1999

# 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
- 

# Figures


**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

# ✻ Contributors

## Governor's Office of Planning and Budget

116 State Capitol / Salt Lake City, Utah 84114 / (801) 538-1027
www.governor.state.ut.us/gopb

Lynne N. Koga, CPA, Director
Brad T. Barber, State Planning Coordinator / Chair, Council of Economic Advisors
Natalie Gochnour, Manager, Demographic and Economic Analysis
Sally Allen, Research Analyst
Christine Auernig, Research Analyst
Joseph Brown, Policy Analyst
Peter Donner, Economist
Scott Frisby, Research Analyst
Camille Hacking, Executive Secretary
Lisa Hillman, Research Analyst
Jamie Jensen, Research Aide
Julie Johnsson, Research Analyst
Pam Perlich, Economist
Ross Reeve, Research Consultant
Keith Rigtrup, Research Analyst
Lance Rovig, Senior Economist

*Chapters:* Executive Summary, Utah Outlook, Utah's Long-Term Projections, Demographics, Gross State Product, Tax Collections, International Merchandise Exports, Social Indicators, Defense/Aerospace, Envision Utah, Transportation Funding

## Utah Department of Community and Economic Development

324 South State, Suite 500 / SLC, UT 84111 / (801) 538-8700
www.dced.state.ut.us

Douglass Jex, Research Director
Carol Brinkerhoff, Utah Travel Council
Karen Sudmeier, Utah Travel Council
*Chapters:* Economic Development Activities; Tourism, Travel, and Recreation

## University of Utah, Bureau of Economic and Business Research

Salt Lake City, Utah 84112 / (801) 581-6333
www.business.utah.edu/BEBR

R. Thayne Robson, Director
Frank Hachman, Associate Director
Boyd Fjeldsted, Senior Research Economist
Jan Crispin-Little, Senior Research Analyst
Jim Wood, Senior Research Analyst

*Chapters:* Construction and Housing, High Technology, Salt Lake International Aiport

## Utah State Tax Commission

210 North 1950 West / Salt Lake City, Utah 84134 / (801) 297-3900
www.tax.ex.state.ut.us
Doug Macdonald, Chief Economist
Tom Williams, Senior Economist
Leslee Katayama, Economist

*Chapter:* Gross Taxable Sales

## Utah Department of Workforce Services

140 East 300 South / Salt Lake City, Utah 84111 / (801) 526-9675
www.udws.state.ut.us

Ron Ahlstrom, Director, Workforce Information Division
Kenneth E. Jensen, Chief Economist
John T. Mathews, Labor Market Economist

*Chapters*: Employment and Wages; Personal Income

## Utah Department of Natural Resources

1594 W. North Temple, Ste 3610 / SLC, UT 84114 / (801) 538-7200
www.nr.state.ut.us
Roger Lee Bon, Geologist, Utah Geological Survey
Jeff Burks, Director, Energy and Resource Planning
F.R. Djahanbani, Senior Energy Analyst
Thomas Brill, Economist
James Galanis, Economist

