2.5	-63.4%
South Africa	3.9	3.6	2.9	1.4	7.8	8.1	0.2%	1.6	1.0	-38.7%	6.2	4.2	-32.1%
Venezuela	3.7	2.5	2.5	0.9	2.9	6.9	0.2%	1.7	0.8	-53.8%	4.1	3.4	-17.0%
Russian Federation	6.6	4.4	2.6	9.1	2.9	6.6	0.2%	0.6	0.2	-58.6%	5.9	1.1	-80.7%
Austria	4.2	5.0	5.0	1.0	5.4	4.9	0.1%	1.4	1.7	19.9%	3.7	3.9	4.7%
Peru	NA	2.1	4.5	1.3	4.4	4.9	0.1%	1.2	0.5	-55.5%	4.1	3.5	-13.6%
Columbia	1.0	2.8	5.5	10.7	4.4	4.6	0.1%	0.9	1.3	48.5%	3.6	3.8	4.8%
Turkey	39.8	22.4	2.5	NA	1.7	4.5	0.1%	2.3	1.3	-44.5%	3.9	3.7	-6.0%
Norway	4.7	4.3	3.7	2.9	5.2	4.3	0.1%	1.2	0.9	-31.3%	3.1	5.5	76.0%
Dominican Republic	NA	1.2	2.5	7.6	12.5	4.0	0.1%	0.5	0.8	50.1%	3.0	2.2	-27.6%
Denmark	2.5	2.8	3.8	0.5	2.6	3.7	0.1%	1.3	0.6	-48.1%	2.9	2.0	-32.4%
Saudi Arabia	7.5	4.7	3.0	2.7	2.3	2.4	0.1%	0.4	0.7	58.6%	1.8	2.6	42.3%
Exports to The World, Outside U.S.	2897.5	2540.5	2510.5	3649.8	3670.4	3624.3	100.0%	966.8	715.3	-26.0%	2695.7	2493.1	-7.5%
Exports to Non-Asia	1337.2	1248.9	1245.3	2105.3	2131.2	2403.6	66.3%	666.7	509.7	-23.5%	1774.5	1806.3	1.8%
Exports to Asia	1560.3	1291.7	1265.2	1544.5	1539.2	1220.7	33.7%	300.2	205.6	-31.5%	921.2	686.9	-25.4%
Export Percentage to Asia	53.9	50.8	50.4	42.3	41.9	33.7	---	31.0	28.7	---	34.2	27.5	---
Export Percentage to Non-Asia	46.1	49.2	49.6	57.7	58.1	66.3	---	69.0	71.3	---	65.8	72.5	---

Notes:

1. NA means exports for a given year and country are not available
2. Third quarter year to date (YTD) exports for 1997 and 1998 are based on exports from January 1 through September 30.

Source: Massachusetts Institute for Social and Economic Research processing of U.S. Census Bureau data.

U.S. Merchandise Exports by State (Thousands of Dollars): 1994 to 1998

Rank	State	First Three Quarters to Date					Growth Rates		
		1994	1995	1996	1997	1997	1998	1996-97 Annual	1997-98 YTD
25	Alabama	4,654,285	5,407,078	5,849,054	6,702,439	4,975,071	5,126,207	14.6%	3.0%
40	Alaska	2,639,179	3,000,395	3,125,016	2,979,411	2,359,122	1,634,215	-4.7%	-30.7%
17	Arizona	9,032,527	10,222,255	11,377,704	14,920,124	11,399,544	9,083,081	31.1%	-20.3%
36	Arkansas	1,894,369	2,245,042	2,245,126	2,576,433	1,895,173	1,961,471	14.8%	3.5%
1	California	81,189,967	96,572,987	103,253,948	109,536,654	80,066,299	77,442,067	6.1%	-3.3%
29	Colorado	4,573,734	5,237,381	5,331,556	5,602,492	4,175,785	4,218,538	5.1%	1.0%
24	Connecticut	6,389,090	6,545,131	6,829,453	7,784,447	5,721,380	6,136,044	14.0%	7.2%
37	Delaware	1,766,928	1,700,874	1,840,888	2,316,040	1,711,681	1,761,684	25.8%	2.9%
51	District of Columbia	690,295	312,475	367,306	612,198	460,081	246,956	66.7%	-46.3%
7	Florida	20,513,534	23,671,149	24,663,716	27,599,578	20,275,721	20,805,988	11.9%	2.6%
14	Georgia	10,029,149	12,400,490	12,550,904	14,688,908	10,907,678	11,059,313	17.0%	1.4%
52	Hawaii	396,265	352,477	308,473	367,095	292,214	232,068	19.0%	-20.6%
44	Idaho	1,612,571	1,973,288	1,708,350	1,808,261	1,367,283	1,227,770	5.8%	-10.2%
6	Illinois	21,980,467	25,572,688	26,772,870	29,186,311	21,629,690	23,529,989	9.0%	8.8%
15	Indiana	9,260,761	11,627,671	12,038,738	13,135,773	9,805,839	10,090,835	9.1%	2.9%
28	Iowa	3,570,871	4,352,877	4,884,476	5,676,257	4,196,982	4,192,061	16.2%	-0.1%
31	Kansas	3,370,377	3,854,133	4,196,671	4,737,550	3,402,732	3,311,851	12.9%	-2.7%
23	Kentucky	5,398,575	5,948,407	7,049,973	8,695,124	6,221,326	6,435,114	23.3%	3.4%
9	Louisiana	15,559,652	21,059,453	23,357,806	20,645,031	14,657,195	13,237,235	-11.6%	-9.7%
42	Maine	1,204,763	1,486,768	1,512,254	1,880,497	1,315,891	1,444,025	24.4%	9.7%
30	Maryland	5,840,930	6,215,664	5,924,366	5,998,536	4,497,915	3,963,837	1.3%	-11.9%
13	Massachusetts	13,064,782	15,065,264	15,998,555	18,027,628	13,295,362	12,771,184	12.7%	-3.9%
5	Michigan	28,496,856	28,430,731	29,771,126	34,775,679	25,798,916	23,423,378	16.8%	-9.2%
20	Minnesota	7,856,467	8,829,647	9,776,325	10,459,589	7,654,230	7,326,218	7.0%	-4.3%
35	Mississippi	2,033,386	2,773,591	2,993,961	2,713,686	2,007,866	1,977,858	-9.4%	-1.5%
26	Missouri	4,039,785	4,373,335	6,404,539	7,348,450	5,393,320	4,790,292	14.7%	-11.2%
49	Montana	359,662	391,604	469,497	564,168	430,456	330,703	20.2%	-23.2%
39	Nebraska	1,787,592	2,024,271	2,138,758	2,208,287	1,658,789	1,668,980	3.3%	0.6%
47	Nevada	694,185	826,967	1,395,430	1,163,520	943,079	581,241	-16.6%	-38.4%
41	New Hampshire	1,147,360	1,449,368	1,642,811	1,750,064	1,282,627	1,400,422	6.5%	9.2%
11	New Jersey	13,073,156	13,832,972	14,821,286	16,901,841	12,457,329	12,955,244	14.0%	4.0%
43	New Mexico	569,771	457,063	1,012,802	1,876,868	1,404,515	1,425,935	85.3%	1.5%
3	New York	34,011,123	37,089,140	38,372,056	41,725,769	31,512,539	30,864,695	8.7%	-2.1%
12	North Carolina	14,059,809	16,820,102	17,634,705	18,256,937	13,431,351	12,819,326	3.5%	-4.6%
46	North Dakota	528,004	578,384	756,109	837,332	616,289	632,300	10.7%	2.6%
8	Ohio	21,648,978	23,764,127	25,052,244	27,200,897	20,184,897	19,912,810	8.6%	-1.3%
34	Oklahoma	2,423,139	2,426,266	2,626,672	3,030,594	2,217,692	2,333,993	15.4%	5.2%
21	Oregon	7,247,127	9,436,454	9,773,234	10,069,116	7,534,632	6,998,368	3.0%	-7.1%
10	Pennsylvania	13,611,336	15,206,542	16,089,693	17,926,074	13,163,438	13,214,013	11.4%	0.4%
27	Puerto Rico	NA	5,194,520	5,593,322	6,057,182	4,494,610	4,623,750	8.3%	2.9%
45	Rhode Island	1,048,703	1,028,025	1,010,897	1,197,847	908,690	903,494	18.5%	-0.6%
22	South Carolina	6,014,404	7,314,526	7,511,581	8,455,419	6,420,519	6,526,419	12.6%	1.6%
50	South Dakota	337,605	437,624	476,851	556,905	410,075	343,851	16.8%	-16.1%
18	Tennessee	7,685,785	8,827,542	8,973,644	10,220,697	7,520,902	7,853,644	13.9%	4.4%
2	Texas	59,972,121	68,818,614	74,001,108	84,308,715	61,587,546	64,708,392	13.9%	5.1%
53	U.S. Virgin Islands	NA	239,913	214,409	265,433	198,667	88,286	23.8%	-55.6%
33	Utah	2,510,466	3,649,797	3,670,400	3,624,322	2,695,747	2,493,118	-1.3%	-7.5%
32	Vermont	2,979,650	3,456,454	3,527,145	4,097,254	3,095,988	2,847,434	16.2%	-8.0%
16	Virginia	11,343,167	12,905,972	13,529,019	14,147,841	10,571,313	10,300,719	4.6%	-2.6%
4	Washington	26,148,816	24,847,378	28,856,135	36,047,292	27,101,540	29,124,771	24.9%	7.5%
38	West Virginia	1,741,425	2,200,961	2,357,377	2,524,071	1,921,071	1,795,763	7.1%	-6.5%
19	Wisconsin	8,743,621	10,149,104	10,657,254	11,197,615	8,195,490	7,819,378	5.1%	-4.6%
48	Wyoming	378,485	425,588	529,466	611,750	434,124	423,629	15.5%	-2.4%
	Total	507,125,056	583,030,525	622,827,063	687,597,999	507,878,210	502,419,957	10.4%	-1.1%

Notes

1. Third quarter year to date (YTD) exports for 1997 and 1998 are based on exports from January 1 through September 30.
2. State export rank is based on third quarter YTD exports for 1998.
3. Exports for Puerto Rico and the U.S. Virgin Islands are not available for 1994.

Source: Massachusetts Institute for Social and Economic Research processing of U.S. Census Bureau data.

Utah Top Five Export Markets by Top Five Industries (Thousands of Dollars): 1997

Country	Industry	Dollar Value	Percent Country of Total
United Kingdom	Primary Metal Industries	\$787,557	89.4%
	Instruments and Related Products	20,369	2.3%
	Industrial Machinery, Computer Equipment	18,056	2.0%
	Electronic, Electric Equip, Exe Computer	15,436	1.8%
	Transportation Equipment	13,028	1.5%
	Others	26,412	3.0%
	Total All Industries	880,856	100.0%
Japan	Transportation Equipment	\$122,590	20.9%
	Bituminous Coal & Lignite Mining	106,143	18.1%
	Chemicals and Allied Products	75,868	12.9%
	Food and Kindred Products	67,304	11.5%
	Metal Mining	56,622	9.7%
	Others	157,476	26.9%
	Total All Industries	586,003	100.0%
Canada	Transportation Equipment	\$109,500	20.9%
	Primary Metal Industries	86,311	16.5%
	Industrial Machinery, Computer Equipment	76,239	14.6%
	Electronic, Electric Equip, Exe Computer	49,118	9.4%
	Chemicals and Allied Products	41,520	7.9%
	Others	160,727	30.7%
	Total All Industries	523,414	100.0%
Germany	Transportation Equipment	\$70,826	45.4%
	Metal Mining	17,794	11.4%
	Industrial Machinery, Computer Equipment	16,737	10.7%
	Electronic, Electric Equip, Exe Computer	13,885	8.9%
	Instruments and Related Products	12,077	7.7%
	Others	24,827	15.9%
	Total All Industries	156,146	100.0%
Korea	Primary Metal Industries	\$32,965	25.6%
	Metal Mining	23,123	17.9%
	Electronic, Electric Equip, Exe Computer	14,190	11.0%
	Transportation Equipment	13,772	10.7%
	Chemicals and Allied Products	13,224	10.3%
	Others	31,579	24.5%
	Total All Industries	128,852	100.0%

Source: Massachusetts Institute for Social and Economic Research processing of U.S. Census Bureau data.

Overview

Inflation continued to decelerate in 1998, registering an expected 1.6% gain compared with a 2.3% growth rate in 1997, as measured by the CPI-U. The gross domestic product chain-type price deflator increased 1.9% in 1997. Utah's cost-of-living index in selected cities remained near the national average. The second-quarter 1998 composite index (national average equals 100) for Salt Lake City was 104.2; Provo-Orem, 97.2; Cedar City, 92.3; St. George, 101.4; and Logan, 101.5.

1998 Summary

Consumer Price Index. Despite a surprisingly strong U.S. economic growth rate, a fully employed economy and modestly rising wages, the national rate of inflation continued to slow in 1998. The Consumer Price Index (CPI-U) is estimated to have increased by 1.6% in 1998, measured on an annual average basis, compared with 2.3% in 1997. By October 1998, the year-to-year CPI-U gain had moderated to 1.5%.

Economic factors contributing to this decelerated pace of price increases include: (1) Intense international and domestic competition minimizing sellers' ability to raise prices; (2) an ongoing, relatively strong U.S. dollar exchange rate lowering the price of imported goods; (3) sustained labor productivity offsetting much of the gain in wages; and (4) persistent, significant weakness in commodity prices, particularly crude oil.

Gross Domestic Product Deflators. In 1998 the Gross Domestic Product (GDP) chain-type implicit price deflator is estimated to increase 1.0% compared with 1.9% in 1997. The GDP personal consumption deflator in 1998 is expected to rise approximately 0.8% compared with 1.9% in 1997. Beginning in 1996, the Real Gross Domestic Product was reported using a chain-weighted inflation index. Under this method, the composition of economic output (the weighting) is updated each year.

Utah Cost of Living. The American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index is prepared quarterly and includes comparative data for approximately 270 urban areas. The index consists of price comparisons for a single point in time, but does not measure inflation or price changes over time. The cost of consumer goods and services in the urban areas is measured and compared with a national average of 100.

The composite index is based on six components: grocery items, housing, utilities, transportation, health care, and miscellaneous goods and services. The Salt Lake Area Chamber of Commerce is a member of ACCRA and submits quarterly data for the local area.

The second-quarter 1998 composite index for Salt Lake City was 104.2, slightly higher than the national average for the quarter. Other Utah cities included in the second-quarter survey were Cedar City (92.3), Logan (101.5), Provo-Orem (97.2), and St. George (101.4).

1999 Outlook

The national Consumer Price Index for Urban Consumers (CPI-U) in 1999 is forecast to increase 2.1%, slightly higher than in 1998. Imported goods from Asia and other parts of the world will be considerably less expensive, and prices of computer-related products should also continue their lower-cost trend. Medical and housing costs in 1999, however, may rise faster than has occurred during the past two years, and wage rates are likely to remain near 4% in 1999.

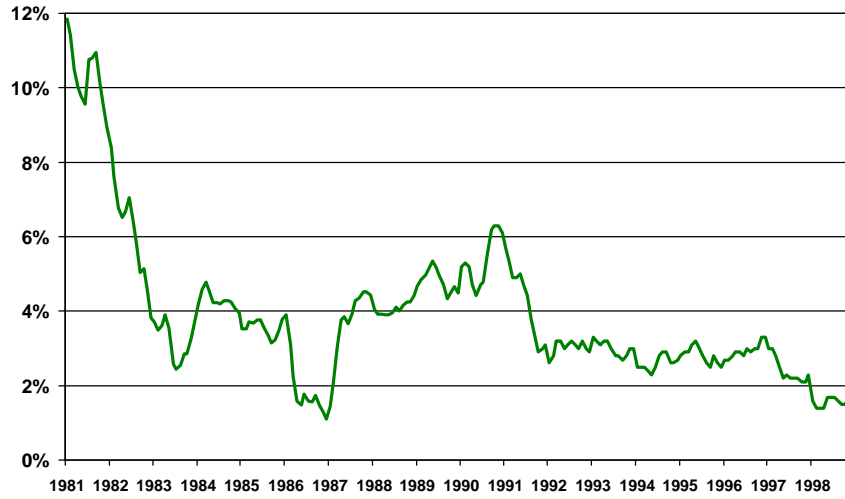
Significant Issues

No Statewide Measure of Inflation. Measuring and understanding price changes over time and cost of living for a point in time are critical to understanding economic issues. In Utah there is no statistically significant, statewide measure of inflation (price change over time). The federal Bureau of Labor Statistics does sample price changes in Utah as part of the national indices of inflation, but the sample size is too small to render meaningful results at the state level. Consequently, monetary measures in Utah are generally adjusted for inflation using national indices such as the Consumer Price Index (CPI) and Gross Domestic Product Deflators.

1998 CPI Revision. Beginning with the January 1998 data, the Bureau of Labor Statistics initiated several improvements to the CPI Index. A new set of expenditure weights, using 1993–1995 Consumers Expenditure Survey data, replaced the 1982–1984 weights previously used. The CPI now utilizes a new geographic sample, a new item structure, and a new variance-based publication system.

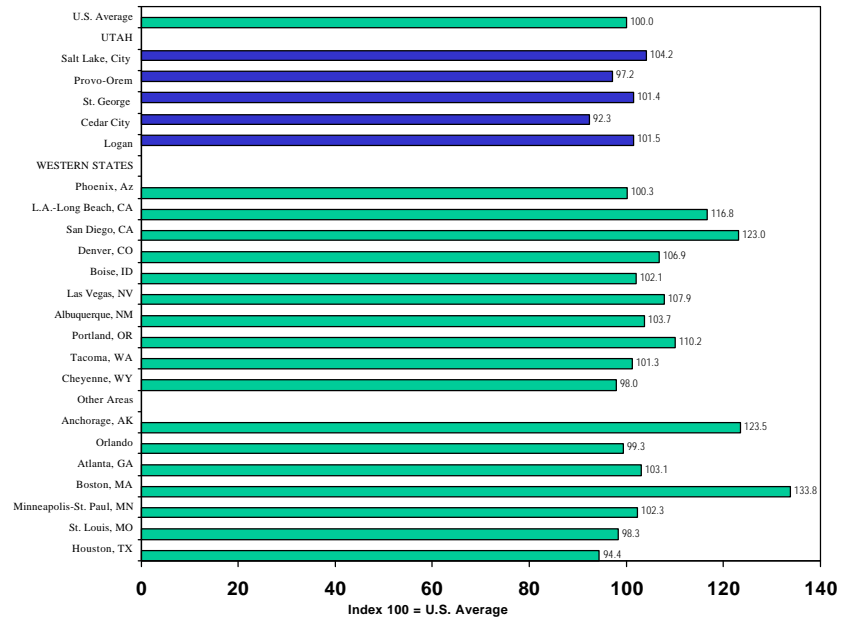
Experimental CPI. In 1997 the Bureau of Labor Statistics introduced an experimental CPI using geometric means: the CPI-U-XG. This experimental methodology attempts to measure the impact of consumers' decisions to change spending patterns as relative prices change. If the assumptions employed are accurate, the index using geometric means will provide a closer approximation to a cost-of-living index. In recent months the experimental CPI has shown a rate of price increase only slightly below the CPI-U. *

Increases in Prices Measured by CPI: Monthly 1981 to 1998



Source: U.S. Department of Labor

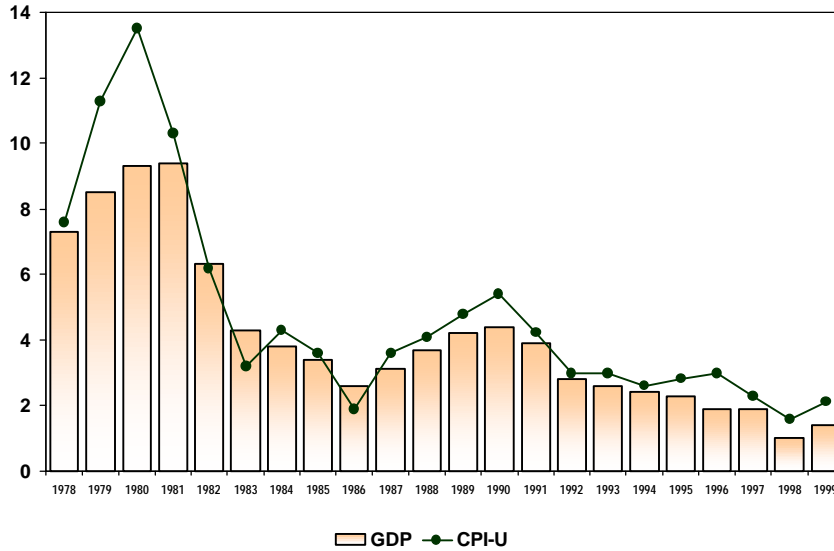
**Cost of Living Comparisons for Selected Metropolitan Areas:
Second Quarter 1998**



Source: American Chamber of Commerce Researchers Association (ACCRA)

CPI-U and GDP Deflator Inflation

Percent



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Council of Economic Advisors

U. S. Consumer Price Index for All Urban Consumers (CPI-U) (1982-1984 = 100): 1959 to 1998 (Not Seasonally Adjusted)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual Avg. Index	Annual Avg. Percent Change	
														Dec.-Dec	Change
1959	29.0	28.9	28.9	29.0	29.0	29.1	29.2	29.2	29.3	29.4	29.4	29.4	29.1	1.7	0.7
1960	29.3	29.4	29.4	29.5	29.5	29.6	29.6	29.6	29.6	29.8	29.8	29.8	29.6	1.4	1.7
1961	29.8	29.8	29.8	29.8	29.8	29.8	30.0	29.9	30.0	30.0	30.0	30.0	29.9	0.7	1.0
1962	30.1	30.1	30.1	30.2	30.2	30.2	30.3	30.3	30.4	30.4	30.4	30.4	30.2	1.3	1.0
1963	30.4	30.4	30.5	30.5	30.5	30.6	30.7	30.7	30.7	30.8	30.8	30.9	30.6	1.6	1.3
1964	30.9	30.9	30.9	30.9	30.9	31.1	31.1	31.0	31.1	31.1	31.2	31.2	31.0	1.0	1.3
1965	31.2	31.2	31.3	31.4	31.4	31.6	31.6	31.6	31.6	31.7	31.7	31.8	31.5	1.9	1.6
1966	31.8	32.0	32.1	32.3	32.3	32.4	32.5	32.7	32.7	32.9	32.9	32.9	32.4	3.5	2.9
1967	32.6	32.9	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	33.4	3.0	3.1
1968	34.1	34.2	34.3	34.4	34.5	34.7	34.9	35.0	35.1	35.3	35.4	35.5	34.8	4.7	4.2
1969	35.6	35.8	36.1	36.3	36.4	36.6	36.8	37.0	37.1	37.3	37.6	37.7	36.7	6.2	5.5
1970	37.8	38.0	38.2	38.5	38.6	38.8	39.0	39.0	39.2	39.4	39.6	39.8	38.8	5.6	5.7
1971	39.8	39.9	40.0	40.1	40.3	40.6	40.7	40.8	40.8	40.9	40.9	41.1	40.5	3.3	4.4
1972	41.1	41.3	41.4	41.5	41.6	41.7	41.9	42.0	42.1	42.3	42.4	42.5	41.8	3.4	3.2
1973	42.6	42.9	43.3	43.6	43.9	44.2	44.3	45.1	45.2	45.6	45.9	46.2	44.4	8.7	6.2
1974	46.6	47.2	47.8	48.0	48.6	49.0	49.4	50.0	50.6	51.1	51.5	51.9	49.3	12.3	11.0
1975	52.1	52.5	52.7	52.9	53.2	53.6	54.2	54.3	54.6	54.9	55.3	55.5	53.8	6.9	9.1
1976	55.6	55.8	55.9	56.1	56.5	56.8	57.1	57.4	57.6	57.9	58.0	58.2	56.9	4.9	5.8
1977	58.5	59.1	59.5	60.0	60.3	60.7	61.0	61.2	61.4	61.6	61.9	62.1	60.6	6.7	6.5
1978	62.5	62.9	63.4	63.9	64.5	65.2	65.7	66.0	66.5	67.1	67.4	67.7	65.2	9.0	7.6
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7	72.6	13.3	11.3
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3	82.4	12.5	13.5
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0	90.9	8.9	10.3
1982	94.3	94.6	94.5	94.9	95.8	97.0	97.5	97.7	97.9	98.2	98.0	97.6	96.5	3.8	6.2
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3	99.6	3.8	3.2
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	103.9	3.9	4.3
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	107.6	3.8	3.6
1986	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.6	1.1	1.9
1987	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	113.6	4.4	3.6
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5	118.3	4.4	4.1
1989	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1	124.0	4.5	4.8
1990	127.4	128.0	128.7	128.9	129.2	129.9	130.4	131.6	132.7	133.5	133.8	133.8	130.7	6.1	5.4
1991	134.6	134.8	135.0	135.2	135.6	136.0	136.2	136.6	137.2	137.4	137.8	137.9	136.2	3.1	4.2
1992	138.1	138.6	139.3	139.5	139.7	140.2	140.5	140.9	141.3	141.8	142.0	141.9	140.3	2.9	3.0
1993	142.6	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8	144.5	2.7	3.0
1994	146.2	146.7	147.2	147.4	147.5	148.0	148.4	149.0	149.4	149.5	149.7	149.7	148.2	2.7	2.6
1995	150.3	150.9	151.4	151.9	152.2	152.5	152.5	152.9	153.2	153.7	153.6	153.5	152.4	2.5	2.8
1996	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6	156.9	3.3	3.0
1997	159.1	159.6	160.0	160.2	160.1	160.3	160.5	160.8	161.2	161.6	161.5	161.3	160.5	1.7	2.3
1998	161.6	161.9	162.2	162.5	162.8	163.0	163.2	163.4	163.6	164.0	164.3(e)	164.6(e)	163.1(e)	2.0(e)	1.6(e)

(e) = estimate

Sources: U.S. Bureau of Labor Statistics and Governor's Office of Planning and Budget.

Gross Domestic Product Price Deflators--Implicit and Chain-Type: 1960-1998 (1992=100)

Year	Gross Domestic Product (Implicit) Deflator	Change from Previous Year	Gross Domestic Product (Chain-Type) Deflator	Change from Previous Year	Personal Consumption Expenditures (Chain-Type) Deflator	Change from Previous Year
1960	23.27	1.7%	23.27	1.3%	23.19	1.8%
1961	23.54	1.2%	23.54	1.2%	23.44	1.1%
1962	23.84	1.3%	23.84	1.3%	23.69	1.1%
1963	24.12	1.2%	24.12	1.2%	23.99	1.3%
1964	24.48	1.5%	24.48	1.5%	24.31	1.3%
1965	24.96	2.0%	24.95	1.9%	24.69	1.6%
1966	25.67	2.8%	25.66	2.8%	25.34	2.6%
1967	26.49	3.2%	26.48	3.2%	26.01	2.6%
1968	27.64	4.3%	27.64	4.4%	27.04	4.0%
1969	28.94	4.7%	28.94	4.7%	28.16	4.1%
1970	30.48	5.3%	30.48	5.3%	29.49	4.7%
1971	32.06	5.2%	32.05	5.2%	30.82	4.5%
1972	33.42	4.2%	33.42	4.3%	31.90	3.5%
1973	35.30	5.6%	35.30	5.6%	33.62	5.4%
1974	38.47	9.0%	38.46	9.0%	37.03	10.1%
1975	42.09	9.4%	42.09	9.4%	40.04	8.1%
1976	44.55	5.8%	44.55	5.8%	42.32	5.7%
1977	47.43	6.5%	47.42	6.4%	45.13	6.6%
1978	50.89	7.3%	50.88	7.3%	48.41	7.3%
1979	55.23	8.5%	55.22	8.5%	52.76	9.0%
1980	60.33	9.2%	60.34	9.3%	58.49	10.9%
1981	66.01	9.4%	66.01	9.4%	63.73	9.0%
1982	70.17	6.3%	70.18	6.3%	67.40	5.8%
1983	73.16	4.3%	73.16	4.2%	70.46	4.5%
1984	75.92	3.8%	75.92	3.8%	73.14	3.8%
1985	78.53	3.4%	78.53	3.4%	75.84	3.7%
1986	80.58	2.6%	80.58	2.6%	78.00	2.8%
1987	83.06	3.1%	83.06	3.1%	80.96	3.8%
1988	86.09	3.6%	86.10	3.7%	84.32	4.2%
1989	89.72	4.2%	89.72	4.2%	88.44	4.9%
1990	93.60	4.3%	93.64	4.4%	92.91	5.1%
1991	97.32	4.0%	97.32	3.9%	96.82	4.2%
1992	100.00	2.8%	100.00	2.8%	100.00	3.3%
1993	102.64	2.6%	102.64	2.6%	102.66	2.7%
1994	105.09	2.4%	105.09	2.4%	105.15	2.4%
1995	107.51	2.3%	107.51	2.3%	107.56	2.3%
1996	109.53	1.9%	109.54	1.9%	109.75	2.0%
1997	111.57	1.9%	111.57	1.9%	111.81	1.9%
1998(e)	112.70	1.0%	112.70	1.0%	112.70	0.8%

(e) = estimate

Sources: U.S. Department of Commerce, Bureau of Economic Analysis and Governor's Office of Planning and Budget.

American Chamber of Commerce Researcher's Association Cost-of-Living Comparisons for Selected Metropolitan Areas: Second Quarter 1998

Component Index Weights:	100% All Items	16% Groceries	28% Housing	8% Utilities	10% Trans- portation	5% Health Care	33% Misc. Goods & Services
U.S. Average	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Utah Areas							
Salt Lake City	104.2	109.9	109.7	78.6	102.8	105.9	103.1
Cedar City (nonmetro)	92.3	107.6	78.6	79.3	106.4	95.4	94.8
Logan (nonmetro)	101.5	104.5	109.2	82.9	99.5	92.0	100.1
Provo-Orem	97.2	100.3	92.1	81.2	105.5	91.0	102.2
St George (nonmetro)	101.4	108.9	104.0	75.8	102.1	99.6	101.9
Western Areas							
Phoenix AZ	100.3	101.0	96.0	105.1	111.2	111.8	97.5
Los Angeles- Long Beach CA	116.8	114.0	129.3	116.4	106.2	121.8	110.0
San Diego CA	123.0	112.9	154.7	103.0	118.9	126.1	106.7
Denver CO	106.9	107.9	120.3	84.4	110.6	125.0	96.6
Boise ID	102.1	99.6	111.2	69.5	97.4	114.1	103.2
Las Vegas NV	107.9	113.1	111.6	84.2	112.5	116.0	105.3
Albuquerque NM	103.7	103.6	107.6	104.4	99.7	107.0	100.9
Portland OR	110.2	107.5	124.5	83.4	111.0	120.5	104.0
Tacoma WA	101.3	106.8	104.9	71.3	105.2	138.5	95.9
Cheyenne WY	98.0	106.7	91.0	76.5	102.6	109.7	101.7
Other Areas							
Anchorage AK	123.5	126.6	131.1	91.3	111.6	165.3	120.6
Orlando FL	99.3	98.7	96.6	103.2	97.9	110.0	99.7
Atlanta GA	103.1	104.4	105.7	95.2	99.2	110.4	108.4
Boston MA	133.8	111.2	181.4	134.1	114.5	141.6	108.9
Minneapolis-St. Paul MN	102.3	100.9	97.2	99.4	108.5	120.6	103.5
St. Louis MO	98.3	103.2	97.8	95.9	98.6	108.7	95.3
Houston TX	94.4	93.0	83.5	101.7	104.8	113.2	96.6

Source: American Chamber of Commerce Researchers Association (ACCRA).

* Social Indicators

Overview

Quality of life is a subjective notion, thus measuring it can be difficult. The tie between the performance of the economy and the quality of life is indisputable. In Utah, 1998 was another year of strong and stable economic growth, however, this growth brings challenges. In a recent survey, Utahns identified growth, crime and education as the most important issues facing the state.

Utah Quality of Life Information

Utah Kids Count Project. Information about child well-being is a critical part of understanding standard of living. A collection of indicators is reported on in *Measures of Child Well-Being in Utah: 1998*¹. The Utah Kids Count Project tracks data on children for each of the counties in the state and produces the report annually. The data fall into the domains of health, education, safety and economic security—with 20 measures.

The Utah Kids Count Project is supported by the Annie E. Casey Foundation, which also tracks indicators of child well-being by state. Utah once again ranked seventh in caring for its children according to the Foundation. The Foundation uses 10 indicators: low birth weight babies, infant mortality, child death rate, teen violent death rates, teen birth rates, juvenile violent crime arrest rates, high school dropouts, idle teens, poverty, and single-parent headed families.

Consumer Survey. The *Utah Consumer Survey* is conducted by Valley Research, Inc. and provides valuable information about consumer sentiment in addition to: policy issues; income and employment; purchase intentions and spending; motor vehicles; home buying and building; health care/health insurance; and demographic characteristics. The survey has been administered for several years and allows comparisons over time. The most recent survey was during October 1998. Interviews were conducted by telephone with 501 randomly selected adults throughout Utah. The survey report details the answers given by respondents. One of the questions asked is "what is the most important issue facing Utah today?" Growth issues were identified as being most important, followed by crime/legal and education.

1997 Data on Social Well-Being

Crime. Statistics for 1997 from the FBI's uniform crime reports show the rate of violent crimes per 100,000 persons to be 334 in Utah, slightly more than half of the U.S. rate of 610.8. Fourteen states had lower rates than Utah.

Utah also compared favorably to other states for statistics on the number of federal and state prisoners per 10,000 population in 1996, ranking eighth from the lowest, with a rate of 19.9. The number for the U.S. as a whole was 44.5.

Education. In 1998, Utah had the sixth highest percentage of persons age 25 and over with at least a high school degree (89.3%). Utah is ranked 13th for the percentage with a bachelor's degree or higher (27.6%).

Vital Statistics and Health. Utah's unique age structure affects its ranking among other states on many vital statistics. Utah has the

highest percentage of the population under 18 years of age (33.4% in 1997) of any state and lowest median age (26.9 in 1997). Utah also has among the lowest percentage of the population age 65 and over (8.7% in 1997). The vital statistics, excluding health insurance coverage, are from the National Center for Health Statistics

Births. The birth rate in 1997 was estimated the highest of all states at 21.3 births per 1,000 people. Texas had the second highest rate at 17.2. The U.S. rate is 14.6.

Deaths. The overall death rate in Utah was 5.5 per 1,000 people in 1997, second lowest of the states. The infant mortality rate (deaths to infants less than 1 year-old per 1,000 live births) was 6.0 in Utah in 1995, six states had lower rates. Utah ranks among the best (second lowest) for death from heart disease and cancer. The death rate per 100,000 people in 1995 from heart disease was 148.8 and from cancer, 108.6 in Utah. The death rate per 100,000 people in the U.S. in 1995 from heart disease was 280.7 and from cancer, 204.9 in Utah.

Health Insurance Coverage. In 1997 the Bureau of the Census estimated that approximately 13.4% of the Utah population was without health insurance coverage. The U.S. average is 16.1%.

Poverty. Utah is among the states with the lowest poverty rates. Statistics from the *Current Population Survey* show 8.9% of the population in poverty in Utah in 1997. Only six states had lower poverty rates. In the U.S. it is estimated that 13.3% of the population was in poverty in 1997.

Public Assistance. Only 3.6% of the population were recipients of public aid in Utah in 1994, according to *Current Population Survey* data. With that figure Utah ranks 48th from the highest. The U.S. average was 7.7%.

Home Ownership. Home ownership rates for 1997 show that Utah has the eleventh highest percent of home owners at 72.5%. The rate for the nation is 65.7%. The lowest rates were in D.C., Hawaii, California and New York.

Significant Issues

The data shown as social indicators in this chapter are presented here to stimulate thought on the interaction of economic performance and social well-being. No effort has been made to give weights to the measure, or to develop a composite index that would allow the data to be compared over time or by geographic area.

Current Population Survey Data. It should also be noted that the source of the data on educational attainment, poverty, public aid, health insurance coverage, and home ownership is the U.S. Bureau of the Census and U.S. Bureau of Labor Statistics. These agencies provide state rankings from the *Current Population Survey*. The *Current Population Survey* is a monthly survey of approximately 50,000 households nationwide. The sampling variability in state estimates from the survey is problematic because of the small sample size. Precise estimates about rank (and changes in ranks over time) are not possible, but the data provide a general indication of the relative level of indicators from state to state. This caution does not apply to the crime statistics, or vital statistics, which are obtained from government records. *

¹ Utah Children, *Measures of Child Well-Being in Utah: 1998*. Salt Lake City, Utah. 1998.

Social Indicators in Crime and Education

	CRIME						EDUCATION					
	Violent Crime* per 100,000 People, 1997 (1)		Federal and State Prisoners per 10,000 People, 1996 (2)		Child Abuse Cases Reported (in 1,000), 1996 (2)		Educational Attainment, Persons 25 Years Old and Over, 1998:					
	Rate	Rank	Rate	Rank	(1,000)	Rank	High School or Higher (3)	Percent	Rank	Bachelor's Degree or Higher (3)	Percent	Rank
U.S.	610.8	–	44.5	–	2,050.8	–	82.1	–	23.9	–		
Alabama	564.5	31	50.9	42	26.4	25	78.8	43	20.6	38		
Alaska	701.1	41	61.2	47	10.1	13	90.6	2	24.2	20		
Arizona	623.7	37	50.8	41	28.4	27	81.9	35	21.9	32		
Arkansas	526.9	29	37.5	29	20.1	20	76.8	50	16.2	51		
California	798.3	43	45.8	38	370.5	51	80.1	40	26.4	17		
Colorado	363.2	18	32.5	23	31.0	31	89.6	4	34.0	2		
Connecticut	390.9	19	45.8	39	33.2	32	83.7	30	31.4	4		
Delaware	677.9	39	70.5	50	5.3	6	85.2	21	25.1	19		
District of Columbia	2,024.2	51	172.7	51	5.0	5	83.8	29	36.5	1		
Florida	1,023.6	50	44.3	37	124.4	49	81.9	35	22.5	26		
Georgia	606.6	35	47.8	40	52.0	41	80.0	41	20.7	37		
Hawaii	277.9	11	33.9	27	5.4	7	84.6	23	24.0	21		
Idaho	256.8	9	32.2	22	12.0	14	82.7	33	20.3	41		
Illinois	861.4	48	32.8	24	70.2	46	84.2	26	25.8	18		
Indiana	514.6	28	29.0	18	43.7	39	83.5	31	17.7	48		
Iowa	310.0	12	22.2	10	22.1	22	87.7	11	20.3	41		
Kansas	409.2	20	30.2	20	30.6	30	89.2	7	28.5	9		
Kentucky	316.9	13	33.2	26	39.2	37	77.9	47	20.1	43		
Louisiana	855.9	47	61.5	48	28.0	26	78.6	44	19.5	45		
Maine	120.8	4	11.5	3	4.5	4	86.7	13	19.2	47		
Maryland	846.6	45	43.5	35	29.9	29	84.7	22	31.8	3		
Massachusetts	644.2	38	19.4	7	35.5	36	85.6	18	31.0	5		
Michigan	590.0	33	44.1	36	58.7	43	85.4	20	22.1	30		
Minnesota	337.8	16	11.1	1	16.7	17	89.4	5	31.0	5		
Mississippi	469.0	26	51.0	43	18.1	18	77.3	48	19.5	45		
Missouri	577.4	32	41.1	31	52.5	42	82.9	32	22.4	28		
Montana	132.1	5	26.1	13	8.9	11	89.1	8	23.9	22		
Nebraska	438.4	22	19.9	9	8.3	9	87.7	11	20.9	36		
Nevada	798.7	44	52.6	44	13.6	15	89.1	8	20.6	38		
New Hampshire	113.2	2	17.7	5	6.2	8	84.0	28	26.6	16		
New Jersey	492.6	27	34.4	28	67.8	45	86.5	15	30.1	8		
New Mexico	853.3	46	27.6	15	28.7	28	79.6	42	23.1	25		
New York	688.6	40	38.3	30	141.4	50	81.5	37	26.8	15		
North Carolina	607.0	36	41.9	34	60.7	44	81.4	38	23.3	23		
North Dakota	87.2	1	11.2	2	4.3	3	84.3	25	22.5	26		
Ohio	435.4	21	41.3	32	95.5	47	86.2	17	21.5	34		
Oklahoma	559.5	30	59.4	46	40.9	38	84.6	23	20.5	40		
Oregon	444.4	25	27.0	14	24.5	24	85.5	19	27.7	12		
Pennsylvania	442.1	24	28.6	17	23.7	23	84.1	27	22.1	30		
Rhode Island	333.5	14	33.0	25	8.7	10	80.7	39	27.8	11		
South Carolina	990.3	49	55.3	45	20.4	21	78.6	44	21.3	35		
South Dakota	197.4	6	28.2	16	9.1	12	86.3	16	21.8	33		
Tennessee	789.7	42	29.4	19	34.3	34	76.9	49	16.9	49		
Texas	602.5	34	69.2	49	99.8	48	78.3	46	23.3	23		
Utah	334.0	15	19.9	8	18.9	19	89.3	6	27.6	13		
Vermont	119.7	3	19.0	6	2.3	1	86.7	13	27.1	14		
Virginia	345.2	17	41.4	33	34.6	35	82.6	34	30.3	7		
Washington	440.7	23	22.6	11	33.9	33	92.0	1	28.1	10		
West Virginia	218.7	7	15.1	4	16.4	16	76.4	51	16.3	50		
Wisconsin	270.6	10	25.2	12	45.5	40	88.0	10	22.3	29		
Wyoming	255.2	8	31.2	21	3.8	2	90.0	3	19.8	44		

Note: Rank is most favorable value to least favorable. When states share the same rank, the next lower rank is omitted.

* Violent crimes are offenses of murder, forcible rape, robbery, and aggravated assault.

Sources: (1) Federal Bureau of Investigation, "Crime in the United States, 1997"; (2) Bureau of the Census, "Statistical Abstract of the United States, 1998"; (3) U.S. Bureau of the Census, "March 1998 Current Population Survey".

Social Indicators in the Health

VITAL STATISTICS AND HEALTH

	Births per 1,000 People, 1997 (1)		Deaths per 1,000 People, 1997 (1)		Infant Deaths per 1,000 Live Births, 1995 (2)		Death Rate per 100,000 People, 1995: Heart Disease (2) Cancer (2)				Persons Without Health Insurance, 1997 (3)	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Percent	Rank
U.S.	14.6	–	8.6	–	7.6	–	280.7	–	204.9	–	16.1	–
Alabama	14.1	22	9.9	42	9.8	48	314.2	38	221.4	38	15.5	30
Alaska	15.9	6	4.1	1	7.7	29	90.6	1	95.1	1	18.1	42
Arizona	16.6	3	8.2	15	7.5	25	242.6	17	190.1	13	24.5	50
Arkansas	14.6	14	11.0	48	8.8	40	339.8	43	244.7	46	24.4	49
California	16.3	4	NA	–	6.3	11	216.3	9	162.8	6	21.5	47
Colorado	14.5	16	6.6	3	6.5	12	172.1	3	145.9	3	15.1	28
Connecticut	13.1	39	8.9	26	7.2	19	298.9	30	215.6	33	12.0	15
Delaware	14.0	25	8.9	23	7.5	25	276.1	22	227.3	40	13.1	21
District of Columbia	14.9	13	11.7	50	7.5	25	302.4	31	267.2	51	16.2	33
Florida	13.1	39	10.6	46	9.4	44	351.6	47	263.5	50	19.6	45
Georgia	15.8	7	7.9	10	5.8	5	242.4	16	177.3	9	17.6	39
Hawaii	14.6	14	6.7	4	6.1	8	196.0	4	156.4	4	7.5	1
Idaho	15.4	10	7.4	7	9.4	44	212.3	8	172.4	8	17.7	40
Illinois	15.2	11	8.7	19	8.4	38	304.4	34	212.2	26	12.4	17
Indiana	14.2	21	8.3	17	8.2	35	294.3	27	216.3	34	11.4	8
Iowa	12.9	42	9.7	38	7.0	17	332.0	41	219.1	36	12.0	15
Kansas	14.4	19	9.2	33	7.6	28	297.0	29	205.9	22	11.7	12
Kentucky	13.6	35	9.8	39	9.8	48	315.8	39	229.2	41	15.0	27
Louisiana	15.2	11	9.2	31	6.5	12	279.4	24	214.3	29	19.5	43
Maine	11.0	50	9.6	37	8.9	41	293.9	26	242.9	45	14.9	26
Maryland	13.8	28	8.2	16	5.2	1	236.4	13	201.9	17	13.4	23
Massachusetts	13.5	37	8.9	29	8.3	36	275.8	21	231.9	43	12.6	18
Michigan	13.7	33	8.6	18	6.7	16	294.8	28	203.5	20	11.6	11
Minnesota	13.8	28	7.9	11	10.5	50	225.2	11	188.6	12	9.2	3
Mississippi	15.7	8	10.1	43	7.4	23	356.0	48	213.1	27	20.1	46
Missouri	13.8	28	10.1	44	7.0	17	345.3	45	230.7	42	12.6	18
Montana	12.3	45	8.9	22	7.4	23	230.3	12	203.4	19	19.5	43
Nebraska	14.1	22	9.2	32	5.7	4	312.0	36	206.2	23	10.8	7
Nevada	16.1	5	8.0	12	5.5	3	246.9	18	194.5	15	17.5	37
New Hampshire	12.3	45	8.1	14	6.6	15	256.9	19	205.2	21	11.8	13
New Jersey	14.0	25	8.9	30	6.2	10	303.3	32	231.9	43	16.5	34
New Mexico	15.5	9	7.4	6	7.7	29	196.1	5	159.5	5	22.6	48
New York	14.5	16	8.9	24	9.2	42	350.2	46	213.3	28	17.5	37
North Carolina	14.4	19	8.9	27	7.2	19	269.5	20	206.8	25	15.5	30
North Dakota	13.0	41	9.5	36	8.7	39	304.3	33	214.4	30	15.2	29
Ohio	13.6	35	9.4	34	8.3	36	317.4	40	226.1	39	11.5	10
Oklahoma	14.5	16	10.1	45	6.1	8	340.4	44	217.9	35	17.8	41
Oregon	13.5	37	8.9	25	7.8	32	240.1	14	214.7	32	13.3	22
Pennsylvania	12.0	47	10.6	47	7.2	19	359.7	49	250.7	48	10.1	5
Rhode Island	12.5	44	9.9	41	9.6	47	334.1	42	250.4	47	10.2	6
South Carolina	13.8	28	8.8	21	9.5	46	277.6	23	201.9	18	16.8	35
South Dakota	13.8	28	9.5	35	9.3	43	312.3	37	214.5	31	11.8	13
Tennessee	13.9	27	9.8	40	6.5	12	308.2	35	220.9	37	13.6	25
Texas	17.2	2	7.3	5	5.4	2	222.9	10	168.9	7	24.5	50
Utah	21.3	1	5.5	2	6.0	7	148.1	2	108.6	2	13.4	23
Vermont	11.3	49	8.9	28	7.8	32	378.2	50	198.9	16	9.5	4
Virginia	13.7	33	8.0	13	5.9	6	240.2	15	190.4	14	12.6	18
Washington	14.1	22	7.6	8	7.9	34	208.6	7	183.0	10	11.4	8
West Virginia	11.4	48	11.6	49	7.3	22	378.9	51	259.4	49	17.2	36
Wisconsin	12.9	42	8.7	20	7.7	29	281.4	25	206.3	24	8.0	2
Wyoming	13.4	51	7.8	9	16.2	51	203.3	6	186.6	11	15.5	30

Note: Rank is most favorable value to least favorable. When states share the same rank, the next lower rank is omitted.

Sources: (1) National Center for Health Statistics, "National Vital Statistics Report"; (2) Bureau of the Census, "Statistical Abstract of the United States, 1998"; (3) Bureau of the Census, "Health Insurance Coverage: 1997 - State Uninsured Rates".

Indicators of Public Assistance/Poverty and Homeownership

	POVERTY		PUBLIC ASSISTANCE		HOME OWNERSHIP	
	All Ages in Poverty 1997 (1)		Public Aid Recipients 1994 (2)		Home Ownership Rates 1997 (3)	
	Percent	Rank	Percent	Rank	Percent	Rank
U.S.	13.3	–	7.7	–	65.7	–
Alabama	15.7	39	6.8	23	71.3	13
Alaska	8.8	5	7.4	15	67.2	32
Arizona	17.2	48	6.5	27	63	41
Arkansas	19.7	49	6.6	26	66.7	36
California	16.6	45	11.7	1	55.7	48
Colorado	8.2	1	4.7	41	64.1	39
Connecticut	8.6	4	6.4	29	68.1	28
Delaware	9.6	51	5.2	37	69.2	20
District of Columbia	21.8	12	16.7	--	42.5	51
Florida	14.3	34	6.8	23	66.9	33
Georgia	14.5	36	8.2	12	70.9	14
Hawaii	13.9	33	6.9	22	50.2	50
Idaho	14.7	37	3.4	50	72.3	12
Illinois	11.2	21	8.3	11	68.1	28
Indiana	8.8	5	5.2	37	74.1	6
Iowa	9.6	12	5.4	35	72.7	10
Kansas	9.7	15	4.7	41	66.5	37
Kentucky	15.9	40	9.3	6	75	2
Louisiana	16.3	41	9.7	4	66.4	38
Maine	10.1	17	7.4	15	74.9	3
Maryland	8.4	3	5.9	33	70.5	16
Massachusetts	12.2	26	7.5	14	62.3	43
Michigan	10.3	18	9.1	7	73.3	9
Minnesota	9.6	12	5.4	35	75.4	1
Mississippi	16.7	46	10.9	2	73.7	7
Missouri	11.8	25	7.0	20	70.5	16
Montana	15.6	38	5.6	34	67.5	31
Nebraska	9.8	16	4.0	45	66.7	36
Nevada	11	19	3.8	47	61.2	45
New Hampshire	9.1	8	3.5	49	66.8	34
New Jersey	9.3	10	6.0	32	63.1	40
New Mexico	21.2	50	8.7	9	69.6	19
New York	16.5	43	10.0	3	52.6	49
North Carolina	11.4	23	7.2	17	70.2	18
North Dakota	13.6	31	3.9	46	68.1	28
Ohio	11	19	8.1	13	69	22
Oklahoma	13.7	32	6.2	31	68.5	23
Oregon	11.6	24	5.1	39	61	46
Pennsylvania	11.2	21	7.2	17	73.3	9
Rhode Island	12.7	27	8.6	10	58.7	47
South Carolina	13.1	29	6.7	25	74.1	6
South Dakota	16.5	43	4.4	44	67.6	30
Tennessee	14.3	34	9.0	8	70.2	18
Texas	16.7	46	6.3	30	61.5	44
Utah	8.9	7	3.6	48	72.5	11
Vermont	9.3	10	7.0	20	69.1	21
Virginia	12.7	27	4.8	40	68.4	24
Washington	9.2	9	7.1	19	62.9	42
West Virginia	16.4	42	9.6	5	74.6	4
Wisconsin	8.2	1	6.5	27	68.3	25
Wyoming	13.5	30	4.5	43	67.6	30

Note: Rank is most favorable value to least favorable. When states share the same rank, the next lower rank is omitted.

Sources: (1) U.S. Bureau of the Census, "March 1997 Current Population Survey"; (2) U.S. Bureau of the Census, "Statistical Abstract of the United States, 1996"; (3) U.S. Bureau of the Census, "Housing Vacancies and Homeownership Annual Statistics: 1997".

* Regional / National Comparisons

Overview

The first seven years of the 1990s have been a period of sustained economic growth for the Mountain Division.¹ The eight mountain states show a population, employment, average annual pay, and per capita personal income growth rates well above national averages. Among the mountain states, Utah ranked higher than the national average in population, employment, and personal income growth rates.

Population Growth

The Mountain Division continues to show population growth above that of the nation. Between 1996 and 1997, the mountain states grew by an annual average rate of 2.2%, while the nation grew by only 0.9%. The mountain region's 1997 population of 16.5 million, amounts to 6.1% of the nation's population. Between 1992 and 1997, the population of the mountain states grew by an annual average rate of 2.7%. In fact, the Mountain Division had the five fastest growing states in the nation for this five-year period. Ranked in order of growth rates for the 1992-1997 period, the mountain states ranked high. Nevada was the fastest growing state in the nation with an annual average population growth rate of 4.7%. Arizona came in second at 3.3%, Idaho ranked third at 2.6%, Utah fourth at 2.5%, and Colorado fifth at 2.4%. New Mexico, which grew at an annual average rate of 1.8%, also grew at a rate above the national average and ranked as the eighth fastest growing state. Montana came in as the 14th fastest growing state at a growth rate of 1.3%, just slightly above the national average. Of the eight mountain states, only Wyoming grew at a rate below the national average, the Cowboy state grew by only 0.7% annually and ranked 31st in the nation.

Personal Income Growth

Total personal income for the mountain region grew by an annual average rate of 7.5% between 1992 and 1997. This is faster than the national average of 5.3% for the same period and shows that the mountain region is still doing much better than the nation. In fact, the mountain region took the four top spots in personal income growth for the 50 states. Nevada lead the nation with a personal income growth rate of 9.0%, Arizona came in second with a growth rate of 8.1%, Utah came in third at 8.1%, and Colorado fourth with a rate of 7.7%. Idaho personal income also grew well at 6.9%, placing it seventh in the nation. New Mexico grew at 6.0%, ranking 12th among the states. Only two mountain states, Montana and Wyoming, had personal income growth rates below the national average for the five-year period. Montana ranked 33rd with a growth rate of 4.9%, and Wyoming ranked 39th with a growth rate of 4.6%. Despite the impressive growth of total personal income in the mountain states, the region, with a total personal income of \$377.7 billion in 1997, accounted for only 5.6% of the nation's total personal income of \$7.8 trillion.

For the five-year period of 1992-1997, the mountain states had a per capita personal income growth rate of 4.7%. This is above the national rate of growth of 4.2% for the same period. Three states accounted for the region's higher than average rate of growth— Utah

at 5.4%, Colorado at 5.2%, and Arizona at 4.6%. These rates of growth ranked these three states first, second and 14th respectively among the 50 states. The rest of the mountain states all had per capita personal income growth rates below the national average. In order, they are: Idaho at 4.2% ranked 35th; Nevada at 4.1% ranked 37th; New Mexico at 4.1% ranked 38th; Wyoming at 3.9% ranked 43rd; and Montana at 3.6% ranked 48th.

The mountain states had an average per capita personal income of \$22,915 in 1997. This is 90.6% of the national average of \$25,298. Only two mountain states had a per capita personal income above the national average. Colorado had the highest per capita personal income of the eight mountain states at \$27,015, 106.8% of the national average, and ranking 10th nationally. Nevada followed close behind with a per capita personal income of \$26,553, 105% of the national average, ranking it 11th nationally. No other mountain state is in the top half of the 50 states in per capita personal income. Wyoming ranked 35th at \$22,611, Arizona ranked 36th at \$21,994, Idaho ranked 43rd at \$20,393, Utah came in at 44th with per capita income of \$20,611, Montana ranked 47th at \$19,704, and New Mexico came in at 49th with a per capita income of \$19,249.

Median Household Income Growth

For the three-year average of 1995-97, the mountain states had a median household income of \$35,929, or 98.7% of the national average. This average, though virtually equivalent to that of the nation's, belies significant household income differences among the eight mountain states. Median household income among the mountain states for the three-year average of 1995-97 ranked from sixth in the nation to 49th. Colorado had the highest median household income of the mountain states at \$42,664 or 117.2% of the national average and placing it sixth in the nation. Though Colorado was the only mountain state in the top ten among the 50 states, two other states ranked in the top twenty. Utah, with a median household income of \$39,694, or 109.1% of the national average, ranked 15th in the nation. Nevada claimed a median household income of \$38,760, 106.5% of the nation, ranking 18th among the states. No other mountain state ranked in the top 30. Two mountain states ranked quite low. Montana, with a median household income of \$29,262 ranked 46th and New Mexico, with a median household income of \$27,707, ranked 49th.

Average Annual Pay

The most complete measure of relative wages is *average annual pay for all workers covered by unemployment insurance programs*. From 1991 to 1996, this measurement of wage growth for the mountain states averaged 3.4% per year compared to 3.3% for the U.S. Mountain state's wages increased slightly from 89.5% of the U.S. average in 1991 to 90.0% by 1996. Such growth rates above the national average show the strength of the regional economy relative to that of the nation's. Colorado ranked first among the mountain states and 15th in the nation with an annual average pay of \$28,520. Nevada, with an average annual pay of \$27,788, ranked second among the mountain states and 18th in the nation. No other mountain state ranked in the top 25 among the states in average annual pay. Arizona ranked 27th among the states, Utah ranked 34th with an annual average pay of \$24,572. Following Utah were New Mexico with an average annual pay of \$23,716 and a national ranking of 41st, Idaho with an annual average pay of

¹ This chapter utilizes the most recent data that allows comparison among all states and the District of Columbia. Generally, 1997 is the most recent year. Other chapters in this report include more recent data for Utah, the nation and other states.

\$23,353 and a rank of 43rd, Wyoming with an annual average pay of \$22,870 and a rank of 46th and last, Montana with an average annual pay of \$21,146 and a rank of 50th.

Nonagricultural Payrolls

Between 1992 and 1997, the mountain states had an average annual employment growth rate of 4.7%. This is almost twice the 2.4% average annual employment growth rate for the nation. Every mountain state, except Wyoming, experienced an employment growth rate above that of the nation. In fact, the mountain states took the top five spots among the 50 states in employment growth rates. Nevada took top honors with an average annual employment growth rate of 6.8%, for the five-year period. Arizona ranked second among the states with an employment growth rate of 5.4%, Utah ranked third at 5.4%, Colorado fourth with an employment growth rate of 4.4%, and Idaho ranked fifth at 4.1%. New Mexico, Montana, and Wyoming had employment growth rates much more modest and ranked much lower among the states. New Mexico experienced an employment growth rate of 3.3% and ranked 10th, Montana's employment growth of 2.9% ranked the state at 13th. Wyoming ranked last among the mountain states and 40th in the nation with an average annual employment growth rate of 1.7%.

Despite the overall impressive growth rates of the mountain states relative to the nation over the last five years, there are now clear signs that the economies of the mountain states are slowing. Recent U.S. Department of Labor shows that from October 1997 to October 1998, every mountain state has experienced slower employment growth rates than they had experienced for the five years of 1992-97. It appears that the economic slowdown in Asia and other parts of the world are starting to have an impact on the mountain states and their economies.

The mountain state's average annual unemployment rate of 4.3% for 1997 was below the national average of 4.9%. From October 1997 to October 1998, the mountain state's experienced an unemployment rate of 3.9% compared to 4.2% for the nation, showing that this region is still doing well economically. Nevertheless, there is substantial divergence among the mountain states in unemployment rates. In 1997, Utah had the lowest unemployment rate of the mountain states and ranked as the 48th lowest in the nation. Colorado was close behind with an

unemployment rate of 3.3%, ranking it 44th lowest in the nation. Nevada ranked third among the mountain states and 35th among the states with an unemployment rate of 4.1%. Arizona ranked fourth among the mountain states and 28th in the nation with an unemployment rate of 4.6%. Wyoming, Idaho, and Montana all had unemployment rates above the national average and ranked 24th, 16th, and 15th respectively among the 50 states.

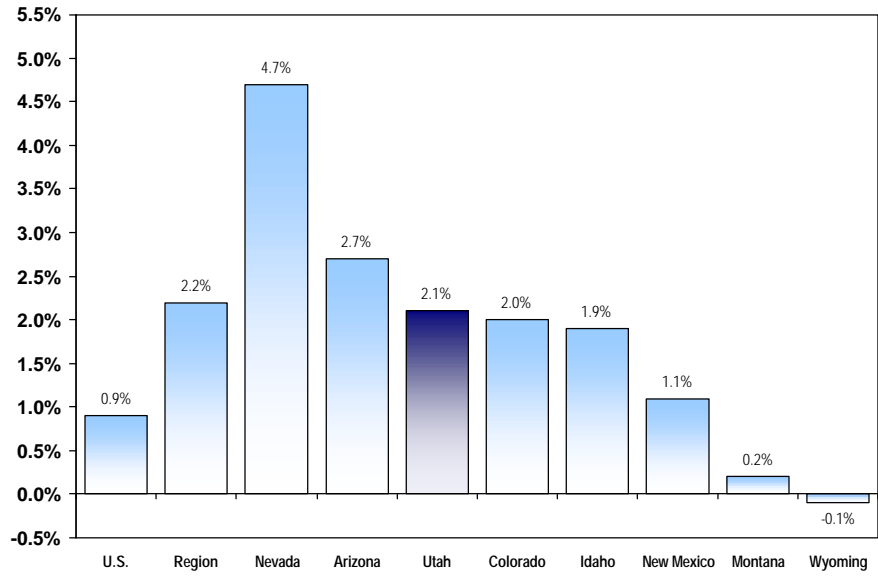
Poverty Rates

In 1997, the mountain states had a poverty rate of 13.5%, slightly above the national average of 13.3%. As with median household income, there is a substantial spread among the eight mountain states in poverty rates. Using a three-year average for 1995-97, the mountain states ranged in poverty rates from a low of 8.3% in Utah to a high of 24.0% in New Mexico. Utah's low rate placed it as the third lowest poverty rate in the nation. Following Utah, was Colorado with a poverty rate of 9.2% placing the state seventh in the nation. Nevada also had a poverty rate below the national average. At 10.1%, Nevada ranked 13th in the nation. The other five mountain states had poverty rates above the national average. Wyoming ranked 31st in the nation with a poverty rate of 12.5%. Idaho followed closely with a poverty rate of 13.7%, placing the Gem state 32nd in the nation. Montana ranked 40th, with a poverty rate of 16.0% and Arizona ranked 47th with a poverty rate of 17.9%. New Mexico had the unenviable distinction of ranking 51st with a poverty rate of 24.0%.

Conclusion

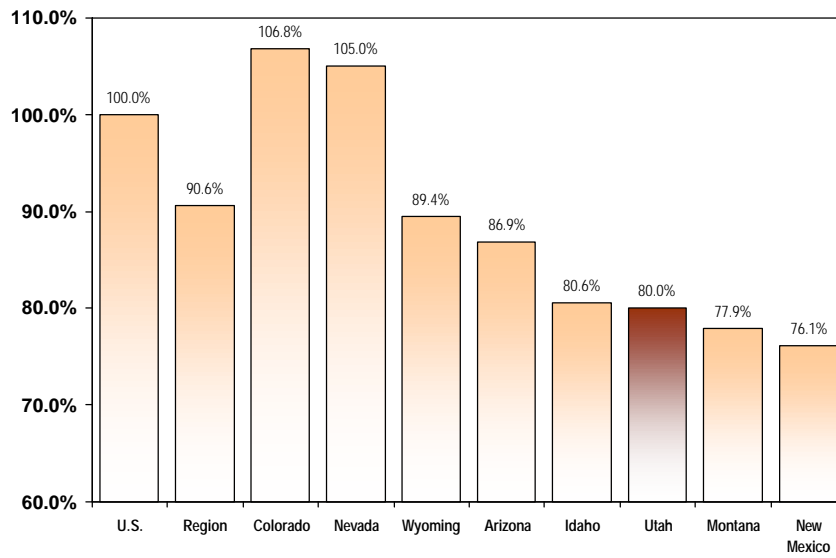
The national economy remains strong. From 1992 to 1997, the nation's employment growth rate grew by an annual average rate of 2.4%. From September 1997 to September 1998, it grew by 2.5%. Most mountain states also show employment growth rates that are still strong. Arizona, Nevada, Colorado, and Utah all experienced employment growth rates (from September to September) above the national average. However, most of these states are experiencing slowing growth rates. For this same period of time, New Mexico, Idaho, Wyoming, and Montana had employment growth rates below the national average. How the Asian crisis affects the nation and the mountain states may have a significant influence on future employment growth rates. *

Population Growth Rates: 1996-1997, U.S. and Mountain States

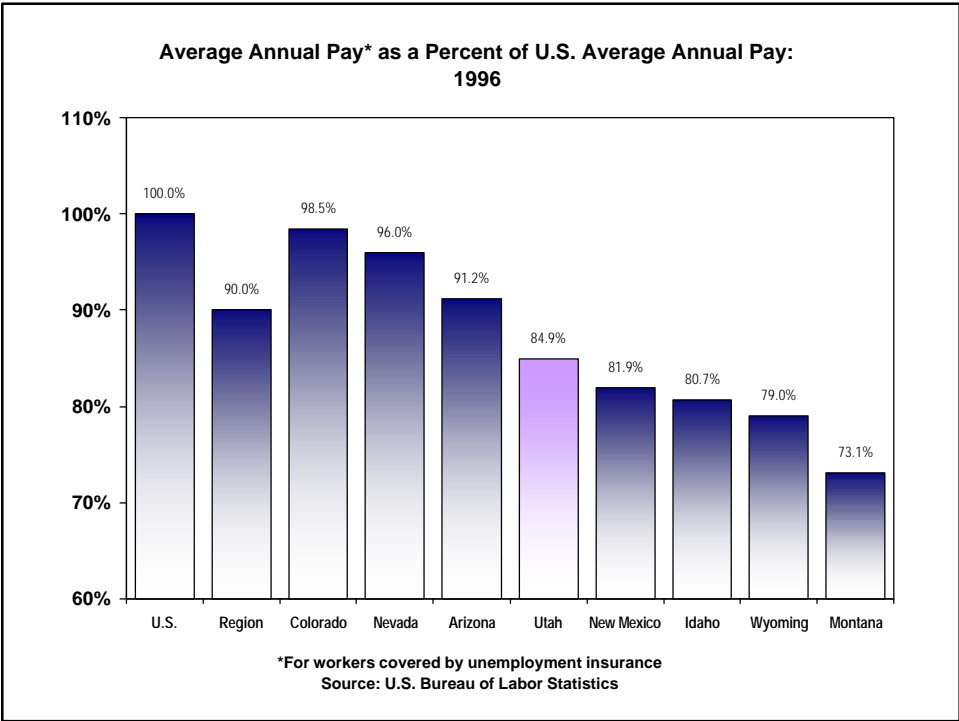
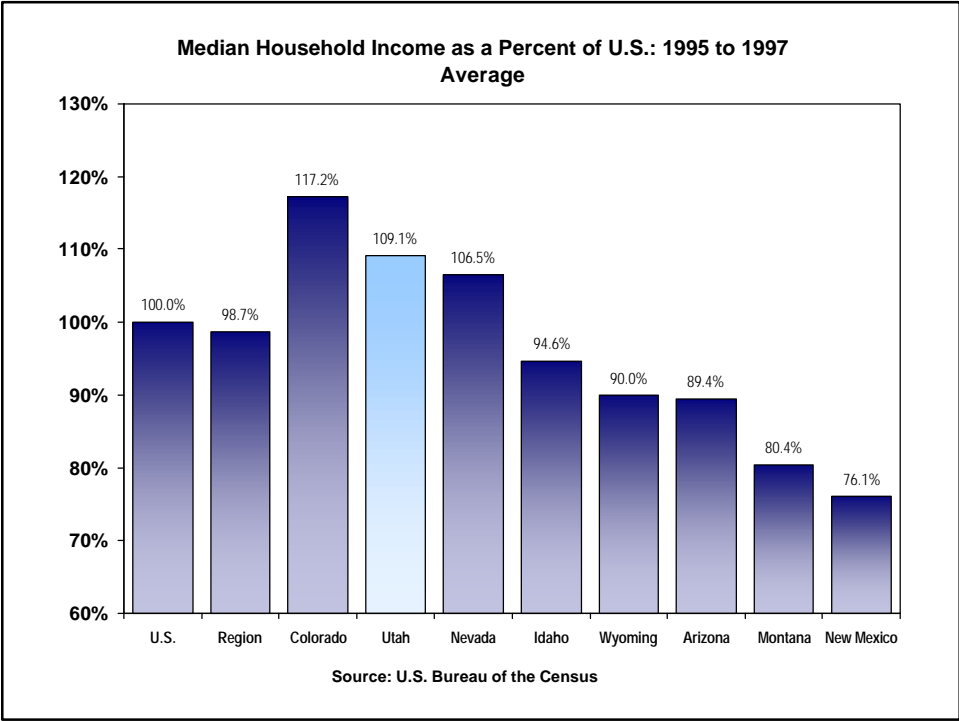


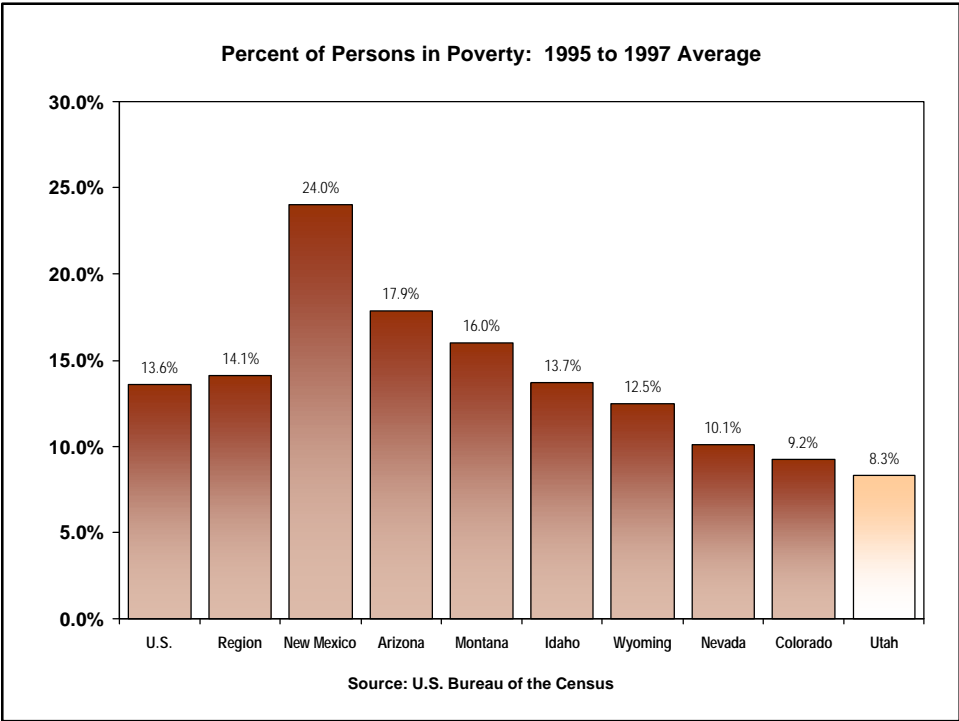
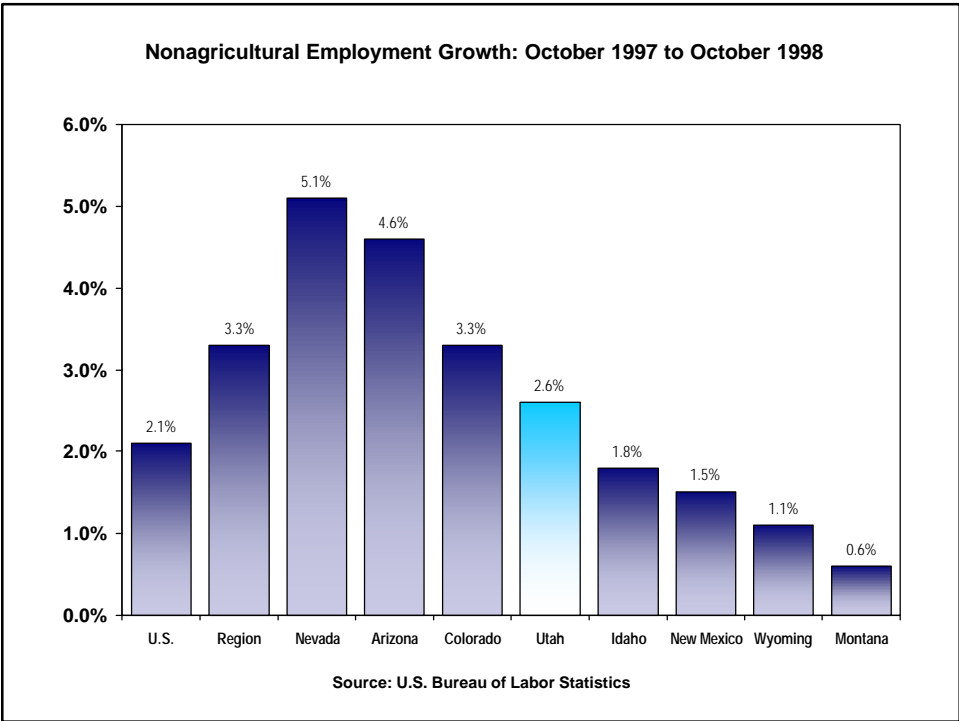
Source: U.S. Census Bureau

Per Capita Income as a Percent of U.S., Mountain States: 1997



Source: U.S. Bureau of Economic Analysis





Population and Households -- U.S., Mountain Division, and States: 1992, 1996, and 1997

Division/State	Population (July 1 Estimates)			Rates of Population Change		Households (July 1 Estimates)		Rankings			
	1992	1996	1997	Avg. Ann.	Percent	1996	Persons	Rank by	Rank by	Rank by	Rank by
	(thousands)	(thousands)	(thousands)	Growth Rate 1992-97	Change 1996-97	(thousands)	per Household	Population 1997	Avg. Ann. Growth Rate 1992-97	Percent Change 1996-97	Persons per Household 1996
United States	255,002	265,179	267,636	1.0%	0.9%	98,751	2.62				
Mountain States	14,418	16,124	16,482	2.7%	2.2%	6,022	2.62				
Arizona	3,868	4,434	4,555	3.3%	2.7%	1,687	2.57	21	2	2	25
Colorado	3,462	3,816	3,893	2.4%	2.0%	1,502	2.49	25	5	5	50
Idaho	1,066	1,188	1,210	2.6%	1.9%	430	2.72	40	3	6	6
Montana	823	877	879	1.3%	0.2%	341	2.51	44	14	40	44
Nevada	1,333	1,601	1,677	4.7%	4.7%	619	2.54	37	1	1	38
New Mexico	1,582	1,711	1,730	1.8%	1.1%	619	2.72	36	8	16	5
Utah	1,821	2,018	2,059	2.5%	2.1%	639	3.08	34	4	4	1
Wyoming	464	480	480	0.7%	-0.1%	184	2.56	51	31	46	28
Other States											
Alabama	4,138	4,287	4,319	0.9%	0.7%	1,624	2.58	23	23	20	21
Alaska	587	605	609	0.8%	0.7%	214	2.75	48	27	22	4
Arkansas	2,394	2,506	2,523	1.1%	0.7%	951	2.58	33	17	27	23
California	30,892	31,858	32,268	0.9%	1.3%	11,101	2.81	1	22	12	3
Connecticut	3,277	3,267	3,270	-0.0%	0.1%	1,231	2.59	28	49	43	18
Delaware	689	723	732	1.2%	1.1%	276	2.56	46	15	15	29
D.C.	585	539	529	-2.0%	-1.9%	231	2.17	50	51	51	51
Florida	13,501	14,419	14,654	1.7%	1.6%	5,648	2.50	4	12	9	45
Georgia	6,761	7,334	7,486	2.1%	2.1%	2,723	2.64	10	6	3	13
Hawaii	1,150	1,183	1,187	0.6%	0.3%	389	2.96	41	35	37	2
Illinois	11,601	11,845	11,896	0.5%	0.4%	4,352	2.66	6	39	36	11
Indiana	5,648	5,828	5,864	0.8%	0.6%	2,209	2.57	14	28	29	26
Iowa	2,807	2,848	2,852	0.3%	0.2%	1,103	2.50	30	43	42	48
Kansas	2,516	2,579	2,595	0.6%	0.6%	982	2.54	32	37	30	35
Kentucky	3,752	3,882	3,908	0.8%	0.7%	1,478	2.56	24	24	25	30
Louisiana	4,271	4,341	4,352	0.4%	0.3%	1,572	2.69	22	41	39	10
Maine	1,235	1,239	1,242	0.1%	0.3%	483	2.50	39	45	38	47
Maryland	4,904	5,060	5,094	0.8%	0.7%	1,871	2.65	19	26	24	12
Massachusetts	5,991	6,085	6,118	0.4%	0.5%	2,322	2.53	13	40	31	40
Michigan	9,466	9,731	9,774	0.6%	0.4%	3,576	2.62	8	34	34	14
Minnesota	4,472	4,649	4,686	0.9%	0.8%	1,763	2.58	20	19	19	19
Mississippi	2,610	2,711	2,731	0.9%	0.7%	979	2.70	31	21	21	9
Missouri	5,194	5,364	5,402	0.8%	0.7%	2,052	2.54	16	25	23	36
Nebraska	1,603	1,649	1,657	0.7%	0.5%	631	2.54	38	32	32	37
New Hampshire	1,113	1,160	1,173	1.0%	1.1%	439	2.58	42	18	17	22
New Jersey	7,824	8,002	8,053	0.6%	0.6%	2,889	2.71	9	38	28	7
New York	18,080	18,134	18,137	0.1%	0.0%	6,737	2.62	3	48	45	15
North Carolina	6,833	7,309	7,425	1.7%	1.6%	2,796	2.54	11	11	10	34
North Dakota	635	643	641	0.2%	-0.3%	247	2.51	47	44	50	43
Ohio	11,000	11,163	11,186	0.3%	0.2%	4,260	2.56	7	42	41	27
Oklahoma	3,204	3,295	3,317	0.7%	0.7%	1,265	2.54	27	30	26	33
Oregon	2,975	3,196	3,243	1.7%	1.5%	1,249	2.51	29	10	11	42
Pennsylvania	11,981	12,040	12,020	0.1%	-0.2%	4,594	2.55	5	47	48	31
Rhode Island	1,001	988	987	-0.3%	-0.1%	378	2.53	43	50	47	41
South Carolina	3,593	3,717	3,760	0.9%	1.2%	1,376	2.62	26	20	13	16
South Dakota	715	738	738	0.6%	0.1%	273	2.59	45	36	44	17
Tennessee	5,013	5,307	5,368	1.4%	1.1%	2,041	2.54	17	13	14	32
Texas	17,680	19,091	19,439	1.9%	1.8%	6,894	2.71	2	7	7	8
Vermont	570	586	589	0.7%	0.4%	227	2.50	49	33	35	49
Virginia	6,383	6,666	6,734	1.1%	1.0%	2,511	2.58	12	16	18	24
Washington	5,144	5,520	5,610	1.8%	1.6%	2,139	2.53	15	9	8	39
West Virginia	1,806	1,820	1,816	0.1%	-0.3%	714	2.50	35	46	49	46
Wisconsin	4,991	5,146	5,170	0.7%	0.5%	1,943	2.58	18	29	33	20

Source: U.S. Bureau of the Census.

Total Personal Income -- U.S., Mountain Division, and States: 1992, 1996, and 1997

Division/State	Total Personal Income			Rates of Total Personal Income Change		Total Personal Income (saar)			Rankings			
	1992	1996	1997	Avg. Ann. Growth Rate 1992-97	Percent Change 1996-97	2nd	2nd	Percent Change 1997-98	Rank by Total Personal Income 1997	Rank by Avg. Ann. Growth Rate 1992-97	Rank by Percent Change 1996-97	Rank by Percent Change (saar) 1997-98
	(millions)	(millions)	(millions)			Quarter 1997	Quarter 1998		(millions)	(millions)		
United States	5,239,364	6,408,990	6,770,709	5.3%	5.6%	6,729,607	7,070,608	5.1%				
Mountain States	262,841	353,534	377,695	7.5%	6.8%	275,794	292,206	6.0%				
Arizona	68,000	93,372	100,182	8.1%	7.3%	99,266	106,370	7.2%	23	2	6	3
Colorado	72,690	97,764	105,158	7.7%	7.6%	104,256	112,098	7.5%	22	4	2	2
Idaho	17,700	23,430	24,681	6.9%	5.3%	24,563	25,847	5.2%	43	7	25	13
Montana	13,605	16,557	17,316	4.9%	4.6%	17,226	17,941	4.2%	46	33	40	35
Nevada	28,956	41,423	44,524	9.0%	7.5%	44,297	47,069	6.3%	34	1	4	5
New Mexico	24,917	31,827	33,297	6.0%	4.6%	33,242	34,353	3.3%	38	12	39	43
Utah	28,303	38,825	41,689	8.1%	7.4%	41,423	43,715	5.5%	35	3	5	11
Wyoming	8,670	10,336	10,848	4.6%	5.0%	10,787	11,183	3.7%	51	39	33	40
Other States												
Alabama	69,582	85,160	89,403	5.1%	5.0%	88,980	92,357	3.8%	24	26	31	39
Alaska	12,951	14,711	15,199	3.3%	3.3%	15,229	15,936	4.6%	48	49	47	21
Arkansas	37,845	47,122	49,453	5.5%	4.9%	49,280	51,185	3.9%	32	18	34	38
California	684,674	798,020	846,017	4.3%	6.0%	841,373	893,636	6.2%	1	42	14	6
Connecticut	92,749	110,550	117,564	4.9%	6.3%	116,716	122,398	4.9%	21	35	11	18
Delaware	15,875	19,744	20,808	5.6%	5.4%	20,535	21,849	6.4%	44	17	24	4
D.C.	16,726	18,244	18,667	2.2%	2.3%	18,556	19,174	3.3%	45	51	50	44
Florida	268,828	343,652	363,347	6.2%	5.7%	361,288	377,843	4.6%	4	10	18	24
Georgia	127,686	167,996	178,870	7.0%	6.5%	177,802	188,259	5.9%	11	5	10	8
Hawaii	26,372	29,698	30,479	2.9%	2.6%	30,390	31,008	2.0%	40	50	49	51
Illinois	258,288	315,117	332,241	5.2%	5.4%	330,778	346,643	4.8%	5	25	22	19
Indiana	105,968	129,682	135,945	5.1%	4.8%	135,332	141,699	4.7%	16	28	36	20
Iowa	51,556	62,880	66,110	5.1%	5.1%	65,973	68,045	3.1%	30	29	26	45
Kansas	48,967	58,793	62,312	4.9%	6.0%	62,031	64,881	4.6%	31	34	15	22
Kentucky	62,678	75,584	80,503	5.1%	6.5%	80,111	83,591	4.3%	26	27	8	30
Louisiana	69,971	85,117	89,094	5.0%	4.7%	88,603	92,557	4.5%	25	32	38	28
Maine	22,230	25,936	27,236	4.1%	5.0%	27,117	27,944	3.0%	41	45	30	46
Maryland	115,446	138,173	146,060	4.8%	5.7%	145,008	151,267	4.3%	15	36	19	33
Massachusetts	147,039	179,876	190,908	5.4%	6.1%	189,401	198,083	4.6%	10	21	12	23
Michigan	187,979	233,628	244,329	5.4%	4.6%	242,939	256,771	5.7%	9	20	41	9
Minnesota	94,472	117,421	123,207	5.5%	4.9%	122,568	129,837	5.9%	19	19	35	7
Mississippi	36,967	47,173	49,386	6.0%	4.7%	49,183	51,405	4.5%	33	13	37	27
Missouri	99,301	121,299	128,151	5.2%	5.6%	127,403	133,230	4.6%	17	24	20	25
Nebraska	30,697	37,741	39,195	5.0%	3.9%	39,103	40,284	3.0%	36	31	45	47
New Hampshire	24,758	30,734	32,608	5.7%	6.1%	32,264	33,904	5.1%	39	15	13	16
New Jersey	209,344	247,267	259,567	4.4%	5.0%	257,195	270,398	5.1%	8	41	32	14
New York	448,371	526,883	549,531	4.2%	4.3%	545,785	569,104	4.3%	2	44	43	34
North Carolina	124,565	161,194	172,073	6.7%	6.7%	171,247	179,056	4.6%	13	8	7	26
North Dakota	10,718	13,051	12,954	3.9%	-0.7%	12,901	13,355	3.5%	50	47	51	42
Ohio	214,356	257,610	270,741	4.8%	5.1%	269,357	281,005	4.3%	7	37	27	32
Oklahoma	53,937	63,809	67,052	4.4%	5.1%	67,061	68,978	2.9%	29	40	29	48
Oregon	55,549	73,044	77,791	7.0%	6.5%	77,276	81,420	5.4%	27	6	9	12
Pennsylvania	251,004	295,349	308,640	4.2%	4.5%	306,921	318,147	3.7%	6	43	42	41
Rhode Island	20,828	24,059	25,366	4.0%	5.4%	25,235	26,334	4.4%	42	46	23	29
South Carolina	59,065	73,407	77,650	5.6%	5.8%	77,101	80,442	4.3%	28	16	17	31
South Dakota	12,195	15,122	15,632	5.1%	3.4%	15,634	16,080	2.9%	47	30	46	49
Tennessee	91,505	115,744	122,136	5.9%	5.5%	121,295	126,106	4.0%	20	14	21	36
Texas	333,569	425,443	459,688	6.6%	8.0%	455,712	490,069	7.5%	3	9	1	1
Vermont	10,762	13,010	13,557	4.7%	4.2%	13,465	14,148	5.1%	49	38	44	17
Virginia	135,857	166,599	176,245	5.3%	5.8%	174,637	184,459	5.6%	12	22	16	10
Washington	110,238	137,788	148,182	6.1%	7.5%	147,465	155,029	5.1%	14	11	3	15
West Virginia	28,310	32,986	34,017	3.7%	3.1%	33,926	34,861	2.8%	37	48	48	50
Wisconsin	96,746	119,042	125,100	5.3%	5.1%	124,369	129,254	3.9%	18	23	28	37

saar = seasonally adjusted annual rate.

Source: U.S. Bureau of Economic Analysis.

Per Capita Personal Income -- U.S., Mountain Division, and States: 1992, 1996, and 1997

Division/State	Per Capita Personal Income			Rates of Per Capita Personal Income Change		Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income			Rankings		
	1992	1996	1997	Avg. Ann. Grwth Rate 1992-97	Percent Change 1996-97	1992	1996	1997	Rank by Per Capita Personal Income 1997	Rank by Average Annual Grwth Rate 1992-97	Rank by Percent Change 1996-97
United States	20,546	24,169	25,298	4.2%	4.7%	100.0%	100.0%	100.0%			
Mountain States	18,231	21,925	22,915	4.7%	4.5%	88.7%	90.7%	90.6%			
Arizona	17,580	21,057	21,994	4.6%	4.4%	85.6%	87.1%	86.9%	36	14	25
Colorado	20,998	25,618	27,015	5.2%	5.5%	102.2%	106.0%	106.8%	10	2	7
Idaho	16,597	19,729	20,393	4.2%	3.4%	80.8%	81.6%	80.6%	43	35	45
Montana	16,540	18,886	19,704	3.6%	4.3%	80.5%	78.1%	77.9%	47	48	28
Nevada	21,727	25,876	26,553	4.1%	2.6%	105.7%	107.1%	105.0%	11	37	48
New Mexico	15,752	18,599	19,249	4.1%	3.5%	76.7%	77.0%	76.1%	49	38	43
Utah*	15,546	19,244	20,246	5.4%	5.2%	75.7%	79.6%	80.0%	44	1	9
Wyoming	18,702	21,532	22,611	3.9%	5.0%	91.0%	89.1%	89.4%	35	43	11
Other States											
Alabama	16,814	19,864	20,699	4.2%	4.2%	81.8%	82.2%	81.8%	39	33	36
Alaska	22,074	24,318	24,945	2.5%	2.6%	107.4%	100.6%	98.6%	20	50	49
Arkansas	15,807	18,802	19,602	4.4%	4.3%	76.9%	77.8%	77.5%	48	24	34
California	22,163	25,050	26,218	3.4%	4.7%	107.9%	103.6%	103.6%	14	49	22
Connecticut	28,305	33,835	35,954	4.9%	6.3%	137.8%	140.0%	142.1%	1	7	1
Delaware	23,041	27,291	28,443	4.3%	4.2%	112.1%	112.9%	112.4%	7	27	35
D.C.	28,607	33,830	35,290	4.3%	4.3%	139.2%	140.0%	139.5%	2	30	30
Florida	19,912	23,833	24,795	4.5%	4.0%	96.9%	98.6%	98.0%	21	19	40
Georgia	18,885	22,906	23,893	4.8%	4.3%	91.9%	94.8%	94.4%	26	8	32
Hawaii	22,942	25,105	25,686	2.3%	2.3%	111.7%	103.9%	101.5%	17	51	50
Illinois	22,265	26,603	27,929	4.6%	5.0%	108.4%	110.1%	110.4%	8	12	13
Indiana	18,763	22,251	23,183	4.3%	4.2%	91.3%	92.1%	91.6%	30	25	37
Iowa	18,369	22,078	23,177	4.8%	5.0%	89.4%	91.3%	91.6%	31	9	14
Kansas	19,464	22,796	24,014	4.3%	5.3%	94.7%	94.3%	94.9%	24	29	8
Kentucky	16,706	19,470	20,599	4.3%	5.8%	81.3%	80.6%	81.4%	41	31	4
Louisiana	16,381	19,608	20,473	4.6%	4.4%	79.7%	81.1%	80.9%	42	16	26
Maine	18,001	20,941	21,928	4.0%	4.7%	87.6%	86.6%	86.7%	37	41	20
Maryland	23,541	27,305	28,671	4.0%	5.0%	114.6%	113.0%	113.3%	6	42	12
Massachusetts	24,541	29,559	31,207	4.9%	5.6%	119.4%	122.3%	123.4%	4	5	5
Michigan	19,858	24,009	24,998	4.7%	4.1%	96.7%	99.3%	98.8%	19	10	38
Minnesota	21,124	25,260	26,295	4.5%	4.1%	102.8%	104.5%	103.9%	13	20	39
Mississippi	14,164	17,402	18,087	5.0%	3.9%	68.9%	72.0%	71.5%	51	4	41
Missouri	19,119	22,615	23,723	4.4%	4.9%	93.1%	93.6%	93.8%	27	23	17
Nebraska	19,153	22,891	23,656	4.3%	3.3%	93.2%	94.7%	93.5%	28	26	46
New Hampshire	22,237	26,490	27,806	4.6%	5.0%	108.2%	109.6%	109.9%	9	15	15
New Jersey	26,758	30,901	32,233	3.8%	4.3%	130.2%	127.9%	127.4%	3	44	31
New York	24,799	29,055	30,299	4.1%	4.3%	120.7%	120.2%	119.8%	5	39	33
North Carolina	18,230	22,054	23,174	4.9%	5.1%	88.7%	91.2%	91.6%	32	6	10
North Dakota	16,867	20,308	20,213	3.7%	-0.5%	82.1%	84.0%	79.9%	46	46	51
Ohio	19,487	23,078	24,203	4.4%	4.9%	94.8%	95.5%	95.7%	22	22	18
Oklahoma	16,833	19,363	20,214	3.7%	4.4%	81.9%	80.1%	79.9%	45	45	27
Oregon	18,671	22,852	23,984	5.1%	5.0%	90.9%	94.6%	94.8%	25	3	16
Pennsylvania	20,951	24,530	25,678	4.2%	4.7%	102.0%	101.5%	101.5%	18	36	21
Rhode Island	20,811	24,344	25,689	4.3%	5.5%	101.3%	100.7%	101.5%	16	28	6
South Carolina	16,441	19,751	20,651	4.7%	4.6%	80.0%	81.7%	81.6%	40	11	24
South Dakota	17,051	20,503	21,183	4.4%	3.3%	83.0%	84.8%	83.7%	38	21	47
Tennessee	18,255	21,808	22,752	4.5%	4.3%	88.8%	90.2%	89.9%	34	18	29
Texas	18,867	22,285	23,647	4.6%	6.1%	91.8%	92.2%	93.5%	29	13	2
Vermont	18,879	22,184	23,018	4.0%	3.8%	91.9%	91.8%	91.0%	33	40	42
Virginia	21,283	24,992	26,172	4.2%	4.7%	103.6%	103.4%	103.5%	15	34	19
Washington	21,430	24,964	26,412	4.3%	5.8%	104.3%	103.3%	104.4%	12	32	3
West Virginia	15,679	18,120	18,734	3.6%	3.4%	76.3%	75.0%	74.1%	50	47	44
Wisconsin	19,382	23,132	24,199	4.5%	4.6%	94.3%	95.7%	95.7%	23	17	23

* Utah ranks 43rd in per capita income if the District of Columbia is excluded from the rankings.

Source: U.S. Bureau of Economic Analysis.

Total Personal Income per Household--U.S., Mountain Division, and States: 1992, 1996, and 1997

Division/State	Total Personal Income per Household (mean average)			Rates of Change for Total Personal Income per Household		Total Personal Income per Household as a Percent of U.S. Personal Income per Household			Rankings		
	1992	1996	1997	Avg. Ann. Grwth Rat 1992-97	Percent Change 1996-97	1992	1996	1997	Rank by Total Personal Income per Household 1997	Rank by Average Annual Grwth Rat 1992-97	Rank by Percent Change 1996-97
United States	55,350	64,900	67,940	4.2%	4.7%	100.0%	100.0%	100.0%			
Mountain States	49,500	58,710	61,360	4.4%	4.5%	89.4%	90.5%	90.3%			
Arizona	47,490	55,340	57,800	4.0%	4.4%	85.8%	85.3%	85.1%	37	36	25
Colorado	53,920	65,070	68,620	4.9%	5.5%	97.4%	100.3%	101.0%	16	3	7
Idaho	46,120	54,540	56,380	4.1%	3.4%	83.3%	84.0%	83.0%	40	33	45
Montana	43,150	48,580	50,680	3.3%	4.3%	78.0%	74.9%	74.6%	49	49	29
Nevada	55,960	66,900	68,650	4.2%	2.6%	101.1%	103.1%	101.0%	15	28	48
New Mexico	43,810	51,400	53,200	4.0%	3.5%	79.2%	79.2%	78.3%	45	37	43
Utah	49,550	60,720	63,880	5.2%	5.2%	89.5%	93.6%	94.0%	24	1	9
Wyoming	49,930	56,260	59,080	3.4%	5.0%	90.2%	86.7%	87.0%	36	47	11
Other States											
Alabama	44,660	52,430	54,640	4.1%	4.2%	80.7%	80.8%	80.4%	43	30	36
Alaska	64,020	68,640	70,410	1.9%	2.6%	115.7%	105.8%	103.6%	12	51	49
Arkansas	41,590	49,560	51,680	4.4%	4.3%	75.1%	76.4%	76.1%	48	15	34
California	63,700	71,890	75,240	3.4%	4.7%	115.1%	110.8%	110.7%	9	48	22
Connecticut	75,180	89,830	95,460	4.9%	6.3%	135.8%	138.4%	140.5%	1	4	1
Delaware	61,490	71,640	74,660	4.0%	4.2%	111.1%	110.4%	109.9%	10	38	35
D.C.	68,110	78,870	82,270	3.8%	4.3%	123.1%	121.5%	121.1%	3	41	31
Florida	50,340	60,840	63,300	4.7%	4.0%	90.9%	93.7%	93.2%	26	10	40
Georgia	51,290	61,700	64,360	4.6%	4.3%	92.7%	95.1%	94.7%	22	12	30
Hawaii	70,600	76,440	78,210	2.1%	2.3%	127.6%	117.8%	115.1%	6	50	50
Illinois	60,290	72,400	76,010	4.7%	5.0%	108.9%	111.6%	111.9%	8	8	13
Indiana	49,680	58,710	61,170	4.2%	4.2%	89.8%	90.5%	90.0%	31	26	37
Iowa	47,620	57,020	59,860	4.7%	5.0%	86.0%	87.9%	88.1%	33	11	14
Kansas	51,050	59,890	63,090	4.3%	5.3%	92.2%	92.3%	92.9%	27	23	8
Kentucky	44,210	51,150	54,110	4.1%	5.8%	79.9%	78.8%	79.6%	44	29	4
Louisiana	45,600	54,150	56,540	4.4%	4.4%	82.4%	83.4%	83.2%	39	18	26
Maine	46,940	53,700	56,240	3.7%	4.7%	84.8%	82.7%	82.8%	41	44	20
Maryland	63,920	73,850	77,550	3.9%	5.0%	115.5%	113.8%	114.1%	7	39	12
Massachusetts	64,930	77,470	81,790	4.7%	5.6%	117.3%	119.4%	120.4%	4	9	5
Michigan	53,820	65,340	68,030	4.8%	4.1%	97.2%	100.7%	100.1%	18	7	38
Minnesota	55,940	66,590	69,320	4.4%	4.1%	101.1%	102.6%	102.0%	14	19	39
Mississippi	39,580	48,190	50,090	4.8%	3.9%	71.5%	74.3%	73.7%	50	6	41
Missouri	49,810	59,110	62,000	4.5%	4.9%	90.0%	91.1%	91.3%	28	14	17
Nebraska	50,020	59,770	61,760	4.3%	3.3%	90.4%	92.1%	90.9%	29	24	46
New Hampshire	59,370	70,070	73,550	4.4%	5.0%	107.3%	108.0%	108.3%	11	20	15
New Jersey	73,760	85,600	89,290	3.9%	4.3%	133.3%	131.9%	131.4%	2	40	32
New York	66,860	78,210	81,560	4.1%	4.3%	120.8%	120.5%	120.0%	5	34	33
North Carolina	47,740	57,650	60,580	4.9%	5.1%	86.3%	88.8%	89.2%	32	5	10
North Dakota	44,290	52,920	52,670	3.5%	-0.5%	80.0%	81.5%	77.5%	46	45	51
Ohio	51,310	60,480	63,430	4.3%	4.9%	92.7%	93.2%	93.4%	25	22	18
Oklahoma	43,850	50,440	52,660	3.7%	4.4%	79.2%	77.7%	77.5%	47	42	27
Oregon	48,010	58,470	61,360	5.0%	4.9%	86.7%	90.1%	90.3%	30	2	16
Pennsylvania	55,010	64,290	67,300	4.1%	4.7%	99.4%	99.1%	99.1%	19	31	21
Rhode Island	54,700	63,680	67,200	4.2%	5.5%	98.8%	98.1%	98.9%	20	27	6
South Carolina	44,930	53,340	55,770	4.4%	4.6%	81.2%	82.2%	82.1%	42	17	24
South Dakota	46,410	55,380	57,220	4.3%	3.3%	83.8%	85.3%	84.2%	38	25	47
Tennessee	47,640	56,710	59,170	4.4%	4.3%	86.1%	87.4%	87.1%	35	16	28
Texas	52,610	61,720	65,490	4.5%	6.1%	95.0%	95.1%	96.4%	21	13	2
Vermont	49,710	57,440	59,600	3.7%	3.8%	89.8%	88.5%	87.7%	34	43	42
Virginia	57,000	66,340	69,480	4.0%	4.7%	103.0%	102.2%	102.3%	13	35	19
Washington	55,740	64,420	68,160	4.1%	5.8%	100.7%	99.3%	100.3%	17	32	3
West Virginia	40,310	46,180	47,750	3.4%	3.4%	72.8%	71.2%	70.3%	51	46	44
Wisconsin	51,790	61,280	64,110	4.4%	4.6%	93.6%	94.4%	94.4%	23	21	23

Source: Base data from the U.S. Bureau of the Census and the U.S. Bureau of Economic Analysis; Personal income per household estimate calculated by Utah Foundation.

Median Income of Households by State, U.S., Mountain Division, and States: 1992, 1995, 1996, and 1997

	Median Income of Households				Median Income of Households Two-year Moving Average*					Median Income of Households Three-year Average*			
	1992	1996	1997	Standard Error	1995-1996	1996-1997		Two-year Average		1995-1997			As a % of the U.S.
	Amount	Amount	Amount		Amount	Amount	Standard Error	Difference	Pct. Chg.	Amount	Standard Error	Rank	
United States	\$35,047	\$36,306	\$37,005	\$171	\$36,097	\$36,656	\$145	\$559	1.5%	\$36,399	\$131	----	100.0%
Mountain States	34,653	35,395	36,662	NA	35,560	36,031	NA	472	1.3%	35,929	NA	----	98.7%
Arizona	33,585	32,363	32,740	1,297	32,433	32,552	1,068	119	0.4%	32,535	938	38	89.4%
Colorado	37,161	41,890	43,233	1,944	42,380	42,562	1,367	182	0.4%	42,664	1,140	6	117.2%
Idaho	31,693	35,505	33,404	1,339	34,959	34,455	1,114	(504)	-1.4%	34,441	911	32	94.6%
Montana	30,344	29,342	29,212	1,144	29,287	29,277	1,136	(10)	-0.0%	29,262	932	46	80.4%
Nevada	36,502	39,424	38,854	1,576	38,713	39,139	1,326	426	1.1%	38,760	1,083	18	106.5%
New Mexico	29,583	25,662	30,086	1,156	26,517	27,874	933	1,357	5.1%	27,707	798	49	76.1%
Utah	39,182	37,888	42,775	1,785	38,154	40,332	1,298	2,178	5.7%	39,694	977	15	109.1%
Wyoming	34,558	31,663	33,423	1,441	32,434	32,543	966	109	0.3%	32,764	810	36	90.0%
Other States													
Alabama	29,524	30,997	31,939	1,607	29,185	31,468	1,192	2,283	7.8%	30,103	981	45	82.7%
Alaska	47,821	53,990	47,994	1,258	52,247	50,992	1,333	(1,255)	-2.4%	50,829	1,268	1	139.6%
Arkansas	27,320	27,745	26,162	1,154	27,466	26,954	886	(512)	-1.9%	27,031	744	50	74.3%
California	39,928	39,703	39,694	864	39,340	39,699	699	359	0.9%	39,458	575	16	108.4%
Connecticut	46,721	43,085	43,985	1,989	42,734	43,535	2,140	801	1.9%	43,151	1,805	4	118.5%
Delaware	40,815	40,211	43,033	2,062	38,498	41,622	1,447	3,124	8.1%	40,009	1,252	13	109.9%
Dist. of C.	34,602	32,699	31,860	984	32,541	32,280	1,082	(261)	-0.8%	32,314	921	39	88.8%
Florida	31,287	31,344	32,455	583	31,335	31,900	455	565	1.8%	31,708	406	40	87.1%
Georgia	32,943	33,242	36,663	916	34,577	34,953	1,099	376	1.1%	35,272	873	27	96.9%
Hawaii	48,176	42,730	40,934	1,398	43,930	41,832	1,378	(2,098)	-4.8%	42,931	1,120	5	117.9%
Illinois	36,094	40,462	41,283	782	40,278	40,873	793	595	1.5%	40,613	674	11	111.6%
Indiana	32,638	35,953	38,889	1,183	35,556	37,421	1,032	1,865	5.2%	36,667	942	20	100.7%
Iowa	32,881	33,971	33,783	1,282	35,689	33,877	1,171	(1,812)	-5.1%	35,054	916	28	96.3%
Kansas	34,715	33,333	36,471	1,614	32,644	34,902	1,277	2,258	6.9%	33,919	970	34	93.2%
Kentucky	26,866	33,157	33,452	1,660	32,276	33,305	1,288	1,029	3.2%	32,668	1,019	37	89.7%
Louisiana	29,102	30,956	33,260	1,551	30,195	32,108	1,181	1,913	6.3%	31,217	940	42	85.8%
Maine	33,881	35,492	32,772	1,301	35,575	34,132	1,044	(1,443)	-4.1%	34,641	860	30	95.2%
Maryland	42,559	45,002	46,685	1,476	44,112	45,844	1,716	1,732	3.9%	44,970	1,409	3	123.5%
Massachusetts	41,594	40,400	42,023	1,383	40,512	41,212	1,390	700	1.7%	41,016	1,169	9	112.7%
Michigan	36,913	40,125	38,742	1,108	39,244	39,434	936	190	0.5%	39,076	778	17	107.4%
Minnesota	35,442	41,932	42,564	1,510	40,941	42,248	1,137	1,307	3.2%	41,482	1,089	7	114.0%
Mississippi	23,532	27,289	28,499	1,386	27,619	27,894	1,122	275	1.0%	27,912	896	48	76.7%
Missouri	31,300	35,051	36,553	2,060	35,864	35,802	1,489	(62)	-0.2%	36,093	1,180	23	99.2%
Nebraska	34,374	34,794	34,692	1,528	34,737	34,743	1,258	6	0.0%	34,722	1,006	29	95.4%
New Hampshire	45,114	40,311	40,998	1,605	40,782	40,655	1,389	(127)	-0.3%	40,854	1,176	10	112.2%
New Jersey	44,615	48,557	48,021	1,424	47,408	48,289	1,098	881	1.9%	47,612	959	2	130.8%
New York	35,522	36,222	35,798	634	35,503	36,010	575	507	1.4%	35,601	505	25	97.8%
North Carolina	31,769	36,418	35,840	917	35,049	36,129	801	1,080	3.1%	35,312	676	26	97.0%
North Dakota	30,840	32,192	31,661	1,362	31,414	31,927	1,058	513	1.6%	31,496	895	41	86.5%
Ohio	35,925	34,852	36,134	894	35,825	35,493	816	(332)	-0.9%	35,928	710	24	98.7%
Oklahoma	28,924	28,067	31,351	1,025	27,888	29,709	879	1,821	6.5%	29,042	721	47	79.8%
Oregon	36,524	36,306	37,247	1,788	37,307	36,777	1,277	(530)	-1.4%	37,287	972	19	102.4%
Pennsylvania	34,184	35,700	37,517	964	36,030	36,609	805	579	1.6%	36,525	633	22	100.3%
Rhode Island	34,814	37,835	34,797	2,234	37,537	36,316	1,394	(1,221)	-3.3%	36,623	1,102	21	100.6%
South Carolina	31,549	35,460	34,262	1,609	33,038	34,861	1,252	1,823	5.5%	33,446	1,050	35	91.9%
South Dakota	30,040	30,203	29,694	1,145	30,677	29,949	892	(728)	-2.4%	30,349	899	44	83.4%
Tennessee	27,819	31,496	30,636	1,358	31,027	31,066	1,017	39	0.1%	30,896	879	43	84.9%
Texas	31,978	33,831	35,075	880	33,787	34,453	683	666	2.0%	34,216	545	33	94.0%
Vermont	37,471	33,100	35,053	1,726	34,361	34,077	1,241	(284)	-0.8%	34,592	1,002	31	95.0%
Virginia	43,698	40,111	42,957	1,897	39,129	41,534	1,397	2,405	6.1%	40,405	1,130	12	111.0%
Washington	38,781	37,518	44,562	1,715	37,488	41,040	1,380	3,552	9.5%	39,846	1,100	14	109.5%
West Virginia	23,190	25,826	27,488	1,315	26,014	26,657	1,087	643	2.5%	26,505	844	51	72.8%
Wisconsin	38,104	40,919	39,595	1,150	42,026	40,257	1,235	(1,769)	-4.2%	41,215	1,044	8	113.2%

*Because the sample of households contacted in small population states like Utah is relatively few in number, the data collected for two or three years is combined to calculate less variable estimates. The Census Bureau recommends using 2-year averages for evaluating changes in state estimates over time, and 3-year averages when comparing the relative ranking of states. Utah's 1997 single-year, median-average income per household ranking was 9th in the nation.

The Standard Error is a measurement that indicates the magnitude of sampling variability for the estimates. Note that the standard errors for U.S. estimates are much smaller than those for the states.

Ranking is done for the 50 states and the District of Columbia.

Source: March Current Population Survey, U.S. Bureau of the Census, Median Household Income by State.

**Average Annual Pay for All Workers Covered by Unemployment Insurance
U.S., Mountain Division, and States: 1991, 1995, and 1996**

Division/State	Average Annual Pay			Rates of Change for Average Annual Pay		Average Annual Pay as a Percent of U.S. Average Annual Pay			Rankings		
	1991	1995	1996	Avg. Ann. Grwth Rate 1991-96	Percent Change 1995-96	1991	1995	1996	Rank by Average Annual Pay 1996	Rank by Avg. Ann. Grwth Rate 1991-96	Rank by Percent Change 1995-96
	United States	24,578	27,846	28,945	3.3%	3.9%	100.0%	100.0%	100.0%		
Mountain States	21,996	25,000	26,045	3.4%	4.2%	89.5%	89.8%	90.0%			
Arizona	22,207	25,324	26,387	3.5%	4.2%	90.4%	90.9%	91.2%	27	20	12
Colorado	23,981	27,122	28,520	3.5%	5.2%	97.6%	97.4%	98.5%	15	18	5
Idaho	19,688	22,839	23,353	3.5%	2.3%	80.1%	82.0%	80.7%	43	23	49
Montana	18,648	20,516	21,146	2.5%	3.1%	75.9%	73.7%	73.1%	50	47	43
Nevada	23,083	26,647	27,788	3.8%	4.3%	93.9%	95.7%	96.0%	18	11	11
New Mexico	20,272	23,040	23,716	3.2%	2.9%	82.5%	82.7%	81.9%	41	39	44
Utah*	20,874	23,626	24,572	3.3%	4.0%	84.9%	84.8%	84.9%	34	30	19
Wyoming	20,591	22,351	22,870	2.1%	2.3%	83.8%	80.3%	79.0%	46	50	48
Other States											
Alabama	21,287	24,396	25,180	3.4%	3.2%	86.6%	87.6%	87.0%	32	26	38
Alaska	30,830	32,685	32,461	1.0%	-0.7%	125.4%	117.4%	112.1%	6	51	51
Arkansas	19,008	21,590	22,294	3.2%	3.3%	77.3%	77.5%	77.0%	47	36	37
California	27,513	30,717	31,773	2.9%	3.4%	111.9%	110.3%	109.8%	7	42	34
Connecticut	30,689	35,127	36,579	3.6%	4.1%	124.9%	126.1%	126.4%	3	16	13
Delaware	25,647	29,123	30,711	3.7%	5.5%	104.3%	104.6%	106.1%	10	14	2
D.C.	35,570	42,453	44,458	4.6%	4.7%	144.7%	152.5%	153.6%	1	1	7
Florida	21,992	24,709	25,640	3.1%	3.8%	89.5%	88.7%	88.6%	30	41	27
Georgia	23,165	26,308	27,488	3.5%	4.5%	94.3%	94.5%	95.0%	21	22	10
Hawaii	24,104	26,977	27,363	2.6%	1.4%	98.1%	96.9%	94.5%	22	46	50
Illinois	26,317	30,101	31,285	3.5%	3.9%	107.1%	108.1%	108.1%	9	19	23
Indiana	22,522	25,571	26,477	3.3%	3.5%	91.6%	91.8%	91.5%	26	34	32
Iowa	19,810	22,875	23,679	3.6%	3.5%	80.6%	82.1%	81.8%	42	15	33
Kansas	21,002	23,709	24,609	3.2%	3.8%	85.5%	85.1%	85.0%	33	37	26
Kentucky	20,730	23,502	24,462	3.4%	4.1%	84.3%	84.4%	84.5%	37	27	16
Louisiana	21,503	23,895	24,528	2.7%	2.6%	87.5%	85.8%	84.7%	35	45	46
Maine	20,870	23,125	23,850	2.7%	3.1%	84.9%	83.0%	82.4%	40	44	41
Maryland	25,962	29,143	30,293	3.1%	3.9%	105.6%	104.7%	104.7%	11	40	22
Massachusetts	28,041	32,352	33,940	3.9%	4.9%	114.1%	116.2%	117.3%	5	3	6
Michigan	26,125	30,545	31,522	3.8%	3.2%	106.3%	109.7%	108.9%	8	6	40
Minnesota	23,962	27,363	28,869	3.8%	5.5%	97.5%	98.3%	99.7%	14	9	1
Mississippi	18,411	21,120	21,822	3.5%	3.3%	74.9%	75.8%	75.4%	48	24	36
Missouri	22,574	25,669	26,608	3.3%	3.7%	91.8%	92.2%	91.9%	25	28	31
Nebraska	19,372	22,389	23,291	3.8%	4.0%	78.8%	80.4%	80.5%	45	12	18
New Hampshire	23,600	26,637	27,691	3.2%	4.0%	96.0%	95.7%	95.7%	20	35	21
New Jersey	29,991	34,533	35,928	3.7%	4.0%	122.0%	124.0%	124.1%	4	13	17
New York	30,011	34,938	36,831	4.2%	5.4%	122.1%	125.5%	127.2%	2	2	3
North Carolina	21,095	24,403	25,408	3.8%	4.1%	85.8%	87.6%	87.8%	31	10	14
North Dakota	18,132	20,492	21,242	3.2%	3.7%	73.8%	73.6%	73.4%	49	38	30
Ohio	23,602	26,868	27,775	3.3%	3.4%	96.0%	96.5%	96.0%	19	31	35
Oklahoma	20,968	22,671	23,329	2.2%	2.9%	85.3%	81.4%	80.6%	44	49	45
Oregon	22,338	25,833	27,027	3.9%	4.6%	90.9%	92.8%	93.4%	24	4	8
Pennsylvania	24,393	27,904	28,973	3.5%	3.8%	99.2%	100.2%	100.1%	12	21	24
Rhode Island	23,082	26,375	27,194	3.3%	3.1%	93.9%	94.7%	94.0%	23	29	42
South Carolina	20,439	23,292	24,039	3.3%	3.2%	83.2%	83.6%	83.1%	39	33	39
South Dakota	17,143	19,931	20,724	3.9%	4.0%	69.7%	71.6%	71.6%	51	5	20
Tennessee	21,541	25,046	25,963	3.8%	3.7%	87.6%	89.9%	89.7%	29	8	29
Texas	23,760	26,899	28,129	3.4%	4.6%	96.7%	96.6%	97.2%	16	25	9
Vermont	21,355	23,583	24,480	2.8%	3.8%	86.9%	84.7%	84.6%	36	43	25
Virginia	23,805	26,899	28,001	3.3%	4.1%	96.9%	96.6%	96.7%	17	32	15
Washington	23,942	27,453	28,881	3.8%	5.2%	97.4%	98.6%	99.8%	13	7	4
West Virginia	21,356	23,488	24,075	2.4%	2.5%	86.9%	84.3%	83.2%	38	48	47
Wisconsin	21,838	25,099	26,021	3.6%	3.7%	88.9%	90.1%	89.9%	28	17	28

* Utah ranks 33rd in average annual pay if the District of Columbia is excluded from the rankings.

Source: U.S. Bureau of Labor Statistics.

Employees on Nonagricultural Payrolls--U.S., Mountain Division, and States: 1992, 1996, and 1997

Division/State	Employees on Nonagricultural Payrolls			Rates of Change for Employees on Nonagricultural Payrolls		Employees on Nonagricultural Payrolls (not seasonally adjusted)			Rankings			
	1992	1996	1997	Avg. Ann. Grwth Rate	Percent Change	October 1997	October 1998(p)	Percent Change	Rank by Employees on Nonag. Payrolls	Rank by Average Annual Grwth Rate	Rank by Percent Change	Rank by Percent Change (unadj.)
	(thousands)	(thousands)	(thousands)	1992-97	1996-97	(thousands)	(thousands)	1997-98	1997	1992-97	1996-97	1997-98
United States	108,601.0	119,523.0	122,259.0	2.4%	2.3%	124,485.0	127,101.9	2.1%				
Mountain States	6,061.4	7,359.1	7,643.8	4.7%	3.9%	7,766.7	8,021.8	3.3%				
Arizona	1,517.0	1,892.3	1,977.0	5.4%	4.5%	2,010.5	2,102.0	4.6%	21	2	2	2
Colorado	1,596.9	1,900.4	1,977.0	4.4%	4.0%	2,002.3	2,068.8	3.3%	22	4	5	5
Idaho	416.4	492.9	508.5	4.1%	3.2%	519.4	529.0	1.8%	43	5	12	24
Montana	316.6	360.3	365.6	2.9%	1.5%	374.6	376.8	0.6%	46	13	43	46
Nevada	638.7	843.0	889.5	6.8%	5.5%	905.2	951.1	5.1%	35	1	1	1
New Mexico	601.5	694.6	707.2	3.3%	1.8%	715.8	726.5	1.5%	38	10	33	31
Utah	768.7	954.5	995.2	5.3%	4.3%	1,010.2	1,036.4	2.6%	34	3	3	11
Wyoming	205.6	221.1	223.8	1.7%	1.2%	228.7	231.2	1.1%	51	40	49	41
Other States												
Alabama	1,674.5	1,828.6	1,863.2	2.2%	1.9%	1,880.5	1,893.4	0.7%	23	35	32	44
Alaska	247.2	263.6	268.3	1.7%	1.8%	269.5	275.4	2.2%	50	41	34	18
Arkansas	963.1	1,086.0	1,102.9	2.7%	1.6%	1,117.9	1,136.6	1.7%	33	17	41	27
California	12,153.5	12,743.4	13,167.4	1.6%	3.3%	13,371.2	13,743.7	2.8%	1	43	11	9
Connecticut	1,526.2	1,583.6	1,616.3	1.2%	2.1%	1,642.1	1,664.7	1.4%	27	47	27	33
Delaware	341.3	376.4	388.0	2.6%	3.1%	394.9	406.2	2.9%	45	21	13	8
D.C.	673.6	623.1	615.0	-1.8%	-1.3%	615.5	613.5	-0.3%	39	51	51	50
Florida	5,358.7	6,183.3	6,427.4	3.7%	3.9%	6,496.2	6,732.3	3.6%	4	8	7	4
Georgia	2,987.2	3,527.4	3,620.3	3.9%	2.6%	3,683.2	3,770.9	2.4%	11	6	18	13
Hawaii	542.8	530.7	531.9	-0.4%	0.2%	530.0	522.9	-1.3%	42	50	50	51
Illinois	5,234.9	5,684.7	5,772.6	2.0%	1.5%	5,859.5	5,932.4	1.2%	5	39	42	37
Indiana	2,554.2	2,814.4	2,859.5	2.3%	1.6%	2,902.8	2,917.0	0.5%	14	33	38	48
Iowa	1,252.6	1,383.4	1,405.4	2.3%	1.6%	1,430.1	1,459.7	2.1%	29	32	39	21
Kansas	1,115.0	1,226.7	1,268.3	2.6%	3.4%	1,290.5	1,321.2	2.4%	31	19	10	14
Kentucky	1,508.5	1,671.7	1,713.7	2.6%	2.5%	1,735.6	1,770.6	2.0%	26	22	21	23
Louisiana	1,626.9	1,809.7	1,847.2	2.6%	2.1%	1,873.8	1,894.4	1.1%	24	24	25	40
Maine	511.9	542.5	553.5	1.6%	2.0%	569.5	579.8	1.8%	41	44	28	26
Maryland	2,081.3	2,211.2	2,256.9	1.6%	2.1%	2,275.7	2,327.3	2.3%	20	42	26	16
Massachusetts	2,795.1	3,035.4	3,118.7	2.2%	2.7%	3,176.4	3,244.1	2.1%	13	34	16	20
Michigan	3,927.4	4,360.7	4,446.0	2.5%	2.0%	4,516.9	4,615.5	2.2%	8	26	30	19
Minnesota	2,184.9	2,433.3	2,485.1	2.6%	2.1%	2,530.1	2,586.6	2.2%	19	20	24	17
Mississippi	960.3	1,088.9	1,106.0	2.9%	1.6%	1,121.6	1,129.9	0.7%	32	14	40	43
Missouri	2,333.7	2,567.4	2,635.7	2.5%	2.7%	2,674.5	2,709.0	1.3%	16	29	17	35
Nebraska	750.1	834.8	855.8	2.7%	2.5%	871.9	891.7	2.3%	36	18	20	15
New Hampshire	487.0	553.6	568.0	3.1%	2.6%	578.8	578.3	-0.1%	40	12	19	49
New Jersey	3,455.4	3,638.9	3,724.5	1.5%	2.4%	3,772.6	3,841.3	1.8%	9	45	23	25
New York	7,729.9	7,921.3	8,027.3	0.8%	1.3%	8,136.7	8,266.9	1.6%	3	49	47	29
North Carolina	3,125.5	3,546.5	3,666.8	3.2%	3.4%	3,738.4	3,794.1	1.5%	10	11	9	32
North Dakota	277.2	308.7	313.1	2.5%	1.4%	319.6	321.7	0.7%	48	28	44	45
Ohio	4,847.7	5,296.4	5,386.0	2.1%	1.7%	5,444.2	5,518.6	1.4%	7	36	37	34
Oklahoma	1,221.7	1,353.5	1,387.4	2.6%	2.5%	1,408.7	1,447.8	2.8%	30	23	22	10
Oregon	1,267.6	1,474.6	1,524.9	3.8%	3.4%	1,557.3	1,589.5	2.1%	28	7	8	22
Pennsylvania	5,075.5	5,306.2	5,398.3	1.2%	1.7%	5,478.8	5,539.9	1.1%	6	46	36	39
Rhode Island	424.8	441.6	449.3	1.1%	1.7%	459.3	461.7	0.5%	44	48	35	47
South Carolina	1,527.7	1,675.2	1,722.2	2.4%	2.8%	1,738.7	1,813.7	4.3%	25	30	15	3
South Dakota	308.7	348.7	353.6	2.8%	1.4%	357.8	363.3	1.5%	47	16	46	30
Tennessee	2,245.0	2,533.4	2,582.3	2.8%	1.9%	2,616.4	2,649.5	1.3%	17	15	31	36
Texas	7,269.1	8,256.1	8,601.7	3.4%	4.2%	8,736.5	8,989.0	2.9%	2	9	4	7
Vermont	251.0	274.9	278.5	2.1%	1.3%	285.1	288.2	1.1%	49	37	48	42
Virginia	2,848.4	3,136.0	3,231.1	2.6%	3.0%	3,276.5	3,361.0	2.6%	12	25	14	12
Washington	2,222.4	2,415.6	2,512.0	2.5%	4.0%	2,556.3	2,638.2	3.2%	18	27	6	6
West Virginia	640.0	698.6	708.5	2.1%	1.4%	721.8	730.3	1.2%	37	38	45	38
Wisconsin	2,357.9	2,600.5	2,652.5	2.4%	2.0%	2,704.9	2,748.3	1.6%	15	31	29	28

(p)=preliminary

Note: This data varies slightly from data reported by the State of Utah Department of Employment Security.

Source: U.S. Bureau of Labor Statistics.

Unemployment Rates--U.S., Mountain Division, and States: 1992, 1996, and 1997

Division/State	Unemployment Rate			Unemployment Rate Percent Change		Unemployment Rate (not seasonally adjusted)		Rankings by Unemployment Rate					
	1992	1996	1997	1992-97	1996-97	October 1997	October 1998(p)	1992	1996	1997	(unadj.) 1997	(unadj.) 1998	
United States	7.5%	5.4%	4.9%	-2.6%	-0.5%	4.4%	4.2%						
Mountain States	6.4%	5.1%	4.3%	-2.1%	-0.8%	3.9%	3.9%						
Arizona	7.4%	5.5%	4.6%	-2.8%	-0.9%	4.6%	3.8%	20	17	28	20	29	
Colorado	5.9%	4.2%	3.3%	-2.6%	-1.0%	2.7%	3.4%	38	41	44	45	34	
Idaho	6.5%	5.2%	5.3%	-1.2%	0.1%	4.3%	4.1%	33	23	16	24	22	
Montana	6.7%	5.3%	5.4%	-1.3%	0.1%	4.8%	4.9%	29	22	15	16	10	
Nevada	6.6%	5.4%	4.1%	-2.5%	-1.3%	3.8%	3.5%	31	18	35	33	33	
New Mexico	6.8%	8.1%	6.2%	-0.6%	-1.9%	5.6%	6.1%	27	2	7	8	2	
Utah	4.9%	3.5%	3.1%	-1.8%	-0.4%	3.0%	3.2%	45	48	48	43	39	
Wyoming	5.5%	5.0%	5.1%	-0.4%	0.0%	4.0%	4.0%	41	30	24	30	25	
Other States													
Alabama	7.3%	5.1%	5.1%	-2.3%	-0.1%	5.0%	4.5%	21	27	23	11	15	
Alaska	9.1%	7.8%	7.9%	-1.2%	0.1%	7.1%	5.8%	3	3	2	2	4	
Arkansas	7.2%	5.4%	5.3%	-1.9%	-0.1%	4.3%	4.6%	23	19	18	25	13	
California	9.1%	7.2%	6.3%	-2.8%	-0.9%	5.9%	5.6%	2	5	6	6	6	
Connecticut	7.5%	5.7%	5.1%	-2.4%	-0.6%	4.3%	3.3%	15	14	21	26	36	
Delaware	5.3%	5.2%	4.0%	-1.3%	-1.1%	3.2%	3.3%	42	24	36	42	37	
D.C.	8.4%	8.5%	7.9%	-0.5%	-0.6%	8.0%	8.7%	8	1	1	1	1	
Florida	8.2%	5.1%	4.8%	-3.4%	-0.3%	4.7%	4.3%	10	29	26	19	17	
Georgia	6.9%	4.6%	4.5%	-2.4%	-0.1%	4.5%	4.1%	25	34	30	23	21	
Hawaii	4.5%	6.4%	6.4%	1.9%	0.0%	5.9%	5.7%	48	8	5	4	5	
Illinois	7.5%	5.3%	4.7%	-2.8%	-0.6%	4.2%	4.0%	13	21	27	27	26	
Indiana	6.5%	4.1%	3.5%	-3.0%	-0.6%	3.3%	2.5%	32	43	43	40	45	
Iowa	4.6%	3.8%	3.3%	-1.3%	-0.5%	2.3%	2.1%	47	46	45	48	47	
Kansas	4.2%	4.5%	3.8%	-0.4%	-0.7%	3.6%	3.5%	49	37	40	35	32	
Kentucky	6.9%	5.6%	5.4%	-1.5%	-0.2%	4.7%	4.0%	26	16	13	17	23	
Louisiana	8.1%	6.7%	6.1%	-2.0%	-0.6%	5.7%	4.9%	12	6	8	7	11	
Maine	7.1%	5.1%	5.4%	-1.7%	0.3%	4.6%	3.7%	24	28	12	21	31	
Maryland	6.6%	4.9%	5.1%	-1.5%	0.2%	4.9%	4.0%	30	32	22	12	24	
Massachusetts	8.5%	4.3%	4.0%	-4.5%	-0.3%	3.4%	2.9%	7	40	37	37	42	
Michigan	8.8%	4.9%	4.2%	-4.6%	-0.7%	3.4%	3.0%	5	33	33	38	40	
Minnesota	5.1%	4.0%	3.3%	-1.9%	-0.7%	2.7%	1.8%	43	45	46	46	50	
Mississippi	8.1%	6.1%	5.7%	-2.4%	-0.4%	5.5%	4.7%	11	11	10	9	12	
Missouri	5.7%	4.6%	4.2%	-1.4%	-0.3%	3.6%	3.2%	39	36	32	34	38	
Nebraska	3.0%	2.9%	2.6%	-0.4%	-0.3%	2.1%	2.1%	51	51	50	50	48	
New Hampshire	7.5%	4.2%	3.1%	-4.4%	-1.0%	2.5%	2.4%	18	42	47	47	46	
New Jersey	8.4%	6.2%	5.1%	-3.2%	-1.1%	4.7%	4.3%	9	10	20	18	18	
New York	8.5%	6.2%	6.4%	-2.1%	0.2%	6.1%	5.1%	6	9	4	3	7	
North Carolina	5.9%	4.3%	3.6%	-2.3%	-0.7%	3.3%	3.3%	37	39	42	41	35	
North Dakota	4.9%	3.1%	2.5%	-2.4%	-0.5%	1.4%	1.8%	46	50	51	51	51	
Ohio	7.2%	4.9%	4.6%	-2.6%	-0.3%	4.1%	3.9%	22	31	29	28	27	
Oklahoma	5.7%	4.1%	4.1%	-1.5%	0.1%	3.8%	4.2%	40	44	34	31	19	
Oregon	7.5%	5.9%	5.8%	-1.7%	-0.1%	4.8%	5.0%	14	13	9	14	9	
Pennsylvania	7.5%	5.3%	5.2%	-2.3%	-0.1%	4.5%	4.2%	17	20	19	22	20	
Rhode Island	8.9%	5.1%	5.3%	-3.6%	0.2%	5.1%	5.1%	4	26	17	10	8	
South Carolina	6.2%	6.0%	4.5%	-1.7%	-1.5%	3.8%	3.8%	36	12	31	32	28	
South Dakota	3.1%	3.2%	3.1%	-0.1%	-0.2%	2.3%	2.0%	50	49	49	49	49	
Tennessee	6.4%	5.2%	5.4%	-1.0%	0.2%	4.9%	3.8%	35	25	11	13	30	
Texas	7.5%	5.6%	5.4%	-2.1%	-0.3%	4.8%	4.6%	16	15	14	15	14	
Vermont	6.6%	4.6%	4.0%	-2.6%	-0.6%	3.4%	2.8%	28	35	38	39	44	
Virginia	6.4%	4.4%	4.0%	-2.4%	-0.5%	3.4%	2.9%	34	38	39	36	41	
Washington	7.5%	6.5%	4.8%	-2.7%	-1.7%	4.1%	4.5%	19	7	25	29	16	
West Virginia	11.3%	7.5%	6.9%	-4.4%	-0.6%	5.9%	5.9%	1	4	3	5	3	
Wisconsin	5.1%	3.5%	3.7%	-1.4%	0.1%	2.9%	2.9%	44	47	41	44	43	

(p)=preliminary

Source: U.S. Bureau of Labor Statistics.

Percent of People in Poverty by State, U.S., Mountain Division, and States: 1992, 1995, 1996, and 1997

	Percent of Persons in Poverty				Percent of Persons in Poverty Two-year Moving Average*				Percent of Persons in Poverty Three-year Average*		
	1992	1996	1997		1995-1996	1996-1997	Two-year Average Difference	1995-1997 Standard Error	Amount	Standard Error	Amount Rank
	Amount	Amount	Amount	Standard Error							
United States	14.8%	13.7%	13.3%	0.21%	13.8%	13.5%	0.18%	-0.3%	13.6%	0.16%	----
Mountain States	14.0%	15.0%	13.5%	NA	14.4%	14.2%	NA	-0.1%	14.1%	NA	----
Arizona	15.8%	20.5%	17.2%	1.76%	18.3%	18.8%	1.54%	0.5%	17.9%	1.31%	47
Colorado	10.8%	10.6%	8.2%	1.36%	9.7%	9.4%	1.24%	-0.3%	9.2%	1.06%	7
Idaho	15.2%	11.9%	14.7%	1.67%	13.2%	13.3%	1.38%	0.1%	13.7%	1.21%	32
Montana	13.8%	17.0%	15.6%	1.75%	16.1%	16.3%	1.51%	0.2%	16.0%	1.29%	40
Nevada	14.7%	8.1%	11.0%	1.61%	9.6%	9.6%	1.30%	0.0%	10.1%	1.15%	13
New Mexico	21.6%	25.5%	21.2%	1.95%	25.4%	23.4%	1.71%	-2.0%	24.0%	1.49%	51
Utah	9.4%	7.7%	8.9%	1.31%	8.0%	8.3%	1.09%	0.3%	8.3%	0.94%	3
Wyoming	10.3%	11.9%	13.5%	1.73%	12.0%	12.7%	1.43%	0.7%	12.5%	1.22%	31
Other States											
Alabama	17.3%	14.0%	15.7%	1.81%	17.0%	14.8%	1.50%	-2.2%	16.6%	1.33%	41
Alaska	10.2%	8.2%	8.8%	1.40%	7.6%	8.5%	1.16%	0.9%	8.0%	0.98%	2
Arkansas	17.5%	17.2%	19.7%	1.92%	16.0%	18.4%	1.60%	2.4%	17.2%	1.34%	46
California	16.4%	16.9%	16.6%	0.75%	16.8%	16.8%	0.64%	0.0%	16.7%	0.55%	43
Connecticut	9.8%	11.7%	8.6%	1.57%	10.7%	10.1%	1.43%	-0.6%	10.0%	1.23%	12
Delaware	7.8%	8.6%	9.6%	1.63%	9.5%	9.1%	1.36%	-0.4%	9.5%	1.19%	9
Dist. of C.	20.3%	24.1%	21.8%	2.34%	23.2%	23.0%	2.01%	-0.2%	22.7%	1.71%	50
Florida	15.6%	14.2%	14.3%	0.93%	15.2%	14.3%	0.79%	-0.9%	14.9%	0.69%	35
Georgia	17.7%	14.8%	14.5%	1.54%	13.5%	14.7%	1.33%	1.2%	13.8%	1.12%	33
Hawaii	11.2%	12.1%	13.9%	1.92%	11.2%	13.0%	1.59%	1.8%	12.1%	1.32%	29
Illinois	15.6%	12.1%	11.2%	0.92%	12.3%	11.6%	0.81%	-0.7%	11.9%	0.70%	27
Indiana	11.8%	7.5%	8.8%	1.40%	8.6%	8.2%	1.16%	-0.4%	8.6%	1.02%	5
Iowa	11.5%	9.6%	9.6%	1.50%	10.9%	9.6%	1.27%	-1.3%	10.5%	1.13%	16
Kansas	11.1%	11.2%	9.7%	1.51%	11.0%	10.4%	1.33%	-0.6%	10.5%	1.15%	15
Kentucky	19.7%	17.0%	15.9%	1.81%	15.9%	16.4%	1.56%	0.5%	15.9%	1.33%	39
Louisiana	24.5%	20.5%	16.3%	1.78%	20.1%	18.4%	1.59%	-1.7%	18.8%	1.37%	48
Maine	13.5%	11.2%	10.1%	1.69%	11.2%	10.7%	1.48%	-0.5%	10.9%	1.28%	18
Maryland	11.8%	10.3%	8.4%	1.48%	10.2%	9.3%	1.31%	-0.9%	9.6%	1.14%	10
Massachusetts	10.3%	10.1%	12.2%	1.23%	10.5%	11.2%	1.00%	0.7%	11.1%	0.85%	19
Michigan	13.6%	11.2%	10.3%	0.95%	11.7%	10.7%	0.83%	-1.0%	11.2%	0.73%	21
Minnesota	13.0%	9.8%	9.6%	1.45%	9.5%	9.7%	1.25%	0.2%	9.5%	1.06%	8
Mississippi	24.6%	20.6%	16.7%	1.84%	22.0%	18.6%	1.62%	-3.4%	20.2%	1.44%	49
Missouri	15.7%	9.5%	11.8%	1.67%	9.5%	10.6%	1.36%	1.1%	10.2%	1.15%	14
Nebraska	10.6%	10.2%	9.8%	1.53%	9.9%	10.0%	1.31%	0.1%	9.9%	1.12%	11
New Hampshire	8.7%	6.4%	9.1%	1.65%	5.8%	7.7%	1.32%	1.9%	6.9%	1.07%	1
New Jersey	10.3%	9.2%	9.3%	0.95%	8.5%	9.2%	0.81%	0.7%	8.8%	0.68%	6
New York	15.7%	16.7%	16.5%	0.84%	16.6%	16.6%	0.71%	0.0%	16.6%	0.61%	42
North Carolina	15.8%	12.2%	11.4%	1.16%	12.4%	11.8%	1.00%	-0.6%	12.1%	0.88%	28
North Dakota	12.1%	11.0%	13.6%	1.75%	11.5%	12.3%	1.43%	0.8%	12.2%	1.22%	30
Ohio	12.5%	12.7%	11.0%	0.96%	12.1%	11.8%	0.84%	-0.3%	11.7%	0.72%	24
Oklahoma	18.6%	16.6%	13.7%	1.64%	16.9%	15.2%	1.46%	-1.7%	15.8%	1.28%	38
Oregon	11.4%	11.8%	11.6%	1.67%	11.5%	11.7%	1.43%	0.2%	11.5%	1.23%	23
Pennsylvania	11.9%	11.6%	11.2%	0.91%	11.9%	11.4%	0.78%	-0.5%	11.7%	0.68%	25
Rhode Island	12.4%	11.0%	12.7%	1.92%	10.8%	11.9%	1.58%	1.1%	11.5%	1.33%	22
South Carolina	19.0%	13.0%	13.1%	1.77%	16.5%	13.1%	1.52%	-3.4%	15.4%	1.38%	37
South Dakota	15.1%	11.8%	16.5%	1.85%	13.1%	14.1%	1.48%	1.0%	14.2%	1.26%	34
Tennessee	17.0%	15.9%	14.3%	1.75%	15.7%	15.1%	1.53%	-0.6%	15.2%	1.32%	36
Texas	18.3%	16.6%	16.7%	0.94%	17.0%	16.7%	0.81%	-0.3%	16.9%	0.70%	44
Vermont	10.5%	12.6%	9.3%	1.64%	11.4%	10.9%	1.50%	-0.5%	10.7%	1.28%	17
Virginia	9.5%	12.3%	12.7%	1.59%	11.2%	12.5%	1.36%	1.3%	11.7%	1.14%	26
Washington	11.2%	11.9%	9.2%	1.49%	12.2%	10.5%	1.35%	-1.7%	11.2%	1.20%	20
West Virginia	22.3%	18.5%	16.4%	1.79%	17.6%	17.5%	1.56%	-0.1%	17.2%	1.33%	45
Wisconsin	10.9%	8.8%	8.2%	1.37%	8.7%	8.5%	1.18%	-0.2%	8.5%	1.01%	4

*Because the sample of households contacted in small population states like Utah is relatively few in number, the data collected for two or three years is combined to calculate less variable estimates. The Census Bureau recommends using 2-year averages for evaluating changes in state estimates over time, and 3-year averages when comparing the relative ranking of states.

The Standard Error is a measurement that indicates the magnitude of sampling variability for the estimates. Note that the standard errors for U.S. estimates are much smaller than those for the states.

Ranking is done for the 50 states and the District of Columbia.

Source: March Current Population Survey, U.S. Census Bureau, Poverty in the United States: 1997.

* Agriculture

Overview

Governor Leavitt declared 1998 as the “year of the farmer” in Utah. This designation was intended to remind everyone of this sector of Utah’s economy and of the contributions farmers make in providing food, clothing, and open space as well as environmental amenities for all citizens. Unfortunately, 1998 will likely go down as one of the worst years faced by farmers nationally. Not since the farm crisis of the mid 1980s will as many farmers be forced “off the farm.”

National View

The current farm crisis occurring nationally has been caused by several interrelated factors. First, passage of the 1996 farm bill removed all acreage restrictions on the production of food and fiber. This bill also eliminated almost all government programs that were designed to place a floor on farm prices. As a result, market forces instead of government programs have become the primary force affecting domestic prices. Secondly, 1998 was a very good year for production of most farm products. For example, the production of most grains (corn, wheat, soybeans, etc.) will be at or near record levels for 1998. There is probably no greater evidence of the capacity for America’s farmers to produce than exists today. But, this great capacity and production primarily benefits consumers through lower food prices—the percentage of the consumer’s income in the United States that is spent for food is at an all time low. There has never been a period of time when as wide a variety of high quality food that is available today could be purchased for as little as it is currently. The third factor that had a major impact on prices received by farmers is the Asian financial crisis. This turn of events was not fully anticipated. Grain and livestock producers had seen exports to the far east increase dramatically during the last 5 years. When the Asian crisis hit, exports declined dramatically. This put increased downward pressure on domestic prices that were already depressed.

Not all sectors of agriculture have been adversely affected by declines in prices. For example, the dairy sector is currently experiencing record profits. This has resulted from a dramatic increase in prices—an increase in the basic formula price from \$12.50 per cwt. in October 1997 to \$16.04 in October 1998. Furthermore, the price received by dairy farmers for milk in December 1998 will likely be at an all time high. This dramatic increase has occurred at the same time feed prices, particularly grains, are lower than they have been for more than two decades. This change occurred in one year and illustrates two important trends that are affecting agriculture in general. First, the product and input prices paid and received by farmers have become more volatile. Secondly, these changes in prices do not affect all sectors of agriculture equally. For example, in 1995-1997 grain producers received relatively high prices which increased the costs of producing livestock. In 1998 these differences were reversed—low grain prices reduced the cost of raising livestock. Thus, any overall evaluation of the status of agriculture must consider the relative importance of the sectors within the industry in the economy being evaluated. The reduction in grain prices noted above would hurt areas such as the Midwest where grain production dominates agriculture versus areas such as Utah where livestock production is relatively more important.

One issue that is becoming increasing of concern nationally is the “industrialization of agriculture”—the application of modern industrial manufacturing, production, procurement, distribution, and coordination concepts to the food chain. This usually results in the

concentration of production by a few firms. This has become increasingly an issue in the production of poultry and hogs. There is also concern with concentration of the marketing opportunities in several sectors (e.g., cattle slaughter/processing, grains, sheep). These trends could effect production in Utah because custom production (production under contract to meet specific criteria) tends to increase when the industry becomes more concentrated.

Utah Perspective

Livestock and livestock products continue to dominate Utah agriculture, but a shift is expected. As indicated above, the price of grain declined in 1998 to the lowest level in about two decades. Hay prices also declined. As a result, the percentage of receipts for agriculture from crop production will decline while livestock production, especially dairy, will increase in 1998 and 1999. The only exception to this rule may be hog production because hog prices are very depressed at the present time. Expansion of the Circle Four hog operation in Beaver county however, could result in increased receipts even with depressed prices.

While farm receipts and net income are not expected to increase in 1998, Utah agriculture remains healthy from the point of view of assets and not worth. Asset values, primarily land, will continue to increase but the rate of increase may decline slightly. While asset values have steadily increased over time, the same cannot be said for net farm income. For example, net income was at a peak in 1995 when cattle prices were at an all time high. This was followed by a period of decreased income. Net farm income in 1997 and 1998 should be above the levels for 1996, but these will be due to different factors—income from crops in 1997 and livestock, especially dairy, in 1998.

Crop Production. From many points of view 1998 must be viewed as very positive for many producers in Utah. For example, 1997 and 1998 were relatively wet years (above average precipitation and or plentiful water from storage for irrigation). But, unlike 1998 the rainfall was not harmful to the primary crop grown in the state, namely alfalfa. Alfalfa production for 1998 has been projected to be just slightly smaller than the amount produced in 1997, but a much smaller percentage was rained on which has resulted in a larger portion of the crop that is high quality. The total production of corn and other hay (primarily grass hay) in 1998 is expected to be higher than 1997, while the production of most other crops is expected to be somewhat smaller than 1997.

Livestock Production. The production of most livestock declined in Utah for 1998 as compared to 1997. Sheep production nationally continued to rapidly decline, but the decline has not been as rapid in Utah. However, this could change easily as profit margins for lamb production remain narrow and the potential for decreased production exists because some operators will likely leave the industry. Beef production was expected to increase slightly in 1998, but depressed prices have limited herd expansion. As a result, beef production is not expected to increase much, if any, in 1998 or 1999. Low milk prices and high feed prices limited milk production in the U.S. and Utah in 1998. However, the high prices for milk that occurred in late 1998 and early 1999 will probably result in increased production as producers increase numbers of milk cows and increase milk production per cow by feeding relatively inexpensive feed.

County Perspective

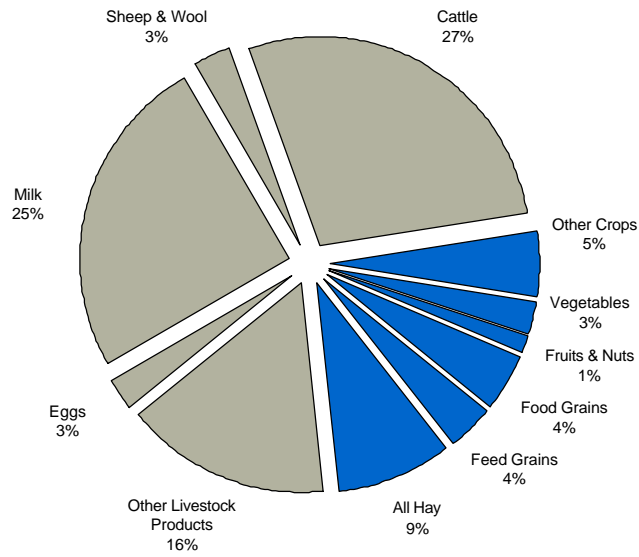
The primary production counties are Cache, Box Elder, Millard, Sanpete, and Utah counties. These counties will continue to dominate production but changes in relative importance are occurring. For example, Utah county has been and continues to be the largest fruit production county of the state. But, tart cherry and apple prices have recently declined. This will shift the value of production to some other counties, like Cache, where dairy production dominates. Agricultural producers in Sanpete county are going through some trying times. Sanpete has always been one of the primary sheep production areas of the state and sheep production is expected to decline. This will be at least partially offset by expansion of turkey production as a larger number of producers shift toward year-long instead of seasonal production.

The production of livestock and livestock products dominates agricultural production in most counties. In many of these counties this is synonymous with the production of cattle and calves. This is especially true in counties such as Rich, Daggett, Kane, Garfield, Emery, Wayne, and Piute where other alternatives are very limited. Counties along the Wasatch front (e.g., Utah, Salt Lake, Weber, Davis and Box Elder) have the greatest opportunity to provide other products (e.g., fruits, vegetables, bedding plants) that can be sold directly to consumers. These areas of production will likely continue to grow in importance in these counties while traditional production activities (cattle, calves, hay and grain) will be emphasized in the more rural areas.

A number of recent developments will likely have an impact on

agricultural production in some counties. For example, construction has been started on a cereal production plant in Box Elder county. It is anticipated that this plant, which is owned by Malt-O-Meal, will be in operation in the year 2000. The grains needed for these cereals is generally different from the grains currently being grown in Utah. But, Utah producers have the ability to grow these grains. This will therefore, provide new opportunities for grain producers in northern Utah that will likely offset the declines in grain prices for traditional varieties. Dairies continue to move to and expand production in south central Utah (primarily Millard county). But, a new player is expected to also "set up business" in this area—"Delta Egg Farm" is expected to be in operation in 1999 near Delta, Utah. This large layer operation is expected to produce about 30 million dozen eggs a year—about four semi-loads a day—when fully in production. In addition, the Circle Four hog operation is planning to expand production. This large hog production facility continues to receive national and regional attention and will be a major player in the economies of south-western Utah in the foreseeable future. While these specialized facilities often gain considerable attention, expansion of traditional agricultural production by many existing firms continues. For example, the number of dairy farms continues to decline but the number of cows and especially the production per cow increases each year. This suggests that a smaller number of operators are producing an increasing portion of the states dairy products. This trend will likely continue for all segments of Utah agriculture. Thus, the number of farms may decline but agricultural production will likely increase in most areas of the state. *

Utah Agricultural Cash Receipts by Commodities: 1996

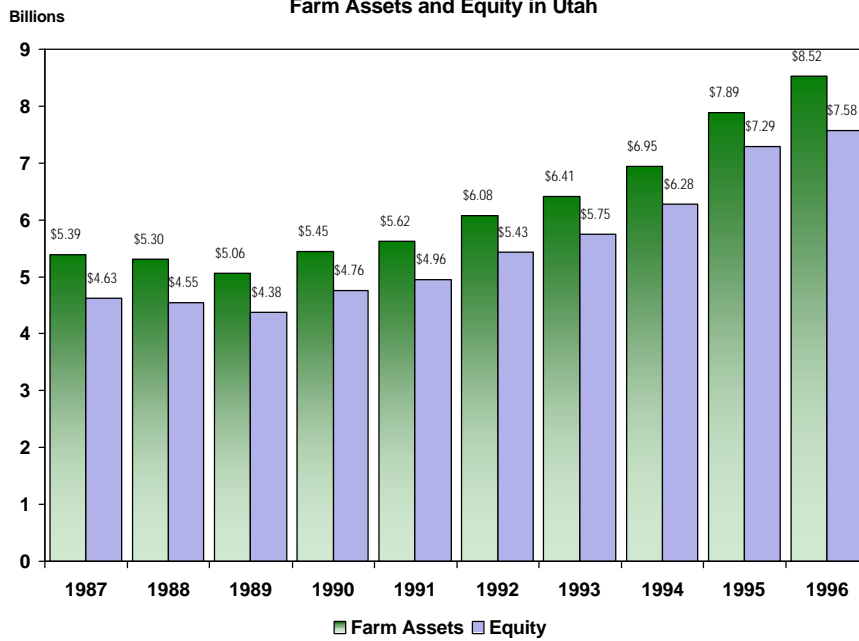


Livestock & Livestock Products = 74%

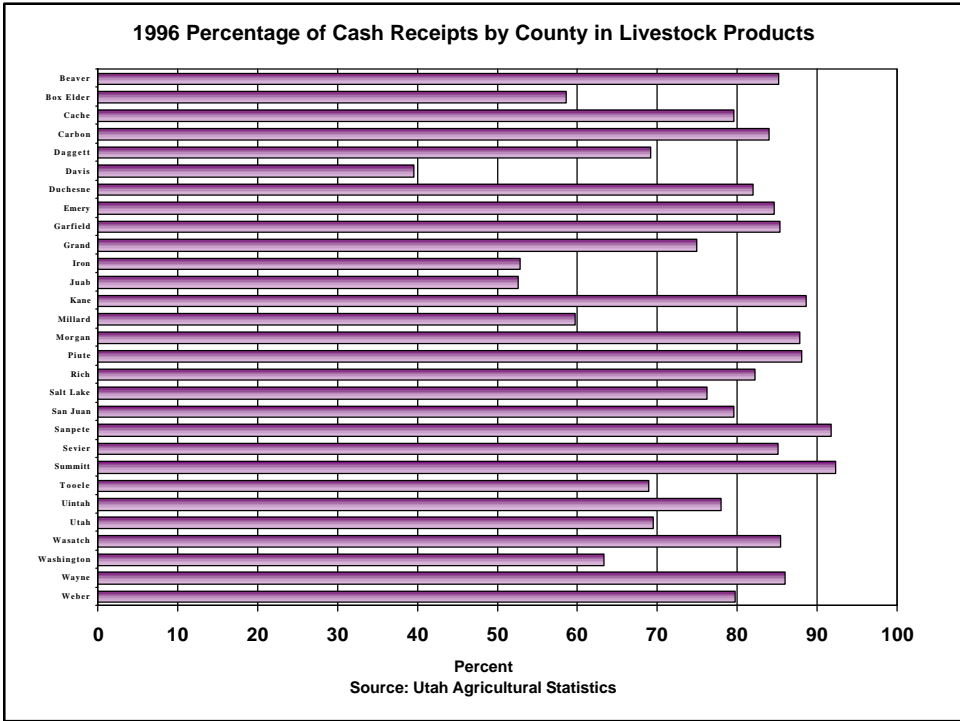
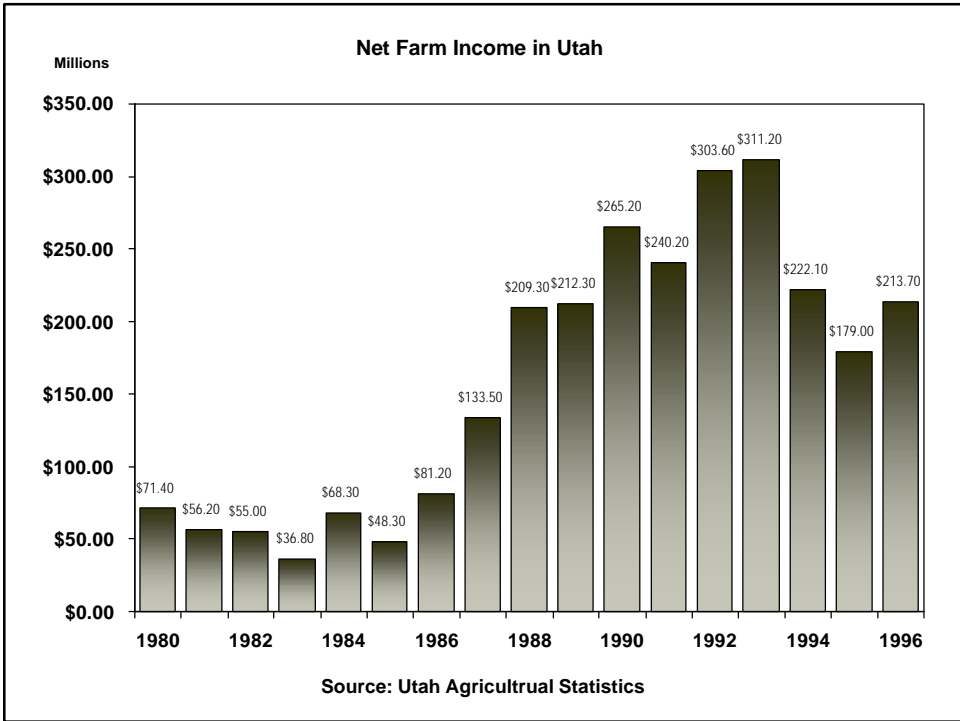
Crops = 26%

Source: Utah Agricultural Statistics

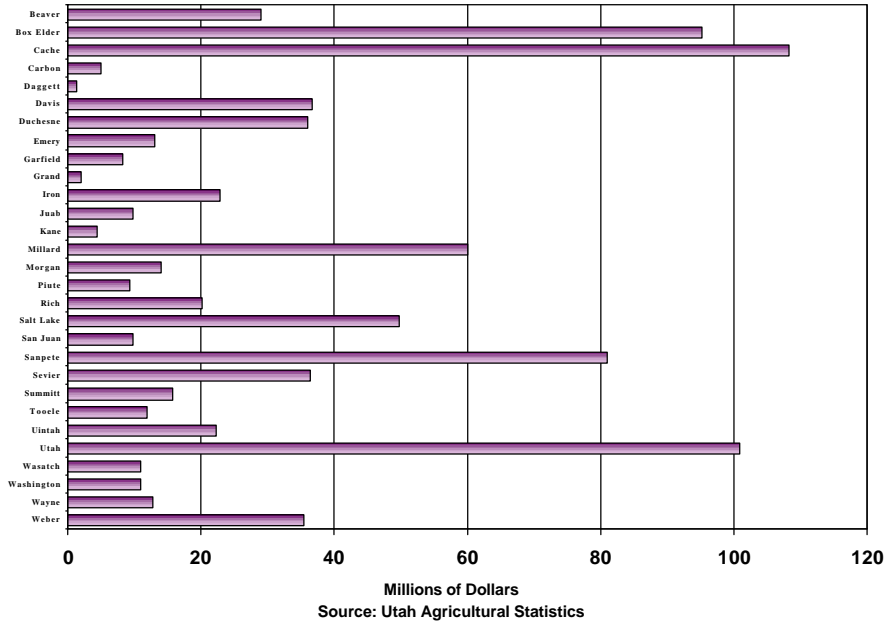
Farm Assets and Equity in Utah



Source: Utah Agricultural Statistics



Farm Cash Receipts by County in Utah, 1996



Utah Farm Balance Sheet (Millions of Dollars): December 31, 1987 to December 31, 1996

Category	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Assets	\$5,390.3	\$5,296.3	\$5,063.0	\$5,452.2	\$5,621.8	\$6,081.3	\$6,406.4	\$6,954.5	\$7,894.1	\$8,522.1
Real Estate	4,197.0	4,112.7	3,881.0	4,160.1	4,433.6	4,841.2	5,172.8	5,725.4	6,589.3	7,145.0
Livestock and Poultry	484.4	536.5	572.0	582.7	566.3	637.9	626.9	626.4	512.9	551.6
Machinery & Motor Vehicles	429.1	428.7	444.6	459.1	472.5	471.0	465.2	472.4	454.5	449.2
Crops	112.4	123.5	94.9	114.6	95.0	90.6	116.2	1,115.9	94.4	120.7
Purchased inputs	7.6	12.2	12.4	15.5	20.8	28.9	27.9	23.4	14.3	24.5
Financial	159.8	82.7	58.1	93.1	32.4	12.0	(2.7)	(9.0)	228.7	231.0
Claims	756.3	743.0	683.1	661.9	660.8	652.2	652.3	674.6	688.3	938.6
Real estate debt	447.0	428.2	390.3	372.7	355.8	352.9	338.3	337.4	348.1	364.4
Non real estate debt	309.3	314.8	292.8	289.2	305.0	299.4	314.0	337.2	340.1	574.1
Equity	4,634.0	4,553.3	4,379.9	4,763.3	4,961.0	5,429.1	5,754.1	6,280.0	7,205.8	7,583.5
Debt/ Equity	16.3	16.3	15.6	13.9	13.3	12.0	11.3	10.7	9.6	12.4

Source: Utah Agricultural Statistics

Percent of Utah Agricultural Receipts by Sector: 1980-1996

Sector	1980	1985	1990	1995	1996
Cattle	30.0	28.3	37.7	32.1	28.1
Sheep	4.3	4.5	2.1	2.8	2.5
Hogs	1.0	0.5	0.7	0.9	2.1
Dairy	24.3	25.1	21.8	22.3	25.1
Poultry/eggs	8.4	11.7	9.5	8.5	8.4
Other livestock	5.2	4.6	4.5	6.2	7.9
Food grains	5.8	4.9	2.5	4.0	4.4
Feed grains	2.6	3.1	2.0	2.9	3.4
Hay	8.0	6.6	9.1	10.8	8.9
Vegetables	2.8	3.1	4.1	2.9	2.7
Fruits/Nuts	2.9	3.6	1.5	1.1	1.6
Greenhouse/Nursery	2.5	2.6	3.3	4.3	3.7
Other crops	2.2	1.4	1.2	1.2	1.2
Total	100.0	100.0	100.0	100.0	100.0

Source: Utah Agricultural Statistics

Cash Receipts by Source-Counties (Millions of Dollars): 1991 to 1996

County	1992			1993			1994			1995			1996		
	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total
Beaver	\$17.8	\$2.8	\$20.6	\$20.0	\$3.2	\$23.2	\$18.5	\$4.3	\$22.8	\$16.4	\$4.6	\$21.0	\$24.7	\$4.3	\$29.0
Box Elder	46.0	30.5	76.5	51.2	29.8	81.0	49.6	35.4	85.0	52.7	35.7	88.4	55.8	39.4	95.2
Cache	80.0	13.7	93.7	80.8	13.4	94.2	83.1	17.4	100.5	78.5	20.0	98.5	86.2	22.1	108.3
Carbon	3.5	0.5	4.0	4.1	0.6	4.7	4.0	0.7	4.7	4.2	0.8	5.0	4.2	0.8	5
Daggett	1.0	0.3	1.3	1.5	0.3	1.8	1.0	0.5	1.5	0.9	0.4	1.3	0.9	0.4	1.3
Davis	11.8	29.7	41.5	14.4	22.1	36.5	12.6	25.8	38.4	12.7	22.0	34.7	14.5	22.2	36.7
Duchesne	25.3	3.5	28.8	28.5	4.4	32.9	26.7	6.3	33.0	28.7	6.8	35.5	29.5	6.5	36
Emery	10.8	1.5	12.3	11.4	1.8	13.2	10.4	2.3	12.7	11.2	2.2	13.4	11	2	13
Garfield	7.0	0.9	7.9	8.3	1.0	9.3	6.5	1.4	7.9	7.2	1.4	8.6	7	1.2	8.2
Grand	1.6	0.7	2.3	1.5	0.7	2.2	1.6	0.8	2.4	1.3	0.6	1.9	1.5	0.5	2
Iron	10.5	10.5	21.0	12.4	10.2	22.6	11.5	12.5	24.0	11.8	11.4	23.2	12.1	10.8	22.9
Juab	5.1	2.7	7.8	6.2	2.6	8.8	5.4	3.9	9.3	5.1	4.4	9.5	5.1	4.6	9.7
Kane	3.7	0.4	4.1	4.5	0.4	4.9	4.3	0.6	4.9	3.9	0.5	4.4	3.9	0.5	4.4
Millard	24.4	16.5	40.9	28.1	18.2	46.3	24.5	21.0	45.5	33.2	23.8	57.0	35.8	24.2	60
Morgan	10.9	1.0	11.9	10.3	1.2	11.5	10.5	1.4	11.9	9.3	1.5	10.8	12.3	1.7	14
Piute	6.4	0.9	7.3	7.3	1.1	8.4	7.7	1.2	8.9	7.7	1.2	8.9	8.2	1.1	9.3
Rich	16.7	2.2	18.9	18.7	2.7	21.4	16.4	4.0	20.4	17.3	3.8	21.1	16.6	3.6	20.2
Salt Lake	24.6	13.7	38.3	34.6	9.6	44.2	33.0	13.0	46.0	31.2	11.9	43.1	37.9	11.8	49.7
San Juan	7.0	2.7	9.7	8.0	2.6	10.6	9.5	3.5	13.0	7.8	4.9	12.7	7.8	2	9.8
Sanpete	70.7	3.8	74.5	79.3	4.7	84.0	70.2	6.5	76.7	72.4	6.9	79.3	74.3	6.7	81
Sevier	25.4	3.2	28.6	29.4	4.1	33.5	30.5	5.0	35.5	29.7	5.4	35.1	31	5.4	36.4
Summit	13.5	0.9	14.4	14.9	1.1	16.0	15.1	1.4	16.5	12.6	1.3	13.9	14.5	1.2	15.7
Tooele	7.4	3.0	10.4	8.3	2.8	11.1	7.5	3.4	10.9	8.1	3.6	11.7	8.2	3.7	11.9
Uintah	19.2	3.2	22.4	21.3	3.4	24.7	21.2	4.3	25.5	17.7	5.3	23.0	17.3	4.9	22.2
Utah	58.7	32.0	90.7	64.3	23.0	87.3	61.6	29.2	90.8	60.0	26.1	86.1	70.2	30.8	101
Wasatch	9.5	1.3	10.8	9.9	1.2	11.1	9.0	1.5	10.5	8.6	1.6	10.2	9.4	1.6	11
Washington	6.9	4.3	11.2	8.7	3.4	12.1	7.7	4.8	12.5	6.8	4.0	10.8	6.9	4	10.9
Wayne	8.7	1.2	9.9	9.4	1.3	10.7	8.0	1.5	9.5	9.5	1.8	11.3	11	1.8	12.8
Weber	23.8	7.3	31.1	29.0	6.3	35.3	30.0	7.7	37.7	24.8	6.8	31.6	28.3	7.2	35.5
State	\$557.9	\$194.9	\$752.8	\$626.3	\$177.2	\$803.5	\$597.6	\$221.3	\$818.9	\$591.3	\$220.7	\$812.0	646.1	227	873.1

Source: Utah Agricultural Statistics.

Utah Livestock and Livestock Products as a Percent of Total Cash Receipts: 1990-1996

Percent of Total Cash Receipts

County	1990	1991	1992	1993	1994	1995	1996
Beaver	81.4	84.1	86.4	86.2	81.1	78.1	85.2
Box Elder	64.2	62.9	60.1	63.2	58.4	59.6	58.6
Cache	85.4	85.6	85.4	85.8	82.7	79.7	79.6
Carbon	87.8	85.7	87.5	87.2	85.1	84.0	84.0
Daggett	89.5	87.5	76.9	83.3	66.7	69.2	69.2
Davis	35.6	67.1	28.4	39.5	32.8	36.6	39.5
Duchesne	85.5	86.9	87.8	86.6	80.9	80.8	81.9
Emery	84.1	86.2	87.8	86.4	81.9	83.6	84.6
Garfield	86.5	88.1	88.6	89.2	82.3	83.7	85.4
Grand	77.8	71.4	69.6	68.2	66.7	68.4	75.0
Iron	55.5	57.8	50.0	54.9	47.9	50.9	52.8
Juab	64.6	68.4	65.4	70.5	58.1	53.7	52.6
Kane	90.9	91.9	90.2	91.8	87.8	88.6	88.6
Millard	56.4	57.9	59.7	60.7	53.8	58.2	59.7
Morgan	89.8	90.5	91.6	89.6	88.2	86.1	87.9
Piute	87.5	86.2	87.7	86.9	86.5	86.5	88.2
Rich	91.0	93.4	88.4	87.4	80.4	82.0	82.2
Salt Lake	72.0	72.4	64.2	78.3	71.7	72.4	76.3
San Juan	83.5	81.6	72.2	75.5	73.1	61.4	79.6
Sanpete	94.2	94.6	94.9	94.4	91.5	91.3	91.7
Sevier	85.2	88.0	88.8	87.8	85.9	84.6	85.2
Summit	94.5	94.8	93.8	93.1	91.5	90.6	92.4
Tooele	75.0	75.5	71.2	74.8	68.8	69.2	68.9
Uintah	83.8	84.2	85.7	86.2	83.1	77.0	77.9
Utah	71.5	63.0	64.7	73.7	67.8	69.7	69.5
Wasatch	88.4	89.6	88.0	89.2	85.7	84.3	85.5
Washington	55.9	56.5	61.6	71.9	61.6	63.0	63.3
Wayne	85.1	88.1	87.9	87.9	84.2	84.1	85.9
Weber	79.4	79.7	76.5	82.2	79.6	78.5	79.7
Total	76.3	77.3	74.11	77.95	72.98	72.82	74.00

Source: Utah Agricultural Statistics

Overview

Both residential and nonresidential construction in Utah were surprisingly strong in 1998. Lower mortgage rates and a slow down in the rate of housing price increases has benefitted the residential sector. Utah's housing price index has increased by 3.9% in the past twelve months, which ranks 30th among all states. Only a year ago Utah ranked second nationally in housing price increases, with a 7.1% rise in prices. The value of permit authorized construction in Utah is projected to reach \$3.6 billion in 1998, only 2% below the all-time high of \$3.7 billion in 1997. The number of building permits issued for new dwelling units will be 21,500 with a valuation of \$2.15 billion, an all-time record for residential building valuation. Nonresidential valuation is projected to be \$1.05 billion in 1998. Additions, alterations and repairs, a sector of growing importance, will account for over \$400 million of construction in 1998. The 1999 outlook includes a projected value for permit authorized construction of \$3.1 billion. Residential construction is anticipated to decline by 10% and nonresidential construction by 20 to 25% as lower levels of demographic and economic growth are reflected in reduced construction activity.

1998 Summary

Housing Market: Interest Rates, Prices and Affordability. In 1998 mortgage interest rates hit a 31-year low, producing significant benefits for home buyers, homebuilders and real estate agents. For the first time since 1967 the average mortgage rate for a 30-year fixed rate conventional mortgage fell below 7%. Prior to 1998, rates had fluctuated for many months in a narrow range between 7.5 and 8.0%. The possibility of mortgage rates falling below 7% seemed extremely remote but the Asian and Russian economic crises and a threatened slow down for U.S. economy combined to pushed interest rates lower. Mortgage rates have fallen 75 basis points in the past year.

The drop in interest rates has improved the affordability of housing. For example, a home buyer purchasing a home priced at \$154,200--the average price of a home sold in Utah in 1998--would pay about 8% less in mortgage and interest with a mortgage rate of 6.9% versus a mortgage rate of 7.6% rate. Improved affordability has brought more home buyers into the market and been instrumental in sustaining high levels of single family construction and existing homes sales despite declining demographic and economic growth rates for Utah.

In 1998, new single family construction in Utah is expected to exceed 14,000 units for only the fourth time in the state's history. The number of "sales of existing homes" as reported by the Wasatch Front Multiple Listing Service will be at or near the record level of 1996. The strength of the home market in the face of declining net in-migration and employment growth is attributable to lower mortgage interest rates. And while home buyers and home builders have benefitted from lower rates, the owners of apartments have not been so fortunate. Low mortgage rates are attracting renters into the home market creating higher vacancy rates for apartment complexes as well as putting downward pressure on rental rate increases. The apartment vacancy rate in the Wasatch Front has risen from less than 5% in 1996 to over 7% in 1998 while annual rental rate increases have been held to less than 4%.

Lower interest rates are not the only factor improving the affordability of housing in Utah. A significant moderation in the

increase in housing prices has also had positive impacts on affordability and housing demand. From the third quarter of 1997 to the third quarter of 1998, the housing price index for Utah, as measured by the Office of Federal Housing Enterprise Oversight, has risen only 3.9%. This increase ranks Utah 30th among all states in housing price increases but as recently as September 30th 1997 Utah ranked 2nd among all states with a 7.1% annual increase in the index.

From 1993 through 1996, the annual increases in Utah's Housing Price Index led the nation. The double digit increases were fueled by a rapidly growing economy and housing prices that were "catching-up" after a decade of stagnant prices. Catch-up has been achieved. The median sales price for an existing home in the Salt Lake Metropolitan area, as reported by the National Association of Realtors, in the third quarter of 1998 was \$133,300 compared to \$132,700 nationally. In 1990 the median sales price of an existing home in Salt Lake Metropolitan area was only \$69,400 compared to \$95,500 nationally.

Permit Value Construction. Both residential and nonresidential construction were surprisingly strong in 1998. The value of permit authorized construction in Utah was \$3.6 billion in 1998, only about 2% below the record \$3.7 billion registered in 1997.

Residential Construction. The value of Utah's residential construction in 1998 is projected to surpass the all-time high, established in 1996, of \$2.1 billion. The number of new dwelling units receiving building permits is expected to exceed 21,500 units, slightly above 1997's total of 20,700 units but well below the record of 23,700 set in 1996. The level of residential construction activity has remained strong throughout the year, undoubtedly buoyed up by very low mortgage rates. Of the 21,500 permits issued for new dwelling units, 14,500 will be for single family homes, 5,500 for multifamily units (apartments and condominiums) and 1,500 for manufactured homes, cabins and mobile homes.

Through the first three quarters of 1998, nearly 70% of all residential construction activity in the state has been located in Salt Lake, Utah, Davis and Weber Counties. Of these Wasatch Front counties, only Weber County has had a decline in construction activity. Through the third quarter of 1998, residential construction in Weber County is down 7.6%. In Salt Lake County, permits have been issued for 5,104 dwelling units, up 14.5% over the same period in 1997. West Jordan leads all municipalities in the county with 948 new dwelling permits, an increase of 26% over 1997. Sandy ranks second in the number of new permits with 776, an increase of 209% over 1997.

In Utah County, permits have been issued for 3,318 dwelling units, an increase of 31.4% over 1997. Every municipality in Utah County, with the exception of Spanish Fork, has had higher levels of residential construction this year. The surge in building activity in Utah County has been led by Lehi, Payson, and Pleasant Grove, with residential construction increases of 157%, 121% and 111% respectively.

Among Utah's 25 non-metropolitan counties, three counties--Washington, Tooele, and Summit have accounted for nearly half of all non-metropolitan residential construction activity in 1998. In Washington County 1,241 residential building permits have been

issued through the third quarter of 1998, up 5.4% over 1997. Over half of these permits (671) have been issued in St. George City. In Tooele County new residential construction is heavily concentrated in Tooele City. Of the 789 building permits issued through September 1998, 621 were in Tooele City. Residential construction activity in Tooele City is up 71.5% over 1997. For the county residential construction is up 31.9%. Like Washington and Tooele Counties, residential construction in Summit County is also higher in 1998. To date, there have been 564 residential building permits issued in Summit County, an increase of 10.4% over 1997.

There are some notable cases of small communities experiencing dramatic changes in building activity in 1998. For example, unincorporated Duchesne County has had an increase of 427.7%. The number of residential building permits issued has increased from 47 in 1997 to 248 in 1998. Nearly all of the increased activity has been in manufactured homes and cabins. Manufactured homes offer a lower priced alternative to the traditional "stick built" home and are becoming increasingly popular in rural areas. In Duchesne County, the average price of a manufactured home ranges between \$40 and \$50 per square foot compared to \$60 to \$80 per square foot for a "stick built" home. Permits for 183 manufactured homes and 30 cabins have been issued this year in Duchesne County.

Garden City in Rich County has had an even more spectacular increase than Duchesne County. The number of building permits issued has risen from five in 1997 to 53 in 1998, an increase of 960%. Most of this increase is associated with second home activity near Bear Lake. Heber City has also recorded an impressive increase in 1998. The number of residential building permits is up 76% to 125 permits. Heber City, and other municipalities in Wasatch and Summit Counties, have become attractive locations as "bedroom communities" to Salt Lake and Utah Counties. Consequently, residential building activity in these municipalities has increased in recent years.

The decline in residential activity in Grand and Iron Counties has continued into 1998. It appears that the number of residential permits issued in these two counties will be at their lowest levels since 1991. Through the first three quarters of the year, residential building permit activity is down 50% in Grand County (63 permits) and 44.6% in Iron County (215 permits). In the case of Grand County, the housing market reflects a decline in employment growth in the county. Whereas in Iron County, the slow down in housing activity is more an adjustment to very high levels of residential construction between 1994 and 1996.

Nonresidential Construction. The value of nonresidential construction in Utah is projected to be slightly over \$1 billion in 1998. This will mark only the second year that nonresidential valuation has exceeded \$1 billion. In 1997, nonresidential valuation established an all-time record of \$1.37 propelled by several mega-projects such as the LDS Assembly Hall and the Little America Grand Hotel. There have been fewer major multi-million dollar projects in 1998, instead nonresidential activity has been characterized by a large number of medium to small size projects.

In 1998 nonresidential activity has been concentrated in retail, office and publicly owned buildings. Through September, stores and retail buildings led all categories with construction value of \$172.9 million, an increase of 40% over 1997. The office building sector is having another strong year with \$157.5 million in permit value through the first three quarters of 1998. The publically owned category has registered the strongest gains of any nonresidential sector, rising from \$23 million in 1997 to \$122 million in 1998 due primarily to a

\$65 million permit issued for the Salt Lake County Adult Detention Center. And the industrial/warehouse category has shown continued strength with \$123 million in permit valuation compared to \$119 million through September of 1997.

There are two nonresidential categories that will register significant declines in 1998, churches and other religious buildings, and hotels and motels. The LDS Church Assembly Hall and Little America Grand Hotel pushed valuation in each category to record levels in 1997, which will not be repeated in 1998 or anytime in the near future.

Nonresidential construction does not include highways, bridges, dams and power plants, i.e. nonbuilding construction. Therefore, highway and road construction are not included in nonresidential construction valuation.

1999 Outlook

The value of permit authorized construction in 1999 is projected to be nearly \$3.1 billion, comprised of \$1.9 billion in residential construction, \$750 million in nonresidential construction and \$425 million in additions, alterations and repairs.

Residential construction activity will drop from 21,500 units in 1998 to a projected 19,000 units in 1999, a decline of nearly 12%. This decline reflects the recent lower levels of economic and demographic growth of the state. Construction by type of housing is projected to be: single-family- 13,000 units; multifamily- 4,500 units; and manufactured homes, mobile homes and cabins- 1,500 units. The multifamily sector will be higher than otherwise expected due to several hundred multifamily units that will be built for Olympic Housing both at the University of Utah and in downtown Salt Lake City.

Nonresidential construction valuation is projected to decline to approximately \$750 million in 1999. This anticipated decline is more a reflection of a dwindling number of large nonresidential projects than an indication of general market weakness or over building in a particular sector. Vacancy rates for office, industrial and retail space remain between 5% and 7%, one indication that the market has not yet been overbuilt. But there is growing concern for some sectors, particularly hotels and motels and retail. In 1996 and 1997, there were an extraordinary number of medium size motels receiving building permits in Wasatch Front counties. This surge in new construction activity has led to higher vacancy rates for hotels and motels. Retail construction activity has been at very high levels since 1994. The additional space, some of it still under construction or in the planning stages, will ultimately create higher vacancy rates and excess capacity for the sector.

Significant Issues

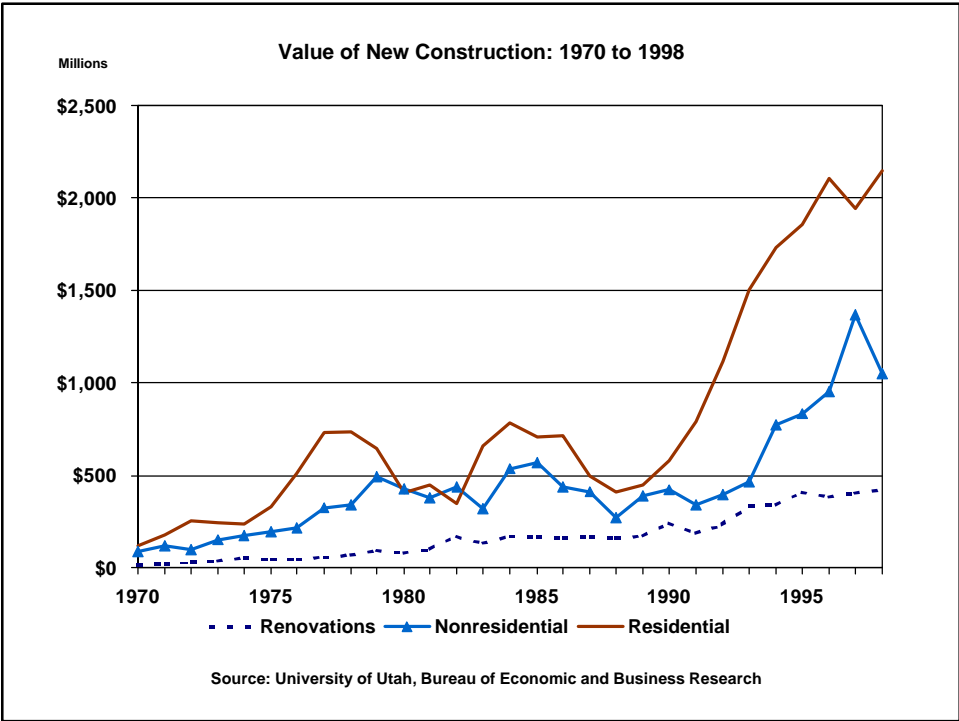
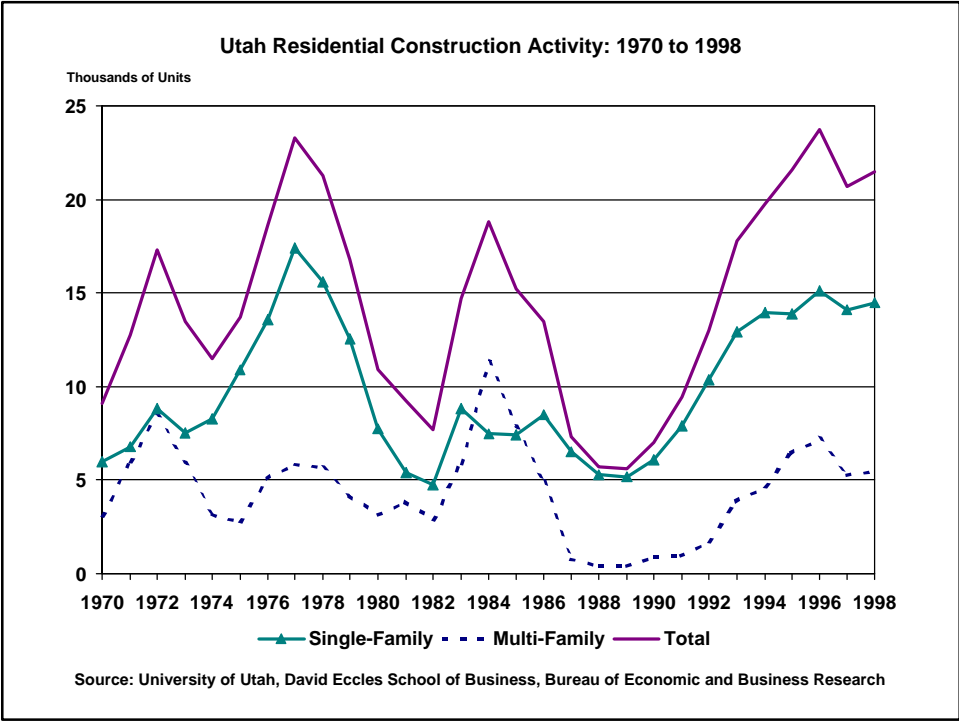
Overbuilding. In recent years, the value of new construction for retail stores, mercantile and restaurants has been substantial. Since 1994 the construction of retail facilities has averaged more than \$150 million annually, raising the possibility of overbuilding, particularly in light of several proposed retail projects planned for Salt Lake County. Over the past three years, nearly three million square feet of retail space have been added to the Salt Lake County market, bringing the total inventory of retail space in the county to 20 million square feet. In the next two years, over three million square feet of new retail space are planned for development in the county: Gateway- 680,000 square feet; Chimney Ridge- 525,000 square feet; Jordan Landing- 800,000 square feet; Grand Salt Lake Mall- 1,300,000 square feet.

Olympics Related Construction. Between 1997 and 2001, the construction of Olympic related facilities could generate as much as \$700 million in construction activity including: the Olympic Village (\$120 million), media housing (\$90 million), expansion at Snowbasin and Park City resorts (\$250 million), and several smaller projects such as Steiner Center and Provo ice sheets. In addition to the Olympic facilities another \$250 million in hotel construction – Little America Grand Hotel, Marriott Hotel (State Street), and Hotel Monaco (Main Street)– is underway or planned, motivated in large part by the Olympics. Thus, Olympic related construction could approach \$1 billion over the five-year period (1997 through 2001). The compression of such a large amount of construction activity into such a short period is bound to amplify the expansion and contraction of the construction cycle. Note that the \$185 million Little America Grand Hotel helped to establish an all-time high in nonresidential valuation in 1997. Likewise, the completion of Olympic construction in 2001 may well lead to a precipitous decline in nonresidential activity by 2002. However, two large projects

planned to get underway near 2002, may offset the end of Olympic related construction. They are the expansion of the Salt Lake International Airport with \$250 million in buildings and parking structure planned sometime between 2002 and 2004, and the \$250 million IHC Mid Valley hospital planned for the same time period.

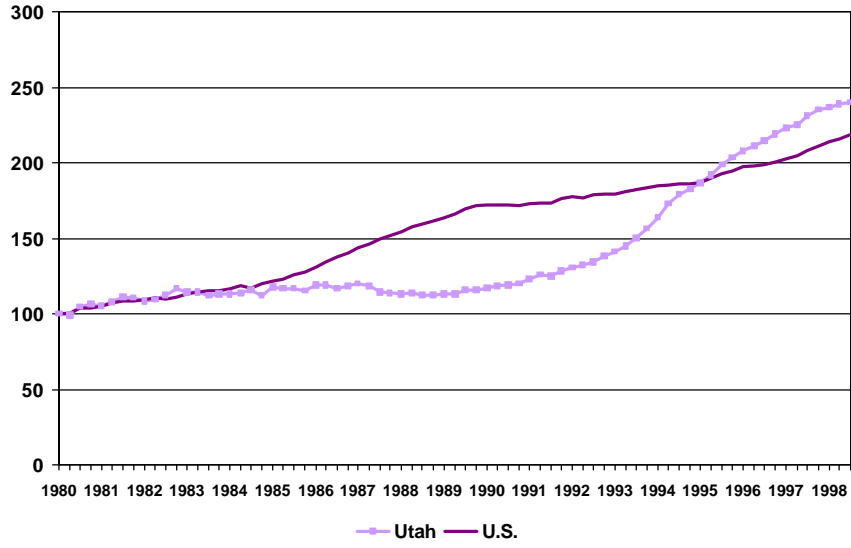
Conclusion

Construction in Utah has been surprisingly strong in 1998. Most impressive has been the residential sector which set an all-time high of \$2.15 billion in valuation in 1998. Single-family construction was particularly strong in Utah and Salt Lake Counties, while several nonmetropolitan counties, including Washington, Tooele and Summit, performed well in 1998. Nonresidential construction broke the billion dollar mark for only the second time, but finished well below the \$1.37 billion record set in 1997. Nonresidential activity was broad based in 1998 with retail, office, industrial and publically owned building all participating in increased levels of valuation. *



Housing Price Index for Utah and the U.S.: 1980 to Third-Quarter 1998

Price Index (1980 Q1=100)



Source: Office of Federal Housing Enterprise Oversight, "House Price Index", Washington D.C.

Residential and Nonresidential Construction Activity in Utah: 1970 to 1998

Year	Single-Family Units	Multi-Family Units	Mobile Homes/Cabins	Total Units	Value of Residential Construction (millions)	Value of Nonresidential Construction (millions)	Value of Add., Alt., and Repairs (millions)	Total Valuation (millions)
1970	5,962	3,108	na	9,070	\$117.0	\$87.3	\$18.0	\$222.3
1971	6,768	6,009	na	12,777	176.8	121.6	23.9	322.3
1972	8,807	8,513	na	17,320	256.5	99.0	31.8	387.3
1973	7,546	5,904	na	13,450	240.9	150.3	36.3	427.5
1974	8,284	3,217	na	11,501	237.9	174.2	52.3	464.4
1975	10,912	2,800	na	13,712	330.6	196.5	50.0	577.1
1976	13,546	5,075	na	18,621	507.0	216.8	49.4	773.2
1977	17,424	5,856	na	23,280	728.0	327.1	61.7	1,116.8
1978	15,618	5,646	na	21,264	734.0	338.6	70.8	1,143.4
1979	12,570	4,179	na	16,749	645.8	490.3	96.0	1,232.1
1980	7,760	3,141	na	10,901	408.3	430.0	83.7	922.0
1981	5,413	3,840	na	9,253	451.5	378.2	101.6	931.3
1982	4,767	2,904	na	7,671	347.6	440.1	175.7	963.4
1983	8,806	5,858	na	14,664	657.8	321.0	136.3	1,115.1
1984	7,496	11,327	na	18,823	786.7	535.2	172.9	1,494.8
1985	7,403	7,844	na	15,247	706.2	567.7	167.6	1,441.5
1986	8,512	4,932	na	13,444	715.5	439.9	164.1	1,319.5
1987	6,530	755	na	7,305	495.2	413.4	166.4	1,075.0
1988	5,297	418	na	5,715	413.0	272.1	161.5	846.6
1989	5,197	453	na	5,632	447.8	389.6	171.1	1,008.5
1990	6,099	910	na	7,009	579.4	422.9	243.4	1,245.7
1991(r)	7,911	958	572	9,441	791.0	342.6	186.9	1,320.5
1992	10,375	1,722	904	13,001	1,113.6	396.9	234.8	1,745.3
1993	12,929	3,865	1,010	17,804	1,504.4	463.7	337.3	2,305.4
1994	13,947	4,646	1,154	19,747	1,730.1	772.2	341.9	2,844.2
1995	13,904	6,425	1,229	21,558	1,854.6	832.7	409.0	3,096.3
1996	15,139	7,190	1,408	23,737	2,104.5	951.8	386.3	3,442.6
1997	14,079	5,265	1,343	20,687	1,943.5	1,370.9	407.1	3,721.6
1998(e)	14,500	5,500	1,500	21,500	2,150.0	1,050.0	425.0	3,625.0

(e) = estimate

(r) = revised to be comparable to 1992 data.

na = not available

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November 1998.

Table
Summary of Residential Construction Activity in Utah by County and Multi-county District:
January-December 1997 (valuation in thousands)

	Single-family	Multi-family	Mobile Homes/ Cabins	Total Units	Residential Valuation	Non-residential Valuation	Total Valuation
Bear River	934	248	118	1,300	118,229.9	43,050.3	181,827.8
Box Elder	390	82	41	513	42,373.0	7,412.0	54,565.3
Cache	523	166	54	743	74,028.0	35,042.7	123,319.4
Rich	21	0	23	44	1,828.9	595.6	3,943.1
Central	278	40	176	494	36,143.0	14,695.3	63,695.9
Juab	45	0	3	48	4,857.0	4,216.5	9,899.8
Millard	25	0	31	56	4,093.8	700.7	8,893.3
Piute	2	0	0	2	105.0	3.4	115.4
Sanpete	116	34	95	245	13,906.3	4,571.4	22,055.8
Sevier	85	6	45	136	12,472.4	4,389.9	21,201.4
Wayne	5	0	2	7	708.5	813.4	1,530.2
Mountainland	2,571	1,503	191	4,265	467,228.5	262,044.3	807,865.3
Summit	385	340	66	791	117,350.2	21,730.0	152,662.8
Utah	2,046	1,157	88	3,291	327,292.7	229,893.8	619,722.2
Wasatch	140	6	37	183	22,585.6	10,420.5	35,480.3
Uintah Basin	40	0	98	138	6,941.6	4,254.0	12,527.4
Daggett	4	0	6	10	667.2	479.1	1,146.3
Duchesne	9	0	64	73	2,471.2	561.2	3,320.6
Uintah	27	0	28	55	3,803.2	3,213.7	8,060.5
Southeast	130	32	188	350	15,975.2	13,897.8	35,875.2
Carbon	22	2	64	88	2,536.9	4,327.0	9,633.0
Emery	43	0	24	67	3,764.6	2,816.5	7,804.8
Grand	28	30	88	146	6,133.0	4,090.9	11,659.9
San Juan	37	0	12	49	3,540.7	2,663.4	6,777.5
Southwest	1,589	368	309	2,266	186,455.6	114,469.2	316,779.7
Beaver	45	11	11	67	5,073.9	3,198.9	8,777.2
Garfield	35	0	41	76	5,522.4	1,689.6	8,008.5
Iron	256	125	93	474	29,891.0	19,978.5	51,413.5
Kane	50	2	83	135	9,715.6	4,772.3	15,620.4
Washington	1,203	230	81	1,514	136,252.7	84,829.9	232,960.1
Wasatch Front	8,537	3,074	263	11,874	1,112,538.9	918,547.3	2,303,047.3
Davis	2,182	1,010	12	3,204	286,574.6	73,095.1	398,169.3
Morgan	10	3	0	13	1,165.4	46.7	1,246.4
Salt Lake	4,178	1,341	217	5,736	561,967.9	796,738.2	1,549,567.1
Tooele	813	178	22	1,013	76,347.0	8,048.4	86,661.1
Weber	1,354	542	12	1,908	186,484.0	40,618.9	267,403.4
State	14,079	5,265	1,343	20,687	1,943,512.7	1,370,958.2	3,721,618.6

Source: Bureau of Economic and Business Research, David Eccles School of Business, University of Utah, December 1997.

Average Annual Mortgage for 30-year Conventional Mortgage for Utah: 1998

Year	Mortgage Rates	Year	Mortgage Rates
1967	6.52%	1983	13.23%
1968	7.03%	1984	13.87%
1969	7.82%	1985	12.42%
1970	8.35%	1986	10.18%
1971	7.83%	1987	10.20%
1972	7.38%	1988	10.34%
1973	8.04%	1989	10.32%
1974	9.19%	1990	10.13%
1975	9.04%	1991	9.25%
1976	8.86%	1992	8.40%
1977	8.84%	1993	7.33%
1978	9.63%	1994	8.35%
1979	11.19%	1995	7.95%
1980	13.77%	1996	7.80%
1981	16.63%	1997	7.60%
1982	16.08%	1998(e)	6.90%

Source: Federal Home Mortgage Corporation

Housing Prices for Utah: 1980 to 3rd Quarter 1998

Year	Index	Percent Change	Year	Index	Percent Change
1980	102.6		1993	148.3	10.9
1981	109.0	6.2	1994	174.4	17.6
1982	111.8	2.6	1995	195.2	11.9
1983	113.6	1.6	1996	213.3	9.3
1984	113.7	0.1	1997	228.5	7.1
1985	116.5	2.5	-- 1Q	223.2	7.3
1986	118.3	1.5	-- 2Q	224.9	6.5
1987	116.5	-1.5	-- 3Q	230.8	7.5
1988	113.3	-2.8	-- 4Q	235.0	7.2
1989	114.7	1.3	1998		
1990	118.8	3.6	-- 1Q	236.6	6.0
1991	125.6	5.7	-- 2Q	239.1	6.3
1992	133.8	6.5	-- 3Q	239.8	3.9

Source: Office of Federal Housing Enterprise Oversight, Housing Price Index, Washington, D.C., 1998.

* Defense

Overview

Utah's defense industry was revitalized in 1998, as base closures and realignments in other states shifted jobs and military spending to Utah. In October, Hill Air Force Base was awarded a contract valued at \$1.58 billion over nine years, and the base is expected to pick up 2,750 new jobs by 2001. The new award is in contrast to the downward trend the defense industry has experienced since the end of the Cold War. The additional operations at the base should also protect Hill from base-closures in the near future. Even with the new contract award in Utah, declines in overall defense spending both nationally and locally, and the closing and redevelopment of military facilities will continue to dominate defense issues in the coming years. Defense spending in Utah in 1997 totaled below \$1.3 billion, dropping 5% from the previous year.

Trends

Budget projections developed by the Congressional Budget Office show the total defense budget increasing slightly from \$266 billion in 1996 to \$287 billion in 2000. While these absolute amounts (both actual and projected) have increased since 1995, the percentage of defense spending relative to the overall economy has decreased. As a percent of gross domestic product (GDP), defense spending was 3.1% in 1995, 3.0% in 1996, and 2.7% in 1997.

The importance of defense spending in Utah's economy has declined relative to that of the nation, and will likely continue down this path. Total defense spending in Utah currently stands below \$1.3 billion—down over 5% from 1996. As a percent of the Gross State Product (GSP), defense outlays have diminished from a high of over 8.3% in 1987, to only 2.3% in 1997.

Private Contracting Activity

Defense contracts to private firms have decreased considerably at both the state and national level throughout the 1990s. Since 1993, 40 major defense companies have merged into five. While total procurement contracts to Utah firms increased 10% between 1996 and 1997, there has been an overall reduction of 46% since 1986. Thiokol remained the state's top contract recipient in 1997, with awards of \$72 million, however, these awards have declined from a peak of \$587 million in 1987. The company cut 200 jobs in 1997 due to restructuring. Former defense giant Hercules, once the recipient of \$353 million in contracts (1986), sold its aerospace division to Minnesota-based Alliant Techsystems in March 1995, and its Composite Products division to California-based Hexcel in 1996. Alliant dropped to Utah's ninth largest defense contractor in 1997, with \$7 million in contract awards. Lockheed Martin was Utah's second largest defense contractor in 1997, with \$39 million in contract awards. Other major contractors include Litton Industries (\$19 million), L-3 Communications (\$17 million), and Utah State University (\$15 million).

Geographic Distribution

Federal defense spending in Utah is concentrated in Davis, Salt Lake, Tooele, and Weber counties, though significant spending occurs in Box Elder, Utah, and Cache counties. Payroll and procurement contracts at Hill Air Force Base accounted for 93% of defense spending in Davis County during 1997. Contracting activity associated with a variety of weapons systems and other projects accounts for most of the defense spending in Salt Lake County. Payroll and procurement contracts at Tooele Army Depot and

Dugway Proving Grounds account for spending in Tooele County, and the Defense Depot Ogden is the recipient of most spending in Weber County.

Military Facilities

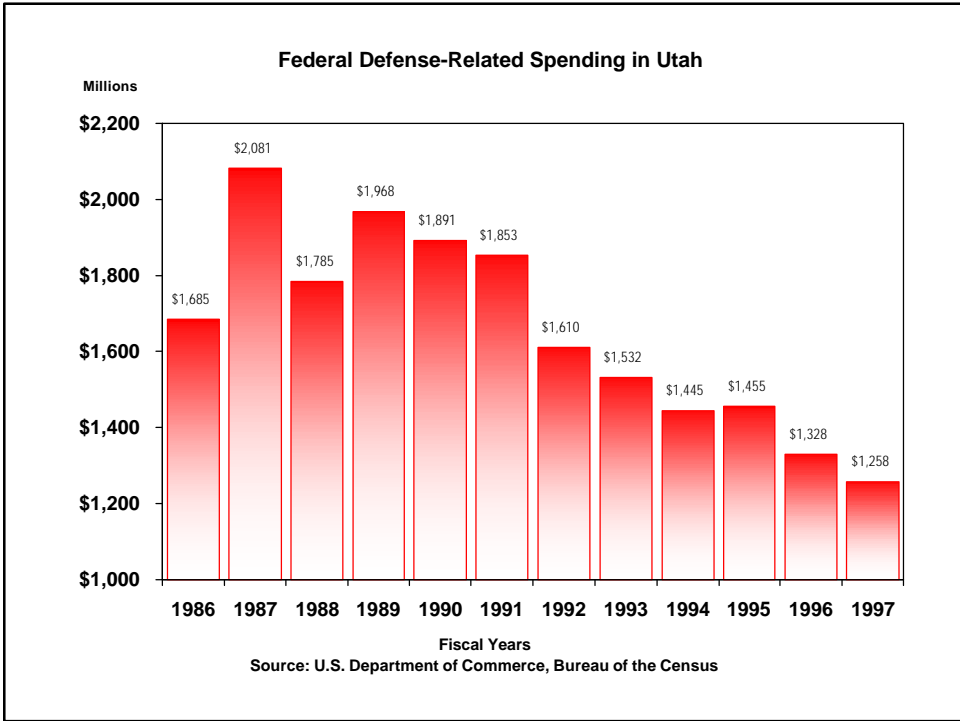
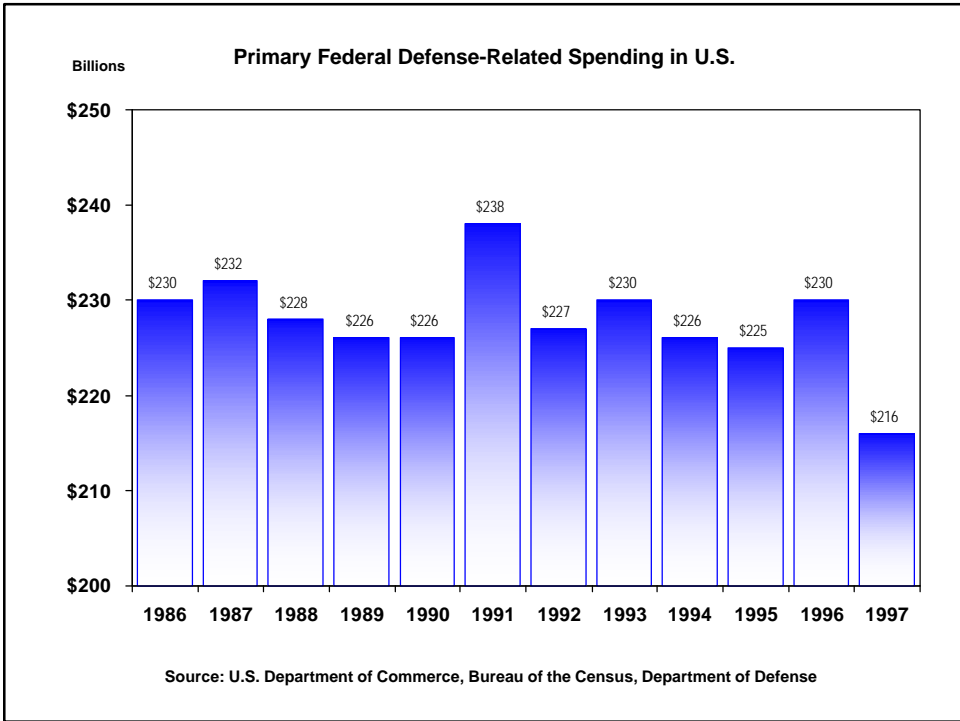
Hill Air Force Base, the state's largest basic employer and center of Utah's defense industry, was recently awarded a contract valued at \$1.58 billion over nine years. The award was a direct result of the upcoming closures of Kelly Air Force Base in California, and McClellan Air Force Base in Texas. Attempts by Washington politicians to "privatize in place" most jobs at these bases were thwarted in October, when the Air Force awarded the contracts to Hill. The new contracts and other realignments are expected to create 2,750 new jobs by 2001. The future of Utah's defense industry is much more certain than in years past, and the increase in operations at Hill Air Force Base should prove to be an excellent buffer against future base closures.

Defense Depot Ogden (DDO) was designated for closure by the Defense Base Closure and Realignment Commission (BRAC) in 1995, and was officially closed in September 1997 after 56 years of operation. Ogden City currently subleases the empty buildings for business and warehouse space, and has negotiated to purchase the facility outright. The city will spend about \$60 million in improvements to roads and utilities in order to convert the depot into an industrial and business park. Many businesses have already begun relocation, and the project could create as many as 10,000 jobs over the next 15 years.

Workforce reductions at Tooele Army Depot (TAD) amounted to nearly 100 lost jobs in 1998, bringing the total number of jobs lost to reductions in force and realignment since 1988 to 2,500. The current workforce at TAD stands at 500 employees. Another 1,250 work at the chemical weapons incinerator, 500 of which are employed by contract. The army has given a green light on a project that will transfer title on 1,700 acres of surplus military land from TAD to Tooele City. Immediately upon transfer, the city will sell the land to a development firm for creation of a business and industrial park. The industrial park began leasing space in the spring of 1998, and once the title transfer is complete, companies will be able to purchase property outright. The park is expected to create 1,700 jobs by 2001, and as many as 3,000 jobs within the next five years.

Outlook

Since the end of the Cold War, federal defense spending has decreased significantly. Estimates of cumulative savings from cuts are in the several hundred billion range. With these kinds of cutbacks, the federal defense industry continues to decline, and the importance of defense to the economy continues to diminish. However, the worst of the defense cutbacks appear to be over, and redevelopment of previously closed facilities is well underway. The rapid conversion of military facilities at DDO and TAD to commercial use shows the strength of the state's economy, and its ability to absorb jobs lost from federal cutbacks. Forecasts of commercial success are strong for both new facilities. In addition, new operations beginning at Hill should prove to be a strengthening influence on the remainder of the defense industry. Although declining in importance, Utah's defense sector continues to contribute significantly to both the nation's defense and the state's economy. *



**Primary U.S. Federal Defense-related Spending (selected categories)
All States and Territories (thousands of dollars): FY 1986 to FY 1997**

Fiscal Year	Wages and Salaries*	Procurement Contract Awards	Military Retirement	State/Local Grants	Total	Gross Domestic Product	Defense Spending as Percent of GDP
1986	\$61,900,746	\$150,055,345	\$17,769,127	\$111,366	\$229,836,584	\$4,422,000,000	5.2%
1987	65,097,948	147,616,385	18,732,723	127,430	231,574,486	4,692,000,000	4.9%
1988	67,270,619	142,175,108	18,640,881	113,637	228,200,245	5,050,000,000	4.5%
1989	72,771,040	132,259,473	20,669,532	172,125	225,872,170	5,439,000,000	4.2%
1990	69,103,253	135,259,039	21,235,041	175,978	225,773,311	5,744,000,000	3.9%
1991	75,254,721	139,570,721	22,669,073	111,454	237,605,969	5,917,000,000	4.0%
1992	73,851,077	129,124,509	24,024,591	223,899	227,224,076	6,244,000,000	3.6%
1993	73,947,670	129,996,047	25,752,104	241,816	229,937,637	6,558,000,000	3.5%
1994	73,470,136	125,982,520	26,478,356	212,466	226,143,478	6,947,000,000	3.3%
1995	71,192,209	126,003,863	27,695,928	244,824	225,136,824	7,265,000,000	3.1%
1996	72,955,074	128,628,822	27,922,897	247,408	229,754,201	7,636,000,000	3.0%
1997	66,719,191	119,858,710	29,595,559	191,715	216,365,175	8,080,000,000	2.7%
Percent Change							
1996-1997	-8.5%	-6.8%	6.0%	-22.5%	5.8%		
1986-1997	7.8%	-2.0%	6.7%	7.2%	5.9%		
Absolute Change							
1996-1997	(\$6,235,883)	(\$8,770,112)	\$1,672,662	(\$55,693)	(\$13,389,026)		
1986-1997	\$4,818,445	(\$30,196,635)	\$11,826,432	\$80,349	(\$13,471,409)		

* Does not include fringe benefits.

Source:

Federal Expenditures: U.S. Department of Commerce, Bureau of the Census

Gross Domestic Product: U.S. Department of Commerce, Bureau of Economic Analysis

Federal Defense Related Spending in Utah (thousands of dollars): FY 1986 to FY 1997

Fiscal Year	Wages and Salaries*	Procurement Contract Awards	Military Retirement	State/Local Grants	Total**	Gross State Product	Defense Spending as Percent of GSP
1986	\$784,567	\$805,747	\$94,612	\$301	\$1,685,227	\$24,259,000	6.9%
1987	794,294	1,182,097	98,743	5,766	2,080,900	25,173,000	8.3%
1988	817,787	866,782	98,876	1,318	1,784,763	26,925,000	6.6%
1989	870,295	979,116	108,005	10,186	1,967,602	28,365,000	6.9%
1990	890,892	883,014	115,442	1,232	1,890,580	31,061,000	6.1%
1991	922,035	804,404	125,526	598	1,852,563	33,283,000	5.6%
1992	852,772	614,286	134,844	8,431	1,610,333	35,193,000	4.6%
1993	847,053	532,269	146,743	5,932	1,531,997	38,129,000	4.0%
1994	763,608	524,001	152,426	4,514	1,444,549	42,007,000	3.4%
1995	794,333	495,771	161,964	2,845	1,454,913	45,554,000	3.2%
1996	760,514	393,157	171,978	2,849	1,328,498	50,352,000	2.6%
1997	642,492	433,428	180,862	1,212	1,257,994	53,678,214	2.3%
Percent Change							
1996-1997	-15.5%	10.2%	5.2%	-57.5%	-5.3%		
1986-1997	-18.1%	-46.2%	91.2%	302.7%	-25.4%		
Absolute Change							
1996-1997	(\$118,022)	\$40,271	\$8,884	(\$1,637)	(\$70,504)		
1986-1997	(\$142,075)	(\$372,319)	\$86,250	\$911	(\$427,233)		

* Does not include fringe benefits.

** These totals do not match those in Table because the data sources and concepts are slightly different.

Source:

Federal Expenitures: U.S. Department of Commerce, Bureau of the Census

Gross State Product: 1986-96, U.S. Department of Commerce, Bureau of Economic Analysis

1997, Regional Financial Associates

Federal Defense-related Spending in Utah by County (thousands of dollars): FY 1996 and FY 1997

County	1997				1996	Change in Total Spending from 1996 to 1997	
	Wages*	Procurement	Other	Total**	Total**	Absolute	Percentage
Beaver	\$96	\$0	\$347	\$443	\$847	(\$404)	-47.7%
Box Elder	3,725	72,663	2,624	79,012	53,877	\$25,135	46.7%
Cache	633	19,355	6,284	26,272	29,267	(\$2,995)	-10.2%
Carbon	0	589	1,152	1,741	1,196	\$545	45.6%
Daggett	0	0	192	192	106	\$86	81.1%
Davis	477,097	105,461	45,930	628,488	654,321	(\$25,833)	-3.9%
Duchesne	519	92	440	1,051	502	\$549	109.4%
Emery	0	0	317	317	366	(\$49)	-13.4%
Garfield	0	0	199	199	233	(\$34)	-14.6%
Grand	93	0	361	454	377	\$77	20.4%
Iron	69	0	2,455	2,524	2,366	\$158	6.7%
Juab	0	0	327	327	287	\$40	13.9%
Kane	0	0	402	402	572	(\$170)	-29.7%
Millard	0	0	451	451	860	(\$409)	-47.6%
Morgan	0	0	931	931	1,268	(\$337)	-26.6%
Piute	0	0	124	124	125	(\$1)	-0.8%
Rich	0	0	69	69	161	(\$92)	-57.1%
Salt Lake	63,567	154,683	74,914	293,164	292,352	\$811	0.3%
San Juan	238	136	168	542	1,817	(\$1,275)	-70.2%
Sanpete	121	0	1,251	1,372	1,827	(\$455)	-24.9%
Sevier	785	121	1,165	2,071	2,241	(\$170)	-7.6%
Summit	2,527	13,525	2,561	18,613	6,034	\$12,579	208.5%
Tooele	55,569	43,270	3,401	102,240	112,885	(\$10,644)	-9.4%
Uintah	59	0	925	984	1,126	(\$142)	-12.6%
Utah	5,702	9,511	18,732	33,945	38,717	(\$4,772)	-12.3%
Wasatch	0	0	362	362	509	(\$147)	-28.9%
Washington	4,459	98	7,594	12,151	9,667	\$2,484	25.7%
Wayne	0	0	71	71	84	(\$13)	-15.5%
Weber	27,233	13,924	34,131	75,288	127,229	(\$51,941)	-40.8%
Undistributed	0	0	0	0	0	\$0	0.0%
State Total	\$642,492	\$433,428	\$207,880	\$1,283,800	\$1,341,219	(\$57,420)	-4.3%

* Does not include fringe benefits.

** The totals here will not match Table 2 because the data sources and concepts are slightly different.

Source: U.S. Department of Commerce, Bureau of the Census.

Energy Overview¹

Crude oil and natural gas production increased in 1998 after several years of decline. Throughout the year oil prices were remarkably low. The total value of minerals (including coal) produced in Utah in 1998 is estimated to be less than last year. Coal production was the second-highest on record while average yearly coal prices increased for the first time since 1992. Industrial minerals production reached new highs in several commodities while prices increased modestly for some commodities and decreased for others.

1998 Review

Petroleum and Natural Gas. Utah production of both crude oil and natural gas has stabilized and reversed its decline of recent years. While crude oil production will increasingly turn to technology as a remedy to slow this decline, natural gas production continues to look to new sources such as coalbed methane. Overall, oil and gas drilling, which has been strong in the past few years, may finally fall off in response to the sustained, low oil prices throughout 1998. A critical factor for the future of oil and gas production is the crude oil market price. At its current low level of around \$13 per barrel, the price of crude oil in Utah is not high enough to spur significant exploration. Well permits, well completions, footage drilled, and drilling success rates have all shown modest increases in the past few years. The combination of increasing natural gas prices and the development of coalbed methane may contribute to a bright future for natural gas production in Utah. Natural gas prices have been on the increase during the past year and should support new gas production. River Gas has undertaken major coalbed methane operations in Carbon County, and Texaco and Anadarko are expected to soon expand their own operations. New production in this area should not only curb Utah's production decline, but actually boost statewide production over the next few years.

Electric Utilities. Having rebounded with a 5.4% increase between 1996 and 1997, Utah electric power generation continued an upward trend throughout 1998. Though registering only a 2.4% increase over 1997 output levels, Utah's power plants are likely to produce a record 34,775 gigawatthours (GWh). Coal-fired generation dominates with 95% of total electricity production, an increase of 2.1% over 1997 levels. Approximately 4% of this total is provided by hydroelectric resources. The remainder is composed of natural gas, fuel oil, and geothermal.

Of the coal production, PacifiCorp-owned Utah Power & Light (UP&L) owns and operates roughly 52% of all coal-fired generation in the state. Since January 1988, the capacity factor (a measure of output ability) at UP&L's plants has been high, though four out of seven units to date are registering declines over 1997 year averages.

The Intermountain Power Project, a 1,660 MW coal-fired facility, continues to account for a substantial share of coal-fired generation. Positioning itself for increased competition in California, the state with which it has a long-term power contract, IPP has cut costs dramatically, including 76 staff positions in 1997 alone. With only 472 employees, the IPP facility has recently garnered industry

recognition for its efficient operations. A recent industry article on the nation's top 100 facilities ranked IPP as 68th in generation, 43rd in cost of operation, 19th in heat rate (Btu/kWh), and 2nd in capacity factor. Revised estimates show gross generation (including auxiliary power) having increased from 11,365 GWh in 1996 to 13,482 GWh in 1997. Year-end calculations put IPP generation at 13,624 GWh, a potentially record setting year.

Coal. Utah coal production, which had been on the rise from 21 million tons in 1992 to 27.1 million tons in 1996, took a slight downward trend in 1997 to 26.4 million tons. In 1998, production climbed to a high of 26.9 million tons. Employment decreased from 2,091 in 1997 to 2,061 in 1998. Coal production from Emery County decreased, while Carbon and Sevier registered higher levels of production. Emery County's decrease in production was mainly due to the shift by Cyprus Plateau from leases in Emery to Carbon and also the decreased production from Energy West, which was mainly as a result of unscheduled maintenance by the Hunter plant. The increased production by Carbon and Sevier was due to higher levels of the state's coal production as well as some shift of production from Emery to Carbon. About 95% of total production came from Federal land. The value of coal produced surpassed \$497 million.

In 1998, Utah produced 0.45 million tons of coal above the 1997 level at a second highest of 26.9 million tons. The Wasatch Plateau coal field, with production of 23.1 million tons, was the major coal-producing field in Central Utah. The other coal field, Book Cliffs, produced 3.8 million tons. Both coal fields produced above 1997 levels. Emery County produced the most coal in Utah (13.8 million tons). This, compared to the previous year's production of 14.5 million tons, was down by 0.7 million tons. Both Carbon and Sevier Counties productions of 7.4 and 5.7 million tons respectively were above previous year's production levels.

Electric utilities outside of Utah were the major contributor to the increased coal production in Utah, followed by other industrial outside of Utah. Other sectors were relatively stable. Major consumers of Utah coal were the State of Utah (13.6 million tons), followed by the Pacific Rim Countries of Japan, Korea, and Taiwan (3.4 million tons), California (2.7 million tons), Illinois (2.6 million tons), Nevada (2.6 million tons) and Tennessee (1.6 million tons). Eight other states also purchased smaller amounts.

Uranium. Uranium production in 1998 in Utah as well as in the United States was down. Aside from the 1991-1994 time period, Utah has been a major player in U.S. uranium production and will most likely continue to be a major player in the near future. In 1986, Utah production represented 43% of the total U.S. uranium production. During 1991 the persistence of a national glut of uranium caused the price to fall below \$10.00 per pound, which resulted in the cessation of domestic uranium production. By 1995, the market strengthened and Utah regained its "number one uranium-producing state" status with production at 1.6 million pounds at the White Mesa Mill in Blanding. In 1997 Utah uranium production declined to 600,000 pounds, which represented about 8% of total U.S. production. In 1998 the White Mesa Mill of International Uranium Corp. produced about 30,000 pounds of U₃O₈ from alternate feed.

¹ This chapter presents the analysis of energy and minerals in two separate sections. It begins with an overview of energy and is followed by minerals. Both sections include analysis of coal and uranium.

1999 Outlook

Petroleum and Natural Gas. After a projected small increase of 1-2% in 1999 and 2000, crude oil production should slowly decline over the first few years of the next decade, in contrast to a typical geologic decline in production of about 10% a year. Crude oil production is estimated to be over 20.0 million barrels in 1999, about 1% over the 1998 level. After several years of decline, gross natural gas production in 1998 is expected to gain some 10% over its 1997 level to the 300 billion cubic feet level it was at in 1995.

Electric Utilities. For electricity across all sectors, consumption is expected to reach a record 20,923 GWh in 1998, based on the same growth rate of 2.6% realized last year. Consumption in the industrial sector has rebounded sharply from last year's 3% decline to a 3.2% increase which is expected to lift consumption to 7,665 GWh. Increased efficiency in manufacturing processes and strong economic growth will further bolster demand through the next year and into the next century.

For 1998, cooling degree days have declined from 765 in 1997 to an estimated 750 through 1998. This decline will have important implications for the residential sector for which demand is expected to decline by 2.3% to 5,832 GWh in 1998 and commercial demand will likely rise by approximately half of 1997's rate and settle at 6,767 GWh. For 1998, growth in residential electricity consumption will track the state's strong rate of population growth, and the trend toward larger new homes that require more electricity for cooling and lighting.

Commercial sector electricity intensity (energy use per square foot) remains relatively stable, but commercial construction is the primary contributor to increased consumption. In addition, the increased use of electricity-intensive technologies such as computers, faxes, and medical imaging devices will likely continue to offset new efficiency gains.

Coal. Coal production in Utah should reach an all-time high of 27.9 million tons in 1999. Productivity should increase by about 1.5%. Coal prices should start to turn around though the increase would be small.

Uranium. The outlook for uranium production from Utah as well as the United States is not very bright. Some uranium will be produced from alternate feed in 1999, but to start production the price of uranium must show a sustained increase.

Significant Issues

Petroleum and Natural Gas. Both crude oil and natural gas wellhead prices have been remarkably low over the past few years. Relatively low and stable energy prices play a major role in encouraging increased demand, and energy conservation efforts will remain challenged for years with low prices.

Electric Utilities. For the past several years, electric industry analysts have watched and waited for federal and state actions on deregulation. In Utah, this research has been formally conducted by a state legislature task force. On November 18th, 1998 the task force presented the "Report of the Electrical Deregulation and Customer Choice Task Force" to the Utah State Legislature. The task force concludes that, "...consideration of a comprehensive electrical restructuring plan during the 1999 General Session is premature. Consideration of a restructuring plan should be deferred until conditions are appropriate." The task force based this conclusion largely on the fact that the "jury is out" with regard to

competitive market performance in those states engaged in deregulation. Furthermore, as Utah is a low-cost state, the task force contends that a "wait-and-see" approach is more responsible and will provide better information and data on the ultimate model chosen for the state.

Coal. The approaching second phase of Clean Air Act Amendments of 1990 would force the creation of a bigger market for high Btu, low-sulfur coal found in Utah. Global climate change, however, could adversely affect the consumption of coal. This will affect low-Btu coal much more than high-Btu coal. As a result of a high degree of mechanization, a highly skilled work force and very favorable geology, productivity continues to rise in the Utah coal industry. In 1998, the productivity of Utah coal miners rose to 6.3 tons per man-hour. Utah coal production should continue to rise for the foreseeable future, and coal prices should make a turnaround and start to increase.

Minerals Overview

The total value of minerals (including coal) produced in Utah in 1998 is estimated to be \$1.87 billion, \$382 million less than last year. Contributions from each segment of the minerals industry are: (1) base metals— \$688 million, (2) industrial minerals— \$534 million, (3) coal— \$497 million, and (4) precious metals— \$154 million. Base- and precious-metal production was lower in 1998, while prices were markedly lower for most metals with the exception of silver which increased slightly in price. Coal production was the second-highest on record while average yearly coal prices increased for the first time since 1992. Industrial minerals production reached new highs in several commodities while prices increased modestly for some commodities and decreased for others. The U.S. Geological Survey ranked Utah fifth in the nation (up from sixth) in the value of nonfuel minerals produced in 1997. Utah accounted for about 4.5% of the U.S. total nonfuel mineral production value.

The state has 72 active large mines (five acres and larger disturbance) operations (excluding sand and gravel) which are grouped by industry segment as follows: base metals – 4, precious metals – 1, coal – 13, and industrial minerals – 54. Eighty small mines (less than five acres disturbance) reported production in 1997. Through mid-November 1998, the Utah Division of Oil, Gas and Mining received eight Large mine permit applications and 42 new Small mine permit applications. Six of the eight large mine applications were changes from small mine to large mine status.

New or reopened mines which are in planning or early development include two relatively small copper mines, a small silver and gold mine, and one lead, zinc, and silver mine. In addition, one new coal mine completed its first full year of operation and one new coal mine began producing in mid-1998. Two additional coal mines are being planned. One uranium mine that had been on standby for several years produced a small amount of uranium and vanadium ore and is planning to increase production in 1999. This is the first reported production of vanadium or uranium ore since 1991.

Mineral exploration statewide is expected to be substantially lower in 1998 than in 1997. Sixteen Notices of Intent (NOI) to explore on public lands were filed with the Utah Division of Oil, Gas and Mining through mid-November 1998, compared to 34 for all of 1997, and 32 for 1996.

Operator questionnaires indicate that base-metal production, with some exceptions, should increase modestly in 1999; precious-metal production will be split with gold increasing and silver decreasing; coal production will increase modestly as will most industrial mineral

commodities. Tar sand production will increase significantly as a new processing facility begins its first full year of operation.

1998 Summary

The value of Utah's mineral production in 1998 is estimated to be \$1.87 billion, a decrease of \$382 million from 1997. Contributions from each of the major industry segments are:

- * base metals, \$688 million (37% of total);
- * industrial minerals, \$534 million (28% of total);
- * coal, \$498 million (27% of total); and
- * precious metals, \$154 million (8% of total).

Compared to 1997, the 1998 mineral valuation changed as follows: (1) base metals decreased \$261 million, (2) industrial minerals increased \$1 million, (3) coal increased \$13 million, and (4) precious metals decreased \$135 million. Prices decreased for most base metals (copper, molybdenum, and magnesium) in 1998, while precious-metal prices were mixed; silver prices increased slightly while gold prices decreased significantly. Coal prices increased slightly in 1998. Industrial mineral prices increased modestly for several commodities, remained flat for the majority of commodities, and were lower for several others.

New Mine Permits. Through mid-November 1998, the Utah Division of Oil, Gas and Mining received eight Large mine permit applications (five acres and larger disturbance) and 42 new Small mine permit applications (less than five acres disturbance). Six applications were made to change from small mine to large mine status. These numbers represent an increase of three large mine permit applications and nine small mine permit applications compared to 1997. New large mine permits include five dimension stone quarries, one limestone quarry (aggregate), one gypsum quarry, and one silica quarry. New small mine permits are grouped as follows: industrial minerals— 30, base metals— 11 (vanadium), and precious metals— 1. Seventy-two Large mines (excluding sand and gravel) were active in 1998. These mines, grouped by industry segment, are: base metals— 4, precious metals— 1, coal— 13, and industrial minerals— 54. Eighty Small mines reported production in 1997. Small mines are grouped as follows: industrial minerals— 63, gemstones— 8, precious metals— 5, fossils— 1, and other— 3.

National Rankings. The U.S. Geological Survey ranked Utah fifth in the nation (up from sixth) in the value of nonfuel minerals produced in 1997. The state accounted for nearly 4.5% of the U.S. total nonfuel mineral production value. Utah ranked:

- * first in beryllium and gilsonite;
- * second in copper, gold, magnesium metal, and potash;
- * third in molybdenum and mercury;
- * fourth in phosphate rock and grade-A helium;
- * fifth in silver;
- * sixth in salt and bentonite; and
- * 10th in construction sand and gravel.

Mineral Production Trends

According to the U.S. Geological Survey, the value of nonfuel mineral production in 1997 was \$1.76 billion (latest data available), less than a 2% increase from that in 1996. Between 1987 and 1997 the value of nonfuel mineral production in Utah ranged from a low of \$700 million in 1987 to a high of \$1.84 billion in 1995. The total for 1997 represents the second-highest nonfuel mineral valuation for the state. The Utah Geological Survey's estimate for the value of nonfuel mineral production for 1998 is \$1.38 billion, \$395 million less than 1997.

Mineral exploration statewide is expected to be substantially lower in 1998. Sixteen Notices of Intent (NOI) to explore on public lands

were filed with the Utah Division of Oil, Gas and Mining through mid-November 1998, compared to 34 for all of 1997, and 32 for 1996.

Base and Precious Metals

Base-metal production, valued at \$688 million, was the largest contributor to the value of minerals produced in 1998. In descending order of value, those metals are: copper, magnesium metal, molybdenum, beryllium, and vanadium. Precious metal production, valued at \$154 million, included gold (85% of total value) and silver (15% of total value). Kennecott Utah Copper Company's Bingham Canyon mine is the state's sole producer of copper and molybdenum, and a major producer of gold and silver. The combined value of minerals produced from the Bingham mine is more than one-third of the total value of all minerals produced statewide.

Copper. Copper production from Kennecott's Bingham Canyon mine decreased in 1998 from 1997 production of about 330,000 tons of copper metal. The Bingham Canyon mine is the largest copper mine in the U.S. and one of the largest open pit mines in the world.

Magnesium Metal. Magnesium metal is produced from Great Salt Lake brines by Magnesium Corporation of America (Magcorp). Magcorp's plant has the capacity to produce 42,000 tons of magnesium metal (99.9% purity) annually and is the fourth largest magnesium plant in the world. Production in 1998 is estimated to be slightly below capacity.

Molybdenum. Utah's sole molybdenum producer is Kennecott's Bingham Canyon mine, which produced about 10,000 tons of molybdenum concentrate (MoS₂) as a by-product in 1998, a significant decline from the 19,000 tons produced in 1997. The Bingham Canyon mine was one of only 14 molybdenum producing mines in the U.S. in 1998.

Beryllium. Utah continued to be the nation's largest producer of beryllium metal. Beryllium ore (bertrandite) is mined at Brush Wellman's two surface mines and processed with domestic and imported beryl ore at the company's plant a few miles north of Delta. Beryllium hydroxide is produced at the Delta plant and sent to the company-owned refinery and finishing plant in Ohio. Beryllium production in 1998 is the highest in the past several years.

Vanadium. International Uranium Corporation produced a small amount of vanadium from the Rim uranium/vanadium mine that had been on standby for several years. Vanadium production is expected to increase at this mine, and several additional mines are planning to produce vanadium in 1999.

Gold and Silver. Gold production is estimated to be more than 400,000 Troy ounces in 1998, significantly less than the record-high of nearly 800,000 Troy ounces produced in 1997. Gold is produced from two surface mines owned by Kennecott Corporation: one primary producer (Barneys Canyon) and one by-product operation (Bingham Canyon).

In 1998, silver production is estimated to be about 4.0 million Troy ounces, 800,000 Troy ounces less than that produced in 1997. Silver is produced as a by-product metal from the Bingham Canyon mine which is the only major silver producer in the state.

Industrial Minerals

Industrial minerals production, valued at \$534 million, was the second-largest contributor to the value of minerals produced in 1998. Major commodities produced by group or individual commodity in descending order of value include:

- * salines, including sulfate of potash, salt, potash, and magnesium chloride;
- * sand and gravel, and crushed stone;
- * Portland cement;
- * lime (dolomitic quicklime and hydrated lime, and high-calcium quicklime);
- * phosphate;
- * gilsonite;
- * gypsum;
- * clay and bentonite, and
- * expanded shale.

Sulfate of Potash, Salt, Potash (Potassium Chloride), and Magnesium Chloride. Brine-derived products including salt are the largest contributors to the value of industrial minerals production in Utah. The production of these commodities is estimated to be 2.74 million tons in 1998, the same as 1997. Sulfate of potash (SOP) is produced by IMC Kalium Ogden Corporation (IMC), formerly GSL Minerals, Inc., one of the largest suppliers of SOP in North America. Salt production alone is estimated to be 1.77 million tons (200,000 tons less than 1997) with most of the production from three operators using brine from Great Salt Lake. These operators, in descending order of production are: (1) Morton Salt Company, (2) IMC, and (3) Cargill Salt, Inc. In addition, three other companies produce salt and/or potash from operations not related to Great Salt Lake. In descending order of production they are: (1) Moab Salt Company (potash and salt), (2) Redmond Clay and Salt Company (salt), and (3) Reilly Wendover Company (potash).

Sand and Gravel, and Crushed Stone. Sand and gravel, and crushed stone (including limestone and dolomite) are the second-largest contributors to the value of industrial minerals produced in 1998. These materials are produced by commercial operators, and by state and county agencies in every county in Utah. Data compiled by the U.S. Geological Survey show that in 1997, 33.5 million tons of sand and gravel and 6.9 million tons of crushed stone were produced with a total value of \$126.2 million. Mid-1998 data indicate that production has increased modestly above the mid-1997 level.

Portland Cement. Two operators produce Portland cement in Utah: Ash Grove Cement Company and Holnam, Inc. The companies' two plants have a combined capacity of more than 1.5 million tons of cement products annually. Both companies have recently completed modernization and/or plant expansion and production data provided to the Utah Geological Survey indicates that both plants are running at or near capacity.

Lime. Lime production continues to expand. Continental Lime, Inc., which produces high-calcium lime, and Chemical Lime of Arizona, which produces dolomitic lime, are the two suppliers of calcined limestone (quicklime) and hydrated lime in Utah, with a combined capacity of more than 900,000 tons per year. Continental Lime's newly expanded plant is rated one of the ten largest lime plants in the U.S.

Phosphate. Utah's only phosphate producer is SF Phosphates Limited. The company mines about 2.5 million tons of ore annually, which is processed into about 1 million tons of concentrate and transported in slurry form to the company's Rock Springs,

Wyoming, fertilizer plant. The mine operates at a nearly constant annual rate since its product is used exclusively in its company-owned fertilizer plant. Phosphate production in 1998 was the highest in the past seven years.

Gilsonite. Gilsonite production in 1998 is estimated to be more than 60,000 tons, the same as 1997 and 1996. Gilsonite is an unusual solid hydrocarbon which has been mined in Utah for more than 100 years. The three companies which produce gilsonite, in descending order of production are: (1) American Gilsonite Company, (2) Zeigler Chemical and Minerals Company, and (3) Lexco, Inc.

Gypsum. Nearly 405,000 tons of gypsum were produced by six companies in 1998, slightly higher than in 1997. In descending order of production they are: (1) Georgia Pacific Corporation, (2) U.S. Gypsum Company, (3) Thomas J. Peck and Sons, (4) H.E. Davis and Sons, Inc., (5) Diamond K Gypsum Industries, and (6) Western Clay Company. The majority of gypsum produced in Utah is used for making wall board, but several operators supply raw gypsum to regional cement plants and to the agriculture industry for use as a soil conditioner.

Heavy Clay and Bentonite. More than 225,000 tons of common clay and more than 70,000 tons of bentonite were produced by five companies in 1998, a moderate increase in heavy clay (clay used for brick and tile) production and a significant increase in bentonite production than in 1997. In descending order of production the companies are: (1) Interstate Brick Company (heavy clay), (2) Redmond Minerals, Inc. (bentonite), (3) Paradise Management Company (heavy clay), (4) Western Clay Company (bentonite), and (5) Interpace Industries (heavy clay). More than 75% of all clay is used in the manufacture of brick.

Expanded Shale. One company, Utelite, Inc., mines shale to manufacture 'expanded shale' for use as a lightweight aggregate for the construction industry. Production of 'expanded shale' products has increased modestly over the past several years. Two other companies mine modest amounts of shale for use in the manufacture of cement.

1999 Outlook

The value of mineral production is expected to decrease in 1999 primarily due to lower base- and precious-metal prices. Operator surveys indicate that in 1999, base-metal production should remain relatively stable, precious-metal production should increase moderately, and coal production should increase modestly. Industrial mineral commodities as a whole should show an increase in value in 1999, due mostly to increased production. Prices for copper, molybdenum, magnesium, and gold are near their respective multi-year lows and no improvement in prices is forecast for 1999. Prices for industrial minerals should remain relatively flat while coal prices are expected to increase slightly. Base- and precious-metal exploration will remain low until the market for these minerals improves.

Significant Issues

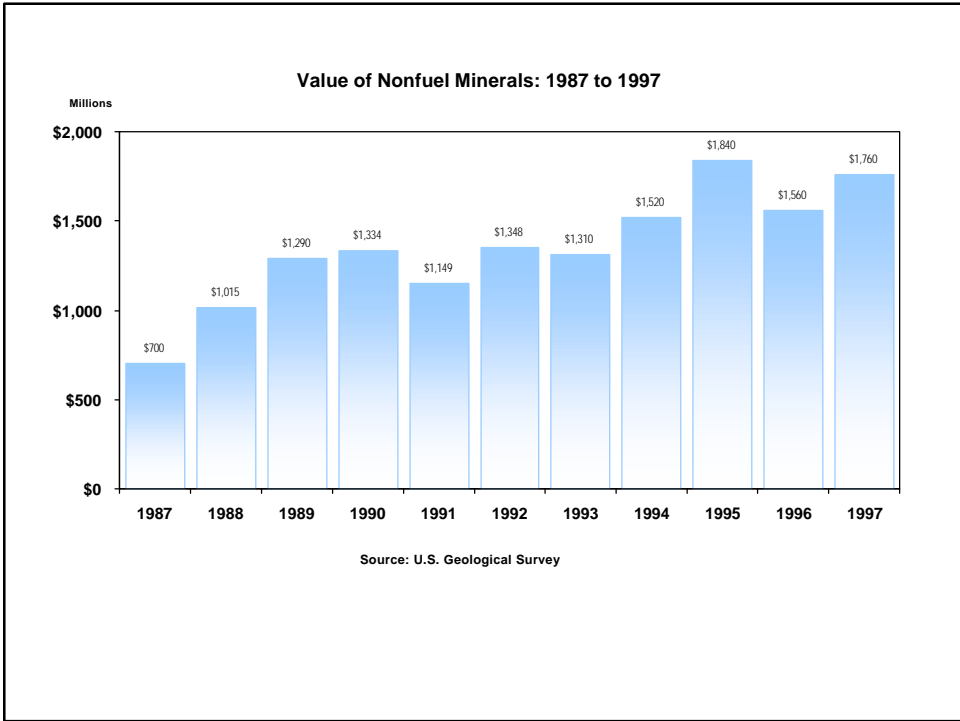
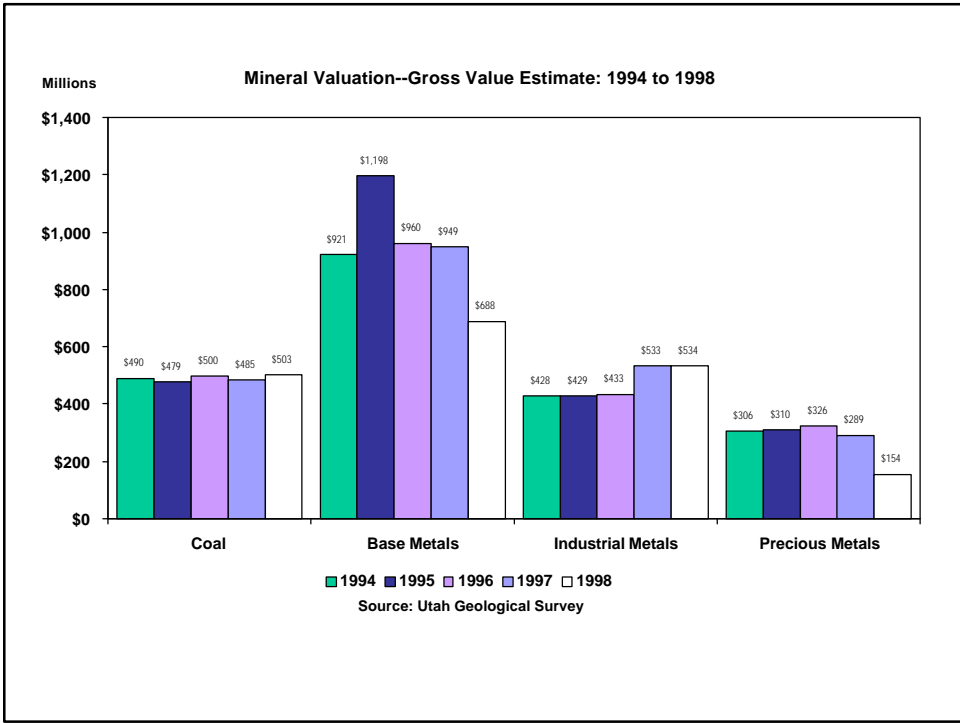
Significant issues which will affect the long-term viability of Utah's mineral industry are: (1) the uncertainty about mine permit requirements and royalty rates in proposed changes to the 1872 Mining Law, (2) the limited availability of public lands open for mineral exploration due to federal withdrawals such as Wilderness Study Areas, and (3) continued low metal prices which could significantly affect production.

Conclusion

Mineral production in the state remains at record and near-record levels for many minerals and mineral commodities. Utah ranks fifth in the nation in the value of nonfuel mineral production and 12th in coal production. The combined value of metallic minerals declined in 1998 due to a significant drop in copper and gold metal prices and a significant drop in precious-metal production. Base-metal production will remain relatively high in order to maintain efficient cost levels unless metal prices decline significantly resulting in mine closures. Precious-metal production will improve modestly in 1999, but continued expansion is dependent on the discovery and development of additional resources. Industrial minerals production is at an all-time high and continues to expand for a majority of commodities. Industrial mineral production is closely linked to

regional and local construction and population growth. Coal production is near record level and will continue to expand; three new mines have opened in recent years and two additional mines will open in the next several years. In 1997, 64 Large mines (including coal) were active; this number increased to 72 in 1998. Current low metal prices have dampened metal exploration activities and will delay the opening of several base- and precious-metal mines.

Significant issues which will impact the future of the minerals industry in Utah are proposed legislative changes in the 1872 Mining Law which will affect most metal producers, and the limited availability of public lands open for mineral exploration and development due to federal withdrawals. *



Supply and Disposition of Crude Oil (Thousand Barrels) in Utah: 1980-1998

Year	Supply			Disposition			
	Field Production	Colorado Imports	Wyoming Imports	Utah Crude Exports	Refinery Receipts	Refinery Inputs	Refinery Stocks
1980	24,979	15,846	12,233	8,232	45,516	45,599	665
1981	24,309	14,931	11,724	7,866	43,700	42,673	762
1982	23,595	13,911	12,033	7,826	41,246	40,368	614
1983	31,045	14,696	7,283	8,316	43,615	43,185	632
1984	38,054	13,045	6,195	13,616	43,672	43,746	607
1985	41,144	13,107	6,827	14,597	45,549	45,021	695
1986	39,245	12,567	7,574	15,721	45,132	45,034	559
1987	35,835	13,246	7,454	12,137	45,664	44,483	612
1988	33,350	12,783	14,739	8,411	48,882	47,618	599
1989	28,512	13,861	18,380	6,179	46,775	46,767	609
1990	27,693	14,494	18,844	7,725	49,104	48,985	656
1991	25,930	14,423	20,113	8,961	48,646	48,852	749
1992	24,075	13,262	21,949	6,901	50,079	49,776	513
1993	21,826	11,575	22,279	7,758	48,554	48,307	645
1994	20,662	10,480	26,227	8,048	48,802	48,506	806
1995	19,982	9,929	24,916	7,861	46,695	46,666	767
1996	19,504	9,857	25,079	7,713	46,126	45,766	798
1997	19,584	8,565	28,351	7,819	48,492	48,486	633
1998 (e)	19,976	8,311	30,865	7,825	48,977	48,971	654

(e) = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Supply and Consumption of Petroleum Products (Thousand Gallons) in Utah: 1980-1998

Year	Supply			Consumption by Product					Exports
	Refined in Utah	Imports	Refinery Stocks	Motor Fuel	Aviation Fuel	Distillates	Other	Total	
1980	1,694,260	313,903	93,954	652,428	116,592	357,126	390,600	1,516,746	929,710
1981	1,617,812	367,721	89,754	653,016	107,688	304,626	232,890	1,298,220	992,451
1982	1,508,690	434,236	92,778	663,306	120,834	278,460	227,430	1,290,030	929,006
1983	1,790,822	340,139	77,746	670,068	142,254	270,690	278,670	1,361,682	1,062,499
1984	1,651,342	422,376	83,244	678,342	146,622	291,606	268,338	1,384,908	1,013,079
1985	1,765,248	394,479	80,430	681,912	163,884	250,824	251,874	1,348,494	981,323
1986	1,776,367	337,091	78,246	736,722	186,690	308,112	234,570	1,466,094	839,288
1987	1,797,929	349,466	66,402	749,784	212,856	285,516	245,616	1,493,772	870,198
1988	1,918,644	361,879	75,936	763,224	213,738	308,826	244,776	1,530,564	979,726
1989	1,913,310	393,766	91,980	726,726	218,442	259,980	272,412	1,477,560	937,692
1990	1,929,270	503,917	72,786	698,376	226,254	308,784	252,546	1,485,960	1,048,715
1991	1,593,121	477,078	76,566	721,812	253,470	327,852	277,200	1,580,334	1,114,853
1992	1,931,817	442,428	67,998	752,178	241,080	338,772	245,910	1,577,940	1,076,978
1993	1,948,257	449,694	71,064	790,902	236,544	336,378	242,424	1,606,248	995,020
1994	1,919,848	485,310	90,426	816,480	225,036	353,220	250,824	1,645,560	1,061,131
1995	1,949,717	516,138	84,630	872,424	240,324	384,888	290,850	1,788,486	1,016,625
1996	1,947,795	533,064	72,414	916,045	252,340	404,132	305,392	1,877,910	1,031,561
1997	1,973,338	543,858	63,208	961,847	264,957	424,339	320,662	1,971,806	1,102,418
1998(e)	1,993,071	532,014	69,529	1,009,940	278,205	445,556	336,695	2,070,396	1,116,321

(e) = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Supply and Consumption of Natural Gas (Million Cubic Feet) in Utah: 1980-1998

Year	Supply			Consumption by End Use						
	Gross Production	Marketed Production	Actual Sales	Residential	Commercial	Industrial	Electric Utilities	Lease & Plant	Pipeline	Total
1980	87,766	47,857	na	40,578	17,391	43,545	5,133	7,594	851	115,092
1981	90,936	58,865	na	38,592	16,540	42,779	3,087	511	721	102,230
1982	100,628	56,368	na	47,452	20,336	39,804	3,023	5,965	1,126	117,706
1983	96,933	54,700	na	44,047	18,877	40,246	1,259	4,538	1,218	110,185
1984	183,062	73,154	na	44,246	18,962	42,709	271	8,375	1,015	115,578
1985	208,803	78,906	na	47,062	20,170	37,448	235	9,001	1,201	115,117
1986	239,411	91,036	na	13,603	18,687	28,264	230	13,289	1,102	75,175
1987	262,045	96,360	na	41,536	14,811	23,884	263	17,671	822	98,987
1988	278,463	101,925	na	42,241	17,911	30,365	196	16,889	1,362	108,964
1989	278,081	120,089	na	45,168	16,522	33,963	636	16,211	1,037	113,537
1990	319,632	145,875	58,350	43,424	16,220	35,502	907	19,719	875	116,648
1991	323,660	144,817	65,288	50,572	19,276	43,120	5,190	13,738	864	132,766
1992	314,275	171,293	94,725	44,701	16,584	40,878	6,576	12,611	1,284	122,649
1993	336,183	225,401	137,864	51,779	22,588	42,301	6,305	12,526	2,513	138,044
1994	347,019	270,858	160,967	48,922	26,501	36,618	8,900	13,273	2,807	137,073
1995	303,233	241,290	164,059	48,975	26,825	42,373	8,707	27,012	2,831	156,824
1996	281,208	250,767	179,943	54,344	29,543	42,213	3,428	27,119	3,601	160,371
1997	274,920	257,139	183,427	58,108	31,129	44,162	4,079	24,619	2,935	165,159
1998(e)	302,412	282,853	201,770	58,689	31,440	44,604	4,120	24,865	2,964	166,811

(e) = estimate

na = not available

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Supply and Consumption of Coal (Thousand Short Tons) in Utah: 1980-1998

Year	Supply				Consumption by End Use				
	Production	Marketed Production	Imports	Exports	Residential & Commercial	Coke Plants	Industrial	Electric Utilities	Total
1980	13,236	13,014	1,215	6,728	237	1,528	446	4,895	7,106
1981	13,808	14,627	1,136	8,764	196	1,567	714	4,956	7,432
1982	16,912	15,397	797	8,261	177	841	822	4,947	6,787
1983	11,829	12,188	937	6,133	191	839	629	5,223	6,882
1984	12,259	12,074	1,539	6,432	259	1,386	548	5,712	7,905
1985	12,831	14,361	1,580	6,549	252	1,288	438	6,325	8,303
1986	14,269	13,243	1,145	5,366	191	814	351	6,756	8,112
1987	16,521	16,989	1,165	5,633	123	231	276	11,175	11,806
1988	18,164	18,244	2,448	5,925	196	1,184	589	12,544	14,513
1989	20,517	21,289	2,367	7,283	231	1,178	686	12,949	15,044
1990	22,012	21,680	2,137	7,467	181	1,318	676	13,563	15,738
1991	21,945	21,673	2,007	7,954	320	1,310	535	12,829	14,834
1992	21,015	21,339	2,155	8,332	347	1,182	497	13,136	15,162
1993	21,723	21,935	2,100	8,761	228	1,089	614	13,343	15,274
1994	24,135	23,441	2,588	10,188	157	1,198	647	13,839	15,841
1995	25,051	25,443	1,841	12,848	182	1,062	642	12,550	14,436
1996	27,071	27,816	1,925	15,116	260	1,120	517	12,728	14,625
1997	26,428	25,407	2,615	11,375	96	1,106	665	14,780	16,647
1998(e)	26,876	27,337	2,843	13,702	128	1,110	879	14,361	16,478

(e) = estimate

Source: F.R. Jahanbani, Utah Office of Energy and Resource Planning.

Supply and Consumption of Electricity (Gigawatthours) in Utah: 1980-1998

Year	Net Generation by Fuel Type					Consumption by End Use				
	Coal	Other Fossil Fuels	Hydro	Other	Total	Residential	Commercial	Industrial	Other	Total
1980	10,870	421	823	-	12,114	3,293	3,569	3,800	512	11,174
1981	10,869	270	623	-	11,762	3,476	3,909	3,930	530	11,845
1982	10,635	232	1,024	-	11,891	3,630	3,033	4,610	745	12,018
1983	10,921	109	1,394	-	12,424	3,678	3,375	4,786	769	12,608
1984	12,321	38	1,391	38	13,788	3,825	3,935	4,656	950	13,366
1985	14,229	54	1,019	109	15,411	3,996	4,272	4,663	658	13,589
1986	15,155	80	1,413	171	16,819	3,984	4,262	4,583	662	13,491
1987	25,221	105	856	164	26,346	3,991	4,127	4,570	784	13,472
1988	28,806	64	593	174	29,637	4,186	4,356	5,259	765	14,566
1989	29,676	85	562	173	30,496	4,134	4,365	5,622	782	14,902
1990	31,519	103	486	152	32,260	4,188	4,713	5,553	772	15,225
1991	28,884	484	604	186	30,160	4,458	5,009	5,674	722	15,862
1992	31,543	612	580	186	32,921	4,458	5,170	6,085	668	16,381
1993	31,919	575	818	148	33,461	4,687	5,130	6,093	921	16,831
1994	32,764	780	716	195	34,455	5,031	5,561	6,322	945	17,860
1995	30,260	775	926	140	32,101	5,056	5,503	7,018	781	18,358
1996	30,693	324	1,019	192	32,229	5,481	5,911	7,660	860	19,858
1997	32,144	326	1,331	169	33,969	5,660	6,462	7,430	820	20,373
1998(e)	32,826	378	1,410	159	34,775	5,832	6,767	7,665	679	20,923

(e) = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Energy Prices (Current Dollars) in Utah: 1980-1998

Year	Field Price (dollars per unit)			Average End-Use Price (dollars per unit)								
	Coal (tons)	Crude Oil (barrels)	Natural Gas (mcf)	Petroleum Products			Natural Gas Residential (mcf)	Natural Gas Commercial (mcf)	Natural Gas Industrial (mcf)	Electric Power Residential (kWh)	Electric Power Commercial (kWh)	Electric Power Industrial (kWh)
				Coal (tons)	No. 2 Distillate (gallons)	Motor Fuel (gallons)						
1980	\$25.63	\$19.79	\$1.86	\$29.63	\$0.91	\$1.23	\$2.74	\$5.59	\$2.26	\$5.53	\$4.33	\$3.27
1981	26.87	34.14	1.87	32.79	1.04	1.37	3.23	5.35	2.58	5.95	4.95	3.68
1982	29.42	30.50	2.47	33.38	1.01	1.35	3.41	3.43	2.45	6.30	5.69	4.22
1983	28.32	28.12	2.56	30.64	0.96	1.13	4.26	4.32	3.15	6.91	6.25	4.36
1984	29.20	27.21	3.16	30.64	0.95	1.12	5.68	4.96	3.52	7.43	6.52	4.60
1985	27.69	23.98	3.23	32.34	0.93	1.14	4.86	4.91	3.23	7.78	6.88	4.98
1986	27.64	13.33	2.90	32.32	0.78	0.85	4.64	4.73	3.00	7.95	7.05	5.16
1987	25.67	17.22	1.80	30.95	0.83	0.93	4.97	4.98	3.20	7.95	7.05	4.93
1988	22.85	14.24	1.70	29.50	0.84	0.96	5.11	4.08	3.10	7.81	6.96	4.61
1989	22.00	18.63	1.61	28.05	0.94	1.03	5.14	4.16	3.30	7.39	6.74	4.11
1990	21.78	22.61	1.70	26.80	1.12	1.14	5.28	4.30	3.62	7.09	6.25	3.88
1991	21.56	19.99	1.54	27.40	1.02	1.10	5.44	4.50	3.69	7.12	6.12	3.97
1992	21.83	19.39	1.63	27.54	1.01	1.12	5.44	4.40	3.91	7.00	6.00	3.70
1993	21.17	17.48	1.77	27.34	1.00	1.10	5.13	4.06	3.67	6.85	5.96	3.78
1994	20.07	16.38	1.54	26.10	0.98	1.12	4.96	3.84	2.74	6.91	5.87	3.83
1995	19.11	17.71	1.15	25.27	1.00	1.14	4.74	3.64	2.34	6.87	5.97	3.92
1996	18.50	21.10	1.39	24.50	1.06	1.20	4.47	3.38	2.10	6.93	5.88	3.69
1997	18.34	19.15	1.86	25.33	1.10	1.24	5.13	3.91	2.55	6.90	5.70	3.50
1998(e)	18.51	13.02	1.93	25.45	1.05	1.16	5.30	4.10	2.70	6.80	5.60	3.50

(e) = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

* High Technology

Overview

Technology is characterized by change, and the past year brought sweeping changes in Utah's high tech industry with the loss of a premier software company, mergers and consolidations, and a highly touted plant opening that never occurred. Despite this turmoil, Utah's high tech sector should finish 1998 in a stable position with nearly 500 companies employing about 40,000 people. In an era when high tech companies post meteoric gains and fall just as quickly, Utah high tech companies have shown remarkable resilience. During the past year, most of Utah's major high tech players faced serious setbacks that would have undermined less tenacious firms. However, most of the major segments in Utah's high tech sector will post employment gains in 1998.

Software

The most discouraging blow to Utah's high tech sector was Corel's decision earlier this year to close its Utah-based operations. Closing the former WordPerfect's operations in Utah was part of Corel's restructuring plan. The decision to transfer Utah operations to Canada resulted not only in the loss of 340 jobs in the local economy, but, more importantly, signified the end of Utah's association with a once powerful software competitor-WordPerfect.

Another software giant, Novell, Inc. has been fighting for its survival in the Microsoft dominated computer world. Novell's strong suit-software for corporate networks-is being threatened by Microsoft's Windows NT products. The most recent blow for Novell was Dell Computer's decision to replace its computers that currently run Novell's network operating system with Microsoft's Windows NT operating system. Despite this setback, Novell is showing signs of resilience by shipping Netware 5.0 ahead of schedule. Even better news is the 15% growth in sales of the existing version of Netware suggesting that some factions within the computer market are renewing their commitment to Novell.

Although Novell's 1998 Utah employment base of 2,750 people represents a significant drop from its peak of 4,000 in 1996, the company is still Utah's largest software employer and will continue to be a bell-weather of software activity in the state. And, while Utah's software industry is not the dynamic star it once was, it has remained remarkably stable in the face of mounting external pressures. Estimated software-related employment in 1998 is 5,200, down from 6,000 in 1995. However, the job losses reported in software have been in the prepackaged software and integrated systems sectors. The software consulting sector has experienced extraordinary growth over the past three years from 2,275 employees in 1995 to almost 3,900 employees in 1998. Many of the new companies in this sector are small and consist of employees who were once employed by Corel or Novell.

Aerospace

Two strong performers in Utah's aerospace sector in 1998 were Cordant Technologies (formerly Thiokol) and Alliant Techsystems. Cordant Technologies, a leading producer of high tech solid rocket motors for space, defense and commercial launch applications employs almost 4,000 in Utah and recently relocated its headquarters to Salt Lake City. Earlier this year Thiokol Propulsion Systems (now part of the Cordant family of companies) was selected by the Air Force to head the Minuteman program which is expected to generate more than \$1 billion in sales for the company over the next 12 years.

Alliant Techsystems, a major supplier of heavy-lift solid propulsion launch vehicles for space and strategic applications, also posted steady gains in 1998, increasing its Utah employment base to 1,800 workers. These increases, combined with employment growth at Cordant, could push aerospace-related employment in the high tech sector to more than 7,000 by the end of 1998.

Biomedical and Medical Products

Utah's high tech biomedical/medical sector is a firmly established component of the state's economy with a history spanning more than 30 years. This segment of Utah's high tech sector includes a wide array of companies from manufacturers of disposable medical supplies to those manufacturing sophisticated diagnostic equipment and everything in between.

The largest concentration in Utah's high tech medical sector is in medical device manufacturing. This segment includes companies such as Ballard Medical, Utah Medical and Becton Dickenson-companies that manufacture cost-effective products used by the critical care markets. Companies in this broad segment employ about 85% of all high tech-related employment in the biomedical/medical sector.

At the other end of the spectrum is biomedical research. Although small, this component of the medical/biomedical sector is one of the fastest growing and most exciting. The largest player in the research arena is Myriad Genetics, a Salt Lake-based company focusing on the discovery and commercialization of genes involved in major common diseases including cancer, cardiovascular disease and central nervous system disorders. During the past years, Myriad Genetics entered into multimillion dollar collaborations with large medical and pharmaceutical companies such as Monsanto, Bayer, Novartis and Shering-Plough. Currently, Myriad employs 285 in Utah.

Utah's biomedical industry is competitive and growing. The outlook for the medical/biomedical sector remains positive despite poor performance in the Asian markets. The slowest growth will be in the medical device segment due to continued cost containment measures in the health care market. Much more rapid growth will likely come from innovations and breakthroughs in research-based biomedical companies. Estimates for 1998 indicate employment growth in this sector of about 5%, with employment exceeding 4,700 people by year-end.

Automotive Products

The most recent addition to Utah's high tech sector has been Automotive Products. Entering the high tech arena just nine years ago, the automotive products segment has experienced extraordinary increases growing from less than 100 workers in 1990 to 6,300 workers by year-end 1998. The largest employer in this high tech sector is AutoLiv ASP, a conglomerate of companies headquartered in Utah that design and manufacture a variety of automotive safety products including airbag modules and inflators. Located in Ogden, Utah, the AutoLiv group of companies constitute the largest manufacturing concern in Utah, employing roughly 6,200 people.

High Technology Outlook

The brightest news in the high tech outlook is Intel's interest in locating a state-of-the-art research and development facility in Utah.

Although the final negotiations are still underway, Intel's preliminary plan is to build a R&D campus in Riverton that may employ between 2,800 and 3,200 people as early as the year 2000. Eventually Intel may employ up to 8,000 people in Utah.

For the past four years, employment in the high tech sector has remained almost unchanged, hovering around the 40,000 mark. While layoffs at larger companies such as Novell and Corel are being absorbed with the creation of new, smaller companies, these new companies are not always high tech companies.

High tech activities in Utah are concentrated in maturing industry segments such as software, medical supplies, and aerospace. Given the competitive factors at play in these sectors, the potential for rapid growth is extremely limited. Broad expansion of Utah's high tech sector will require an exogenous shock such as an improving chip market to spur Micron into opening its research and manufacturing facility in Lehi or the entrance of a facility like that proposed by Intel. Without external influences, Utah's high tech sector may be able to remain at current levels for the next two to three years. *

* Tourism, Travel, and Recreation

Overview

The World Tourism Organization defines the travel and tourism industry as the activities of persons traveling and staying in places outside their usual environment. Travel may be for virtually any purpose but is generally limited to a length of stay of less than one year. The "usual environment," is meant to exclude regular commuting between home and work and other frequently visited places. Measurement of the travel and tourism industry is complex since it is not considered an industry in the traditional sense. Travel and tourism is a combination of parts of other industries that provide goods and services demanded while traveling away from home. These industries, to a greater or lesser extent, include entertainment, recreation, restaurants, accommodations, retail trade and transportation services. Additionally, the tourism industry crosses boundaries with construction, manufacturing, services, government, public utilities, real estate, and agriculture.

Worldwide, the tourism, travel, and recreation sector contributes significantly to the economic and social well-being of the world, national and state economies. The WEFA Group (international economic consultants) estimates that travel and tourism accounts for more than one in every ten jobs worldwide. Nationally, according to the World Travel & Tourism Council, the U.S. travel and tourism industry directly or indirectly generated 9.7% of the U.S. gross domestic product, 10.4% of employment, 9.1% of tax collections and 9.5% of capital investment. The Utah travel and tourism industry continues to be one of the largest and most important economic activities in the state. Overall, travel and tourism can be considered one of the top five economic activities in Utah, ranking it along with the other major industries of Trade, Services, Manufacturing, and Government.

Tourism in Utah

Utah's tourism industry is diverse, both in terms of types of jobs created, recreational opportunities, and the multitude of natural and man-made attractions. The state has five national parks, seven national monuments, including the new Grand Staircase-Escalante National Monument, seven national forests, two national recreation areas, and a significant national historic site, Golden Spike N.H.S. These nationally-designated attractions are complemented by 45 state parks featuring scenery, recreation and history. In addition, millions of acres of BLM-administered deserts and rangelands contribute greatly to Utah's "wide open spaces." In an era when open space has become a major concern, the state still provides opportunities for the tourist to experience the vast emptiness and solitude of the West, with the comforts of nearby cities and towns. Many of our attractions and events, although targeted to tourists, also benefit local communities who may not otherwise have had access to diverse and quality amenities without outside funding.

1998 Summary

Notable events in 1998 include increased awareness of Utah at the Nagano Olympic Winter Games where Utah themes were featured at the closing ceremony. Utah attracted national attention from the professional NBA basketball championships, of which several final games were held in Utah. The Recreation Fee Demonstration Program, instituted by federal public land agencies in 1997 was extended through 2001. As a result, increased camping fees, higher entrance fees at many national parks and recreation areas around Utah were implemented. Public reaction to the program was

generally favorable, especially as significant portions of fee revenues will be applied directly toward infrastructure, maintenance and visitor service in the area in which they were collected. Also of significance, the Bureau of Land Management released its Draft Management Plan/Draft Environmental Impact Statement outlining five management scenarios for the Grand Staircase-Escalante National Monument. The chosen scenario will greatly affect future management of Utah's newest national monument and the economic impact of recreation on surrounding communities.

Banner years 1995 and 1996 brought unprecedented numbers of visitors and revenues to Utah, due to a combination of the statehood centennial year and several large national conventions. For 1998, most indicators point toward declines in visitation. The Salt Lake International Airport, national parks, state parks and occupancy rates were down on average 4% compared to 1997. The noted declines are consistent with similar trends in neighboring states which are all experiencing a drop in occupancy rates and fewer visitors at national parks. Explanations include a normal cyclical downturn in regional tourism, increased airfares to Salt Lake City and decreased international visitation to the Intermountain West due to unfavorable exchange rates and higher airfares.

Economic Impact. In 1998, an estimated 17.7 million trips were taken by out of state visitors to Utah for leisure and business. These visitors spent an estimated \$4.1 billion, generating \$299 million in state and local taxes. The travel and tourism industry provided direct employment for 64,750 individuals, and an additional 50,750 indirect jobs, a 3.1% increase over last year, on par with state employment increases. Whereas direct tourism employment represents jobs immediately created by tourism spending, indirect and induced employment represent secondary employment. Secondary employment occurs as travel industry businesses purchase goods and services from local suppliers or as travel and tourism employees spend their salaries on local goods and services. In Utah, travel and tourism employment represent nearly one in every nine employees. Additionally, tourism-related wages continue to increase at a faster rate than overall state wages in 1998.

Outlook

With continued economic expansion projected to continue, tourism activity is expected to remain strong and be an important source of growth. Tourism-related growth is expected to increase substantially in years preceding and including 2002. Although international tourism to the Intermountain West declined somewhat in 1997 and 1998, Utah is well positioned to continue attracting international visitors. International tourism to the U.S. is expected to increase at a higher pace than domestic tourism through the end of the decade¹. These visitors are especially drawn to Utah's national parks, western heritage and other recreational opportunities. The international market is of particular interest as international visitors tend to stay longer and spend more than domestic travelers. Several factors are expected to contribute to tourism growth:

- * Continued high levels of consumer confidence and willingness to spend on leisure activities;
- * Increased recognition because of Salt Lake City's selection to host the 2002 Olympic Winter Games;

¹ Tourism Industries of America, *Outlook for Domestic Tourism, 1998*

- * The growing ecotourism market and increasing interest in heritage tourism, for which Utah is well positioned;
- * Popularity of national parks, the American Southwest, and historic and prehistoric sites;
- * Growth in the LDS Church and consequent increased visitation to church headquarters and sites;
- * Increased convention capacity and hotel capacity resulting from increasing supply in hotel rooms and the renovated Salt Lake Convention Center and Ogden Egyptian Center;
- * Potential establishment of a direct flight from Europe to Salt Lake International Airport. This possibility has been discussed and would considerably enhance Utah as an international travel destination.

Factors that may offset tourism growth include the following:

- * National and international economic uncertainties such as currency fluctuations and U.S. dollar appreciation;
- * Reduced seat capacity and increased airfares to Salt Lake reflecting a shift in market priorities;
- * Capacity constraints and overcrowding of popular attractions during the peak season;
- * National press that perpetuates the perception that the national parks and recreation areas are full, discouraging visitation that could be directed to lesser-used areas or the non-peak season;
- * Degradation of natural resources and the visitor experience;
- * Inability to meet the service expectations of destination travelers with regards to quality, convenience, and availability;
- * Natural conditions such as fire or inclement weather;
- * Overhaul of transportation infrastructure which may deter travel.

Significant Issues

Implementing Long-Range Tourism Planning. Since the beginning of his administration, Governor Michael O. Leavitt has encouraged Utahns to look to the future and become a generation of planners. In 1996, the Division of Travel Development responded with a carefully researched, long-range strategic plan for tourism development. The plan proposed a marked change in tourism economic development, a comprehensive drive to go beyond promotion and advertising. Quality of life for Utah residents, as well as visitors, and extracting greater economic benefits from tourism have become the primary focus of the Division. This means emphasizing *quality earnings over visitation numbers, destination tourism over windshield or pass-through tourism, and career employment over seasonal employment.*

The strategic plan is constantly being updated as new information becomes available and as the planning environment changes. Utah communities continue to have an opportunity to provide input into the strategic plan through participation in an ongoing community meeting series. In 1998, the Division of Travel Development conducted meetings in Kane and Wasatch counties to focus on key county tourism issues. Representatives from the business and tourism sector, public land managers, and elected officials met to discuss challenges, trends and opportunities, as well as how the challenges can be turned into opportunities for higher earnings, quality jobs and increased quality of life.

Hotels. Hotel construction continued at a high pace in 1998, following boom-year 1997. In Salt Lake County alone, hotel/motel room supply increased by 7% over 1997.¹ Because supply is increasing faster than demand, occupancy rates ended the year at

63%, down from 68% in 1997.² Consistent with major tourism indicators, statewide demand for hotel rooms slowed in 1998.

Skiing. With 3.1 million skier visits, the 1997-98 ski season was one of the best years for the Utah ski industry, second only to record-breaking 1994-95. These visits represent a 2% increase over the previous year. Significant investments were made in ski infrastructure in 1998, estimated at \$27 million, due to new installations in the Park City area and in preparation for Olympic events at Snowbasin.³ Nonresident skiers continue to contribute significantly in economic impact to the state, with daily expenditures of \$226, up 13% from 1993, and more than three times the average daily visitor spending. For nonresident skiers alone, this amounts to more than \$300 million spent annually on food and lodging, ski passes and incidentals.

2002 Olympic Winter Games. With the approach of 2002, the Olympics will become an increasingly important part of tourism in Utah. Increased visibility and mention of Utah are expected to generate curiosity and increased visitation in the years before and after the Olympics, although to what extent has yet to be defined. What has been estimated is the expected impact related to increased visitation, spending, and growth in the economy, created by the 2002 Olympic Winter Games.

The total amount of economic output is expected to reach \$2.8 billion,⁴ which includes all final and intermediate sales that are estimated to occur because of the Games.⁵ Much of the spending will occur in the construction industry in the years prior to the Games. The services sector will also see a large amount of the spending, most of which is expected during 2002. The largest employment impacts from the Games will be concentrated in the construction, service, and trade sectors. Employment will peak around 14,000 jobs during the actual month of the Games, while total job years of employment will be approximately 23,000 for the 1996 to 2002 period. The greatest employment impact will occur in 2001, with more than 7,000 jobs created mainly in the construction and business services sectors. This employment results from the following sources of spending:

- * \$858 million⁶ from the Salt Lake Organizing Committee (SLOC);
- * \$311 million in visitor spending during the 2002 Winter Olympics;
- * \$74 million from NBC to broadcast the Games;
- * \$600 million in infrastructure investment.

Visitor spending, tied closely with the travel and tourism industry, is expected to bring in a net \$123 million. This figure is based on SLOC estimates that there will be 70,000 visitors on any given day during the Olympics. Normal visitation during this period is estimated at around 20,000 visitors, creating a net increase of 50,000 visitors per day. The increase in visitors, and the resulting \$123 million net increase in visitor spending is based on the following assumptions:

- * Based on Atlanta's experience, only half of the visitors will pay for lodging;
- * The typical visitor who pays for lodging will spend \$346 per day

² Hire, Jim *The Rocky Mountain Lodging Report*

³ Ski Utah estimate

⁴ The estimate of \$2.8 billion was published prior to the release of SLOC's new budget of \$1.45 billion. In addition, the estimate does not include new federal funds, which are now larger than originally anticipated.

⁵ Governor's Office of Planning and Budget (1998) "2002 Olympic Winter Games, Economic, Demographic and Fiscal Impacts"

⁶ This estimate does not reflect the new SLOC budget of \$1.45 billion.

¹ Salt Lake Convention & Visitors Bureau *1998 Marketing Plan*

during the Games;

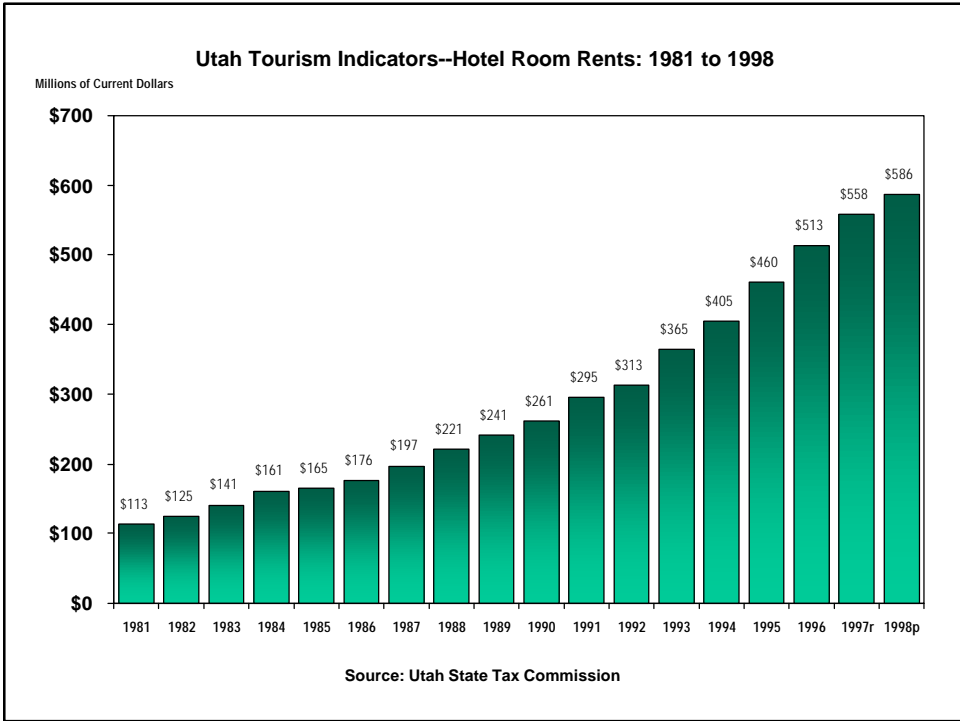
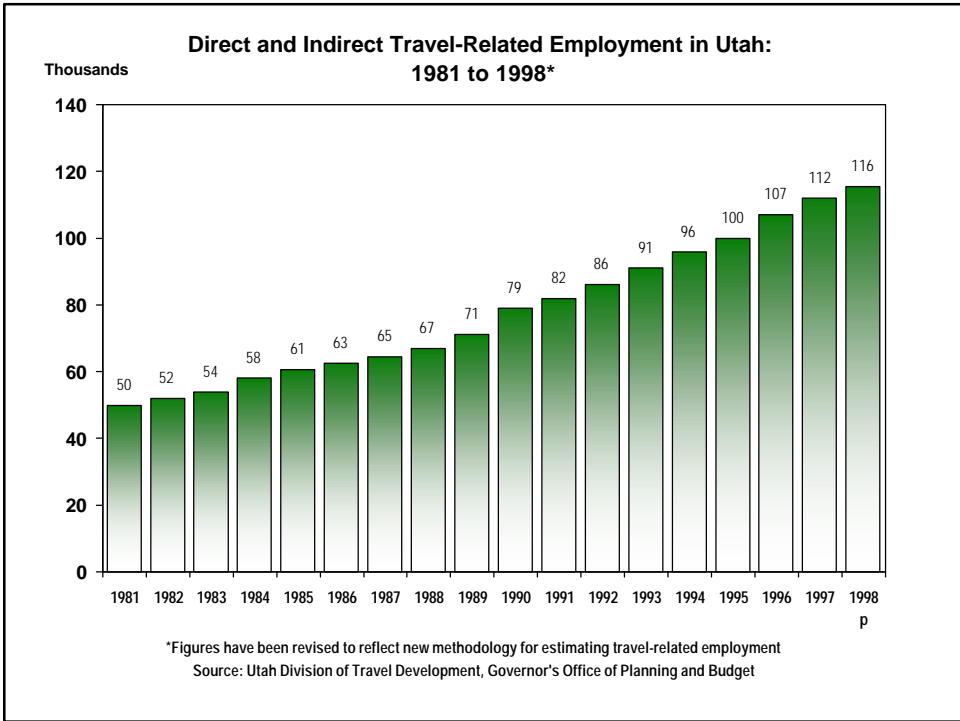
- * Visitors not paying for lodging are estimated to spend \$176 per day during the Games;
- * Based on 1.2 million visitor days, total visitor spending is estimated at \$311 million;
- * Net visitor spending of \$123 million is calculated by subtracting \$83 million for displaced visitor spending, and \$105 million for the portion of spending created outside Utah, from the total estimate of \$311 million.

Because of the Olympics, a number of longer term projects that would have occurred without the Olympics are being accelerated. Hotel construction, greatly spurred by high occupancy rates would have occurred over a ten-year period instead of the current five-year trajectory. It is assumed that 25% of this construction has been accelerated so that the facilities will be in place prior to the games. In addition to hotels, a variety of other infrastructure investments will be affected by the Olympics, including public facilities, such as the Salt Lake International Airport, various highways and transit systems, and private facilities, such as ski resorts. Some projects, such as the Olympic venues and access roads are built specifically for the Games. In other cases, only the timing of the infrastructure investment is impacted. The end result is more economic activity from 1996 to 2002 than would otherwise occur. Additional information regarding fiscal and economic issues surrounding the 2002 Olympic Winter Games can be obtained from the Governor's Office of Planning and Budget.

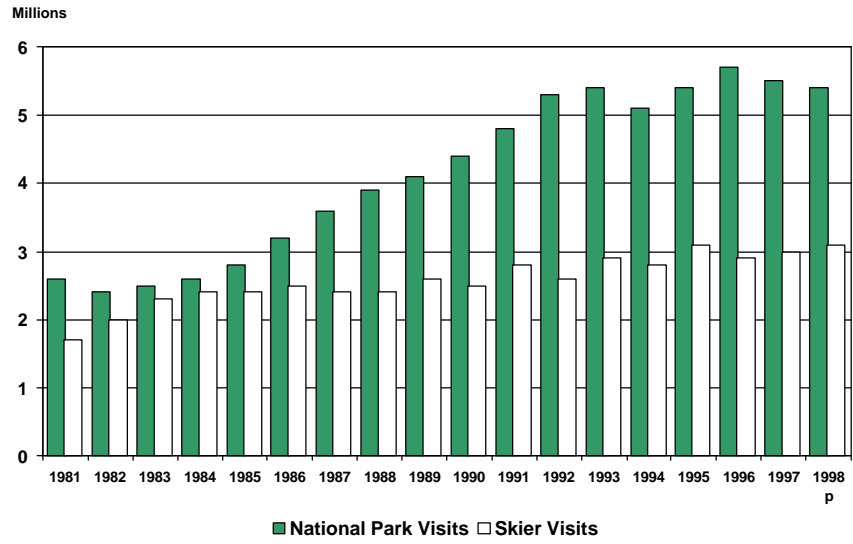
Conclusion

Major tourism indicators recorded modest growth in traveler spending in 1998. Factors included a decline in regional visitation to national parks and unfavorable foreign exchange rates. Skiers, however, came in near-record numbers, and new ski resort capital investments bode well for the future. Increasing hotel supply has caught up with record-high occupancy rates of the mid-1990s, whereas hotel demand and room rates increased at a modest pace. This has resulted in lower occupancy rates which are forecasted to decline through 1999. Some of the hotel supply has been accelerated by the 2002 Olympic Winter Games, expected to generate \$2.8 billion in economic output and \$80 to \$140 million in state and local tax revenue.

In spite of slower growth in tourism spending and visitation in 1997 and 1998, tourism is expected to grow considerably as Utah receives increased awareness due to the 2002 Olympic Winter Games. Foreign exchange rates, airfares and direct international flights to Salt Lake International Airport are other major factors to watch. National travel trends point toward increasing interest in ecotourism, heritage tourism, and soft-adventure activities. Utah is well-positioned to attract those visitors seeking a higher quality, more unique experience and who are willing to pay more and stay longer. By focusing on quality over quantity, tourism can provide higher quality earnings, with fewer of the challenges often associated with "windshield" tourism. This is true particularly when tourism is part of a balanced economic development strategy. However, capturing the "quality tourist" will not happen on its own in spite of Olympic publicity. Long-lasting and statewide impact from the Olympics are dependent on long-term tourism planning through community input and focused marketing efforts. *



**Utah Tourism Indicators--National Park and Skier Visits:
1981 to 1998**



Source: National Park Service, Utah Ski Association

Profile of the Utah Travel Industry: 1992 to 1998

Category	1992	1993	1994	1995	1996	1997	1998(e)
Total Spending by Tourists and Travelers (billions)	\$3.1	\$3.3	\$3.4	\$3.6	\$3.8	\$4.0	\$4.1
Total Number of Foreign and Domestic Visits (millions)	14.4	15.0	15.2	16.1	17.0	17.4	17.7
Number of U.S. Visits	13.6	14.3	14.5	15.3	16.1	16.7	17.0
Number of Foreign Visits	0.73	0.70	0.72	0.76	0.88	0.72	0.70
Total Travel and Recreation-Related Employment*	86,000	91,000	96,000	100,000	107,000	112,000	115,500
Direct Travel and Recreation-Related Employment*	48,000	51,000	54,000	56,000	60,000	62,500	64,750
Indirect Travel and Recreation-Related Employment*	38,000	40,000	42,000	44,000	47,000	49,500	50,750
Percent of All Utah Non-Agricultural Jobs	11.2%	11.2%	11.1%	11.0%	11.2%	11.2%	11.1%
Total State and Local Taxes Generated by Travel Spending (millions)	\$225	\$240	\$247	\$262	\$276	\$292	\$299
State Government Portion	\$169	\$180	\$185	\$193	\$203	\$214	\$218
Local Government Portion	\$56	\$60	\$62	\$69	\$73	\$78	\$81
Total National Park Recreation Visits (millions)	5.3	5.4	5.1	5.4	5.7	5.5	5.3
Total Skier Visits (millions)	2.6	2.9	2.8	3.1	2.9	3.0	3.1
Taxable Room Rents (millions)	\$313	\$365	\$405	\$460	\$513	\$558	\$586
Hotel/Motel Occupancy Rates	70.3%	71.9%	73.7%	73.5%	73.1%	68.0%	63.0%

(e) = estimate

* Figures have been revised to reflect new methodology for estimating travel and recreation-related employment.

Source: Estimates based on information from U.S. Department of Commerce, Tourism Industries (Washington, D.C.), Utah State Tax Commission, Utah Department of Transportation, National Park Service, Ski Utah and Rocky Mountain Lodging Report.

Utah Tourism Indicators: 1981 to 1998

Year	Hotel Room Rents (Current \$)	Hotel Room Rents (1998 \$)	National Park and Monument Visits*	State Park Visits	Salt Lake Int'l. Airport Passengers	Skier Visits	Direct and Indirect Travel, Tourism and Recreation Employment*
1981	\$113,273,174	\$202,191,872	5,400,083	6,430,174	4,149,316	1,726,000	50,000
1982	124,787,207	209,740,438	5,339,306	6,436,488	5,861,477	2,038,544	52,000
1983	140,728,877	227,000,916	5,474,770	5,214,498	7,059,964	2,317,255	54,000
1984	161,217,797	249,090,836	5,838,832	4,400,103	7,514,113	2,369,901	58,000
1985	165,280,248	246,731,440	6,114,954	4,846,637	8,984,780	2,436,544	60,700
1986	175,807,344	257,552,854	7,074,521	5,387,791	9,990,986	2,491,191	62,500
1987	196,960,612	278,246,675	7,766,553	5,489,539	10,163,883	2,440,668	64,500
1988	220,687,694	299,487,007	8,962,088	5,072,123	10,408,233	2,368,985	67,000
1989	240,959,095	312,019,624	9,046,397	4,917,615	11,898,847	2,572,154	71,000
1990	261,017,079	320,676,326	8,914,692	5,033,776	11,982,276	2,500,134	79,000
1991	295,490,324	348,396,289	9,485,947	5,425,129	12,477,926	2,751,551	82,000
1992	312,895,967	358,134,968	10,335,082	5,908,000	13,870,609	2,560,805	86,000
1993	364,632,516	405,238,968	10,526,422	6,950,063	15,894,404	2,850,000	91,000
1994	405,342,342	439,067,642	9,702,217	6,953,400	17,564,149	2,800,000	96,000
1995	460,213,064	484,924,665	9,578,418	7,070,702	18,460,000	3,100,000	100,000
1996	513,080,390	525,394,319	9,909,243	7,478,764	21,088,482	2,954,690	107,000
1997	558,204,110	571,042,804	9,512,873	7,184,639	21,068,314	3,042,767	112,000
1998(e)	586,114,315	586,114,315	9,227,487	6,897,253	20,225,581	3,101,735	115,500

Percent Change							
1981-98	417.4%	189.9%	70.9%	7.3%	387.4%	79.7%	131.0%
1997-98	5.0%	2.6%	-3.0%	-4.0%	-4.0%	1.9%	3.1%

Average Annual Rate of Change							
1981-98	10.2%	6.5%	3.2%	0.4%	9.8%	3.5%	5.0%

National Park Recreation Visits: 1981 to 1998

Year	Arches	Bryce Canyon	Canyonlands	Capitol Reef	Zion	Total National Parks
1981	326,508	474,092	89,915	397,789	1,288,808	2,577,112
1982	339,415	471,517	97,079	289,486	1,246,290	2,443,787
1983	287,875	472,633	100,022	331,734	1,273,030	2,465,294
1984	345,180	495,104	102,533	296,230	1,377,254	2,616,301
1985	363,464	500,782	116,672	320,503	1,503,272	2,804,693
1986	419,444	578,018	172,987	383,742	1,670,503	3,224,694
1987	468,916	718,342	172,384	428,808	1,777,619	3,566,069
1988	520,455	791,348	212,100	469,556	1,948,332	3,941,791
1989	555,809	808,045	257,411	515,278	1,998,856	4,135,399
1990	620,719	862,659	276,831	562,477	2,102,400	4,425,086
1991	705,882	929,067	339,315	618,056	2,236,997	4,829,317
1992	799,800	1,018,200	395,700	675,800	2,390,600	5,280,100
1993	773,678	1,107,951	434,844	660,800	2,361,434	5,338,707
1994	777,200	1,028,100	429,900	605,300	2,270,900	5,111,400
1995	859,374	994,548	448,769	648,864	2,430,162	5,381,717
1996	856,016	1,269,600	447,527	678,012	2,498,001	5,749,110
1997	858,525	1,174,824	432,697	625,680	2,445,534	5,537,260
1998(e)	830,194	1,133,705	435,771	648,204	2,337,930	5,385,804

Percent Change						
1981-97	162.9%	147.8%	381.2%	57.3%	89.8%	114.9%
1997-98	-3.3%	-3.5%	0.7%	3.6%	-4.4%	-2.7%

Annual Average Rate of Change						
1981-98	5.6%	5.3%	9.7%	2.9%	3.6%	4.4%

(e) = estimate

* Figures have been revised to reflect new methodology for estimating travel-related employment.

* Federal Government Expenditures in Utah

Overview

In 1970, federal expenditures per capita in Utah were 122% of the national average. This very high level fell quickly and by 1970 federal expenditures per capita were at the national average. Over the next twenty years, federal per capita expenditures in Utah stayed at or near 100% of the national average. However, during the 1990s, federal per capita expenditures as a percent of the national average have fallen dramatically in Utah— from 93.6% of the national average to 76.7%. The decline in federal expenditures per capita as a percent of the national average in Utah is a result of a shift away from federal defense related spending to health care spending. This report, while providing some longer historical overview, will focus on the significant changes that have taken place in federal expenditures in Utah and all the states in the decade of the 1990s.

Federal Spending in Utah – Who Gets What

Each year the U.S. Department of Commerce publishes a report entitled *Federal Expenditures by State*.¹ The report shows all federal expenditures in the states and territories made by the federal government from whatever federal agency. It does not include all federal expenditures because some expenditures are not distributed by states.² The report divides federal expenditures into five main categories:

- * Grants to state and local governments— Major grants in this area are: Medicaid, Temporary Assistance for Needy Families, highways, housing, environment, mass transit and others.
- * Federal salary and wages— These are wages paid by a federal employer.
- * Payments to individuals -Such programs include Social Security, Medicare, federal employee retirement, earned income tax credit, Food Stamps, veterans' programs, etc.
- * Procurement contracts— The major contracts are defense, National Air and Space Administration, and Post Office. In Utah, contracts with BLM, Forest Service or Parks Service are common.
- * Other grants and payments— This is a catch-all category that includes everything not in the other four categories. It is the smallest of the five groups.

Grants to State and Local Government

In Utah, federal grants to state and local governments have grown from 12.9% of all federal expenditures to 16.1% between 1990 and 1997. The main reason for this growth in state and local grants is the significant rise in Medicaid expenditures. Medicaid is one of four federal grants that has grown rapidly during the 1990s in Utah. However, it is the most important because it is so much larger than any other federal grant. Medicaid expenditures have more than doubled in the 1990s, growing from \$224.5 million to \$485.4 million. This is an annual average growth rate of 11.6%.

Medicaid not only accounts for half of the total increase of all federal grants to state and local governments in Utah in the 1990s, but it also accounts for 13.5% of the total increase of all federal

expenditures in Utah in the 1990s. Only Social Security (35.9%) and Medicare (23.3%) account for a larger share of the total increase in federal expenditures in Utah than Medicaid.

Medicaid is the state and federal health insurance program for the poor and medically needy. Though all states participate in the Medicaid program, it has been a point of serious complaint by governors across the nation. The main reason for concern is the rapidly increasing cost of the program. States must pay a portion of the program's cost, about 25%, but until recently, the federal government made the decisions as to eligibility and coverage. As costs of the program began to grow rapidly, states were finding it difficult to come up with the ever increasing matching fund requirements.

There are two main reasons for the rapid increase in Medicaid expenditures. First, medical inflation has exceeded overall inflation for the last two decades. Between 1976 and 1996, medical costs have risen by an annual average rate of 8.1% while overall inflation has risen by 5.2%.³ Second, the federal government has mandated changes in Medicaid eligibility that have significantly increased the number of participants.⁴

Nationally, between 1980 and 1990, the number of Medicaid participants increased from 21.6 million to 25.3 million. This is an annual average increase of 1.6%. However, between 1990 and 1995, the number of participants jumped to 36.3 million. This is an annual average increase of 7.6%. The combined effect of higher than average inflation in medical care and an increasing number of participants in the program has pushed Medicaid expenditures up sharply.

In addition to Medicaid, federal grants for mass transit have jumped in the last few years. In 1995, Utah received just \$10.1 million for mass transit. In 1997, that amount quadrupled to \$43.1 million. With the continued development of light rail in Salt Lake County, such grants should continue. Not surprising to those living along the Wasatch Front, highway grants have shown a significant increase in the last few years. Since 1994, federal highway expenditures in Utah have increased from \$112.2 million to \$164.3 million. This increase is likely to continue given the major renovation to Interstate 15 and the coming of the Olympics in 2002.

There is one federal grant program that recently has gone in the opposite direction than the ones mentioned— Aid to Families with Dependent Children (AFDC). Between 1990 and 1995, AFDC grew from \$52.8 million to \$91.2 million. In 1996, AFDC was dissolved and replaced with Temporary Assistance for Needy Families (TANF). The administration of this new program was turned over to the states with oversight by the federal government. The purpose of TANF was to shift the focus from providing financial help to those who qualify to providing incentives to get participants jobs. So far the program seems to be working. TANF grants have fallen to \$26.9 million from the AFDC high of \$91.2 million in 1995.

¹ *Federal Expenditures by State for Fiscal Year 1997*, (U.S. Department of Commerce). Fiscal Year 1997 began October 1, 1996 and ended September 30, 1997.

² Federal expenditures by state have amounted to 89% or higher of all federal outlays over the last five years.

³ *Monthly Labor Review and Handbook of Labor Statistics*, (U.S. Bureau of Labor Statistics).

⁴ Utah Foundation has written two reports that treat the growth of Medicaid, both reports are titled "A Look at State Government Growth". They are *Research Report*, No. 585 Aug-Sept. 1995 and No. 609, October 1997.

Nationally, Medicaid expenditures are growing even faster than in Utah, by an annual average rate of 12.9%. Because of this faster growth in Medicaid nationally, federal grants to state and local governments per capita grew faster in the 50 states than in Utah. Federal grants to state and local governments per capita fell in Utah from 89.9% of the national average to 76.6%.

Although the upward trend in health care expenditures in Utah is similar to the nation, federal Medicaid spending is much lower here than nationally. The main reason for this is that Utah's poverty rate is below the national average and, therefore, a smaller portion of Utah's population qualify for this health insurance program.

Nationally, AFDC/TANF has also shown the same trend as has occurred in Utah. After peaking in 1995 at \$17.1 billion, AFDC/TANF grants have dropped to \$9.7 billion. These declines mark a major shift in federal attitudes and programs toward welfare – from providing financial aid to those who qualify to providing help in getting participants off of welfare and into the workforce. How much credit TANF should get for this decline in federal expenditures and how much credit should go to the strong national economy is debatable. Certainly both deserve some credit.

Salary and Wages

A second major federal expenditure category is salary and wages. This category has shown a significant shift during the 1990s. From 1990 to 1997, total federal salaries and wages in Utah declined from \$1.427 billion to \$1.388 billion or a decline of \$39.5 million. This decline in wages has caused this category to drop from 21.9% of all federal expenditures in Utah to 16.5%.

The main reason for this decline in federal wages is the sharp drop in federal military and civilian defense pay. Federal military pay declined from \$234.3 million to \$193.6 million and civilian defense pay declined from \$656.6 million to \$448.9 million during the same time. When combined, the declines in federal military and civilian defense pay amount to a loss to the Utah economy of \$248.5 million over this seven-year period. Military personnel and civilian defense pay fell from 13.7% to 7.6% of all federal expenditures in the state. These declines were the result of reductions in civilian defense workers at Hill Air Force base, and closures of two civilian defense plants: Tooele Army Depot and the Ogden Defense Depot.

Similar, though less dramatic trends can be seen nationally. In 1990, military pay in the states amounted to \$39.4 billion. In 1997, it had fallen slightly to \$39.0 billion. However, as a percent of federal expenditures in states, military pay has fallen dramatically, from 3.9% to 2.7%. Likewise, civilian defense pay in the states has declined from \$29.7 billion to \$27.7 billion during the same time. Combined, these two categories have declined from 6.9% of federal expenditures in the states to 4.6%.

In actual expenditures, military and civilian defense pay has dropped by \$2.4 billion in the 1990s. The decline in federal military and civilian defense pay accounts for the overall decline in salary and wages from 14.6% of federal expenditures in states to 11.6% during the 1990s.

The more dramatic decline in wages and salaries between Utah and the nation is best understood in per capita terms. Federal wages and salaries in Utah have dropped from 140.9% to 108.6% of the national average during the 1990s. This entire drop can be

attributed to the decline in military and civilian defense pay. The only reason that Utah still receives federal salary and wages above the national average is that Utah is a large public land state.¹ These public (federal) lands are managed by federal employees. It is the large presence of Bureau of Land Management, Forest Service, Parks Service, Fish and Game Service and other federal employees that keeps federal per capita wages and salaries above the national average.

Payments to Individuals

Payments to individuals is the largest of the five major categories. This category includes Social Security, Medicare, and federal retirement among others. Social Security is not only the largest federal expenditure in payments to individuals, it is the single largest federal expenditure in the state. Even more important, it is a growing portion of all federal expenditures in Utah. In the 1990s, Social Security has grown from 18.0% of all federal expenditures in Utah to 22.1%.

Medicare is the second largest payment to individuals and the second largest federal expenditure in the state. It is also one of the fastest growing federal expenditures in Utah. Medicare expenditures have increased from \$343.7 million to \$792.9 million between 1990 and 1997 – an increase of 130.7%. To appreciate the size and rapid growth of these two programs, it helps to look at them over the seven-year period of the 1990s. In 1990, Social Security and Medicare amounted to 23.3% of all federal expenditures in the state. By 1997, these two programs had grown to 31.5% of all federal expenditures in the state. In other words, two programs that go just to the elderly account for almost one-third of all federal dollars spent in Utah.

Social Security is also the single biggest expenditure in all the states. In 1997, Social Security amounted to 25.2% of all federal expenditures. Medicare is the second largest program, amounting to 14.5% of all federal expenditures in the states. Combined, these two programs for the elderly amount to 39.7% of all federal expenditures in the states.

The reason that Utah receives a smaller portion of Social Security and Medicare than the national average is that Utah has the youngest population among the states. Utah's 65 years of age and older account for only 8.8% of the state's population. Nationally, those 65 and older make up 12.8%. With fewer people qualifying for Social Security and Medicare, Utah receives fewer dollars.

The state's youthful demographic profile results in fewer federal dollars per capita as payments to individuals than the nation as a whole – and it has been declining steadily.² In 1990, federal per capita payments to individuals in Utah amounted to \$1,439.77 or 72.2% of the national average of \$1,995.26. In 1997, Utah received \$2,003.09 per capita in payments to individuals or 68.6% of a national average of \$2,921.43.

¹ In Utah, 65.9% of the land area (52.5 million acres) is owned by the federal government. Of this amount 42.0% is owned by the Bureau of Land Management, 15.3% by the National Forest Service, 3.6% by the Department of Defense, 3.3% by the National Parks Service, and 1.7% by other federal agencies.

² Population projections by the U.S. Bureau of Census show Utah's elderly population to be growing slightly faster than that of the nation's. Utah's 65 and over population will grow from a projected 9.1% in 2000 to 10.8% in 2010. Nationally, the 65 and over population will grow from 12.6 to 13.2%. See U.S. Bureau of the Census *Population Paper Listings, PPI-47*.

Procurement Contracts

Of the five major categories of federal expenditures, procurement contracts have shown the most significant change. Total procurement contracts, in Utah, have declined from \$1.54 billion to \$1.21 billion. This is a loss to the Utah economy of \$337 million over the seven-year period. The biggest reason for this dramatic drop in procurement contracts is the loss of federal defense contracts. During this time, Utah's defense contractors have gone from contracts totaling \$883.0 million in 1990 to only \$433.4 million in 1997— a loss of \$449.6 million.

Looking at it from another perspective, defense contracts have fallen from 13.6% of all federal expenditures in Utah to only 5.1% during the 1990s. Such losses in revenue have forced Utah's defense contractors to substantially rethink and redefine their corporate missions.

Offsetting the decline in defense contracts, to a small degree, is the significant rise in postal service contracts. Postal contracts have grown from \$22.4 million to \$69.5 million, an annual average growth rate of 17.6%. Even at this higher level, postal service contracts account for less than 1% of all federal expenditures in the state.

Nationally, procurement contracts show a similar but less dramatic decline. As a percent of all federal expenditures in the states, procurement contracts have dropped from 18.8% to 13.5% between 1990 and 1997. However, procurement contracts did not fall in actual expenditures nationally as they did in Utah. National procurement contracts grew from \$188.5 billion to \$193.1 billion — a small increase of \$4.6 billion.

Despite this slight increase in total procurement contracts, defense contracts took a big hit, falling from \$135.3 billion to \$119.9 billion, a decline of \$15.4 billion. As a percent of all procurement contracts, defense contracts have dropped from 71.7% to 62.1%. Defense contracts fell from 13.5% of all federal spending in the states to 8.4%.

As with federal wages and salaries, the best way to see how much better the nation has fared in the decline in contracts is by looking at per capita expenditures. Nationally, per capita procurement contracts have fallen from \$756 to \$721— a decline of \$35 per capita. In Utah, the decline was much sharper, from \$892 to \$585. This is a loss of \$306 per capita. In percentage terms, Utah went from 118% of the per capita national average to 81.2%— a remarkable drop in just seven years.

Trends in Federal Expenditures

There are three trends that stand out in the Department of Commerce data on federal expenditures in the states. **The first major trend is the substantial decline in both federal salary and wages, and federal procurement contracts.** The decline in federal expenditures in these two categories are not separate stories— but only different parts of the same story.

Federal military expenditures have dropped precipitously since the end of the Cold War. This has impacted both defense contracts, and federal military and civilian defense employment. Between 1990 and 1997, federal military and civilian defense wages, and federal defense contracts have fallen from 20.4% of all federal expenditures in the states to 13.0%. In Utah, these defense related

declines are even more dramatic, falling from 27.3% to 12.7% of all federal expenditures.

The decline in federal defense expenditures, as a percent of all federal expenditures, began in the 1960s and continued to the 1980s. During that time, federal defense expenditures fell from 52% of the federal budget in 1960 to 23% in 1980. The Reagan administration stopped this downward trend and increased federal defense expenditures to 27% of the budget by 1988. With the end of the Cold War, declines in federal defense expenditures have resumed and in 1997 they amounted to a post World War II low of 17% of the federal budget¹. This decline in federal defense expenditures is affecting many states.

Because of Utah's large defense related employers on the one hand, and its large private sector companies that contract with federal defense agencies on the other hand, it has felt this shift away from national defense more than most states. The Tooele Army Depot has had most of its responsibilities transferred out of state, the Defense Depot in Ogden was closed in 1997 and Hill Air Force Base employment has been reduced. Equally important, reductions in defense contracts have affected such Utah companies as Thiokol, Hercules, Evans and Sutherland, Litton and others.

The second major trend is the increase in health care expenditures. In sharp contrast to federal defense related expenditures, two federal programs— Medicare and Medicaid— have increased significantly as a percent of all federal expenditures in the states. Between 1990 and 1997 these two health care programs have grown from 15.3% of all federal expenditures in the states to 21.2%. In fact, 35.1% of the \$426.1 billion increase in federal expenditures during this period in the states can be attributed to Medicare and Medicaid.

In Utah, these shifts are similar. Medicare and Medicaid have risen from 8.7% to 15.2% of all federal expenditures in the state and account for 36.9% of the \$1.9 billion increase in federal expenditures in Utah.

Like the shift away from defense expenditures, the shift toward increased federal health care expenditures began in the 1960s. During the administration of President Johnson, both Medicare and Medicaid became new federal programs. By 1970, these two programs accounted for about 4% of the federal budget. By 1980, they had grown to about 8%, by 1990 to about 12% and by 1997 to about 19%.² With growth rates like this, it is no wonder that federal and state governments are scrambling to find ways to reduce the increasing costs of these two health insurance programs.

The third major trend is the significant slowdown in the growth of federal expenditures in the states. In almost every year of the 1990s, federal expenditures in the states have grown more slowly than the previous year. Federal expenditures grew by 9.4% from 1990 to 1991. Since then the annual growth rate fell every year until 1996, when it grew by only 2.2%. In 1997, it grew by only a slightly faster rate of 2.5%.

The important point is not the slight increase from 1996 to 1997 but

¹ *Economic Report of the President*, (Council of Economic Advisors, United States Government Printing Office, 1998), p. 375.

² *Budget of the United States*, U. S. Office of Management and Budget, annual.

the long-term decline in the 1990s from over 9% to approximately 2.5%. As a result of this, federal expenditures in the states,¹ as a percent of total personal income, have fallen from 23.1% in 1994 to 21.1% in 1997. This is a remarkable turnaround that for the first time since 1969 makes balancing the federal budget a realistic possibility in the next year. The single biggest reason for this, as already discussed, is the drop in federal defense related expenditures.

However, Medicare and Medicaid growth rates have slowed some in the past few years as well. Medicare growth rates have slowed from an average annual increase of 12.8% from 1990 to 1994, to an annual average increase of 4.4% from 1994 to 1997. Likewise, Medicaid has slowed from an annual average rate of growth of 19.0% from 1990 to 1994, to 5.2 from 1994 to 1997. If the federal government can continue to keep health care costs from escalating again (not an easy task) then the nation can look to federal budgets that will be much easier to keep in line with federal revenues.

Impact of Federal Expenditures on Utah

The loss in federal expenditures in Utah from 1990 to 1997 due to the shift away from national defense spending is substantial. Utah has lost \$40.7 million in military pay, \$207.7 million in civilian defense pay, and most important, \$449.6 million in defense contracts. Totaled, this is a loss in federal expenditures in Utah of \$698 million over the seven-year period.

The impressive aspect about losing more than two-thirds of a billion dollars in the state economy is that Utah has absorbed this loss with relative ease. Since 1988, the state economy has been very strong.

Employment growth has averaged an annual average growth rate of 4.7%. This is substantially higher than the long-term annual average growth rate of 3.6%.

In fact, the strength and length of Utah's current strong economy is unprecedented. Utah has had four straight years with an annual employment growth rate above 4% and 10 straight years of an annual employment growth rate of 3% or more. The 1997 unemployment rate of 3.2% is the lowest in 45 years. During this expansion, Utah's per capita income has risen from 49th lowest in the nation to 44th— a substantial improvement in such a short time.

The decline in federal defense related employment and the corresponding increase in other industries, especially construction, services and trade, has made for a more diverse economy in Utah. Such an increase in employment diversity means that the Utah economy is less likely to be significantly disturbed by downturns in any one industry.

In short, the significant decline in federal defense related spending which has resulted in the loss of federal military and civilian defense employment and in the loss of federal defense contracts has barely been noticed because of the tremendous growth in the Utah economy. This growth is driven by the private sector not the public sector. In fact, more than 91.3% of all net new jobs created in the 1990s have been in the private sector. As a result of this, the private sector now employs 82.7% of Utah's total workforce. This is the highest level in the post World War II period. This stronger, more diverse and private-sector oriented economy should serve Utah well as it moves into the 21st century. *

¹ Total federal expenditures as a percent of GDP show an even sharper decline than federal expenditures in the states, from an all time high of 22.6% of GDP in 1991, total federal expenditures have fallen to an estimated 20.0% in 1998.

Table
Federal Expenditures in Utah and in Other States

Fiscal Year	Expenditures (in thousands \$)		Percent Change		Per Capita Expenditures**			Expenditures as a Percent of TPI***	
	Utah	U.S.	Utah	U.S.	Utah	U.S.	Utah as a % of U.S.	Utah	U.S.
1970	\$1,115,940	\$175,446,202	na	na	\$1,047	\$861	121.6%	32.3%	21.5%
1975	1,747,756	305,043,711	na	na	1,414	1,416	99.9%	28.9%	23.7%
1976	1,896,675	331,690,711	8.5%	8.7%	1,488	1,525	97.6%	27.7%	23.4%
1977	2,382,914	395,656,215	25.6%	19.3%	1,806	1,800	100.3%	30.6%	25.2%
1978	2,619,009	432,861,246	9.9%	9.4%	1,915	1,949	98.3%	29.3%	24.5%
1979	2,849,390	469,746,255	8.8%	8.5%	2,006	2,092	95.9%	27.9%	23.6%
1980	3,096,463	528,687,135	8.7%	12.5%	2,102	2,329	90.3%	27.0%	23.7%
1981	3,334,788	562,219,193	7.7%	6.3%	2,200	2,450	89.8%	25.8%	22.6%
1982	3,710,197	603,575,580	11.3%	7.4%	2,381	2,605	91.4%	26.4%	22.5%
1983	4,111,535	696,780,062	10.8%	15.4%	2,578	2,980	86.5%	27.3%	24.4%
1984	4,839,941	724,748,194	17.7%	4.0%	2,983	3,073	97.1%	29.3%	23.2%
1985	4,969,906	788,488,251	2.7%	8.8%	3,025	3,314	91.3%	27.9%	23.3%
1986	5,500,919	830,258,685	10.7%	5.3%	3,308	3,457	95.7%	29.3%	23.1%
1987	5,704,511	847,810,233	3.7%	2.1%	3,399	3,499	97.1%	28.9%	22.2%
1988	5,750,054	884,130,543	0.8%	4.3%	3,404	3,616	94.1%	27.7%	21.6%
1989	6,190,743	931,900,471	7.7%	5.4%	3,629	3,776	96.1%	27.9%	21.1%
1990	6,511,054	1,002,703,246	5.2%	7.6%	3,764	4,020	93.6%	27.0%	21.3%
1991	6,693,940	1,096,493,278	2.8%	9.4%	3,779	4,349	86.9%	25.8%	22.3%
1992	7,115,129	1,191,087,434	6.3%	8.6%	3,908	4,671	83.7%	25.5%	23.0%
1993	7,461,360	1,260,211,669	4.9%	5.8%	3,980	4,889	81.4%	24.7%	23.1%
1994	7,593,501	1,320,132,173	1.8%	4.8%	3,937	5,072	77.6%	23.3%	23.1%
1995	8,526,244	1,363,511,000	12.3%	3.3%	4,318	5,189	83.2%	24.1%	22.5%
1996	8,193,193	1,394,056,662	-3.9%	2.2%	4,061	5,257	77.2%	21.4%	21.8%
1997	\$8,436,000	\$1,428,818,000	3.0%	2.5%	\$4,097	\$5,339	76.7%	20.4%	21.1%

*The data in this table includes all federal expenditures in the states and territories. It excludes federal spending that is not attributable to the states and territories, such as net interest and international payments, and foreign outlays. The U.S. total does account for about 90 percent of all federal outlays in a given year.

**Per capita calculations use a July 1st estimate of resident population for expenditures ending on September 30th.

***TPI - Total Personal Income estimate for the federal fiscal year (October 1 through : 7,115,129

Source: Base data: Federal Expenditures by State, published annually by the U.S. Dept of Commerce.

Per capita and total personal income calculations: Utah Foundation with data also from the Dept of Commerce.

Table

Federal Expenitures in Utah and in the U.S. (Thousands of Dollars): FY 1990 to 1997

UTAH	1990	1991	1992	1993	1994
GRANTS TO STATE & LOCAL GOV'TS:					
Medicaid	\$224,471	\$250,273	\$352,312	\$357,084	\$405,664
Food & Nutrition	73,912	80,537	95,855	101,867	103,385
A.F.D.C. / T.A.N.F.	52,845	65,987	80,137	77,321	86,555
Social Services / Health	77,867	81,672	77,090	103,890	114,529
Highways	123,201	81,821	110,514	160,031	112,205
Mass Transit	21,951	7,753	20,880	28,128	9,023
Education	75,609	83,104	88,451	96,295	110,705
Housing & Urban Development	41,462	43,810	55,972	61,716	72,147
Employment & Training	42,212	43,852	46,473	47,443	46,454
Interior	53,378	52,226	49,354	50,970	49,823
Environment	16,087	9,761	10,712	18,264	32,282
Crime	2,365	4,836	6,296	7,658	6,497
All Other	33,103	33,525	48,443	62,774	59,475
TOTAL STATE & LOCAL GRANTS	838,463	839,157	1,042,489	1,173,441	1,208,744
FEDERAL SALARY & WAGES:					
Military Personnel	234,287	268,622	239,652	223,437	221,512
Civilian Defense Workers	656,605	653,413	613,120	623,616	542,096
Postal Service Employees	161,459	171,513	186,320	196,306	236,896
Treasury	NA	NA	NA	164,996	169,775
All Other	375,005	392,665	437,309	295,188	308,884
TOTAL SALARY & WAGES	1,427,356	1,486,213	1,476,401	1,503,543	1,479,163
PAYMENTS TO INDIVIDUALS:					
Social Security Payments	1,170,665	1,286,855	1,391,106	1,491,557	1,589,168
Medicare Payments	343,707	361,245	451,010	470,249	552,007
Supplemental Security Payments	32,991	45,232	57,145	67,808	88,600
Food Stamps	71,050	82,830	92,206	97,672	94,479
Veterans' Program	77,853	79,559	82,226	87,717	87,114
Federal Employee Retirement	516,394	560,234	578,403	623,590	651,898
Other Federal Employee Benefits	13,935	15,786	17,012	17,486	19,034
All Other	263,877	289,553	346,362	407,028	361,753
TOTAL PAYMENTS TO INDIVIDUALS	2,490,472	2,721,294	3,015,470	3,263,107	3,444,053
PROCUREMENT CONTRACTS:					
Defense Contracts	883,014	804,404	614,286	532,269	524,001
Postal Service Contracts	22,400	34,299	36,500	38,206	51,182
Other Contracts	637,757	594,630	693,895	708,369	615,010
TOTAL PROCUREMENT CONTRACTS	1,543,171	1,433,333	1,344,681	1,278,844	1,190,193
OTHER GRANTS & PAYMENTS	211,592	213,943	236,088	242,425	271,348
FED. EXPEND. TOTALS FOR UTAH	\$6,511,054	\$6,693,940	\$7,115,129	\$7,461,360	\$7,593,501
50 STATES AND D.C.					
	1990	1991	1992	1993	1994
GRANTS TO STATE & LOCAL GOV'TS:					
Medicaid	\$40,857,263	\$52,532,714	\$67,827,253	\$75,774,060	\$82,033,657
Food & Nutrition	10,023,143	10,797,232	12,011,762	13,057,199	13,925,982
A.F.D.C. / T.A.N.F.	12,246,000	13,519,608	15,460,542	15,641,147	16,635,326
Social Services/Health	12,383,748	14,181,273	13,455,506	15,910,996	20,108,925
Highways	13,969,136	14,359,438	15,295,447	16,653,405	19,139,687
Mass Transit	3,754,357	3,825,769	3,528,081	3,515,859	3,933,912
Education	11,176,099	12,414,391	13,659,019	14,739,636	15,491,343
Housing & Urban Development	12,524,339	13,824,215	16,678,854	19,055,513	21,504,822
Employment & Training	5,734,997	5,960,758	6,712,287	6,722,040	6,733,020
Interior	1,608,226	1,443,144	1,497,360	1,565,933	1,768,653
Environment	2,885,944	2,835,837	3,206,042	3,515,859	2,912,437
Crime	330,071	769,427	845,909	853,246	876,699
All Other	6,963,579	6,886,594	7,822,203	8,195,872	9,174,338
TOTAL STATE & LOCAL GRANTS	134,456,902	153,350,400	178,000,265	195,200,765	214,238,801

Table

Federal Expenditures in Utah and in the U.S. as a Percent of Total: FY 1990 to 1997

Federal Expenditures by Category as a Percent of Total

UTAH	1990	1991	1992	1993	1994	1995	1996	1997	Percent Change 1996-97
GRANTS TO STATE & LOCAL GOV'TS:									
Medicaid	3.4%	3.7%	5.0%	4.8%	5.3%	4.9%	5.7%	5.8%	3.3%
Food & Nutrition	1.1%	1.2%	1.3%	1.4%	1.4%	1.3%	1.5%	1.6%	10.3%
A.F.D.C. / T.A.N.F.	0.8%	1.0%	1.1%	1.0%	1.1%	1.1%	1.0%	0.3%	-66.8%
Social Services / Health	1.2%	1.2%	1.1%	1.4%	1.5%	1.4%	1.5%	1.1%	-26.5%
Highways	1.9%	1.2%	1.6%	2.1%	1.5%	1.6%	1.8%	1.9%	12.0%
Mass Transit	0.3%	0.1%	0.3%	0.4%	0.1%	0.1%	0.3%	0.5%	51.7%
Education	1.2%	1.2%	1.2%	1.3%	1.5%	1.3%	1.7%	1.5%	-6.7%
Housing & Urban Development	0.6%	0.7%	0.8%	0.8%	1.0%	1.0%	1.3%	0.8%	-32.9%
Employment & Training	0.6%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.4%	-26.3%
Interior	0.8%	0.8%	0.7%	0.7%	0.7%	0.6%	0.7%	0.7%	8.4%
Environment	0.2%	0.1%	0.2%	0.2%	0.4%	0.5%	0.7%	0.6%	-20.4%
Crime	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	-7.6%
All Other	0.5%	0.5%	0.7%	0.8%	0.8%	1.0%	0.6%	0.6%	1.6%
TOTAL STATE & LOCAL GRANTS	12.9%	12.5%	14.7%	15.7%	15.9%	15.5%	17.6%	16.1%	-6.3%
FEDERAL SALARY & WAGES:									
Military Personnel	3.6%	4.0%	3.4%	3.0%	2.9%	2.7%	3.0%	2.3%	-21.1%
Civilian Defense Workers	10.1%	9.8%	8.6%	8.4%	7.1%	6.6%	6.3%	5.3%	-12.8%
Postal Service Employees	2.5%	2.6%	2.6%	2.6%	3.1%	3.0%	3.1%	3.3%	7.4%
Treasury	NA	NA	NA	2.2%	2.2%	2.1%	2.1%	2.1%	1.0%
All Other	5.8%	5.9%	6.1%	4.0%	4.1%	3.4%	3.5%	3.5%	2.5%
TOTAL SALARY & WAGES	21.9%	22.2%	20.8%	20.2%	19.5%	17.8%	18.0%	16.5%	-6.1%
PAYMENTS TO INDIVIDUALS:									
Social Security Payments	18.0%	19.2%	19.6%	20.0%	20.9%	19.8%	22.6%	22.1%	0.5%
Medicare Payments	5.3%	5.4%	6.3%	6.3%	7.3%	7.4%	9.1%	9.4%	6.7%
Supplemental Security Payments	0.5%	0.7%	0.8%	0.9%	1.2%	1.0%	1.0%	1.1%	10.8%
Food Stamps	1.1%	1.2%	1.3%	1.3%	1.2%	1.1%	1.1%	0.9%	-9.9%
Veterans' Program	1.2%	1.2%	1.2%	1.2%	1.1%	1.1%	1.2%	1.1%	-2.9%
Federal Employee Retirement	7.9%	8.4%	8.1%	8.4%	8.6%	8.5%	9.3%	8.9%	-1.1%
Other Federal Employee Benefits	0.2%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%	-3.7%
All Other	4.1%	4.3%	4.9%	5.5%	4.8%	4.4%	3.4%	5.2%	57.1%
TOTAL PAYMENTS TO INDIVIDUALS	38.2%	40.7%	42.4%	43.7%	45.4%	43.6%	47.8%	48.9%	5.2%
PROCUREMENT CONTRACTS:									
Defense Contracts	13.6%	12.0%	8.6%	7.1%	6.9%	5.8%	4.8%	5.1%	10.2%
Postal Service Contracts	0.3%	0.5%	0.5%	0.5%	0.7%	0.6%	0.8%	0.8%	10.6%
Other Contracts	9.8%	8.9%	9.8%	9.5%	8.1%	12.6%	2.7%	8.3%	223.4%
TOTAL PROCUREMENT CONTRACTS	23.7%	21.4%	18.9%	17.1%	15.7%	19.1%	13.1%	14.3%	12.4%
OTHER GRANTS & PAYMENTS	3.2%	3.2%	3.3%	3.2%	3.6%	4.1%	3.4%	4.3%	30.6%
FED. EXPEND. TOTALS FOR UTAH	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	3.0%

Federal Expenditures by Category as a Percent of Total

50 STATES AND D.C.	1990	1991	1992	1993	1994	1995	1996	1997	Percent Change 1996-97
GRANTS TO STATE & LOCAL GOV'TS:									
Medicaid	4.1%	4.8%	5.7%	6.0%	6.2%	6.5%	6.6%	6.7%	3.9%
Food & Nutrition	1.0%	1.0%	1.0%	1.0%	1.1%	1.0%	1.1%	1.1%	7.2%
A.F.D.C. / T.A.N.F.	1.2%	1.2%	1.3%	1.2%	1.3%	1.3%	1.2%	0.7%	-40.9%
Social Services/Health	1.2%	1.3%	1.1%	1.3%	1.5%	1.5%	1.4%	1.0%	-23.2%
Highways	1.4%	1.3%	1.3%	1.3%	1.4%	1.4%	1.5%	1.5%	3.7%
Mass Transit	0.4%	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%	0.3%	-6.8%
Education	1.1%	1.1%	1.1%	1.2%	1.2%	1.2%	1.1%	1.3%	19.8%
Housing & Urban Development	1.2%	1.3%	1.4%	1.5%	1.6%	1.9%	1.6%	1.6%	1.8%
Employment & Training	0.6%	0.5%	0.6%	0.5%	0.5%	0.5%	0.5%	0.4%	-18.1%

* Envision Utah Scenario Analysis

Overview

This year the Quality Growth Efficiency Tools Committee completed an initial analysis on four scenarios demonstrating different ways in which the 10 county region may grow between 1998 and the year 2020. Initial findings helped analysts understand how growth may occur in the region and how the unique geography of the region may affect growth. Transportation modeling showed differences in speeds and trip time for each scenario. Vehicle miles traveled (VMT) were demonstrated to be lower for the more densely populated growth scenarios, though trip times were faster for the more dispersed growth patterns. Analysts also found that public transportation ridership can rise, theoretically, as populations are placed in closer proximity to transit lines.

Air Quality experts found dispersed development in the region lowers the population pollution coincidence index because of geophysical conditions along the Wasatch Front. For the same reason, overall air quality modeling results showed the densest development scenario receiving an overall second to the worst ranking among scenarios, leaving the most dispersed as the worst among scenarios because of total tonnage of pollutants released into the air.

Water modeling demonstrated that Utah might hold its position as being the second highest water consuming state under dispersed development scenarios. Modeling also demonstrated that with denser development Utah could slip down among western states to a more moderate consumption level.

Infrastructure modeling demonstrated that dispersed patterns of growth cost more overall because connecting spread out housing units to a community infrastructure system requires more materials than housing units that are clustered together. Infrastructure costing showed that the densest of scenarios became more expensive as walkability was achieved because of the regional cost of implementing a mass transit system.

Background

The design and analysis of alternative scenarios for the Greater Wasatch Area are the products of Envision Utah, a public-private partnership for quality growth, with technical support provided by the Quality Growth Efficiency Tools (QGET) Technical Committee, a group of state and local experts who specialize in the technical analysis useful for long range planning. Since the original release of the Baseline Scenario in September 1997, members of the QGET Technical Committee have spent approximately 20,000 hours preparing the Scenario Analysis. The analysis includes contributions from 79 local government entities, eight state government departments, multiple private entities, and the consulting assistance of Fregonese Calthorpe Associates.

Scenario Components. Each scenario includes varying assumptions about future development and design characteristics. Distinctions include: residential density and lot size, land area consumed, agricultural land converted to urban use, level of infill and redevelopment, and type of development (walkable or non-walkable).

Study Area and Scope. The analysis has been prepared for the Greater Wasatch Area, a 10-county area that includes four counties within and six counties adjacent to the Salt Lake-Ogden and Provo-Orem metropolitan areas. It is the combined area of what is commonly referred to as the Wasatch Front and Wasatch Back, including the population living on the front (west) and back (east) side of the Wasatch Mountain Range. This area is the emerging commutershed for the extended Salt Lake area.

The scope is limited to the subject areas of demographics, economics, transportation, air quality, water, sewer, and land use. Other relevant subject areas and issues are being addressed qualitatively by Envision Utah.

Major Limitations. The analysis is meant to inform, not dictate future development. Land use decisions are and will continue to be made by local government. Infrastructure decisions will continue to be made by the relevant government entity. Accordingly, the analysis should be viewed as part of a regional visioning process to form a growth strategy for the future. As such it cannot be used to determine the feasibility of specific projects or developments.

Regional Scale– The analysis has been completed at the regional scale. This means that specific decisions about projects, alignment, and type (such as transit technology) cannot be inferred from the analysis. Estimates of ridership on individual rail lines or traffic on specific streets or highways cannot be used at this juncture to conclude that specific facilities are or are not warranted.

Population Growth– Regional population projections are held constant in each scenario so that the differences among scenarios reflect changes in how the region grows, not how much the region grows. The projections indicate the Greater Wasatch Area will increase from 1.6 million to 2.7 million by about 2020.

Models¹

The QGET Technical Committee used several different types of models to simulate what specific aspects of life such as transportation, air quality, water demand, and infrastructure may be like in 2020.² Land use is calculated as part of each scenario through a Geographical Information System (GIS).

Transportation Models. The transportation models used are maintained and operated by the Wasatch Front Regional Council and Mountainland Association of Governments. These models are referred to as four-step models because they utilize a four step modeling process. The first step of the model is trip³ generation (projecting the number of anticipated trips for an area). Step two is

1 For additional information about the QGET Models please refer to QGET Data Book Second addition pg. 169-192

2 Population and employment projections were produced by the Utah Population and Employment Demographic projection system housed at GOPB. Population projections are held constant for all scenarios.

3 A trip, as used by this model, is defined as travel from one geographic location to another geographic location on a typical weekday.

trip distribution. The third step is mode choice. Choice of route is considered in the final step of the modeling process. This model then projects total VMT, commute time, number of trips, transit ridership, average speeds, and other transportation characteristics.

While these models provide valuable information and are the only models currently developed for application in this area, their ability to predict the full range of responses to alternative land use and transportation scenarios is limited. Consequently, the transportation analysis depicts conservative estimates of the range of travel demand. For example, vehicular travel reductions and transit ridership for two of the alternatives (C and D) will be at least as large as those estimated.

Air Quality Model. The Utah Division of Air Quality has recently created the QMOD air quality planning model. QMOD is a GIS-based modeling attempt to track pollutants based on emission projections and meteorological patterns. Evaluating air quality for the Greater Wasatch Area requires the consideration of several pollutants, each of which has unique physical and chemical characteristics, as well as varying effects on human and ecosystem health. The model projects total emissions for the domain, tracks the distribution of pollutants throughout the domain, and records proximity of population to emissions. The analysis performed for these scenarios may be affected by the conservative nature of the transportation modeling. This is because automobiles emit more pollution into the air than all other sources combined.

Water Model. The Wasatch Front Water Demand/Supply Model, housed at the Utah Division of Water Resources, was used to project water demands for each scenario. The Water Demand/Supply Model uses separate calculations for residential uses and for commercial/industrial uses. Residential demand is calculated as a function of persons per household, lot size, assessed value of property, soil type, and season of the year. Industrial and commercial demand is calculated as a function of employment.

These water demand functions are combined with the population distribution, water pressure system zones, and changing land use categories to yield a forecast of water demand.

Infrastructure Cost Model. The Infrastructure Cost Model used by the QGET Technical Committee has been developed by The Governor's Office of Planning and Budget. The methodology includes a two-step approach where developer and municipal costs were estimated with a mathematical model, while regional costs are based on engineering estimates of specific infrastructure projects. Developer and municipal costs are calculated through a GIS system maintained by the Utah Automated Geographical Referencing Center.

These infrastructure cost estimates are more elaborate and incorporate more local specificity than many others that have been utilized as part of a regional visioning process. These estimates must still, however, be viewed as regional approximations of the magnitude of infrastructure costs associated with alternative forms of development.

Infrastructure for other public facilities such as schools, parks,

police, and fire have not been estimated. Cost estimates include capital costs for new residential development only; estimates have not been made for operating and maintenance costs.

Scenario Description

As part of a regional visioning process, four alternative growth scenarios have been prepared. All of these scenarios utilize the same regional population growth, but distribute this growth differently. Scenario B is the baseline scenario because it portrays the future as planned for in state and local planning documents current as of 1997.

Scenario A. Shows how the region could develop if the pattern of dispersed development currently occurring in many communities continued in the future. Larger lot sizes will be present and more auto-oriented development will occur.

Key Attributes. Population densities fall below the current average for the region (5.0 persons per residential acre in 2020 compared to 6.0 presently). Seventy-seven percent of total housing in 2020 is single family residential. People will have larger yards and more private space than other scenarios. The average lot size for a single-family residence in 2020 will be 0.37 acre, the largest of all scenarios. The developed area will nearly double by 2020, increasing from 431 square miles currently to 840 square miles in 2020.

Automobile use is higher than all other scenarios (vehicle miles of travel 'VMT' per capita is 31.6 in 2020 compared with 25.1 currently). Increased investment in roads results in faster speeds (less congestion) than other scenarios. However, the dispersed development results in longer trips with the end result being about the same amount of time on the road. Air quality is expected to be worse than all other scenarios, although not significantly so. The larger amount of vehicle travel contributes 2,660 tons per day of pollution in the airshed in 2020, 5.9% greater than the baseline estimate (Scenario B). Per capita water use and infrastructure costs are higher than all other scenarios because of the expansive growth patterns that result in additional outdoor watering and increased costs associated with more lineal feet of pipeline, roads, and utilities. Per capita water use in 2020 is 303 gallons per day, 8.6% higher than the baseline. Infrastructure costs for transportation, water, sewer, and utilities are estimated to be \$37.6 billion, 26% more than the baseline.

Scenario B. This is the baseline scenario with minor refinements. It shows how the region is likely to develop based on plans current through 1997. Development continues in a dispersed pattern much like it has for the past 20 years.

Key Attributes. Population densities remain approximately at current levels. Seventy-five percent of total housing is single family residential. Development patterns remain much like they are today. The average lot size for single family residential homes in 2020 will be 0.36 acre, the second largest of all scenarios. The developed area increases by 75% over present, increasing from 431 square miles to 755 square miles in 2020.

Automobile use is the second highest of all of the scenarios with a

VMT/capita in 2020 of 29.3 compared with 25.1 today. Street and highway expenditures are less than Scenario A, but speeds are lower as well. Air quality, with total emissions of 2,511 tons per day in 2020, is the second best of all the scenarios. Per capita water use and infrastructure costs are the second highest of all of the scenarios. This is true because the dispersed growth pattern results in additional outdoor watering and higher costs for more lineal feet of pipeline, roads, and utilities.

Scenario C. This scenario accommodates new growth by increasing the proportion of new development devoted to infill and redevelopment, as well as focusing the development of new lands into walkable development types. Walkable development includes a street layout, transit development, and mix of residential and commercial uses that allow residents to walk more. This more compact development pattern is integrated with a more extensive transit system.

Key Attributes Population densities increase by 26% from current levels. Sixty-eight percent of total housing in 2020 is single family residential. People will live closer to one another in Scenario C than Scenarios A and B. The average lot size for single family residential in 2020 will be 0.29 acres, the second smallest among the scenarios. The developed area increases by 30%, growing from 431 square miles today to 557 square miles in 2020.

Automobile use is the second lowest among the scenarios with VMT/capita of 28.4 in 2020. Average peak period speeds are slightly lower than the baseline because travel is more concentrated and congested. However, trip times are slightly shorter than the baseline for the same reason. One-quarter of the population would be within a half mile of rail transit in 2020 compared with just 2% in the baseline. Air quality is deemed the best of all the scenarios, although not significantly so. The amount of pollution in the airshed in 2020 is estimated to be 2,501 tons per day, 0.4% lower than the baseline. Per capita water use of 231 gallons per day in 2020 is the second lowest among the scenarios because of less outdoor watering. Infrastructure costs of \$22.1 billion are the lowest of all of the scenarios because of less highway construction and water

development, as well as lower municipal and developer costs because of the compact development pattern.

Scenario D. In this scenario new growth is accommodated by significantly increasing current densities. Relatively large amounts of infill and redevelopment occur. New development is concentrated along rail transit infrastructure and incorporates a high degree of walkable development and mixed uses.

Key Attributes Overall densities increase by approximately one-third from current levels. Sixty-two percent of total housing in 2020 is single family residential. People live closer to one another under Scenario D than all other scenarios. The average lot size for single family residential in 2020 would be 0.27 acres, the smallest of all of the scenarios. The developed area increases by 20% over the present, growing from 431 square miles currently, to 516 square miles in 2020.

Water consumption of 218 gallons per day in 2020 and automobile travel per capita of 28.1 in 2020 are lower than all other scenarios. This occurs because of the compact development pattern and the extensive transit network. One-third of the population would be within a half mile of rail transit in 2020 instead of 2% in Scenario B. Despite less vehicular travel, air quality is worse than Scenarios B and C because of the concentration of activity along the urban core. The air quality differences among scenarios B, C, and D, however, are very small. Infrastructure costs of \$23.0 billion are second lowest among the scenarios.

Conclusion

Modeling performed by the QGET technical Committee demonstrated various tradeoffs associated with varying growth patterns in the Greater Wasatch Area. These trade-offs affect each existing and future resident in uniquely different ways. The QGET Technical Committee and Envision Utah have compiled this information so that a comprehensive growth strategy can be prepared. *

Table
Scenario Analysis for the Greater Wasatch Area: Selected Characteristics in the Year 2020

		Scenarios				
	Measure	Current***	A	B	C	D
Demographics						
	Population	1,687,124	2,695,278	2,695,278	2,695,278	2,695,278
	Households	549,889	958,454	958,454	958,454	958,454
Land Use						
	Population Density	6.0	5.0	5.6	7.6	8.2
	Total Developed Area	431	840	755	557	516
	New Land Developed (1998 to 2020)	---	409	325	126	85
	Agricultural Land Consumed (1998 to 2020)	---	174	143	65	43
	Average Lot Size	0.32	0.37	0.35	0.29	0.27
Housing Type						
	Single Family	68%	77%	75%	68%	62%
	Town House	4%	4%	4%	7%	9%
	Multiple Family	28%	19%	21%	25%	29%
Transportation*						
	Vehicle Miles Traveled	40.7	85.3	79.2	76.6	76.0
	VMT / per Capita	25.1	31.6	29.3	28.4	28.1
	Average Peak Speeds**	25.7	22.9	20.0	20.9	19.8
	Average Trip Time**	18.5	21.5	23.2	22.0	22.8
	Transit Share of Work Trips**	2.6%	2.9%	3.2%	4.2%	4.8%
	Population within Half Mile of Rail Transit:					
	Total	---	38,755	45,557	664,991	866,765
	Percent	---	1.5%	1.7%	25.0%	32.0%
Air Quality						
	Emissions	1,869	2,660	2,511	2,501	2,512
	Air Quality Score	---	9	7	6	8
Water						
	Water Demand	698,800	1,025,900	954,200	808,600	770,500
	Per Capita Water Use	319	303	279	231	218
Infrastructure Costs						
	Regional Water	---	0.6	0.6	0.5	0.5
	Regional Transit	---	0.6	0.6	2.3	4.7
	Regional Roads	---	17	10.7	10.1	10.6
	Municipal and Developer	---	19.4	17.8	9.2	7.2
	Total	---	37.6	29.8	22.1	23.0

Notes:

* Population varies slightly among scenarios for transportation modeling.

** Metro counties only.

*** Current represents the base year used for modeling purposes and varies from 1995 - 1998 among measures.

Highway Overview¹

Highway transportation needs of the state are financed in a variety of ways. The largest portion comes from the state tax on motor and special fuels. This goes to the Transportation Fund and is divided between the state and cities and counties. The state receives 75% of the money and cities and counties get the other 25%. In addition, the state receives federal money. This generally comes from the federal tax on motor and special fuels.

Federal money is given to the state in special categories. These categories are for a variety of purposes such as recreational trails, metropolitan planning, bridge replacement, interstate maintenance, and the National Highway System.

The state has also diverted a 1/16 percent state sales tax for roads. This money is allocated \$500,000 each to two programs: the corridor preservation program and state park access program. The remaining money, approximately \$17 million, goes to local and county governments each year. With the growing population and aging transportation infrastructure, many critical areas in Utah need new roadways or need major road reconstruction on existing roadways. Even with the above funding sources, the financing of these roads has not been sufficient to keep up with demand.

Standard Transportation Program

The Utah Department of Transportation is in charge of the Statewide Transportation Improvement Program known as the STIP. This program includes highway and transit projects that are scheduled for construction in the next five years. The STIP contains a list of projects that have been approved by the Transportation Commission based on projections of various federal and state funding programs. Many projects are critical to meet transportation capacity needs, but due to insufficient funding, are left off the STIP. These are commonly referred to as unfunded transportation capacity needs. The 1997 STIP Legislative Edition total for this list was over \$3 billion and included reconstruction of I-15 from 10800 South to 500 North. The major costs for Interstate 80 or I-15 north of Salt Lake were not included in this list. The STIP program typically funds approximately \$100 million of state projects each year. With the increasing population growth of Utah, the STIP program cannot keep pace with needed projects.

Centennial Highway Fund

The "Centennial Highway Fund", created by the state legislature during the 1996 General Legislative Session, is a special revenue fund to provide financing for unfunded projects. Funds in this account are to be used exclusively for the construction of critical transportation needs that previously were not scheduled for construction due to lack of financing. The planned funding sources for the Centennial Highway Fund include General Fund monies; fuel taxes and registration fees; bonding; federal funds, local, private or toll road funding; and department efficiencies.

In 1997, the governor and legislature adopted a ten year funding

¹ This chapter includes a summary of highway and transit transportation funding. The presentation begins with highways and is followed by transit.

plan to finance \$2.6 billion of construction projects above current levels of highway construction. Funding would go into the Centennial Highway Fund and would be used to finance the \$2.6 billion of projects. One of these projects is the reconstruction of Interstate 15 (I-15) estimated at a cost of \$1.36 billion. After the plan was adopted and passed by the legislature, the Utah Department of Transportation (UDOT) received and accepted a bid from Wasatch Constructors for reconstruction of I-15 at a price tag of \$1.325 billion. However, with enhancements and changes in the program, the total cost of the I-15 project is now \$1.59 billion or \$230 million higher than the original estimate of \$1.36 billion. In a show of support for rural projects, the Governor, along with legislative leadership, decided to finance the additional \$230 million without decreasing funding for other projects.

The ten year funding plan was modified in 1998 to accommodate the increased costs of I-15. However, changes have already happened. Just recently, the governor has recommended that the West Davis Highway portion of the Legacy Parkway scheduled for construction this year be delayed until FY 2004. The governor recommends that some funds continue to be used to purchase the right-of-ways that intersects all three alignment proposals of the West Davis Highway. Recognizing the extreme traffic needs in this area, the governor has also recommended that an additional lane be added on each side of I-15 from North Salt Lake to the junction of U.S. 89 in Farmington. This will be an additional project costing \$50 million and would be completed in the summer of year 2000.

General Fund. The funding package was modified significantly by the 1998 legislature. The plan keeps its original General Fund commitment of \$85 million for fiscal year 1999 growing by \$5 million annually through fiscal year 2004 and by \$10 million annually through fiscal year 2007. In addition, the legislature decided to add a straight \$25 million annually through fiscal year 2007. Total General Fund contributions through fiscal year 2007 are now estimated to be \$1.388 billion which is \$209 million more than the plan adopted by the 1997 legislature. In addition, beginning on January 1, 2001, the state's portion of the sales tax used for Olympic facilities will go to the Centennial Highway Fund.

Fuel Taxes and Vehicle Registration Fees. The 1998 legislature left this area unchanged. The Centennial Highway Fund is still to receive collections from a five cent per gallon motor fuels tax and a half cent per gallon tax formerly collected for the Underground Storage Tank program. A surprise has been the significant rise in special fuel (mostly diesel) tax collections since the collection was changed from the pumps to the refinery level. In the first year, collections rose 56%. Some of this is attributable to the increase in fuel tax, however, motor fuel taxes had the same increase and only rose 29%. Apparently, this change has greatly reduced tax evasion. Increased registration fees for vehicles and trucks continue to be included in the Centennial Highway Fund.

Bonding. In Senate Bill 2 of the 1998 legislative session entitled "1998 Highway Financing", the legislature authorized bonding of up to \$240 million. The bill stated that if federal funds were allocated to the Centennial Highway Fund in FY 1999, this bonding was to be

reduced by the amount allocated up to \$50 million. In June 1998, the state bonded for \$210 million and received another bond premium. A bond premium amount of \$8.7 million was allocated to the Centennial Highway Fund.

Since 1997, the state has borrowed \$550 million in general obligation bonds for highways, and should have outstanding \$240 million in commercial paper. Currently, the interest rate the state is earning on the unspent bond and commercial paper funds is greater than the interest rate owed on the borrowed money, thus creating arbitrage earnings. The state will spend the bond proceeds and commercial paper in less than two years, thus avoiding any federal arbitrage penalties.

Federal Funding. The Centennial Highway Fund is scheduled to get additional federal funding over and above what Utah normally would receive. The governor and legislators hoped that the federal government would give Utah extra money due to the reconstruction of a major interstate and due to preparations for the 2002 Winter Games.

For state Fiscal Year 1998, UDOT received a little over \$11 million in additional federal funding. In the fall of 1998, Congress finally passed the Transportation Equity Act for the 21st Century. This bill should give more federal money to Utah with the excess over previous years allocated to the Centennial Highway Fund.

Original estimates had this extra money at between \$65 - \$75 million per year. However, with obligation authority, this amount has significantly decreased. Obligation authority is the authority to spend money that has been authorized. In other words, each year Congress authorizes the amount of federal money Utah is to receive, however, the only amount which actually comes to Utah is the amount that is obligated. This amount is typically lower sometimes by as much as 20% than the authorized amount. The federal money also comes with strings attached as to where it can be spent. With this in mind, UDOT estimates that Utah will receive between \$20 and \$30 million additional federal funds each year that can go into the Centennial Highway Fund. A far cry from the \$50 million estimated to be received in FY 1999 and the \$100 million hoped for in FY 2000 through 2003.

However, Congress also gives the Secretary of Transportation discretionary funding that he can give to states as he sees fit. Utah received approximately \$90 million of discretionary funding in federal fiscal year 1998 to help with I-15 reconstruction and Olympic related projects. Of this amount, approximately \$62 million will go into the Centennial Highway Fund. The rest of the funds will also go for highway projects not included on the Centennial list. Hopefully, Utah will receive additional federal discretionary funding for the next couple of years.

The state will also receive money for high priority projects. The amount Utah is scheduled to receive over the next six years is \$80.7 million with \$8.8 million in the first year and \$12.0 million in the next year. These projects however, are not part of the Centennial project list and will not count towards the \$450 million of federal funding contained in the ten year plan.

Other Funding and Department Efficiencies. Because of the

proposed delay of the West Davis Highway, funding from local or private entities will also be delayed. The governor has indicated that he would not like the West Davis Highway to be a toll road. This may eliminate almost entirely the amount of financing from local or private sources.

Beginning FY 1999, the legislature reduced the amount of department efficiencies from \$20 million per year to \$6 million per year through fiscal year 2007. However, now these funds are to be a transfer of funds from the operations of UDOT, to the Centennial Highway Fund.

Additional Costs of I-15 Reconstruction

The estimated costs of I-15 reconstruction increased \$230 million due to enhancements and changes in the program. These changes bring the total cost to nearly \$1.6 billion. These changes were presented by the Utah Department of Transportation to the Executive Appropriations Committee on April 22, 1997 and can be summarized as follows:

Changes in scope that affected the design/build bid proposal amount (millions of dollars):

\$(10.0)	Cooperative development of drainage facilities with local governments
30.4	Improved structure and pavement strength and durability/maintainability
76.5	Highway design refinements including aesthetics, lighting, etc.
22.5	Utility relocations (D/B contract costs)
(40.0)	Reduction due to owner controlled insurance program
50.7	Embankment stabilization and subsurface consolidation
13.0	Construction options (shorten viaducts, underpass at 10000 South, etc.)

Changes in the total program amount (millions of dollars):

\$20.0	Owner controlled insurance program
30.5	Payments for utility relocations, for railroad grad separation projects and for cooperative drainage development projects with local governments
(31.6)	Reductions (preliminary engineering costs incurred prior to Centennial Fund)
18.4	Program management, including design and construction oversight, contract administration, utility and railroad coordination, public information, right-of-way program implementation, etc.

Potential award fee (millions of dollars):

\$50.0	Total potential award (incentive) fee contractor can earn
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Total change in program costs (millions of dollars):

\$230.4

Problems and Alternatives

Problems. The same problems that existed last year exist this year but perhaps in differing degrees. Certainly the extra cost of the I-15 project along with the accelerated cash flow needs of Wasatch Constructors has put a huge strain on the ten year financing plan. However, these needs have, for the most part, been met by adjusting the ten year plan to include large amounts of borrowing.

This has pushed the bonding capabilities of the state closer to the bonding limits than desired and has also put a strain on the state to maintain its Triple A bond rating.

Perhaps the most serious problem is the unpredictable nature of federal funding. The state is counting on \$450 million in federal aid. The state is hopeful that the Secretary of Transportation will continue to give discretionary funding to the state for the next several years. Otherwise, the ten year funding plan will have to be significantly modified.

Another problem is that legislators in each area that have projects are very concerned that projects in their areas get done. The opportunity to delay or eliminate projects is politically unsuitable. In fact, some projects have been moved forward increasing the cash flow strain of the ten year plan.

Alternatives. If the amount to be received from all sources of projected revenue were known, the ability to plan for the future would be far less complicated. For example, additional federal discretionary aid that Utah may receive in the next couple of years is a major uncertainty. The legislature will need to develop a new plan without knowledge of how much the state may receive from discretionary sources.

Assuming federal dollars will come in at the estimated amount of \$450 million, the financing plan for FY 2000 will still need to be decided. According to the plan adopted by the legislature, \$84 million in additional General Obligation bonding is intended to balance the financing plan. If the legislature is hesitant due to the amount of outstanding debt the state already has, the most likely other alternatives would be the following: 1) increase transportation related taxes or fees, 2) increase allocation of General Fund to transportation, 3) eliminate other projects on the Centennial projects list, 4) delay the timing of some of the other projects on the Centennial projects list, or 5) a combination of the above.

If no additional financing is adopted in the next legislative session, there will not be enough financing in the current plan to meet Wasatch Constructors' cash flow needs and keep them on schedule. UDOT estimates that under the current funding plan, money to pay Wasatch Constructors will run out in spring of the Year 2000. This may result in a breach of contract or significant penalties to the state. The state would have to delay many projects that are slated for construction in the next couple of years.

If the bonding amount were increased, projects could remain on schedule only if other sources of funding came through. If federal revenue projections fall short, additional measures will have to be taken.

Conclusion

The governor and the legislature again have some major decisions to make about financing for I-15 and other state projects on the Centennial projects list this year. Whatever plan changes are adopted, there is little doubt that additional decisions will have to be made in the future. Projected revenues and expenditures are fluid. Already, the timing of projects, cost estimates of projects, cash needs, estimates of revenues, bond interest rates, etc. have changed, some significantly, since the 1998 General Legislative

Session. The revised funding plan submitted by the Fiscal Analyst to the Executive Appropriations Committee in June 1997 already contains outdated information.

This ten year plan, while addressing many of Utah's critical infrastructure needs, will by no means complete all transportation projects vital to Utah. Critical areas, such as the reconstruction of I-15 north of 500 North, and Interstate 80 from Parley's Canyon to downtown Salt Lake, are not included in full amount on the Centennial projects list. Responsible long-term planning necessitates a ten-year plan; however, the plan must be revisited each year.

Transit Overview

The Utah Transit Authority (UTA) was incorporated on March 2, 1970 under the authority of the Utah Public Transit District Act of 1969 for the purpose of providing a public mass transportation system for Utah communities. Utah Transit Authority is a political subdivision of the State of Utah. It is not a state agency. Oversight of UTA is exercised by a 15-member Board of Directors appointed by each municipality or combination of municipalities (or county) that have annexed to the Authority and that pay a 1/4 of one percent local option sales tax to support its operation. Through UTA's enabling legislation, the Utah State Legislature determines the number of board members and their method of appointment. The board is an oversight authority that sets agency policy and provides guidance for the operation of UTA.

Responsibility for the operation of the Authority is held by the General Manager in accordance with the direction, goals and policies of UTA's Board of Directors. The General Manager has charge of the acquisition, construction, maintenance and operations of the facilities of the Authority and the administration of its business affairs.

The UTA system began operation in Salt Lake County on August 10, 1970 with a fleet of 67 buses. UTA currently operates 550 vehicles in a 1,400 square mile service district that reaches through six counties from Brigham City on the north to Payson on the south, and from the Cottonwood Canyon ski areas to Grantsville. About 75% of the population of the state of Utah reside in the service district that is, geographically, one of the largest in the nation.

Approximately 1,400 people are currently employed by UTA. Nearly two-thirds of those employees are bus operators with the remainder split evenly between maintenance/operations support personnel and administrative employees. In addition, UTA operates six state-of-the-art maintenance facilities to service its bus and TRAX rail vehicles.

Operational Funding (1998 Financial Statement)

A majority (75%) of UTA's operational funding is received from the 1/4 of one percent local option sales tax authorized by counties and municipalities in the district. The balance of operating funds come from passenger fares (18%), federal assistance (3%), and the balance from miscellaneous sources including advertising, investments and earned interest.

UTA's 1999 operating budget is \$79.9 million, and this reflects a 10% increase over the 1998 operating budget. The significant items

that affect the increase are: preparation for rail start-up and operations, increases in paratransit services, materials cost, and labor adjustments.

Capital Funding (1997-98 program plus FY99 - 03)

UTA has an ongoing capital program that provides funds for fleet replacement, selected maintenance activities, fleet expansion, park and ride lots, transfer centers and other programs and projects. Fleet needs average approximately \$15 million each year to replace and expand bus services in the district. In 1997, federal contributions for capital projects (including North/South TRAX) was \$50.63 million. In 1996, those funds totaled \$24.64 million. Through 2003, UTA, in cooperation with the Wasatch Front Regional Council and the Mountainland Association of Governments has adopted a program that averages capital expenditures of \$18 million per year for new vehicles, services, facilities, rideshare activities and planning projects. In addition, UTA will spend an average of \$50 million per year on rail construction for the next several years. UTA's capital budget for 1999 is \$233 million, with the expectation of spending \$132 million of it in the year 1999. The largest items are: \$116 million for the North/South TRAX project, \$30.0 million for buses, \$4.9 million for information technology and communications projects.

TEA 21 Opportunities

In May, 1998, the United States Congress passed the Transportation Equity Act for the 21st Century (TEA 21) that authorizes federal expenditures for transportation projects through 2003. TEA 21 authorizes Congress to appropriate 100% federal funding for the following UTA projects provided that 1) the projects have a "stable and reliable" source of local operating funds, and 2) the projects are operational prior to the 2002 Olympic Winter Games. The total authorization is \$640 million and includes funding for the following:

- North/South TRAX light rail (remaining balance)
- West/East TRAX light rail
- Intermodal Centers
- New Buses
- Park and Ride lots

TEA 21 also authorizes Congress to appropriate up to 80% of the capital costs for design, engineering and construction light rail extensions and commuter rail provided that non-federal funds provide the remaining balance of capital costs and that there are ongoing operational funds committed to the projects.

TRAX North/South

Construction is underway on UTA's 15-mile North/South TRAX line. The line runs from the Delta Center in downtown Salt Lake City to 100th South in Sandy. It is scheduled to be in operation by March 2000. At present, a majority of the 23 vehicle fleet are at the TRAX maintenance facility in Midvale and are undergoing acceptance testing and test runs. Project construction is 75% complete and on budget.

The total capital cost of the North/South line is \$312.5 million. The Federal Transit Administration agreed in 1996 to provide \$241.4 million in capital funds to combine with UTA's \$71.1 million in local funds. Capital costs include all trackwork, vehicles, stations, park and ride lots and electrical systems. Through 1998, approximately \$200 million of the federal shared had been appropriated. The agreement calls for the remainder of the federal funds to be appropriated by FY2000.

TRAX West/East

The proposed 11 mile West/East (Airport to University of Utah) rail extension is currently in its final stages of environmental analysis and in early engineering analysis. To take advantage of federal funding opportunities, UTA, the Wasatch Front Regional Council and Salt Lake City are working as quickly as possible to address funding and design issues. Several partners have participated in funding the project studies. They include the Federal Highway Administration, the Salt Lake City Redevelopment Agency, The Church of Jesus Christ of Latter-Day Saints Foundation and UTA. The project will be a Design/Build approach with construction completed in late 2001 for operation in 2002.

Other Potential Projects (2002 and beyond)

Several potential projects are currently under study throughout the region. A West Valley alignment, a West Jordan rail spur and a Draper TRAX extension are being examined for future implementation. In addition, the Wasatch Front Regional Council and the Mountainland Association of Governments are joining UTA in a study of regional commuter rail services. A recent feasibility study is being expanded to begin a detailed analysis of alternatives in a 120 mile corridor along the Wasatch Front. Those alternatives include commuter rail, commuter bus and freeway improvements. The study will develop an implementation plan, operation scenarios, property requirements and capital costs. *

Table
Plan Adopted by the Legislature, 1997 General Session
Ten Year Funding Option for Transportation Project Needs (Thousands of Dollars): Fiscal Year 1997 to Fiscal Year 2007

Available Funding Sources	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Beginning Balances		(\$8,634)	\$366	\$192	\$433	\$252	\$93	\$441	\$113	\$161	\$134	
State Sources												
General Fund	110,000	85,000	90,000	95,000	100,000	105,000	110,000	120,000	130,000	140,000	150,000	1,235,000
Base Adjustments		30,000	31,800	33,708	35,730	37,874	40,147	42,556	45,109	47,815	50,684	395,424
Sales Tax Reduction (one Eighth Cent)		(34,250)	(36,305)	(38,483)	(40,792)	(43,240)	(45,834)	(48,584)	(51,499)	(54,589)	(57,865)	(451,442)
Less: Debt Service Interest		(11,554)	(18,632)	(25,477)	(32,965)	(32,965)	(25,020)	(22,037)	(18,088)	(13,174)	(7,207)	(207,119)
Less: Debt Service Principal				0	0	(135,800)	(51,000)	(67,500)	(84,000)	(102,000)	(121,274)	(561,574)
Net General Funds Available	110,000	69,196	66,863	64,748	61,973	(69,130)	28,292	24,434	21,521	18,052	14,339	410,288
New Transportation Funds												
Fuel Tax Change (UST Shift)		5,750	5,923	6,100	6,283	6,472	6,666	6,866	7,072	7,284	7,502	65,917
Fuel Tax Increase (5.0 Cents)		57,500	59,225	61,002	62,832	64,717	66,658	68,658	70,718	72,839	75,024	659,173
Diesel Tax Collection Change		10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	114,639
Less B & C Allocation (25% on above changes)	0	(18,313)	(18,862)	(19,428)	(20,011)	(20,611)	(21,229)	(21,866)	(22,522)	(23,198)	(23,894)	(209,932)
Registration Increase Autos	0	14,000	14,420	14,853	15,298	15,757	16,230	16,717	17,218	17,735	18,267	160,494
Registration Increase (Commercial Carriers)		2,100	2,163	2,228	2,295	2,364	2,434	2,508	2,583	2,660	2,740	24,074
Net Transportation Funds Available	0	71,038	73,169	75,364	77,625	79,953	82,352	84,822	87,367	89,988	92,688	814,365
Sales Tax Revenue (Olympics 1/64 cent)					4,200	4,452	4,719	5,002	5,302	5,621	5,958	35,254
Local Match/Toll Road		7,000	7,210	7,426	7,649	14,000	14,420	14,853	15,298	15,757	16,230	119,843
Investment Income	366	2,171	2,074	2,051	2,136	665	665	661	658	656	652	12,755
General Obligation Bonds												
Par Amount of Bond Issued		197,500	121,000	117,000	128,000							563,500
Less Issuance Costs		2,105	1,290	1,247	1,364							6,006
Subtotal Bonds Proceeds		195,395	119,710	115,753	126,636							557,494
Subtotal State Sources	110,366	344,800	269,026	265,342	280,219	29,941	130,447	129,773	130,148	130,073	129,866	1,950,000
New Federal Funds	0	50,000	100,000	100,000	100,000	100,000	0	0	0	0	0	450,000
Total Project Funds Available	110,366	386,166	369,392	365,533	380,652	130,193	130,541	130,213	130,261	130,234	130,000	2,400,000
Capital Expenditures												
Project Construction Costs	119,000	405,800	389,200	385,100	400,400	150,100	150,100	150,100	150,100	150,100	150,000	2,600,000
Departmental Efficiencies		(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(200,000)
Net Capital Expenditures	119,000	385,800	369,200	365,100	380,400	130,100	130,100	130,100	130,100	130,100	130,000	2,400,000
Projected Ending Balances	(8,634)	366	192	433	252	93	441	113	161	134	(0)	
Total Capital Expenditure & Ending Balance	\$110,366	\$386,166	\$369,392	\$365,533	\$380,652	\$130,193	\$130,541	\$130,213	\$130,261	\$130,234	\$130,000	\$2,400,000
Projected Ending Principal Balances												\$1,926

Source: Plan adopted by the legislature, 1997 General Session

Table
Plan Adopted by the Legislature, 1998 General Session
Ten Year Funding Option for Transportation Project Needs (Thousands of Dollars): Fiscal Year 1997 to Fiscal Year 2007

Available Funding Sources	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Beginning Balances		\$44,390	\$163,287	\$1,062	\$160	\$560	\$140	\$2,896	\$59,884	\$78,633	\$109,917	
State Sources												
General Fund	110,000	78,000	85,000	90,000	95,000	100,000	105,000	110,000	120,000	130,000	140,000	1,163,000
Base Adjustments		0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	225,000
Less: Debt Service Interest		(27,274)	(36,406)	(40,873)	(40,873)	(38,393)	(32,997)	(27,765)	(25,744)	(23,613)	(21,367)	(315,305)
Less: Debt Service Principal				0	(62,000)	(129,875)	(122,690)	(40,715)	(42,934)	(45,260)	(47,735)	(491,209)
Net General Funds Available	110,000	50,726	73,594	74,127	17,127	(43,268)	(25,687)	66,520	76,322	86,127	95,898	581,486
New Transportation Funds												
Fuel Tax Change (UST Shift)	0	5,750	5,923	6,100	6,283	6,472	6,666	6,866	7,072	7,284	7,502	65,918
Fuel Tax Increase (5.0 Cents)		57,500	59,225	61,002	62,832	64,717	66,658	68,658	70,718	72,839	75,024	659,173
Diesel Tax Collection Change		10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	114,639
Less B & C Allocation (25% on above changes)	0	(18,313)	(18,862)	(19,428)	(20,011)	(20,611)	(21,229)	(21,866)	(22,522)	(23,198)	(23,894)	(209,932)
Registration Increase Autos	0	14,000	14,420	14,853	15,298	15,757	16,230	16,717	17,218	17,735	18,267	160,494
Registration Increase (Commercial Carriers)		2,100	2,163	2,228	2,295	2,364	2,434	2,508	2,583	2,660	2,740	24,074
Departmental Efficiencies		13,413	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	67,413
Net Transportation Funds Available	0	84,451	79,169	81,364	83,625	85,953	88,352	90,822	93,367	95,988	98,688	881,779
Sales Tax Revenue (Olympics 1/64 cent)					4,200	4,452	4,719	5,002	5,302	5,621	5,958	35,254
Local Match/Toll Road		2,829	2,171	15,000	60,000	55,000	0	0	0	0	0	135,000
Investment Income	720	32,691	3,497	1,530	923	665	691	744	1,057	1,199	1,397	45,114
General Obligation Bonds												
Par Amount of Bond Issued		340,000	190,000	84,000	0							614,000
Bond Anticipation Notes		260,000		0								260,000
Less Issuance Costs		2,501	1,180	522	0							4,203
Subtotal Bonds Proceeds		597,499	188,820	83,478	0	0						869,797
Subtotal State Sources	110,720	812,586	510,538	256,561	166,035	103,362	68,215	165,984	235,932	267,568	311,858	2,548,430
New Federal Funds	0	13,958	50,000	100,000	100,000	100,000	86,042	0	0	0	0	450,000
Total Project Funds Available	110,720	826,544	560,538	356,561	266,035	203,362	154,257	165,984	235,932	267,568	311,858	2,998,430
Capital Expenditures												
I-15 Construction	49,227	592,372	475,953	277,751	160,525	34,172	0	0	0	0	0	1,590,000
Statewide Construction	17,103	70,884	83,523	78,650	104,950	169,050	151,361	106,100	157,300	157,650	143,429	1,240,000
Net Capital Expenditures	66,330	663,256	559,476	356,401	265,475	203,222	151,361	106,100	157,300	157,650	143,429	2,830,000
Projected Ending Balances	44,390	163,288	1,062	160	560	140	2,896	59,884	78,632	109,918	168,429	168,429
Total Capital Expenditure & Ending Balance	\$110,720	\$826,544	\$560,538	\$356,561	\$266,035	\$203,362	\$154,257	\$165,984	\$235,932	\$267,568	\$311,858	\$168,429
Projected Ending Principal Balances												\$382,791

Source: Plan adopted by the legislature, 1998 General Session

Table

Ten Year Funding Option for Transportation Project Needs (Thousands of Dollars): FY 1997 to FY 2007

Funding Source	FY 1997 to FY 2007*	FY 1997 to FY 2007**
General Fund	\$1,178,982	\$1,388,000
New Transportation Funds	814,365	881,779
Sales Tax Revenue	35,254	35,254
Local Match/Toll Road	119,843	135,000
Investment Income	12,755	45,114
Bonds	563,500	614,000
Federal Funds	450,000	450,000
Debt Service Interest	207,119	315,305
Debt Service Principal	561,574	491,209
Bond Issuance Costs	6,006	4,203
Bond Outstanding at FY 2007	1,926	382,791

* This is the plan adopted by the legislature in the 1997 General Session

**This is the plan adopted by the legislature in the 1998 General Session

Sources: Utah Legislature, 1997 and 1998 General Sessions;
Legislative Fiscal Analyst's Office

* Economic Impacts of the Salt Lake City International Airport

Overview

Acting as a catalyst for business expansion, job growth, and the development of travel-sensitive industries, The Salt Lake City International Airport¹ is critical to Utah's economic well-being and cultivation as a thriving regional metropolis. In 1998, more than 21.1 million passengers and 253 thousand tons of air cargo will pass through Salt Lake City via the Salt Lake City International Airport (Airport²). In 1997, the Airport was the 29th largest airport in the nation in terms of cargo volume processed. Also in that same year, the Airport ranked 23rd in the nation and 38th in the world in total passengers served. For over a decade the number of passengers using the Airport and the volume of air transport cargo has increased at rates more than double those reported nationwide.

Economic Impact of Airport Operations

Despite heavy demands, the Airport has provided accessible and efficient air transport services to Utah residents and businesses. To achieve this success, the Airport spends millions of dollars and employs thousands of people each year to provide a variety of aviation related services, products and facilities. In 1997, more than 12,500 people were directly engaged in air service-related activities in Utah at the Airport. Airport-related spending for operations totaled almost \$934 million-\$502.5 million in payroll expenses and \$431.2 million for non-wage goods and services.

This Airport spending benefits Utah's economy in myriad ways—directly, indirectly, induced, and fiscally. The direct impact of the Airport can be measured in the wages, salaries and supplements paid by the Airport to its employees. The indirect impacts reflect the wages, salaries and benefits paid by suppliers as they satisfy the Airport's purchase requirements. Induced impacts measure the effects of subsequent spending by the employees of these suppliers as they purchase goods and services from secondary and tertiary suppliers. Fiscal benefits accrue to the state from taxes paid on earnings generated by Airport activities.

Through direct, indirect and induced economic effects, the Airport's operating expenditures generated almost \$551.5 million in earnings for Utah households and supported 19,300 jobs in the Utah economy during 1997.³ Its fiscal impacts further show the economic importance of the Airport. In 1997, the Airport's state and local tax impacts were estimated to be \$64.7 million.⁴

¹ This study summarizes a more detailed economic impact study titled "The Economic Impact of the Salt Lake City International Airport", undertaken by the Bureau of Economic and Business Research at the University of Utah in 1998.

² The Airport is owned and operated by Salt Lake City through a separately incorporated authority with its own board. The term "Airport" as used in this study includes the following: (1) Salt Lake City Airport Authority, (2) Airlines that use the Airport's facilities, (3) Concessionaires affiliated with the Airport.

³ The economic impact estimates presented here study utilize a standard tool of regional economic impact analysis known as the "Regional Input-Output Modeling System (RIMS II)". Developed by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

⁴ Fiscal impacts were derived by multiplying total earnings generated from Airport activities by an estimate of the effective state and local tax rate on Utah earnings in 1997. This rate was 11.74 and was obtained by dividing total 1994-1995 state and local tax receipts (\$4.0 billion) by 1994-1995 Utah personal income (\$34.2 billion).

Economic Impact of Maintenance and Expansion

While the Airport has both sustained impressive levels of use and met the ever-increasing demands placed on it, extraordinary pressures have been brought to bear on all Airport facilities over the past several years. Current passenger traffic is nearly triple the volume of that when the existing facilities were designed. And, the most recent baseline aviation forecasts for the Airport show continued expansion. The number of passengers using the Airport by 2015 is projected to reach 44.1 million. Aircraft operations (takeoffs and landings) are projected to grow from 374,209 in 1996 to 636,000 by 2015 and total air cargo is expected to reach 730,700 tons. Although the growth in Airport activity will ultimately encourage improved air service for Utah residents and businesses, it will also tax the capabilities of the Airport's existing infrastructure, creating demand for additional services and facilities.

To maintain and improve its existing facilities, the Airport will spend \$10.0 million per year under its Capital Improvement Program (CIP). However, projected growth in future passenger and air cargo volume will require expansion of the Airport's capacity. Future demands will be met with a major Airport expansion that will include (1) new terminal development and modernization, (2) construction of a north and south concourse, (3) bridge construction, (4) development of various roads, construction of new parking facilities, light rail station, and multi-modal transportation center, (5) construction of an automated people mover system and tunnel, (6) apron and taxi-lane paving and (7) installation of specialized systems integral to the terminal and concourse development including baggage handling and conveyors, aircraft docking bridges, and baggage information systems. The estimated price tag of implementing this Capacity Enhancement Development Plan (CEDP) is \$994.0 million. Work on CEDP began earlier this year and is scheduled to continue through 2007.

Maintaining and constructing Airport facilities will also exert positive economic benefits on Utah's economy. Construction-related spending (including maintaining existing facilities) will generate nearly \$596.0 million in earnings for Utah households while supporting 26,513 jobs statewide. These impacts reflect the total direct, indirect and induced benefits on the state's economy during the 10-year construction cycle.

Again, spending on facility maintenance and construction will affect Utah's fiscal bottom line. The estimated increase in state and local tax revenue is estimated to be almost \$70 million over the course of the construction cycle.

Significance of the Airport in Utah's Economy

To place the economic importance of the Airport in perspective, the Airport activities can be compared to those of other large enterprises within the state. When treated as a single entity, and using direct employment as the measure, the Airport is one of the largest organizations in Utah surpassed only by state government, the University of Utah and Brigham Young University.

Qualitative Impacts of the Airport

The economic impact of the Airport's operations, maintenance and construction spending are measured by increases in earnings for Utah households and employment within the state. What is not measured is the value of quality air service for residents, businesses and organizations located throughout Utah and the broader market area. And, while the economic impacts generated by Airport spending are substantial, its full economic importance is far greater than the earnings, employment and tax revenues presented here. The Airport stimulates growth in ways that simply resist measurement.

A reliable air service network is necessary for Utah to fully participate in the global economy by providing for the expeditious movement of planes, people and cargo to locations throughout the world. It provides a venue by which Utah is able to successfully compete with other states for industrial and commercial development. Access to reliable air service encourages tourism and convention business. Local firms may expand the scope of their marketing efforts as air transportation becomes more accessible. New firms, and businesses located outside Utah may view convenient and expanded air service as sufficient incentives to

locate operations within the state. The value of these benefits cannot be reliably quantified. They are, nonetheless, critical components of the Airport's economic influence.

Conclusion

As one of Utah's major employers, the Salt Lake City International Airport makes significant contributions to the state's economic vitality, spending millions of dollars and employing thousands of people to provide accessible and efficient air service in Utah. Not only is the Airport a catalyst for business enterprise and job growth, it is a vital component of Utah's transportation infrastructure moving millions of people and thousands of tons of cargo each year. While the tangible economic benefits of the Airport can be measured in additional jobs and earnings for Utah households, the Airport provides a plethora of intangible benefits as well. Without quality air service it is doubtful that Utah could have been a candidate to host the Winter Olympics of 2002. State-of-the-art airport facilities are essential to the success of any metropolitan area. Indeed, much of Utah's economic well-being has been and will continue to be dependent upon convenient and quality air transport services. *