*Chapter*: Energy and Minerals

## First Security Bank Corporation

79 South Main, #201 / Salt Lake City, Utah 84111 / (801) 246-5582

Kelly K. Matthews, Executive Vice President and Chief Economist

*Chapter:* Prices, Inflation, Cost of Living

## Utah Foundation

10 West 100 South, Ste 323 / SLC, UT 84101-1544 / (801) 364-1837

Michael E. Christensen, Executive Director
Jim Robson, Research Analyst

*Chapters:* Regional/National Comparisons; Federal Expenditures

## Utah State University

Economics Department / Logan, Utah 84322-3530 / (801) 797-2310
www.usu.edu

Bruce Godfrey, Professor of Economics

*Chapter:* Agriculture

## Utah Office of the Legislative Fiscal Analyst

425 State Capitol / SLC, UT 84114-0141 / (801)538-1034
www.le.state.ut.us/lfa/lfa.htm

Andrea Wilko, Fiscal Analyst

*Chapters:* National Outlook, Gross State Product

## Utah Transit Authority

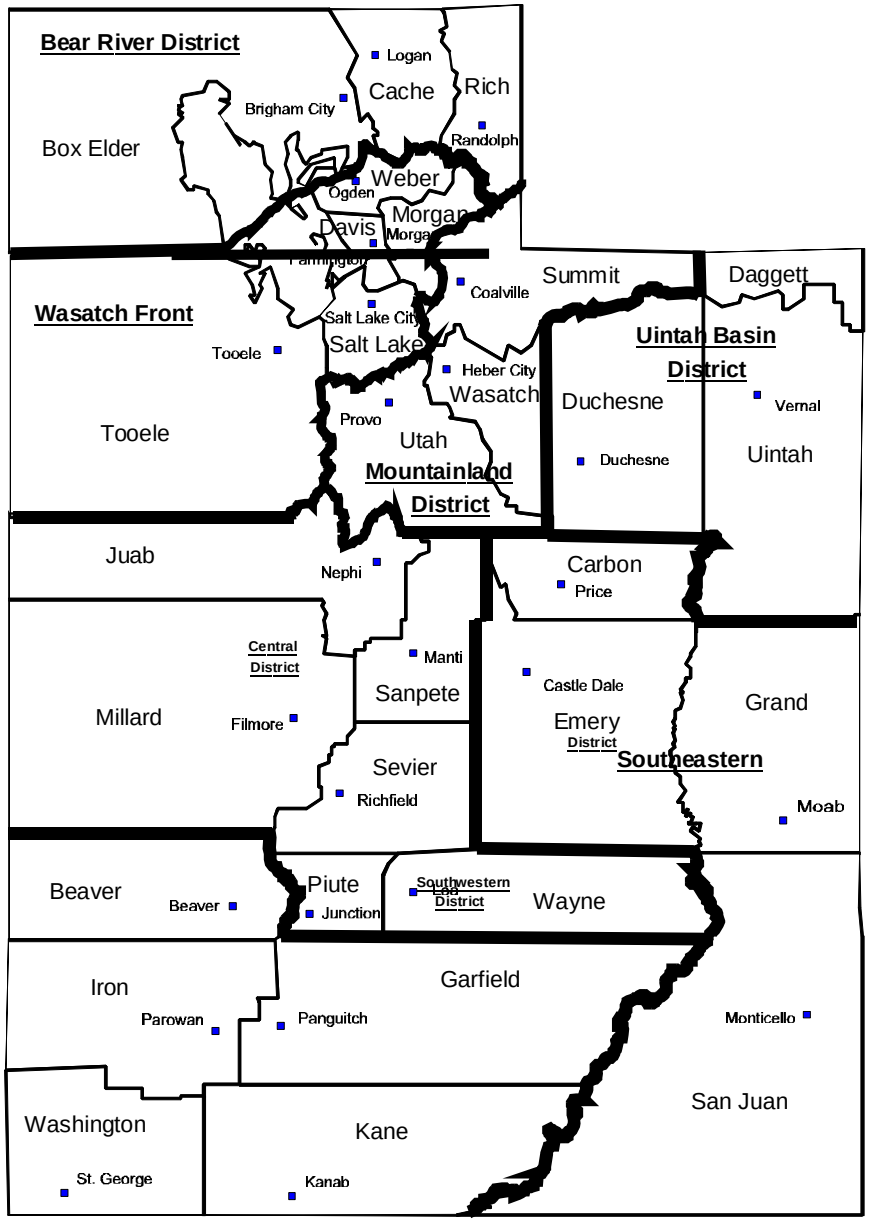
3600 So. 700 West, P.O. Box 30810 / SLC, UT 84130 / (801)262-5626
www.utabus.com

Richard Hodges, Economist

*Chapter:* Transportation Funding

# State of Utah

## Planning Districts, Counties, and County Seats



# ✻ 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 in-migration, 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.

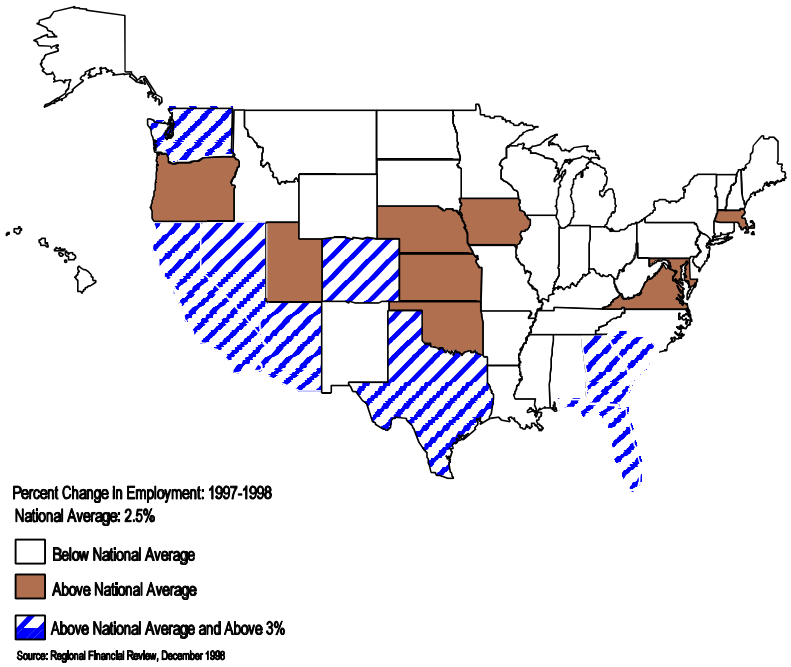
**National Economic Conditions Favorable, but Expected to Slow.** Despite the international economic difficulties, national economic conditions, while slowing, continue to be very favorable. As of December 1998, the current expansion is the second longest in the nation's economic history, starting in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

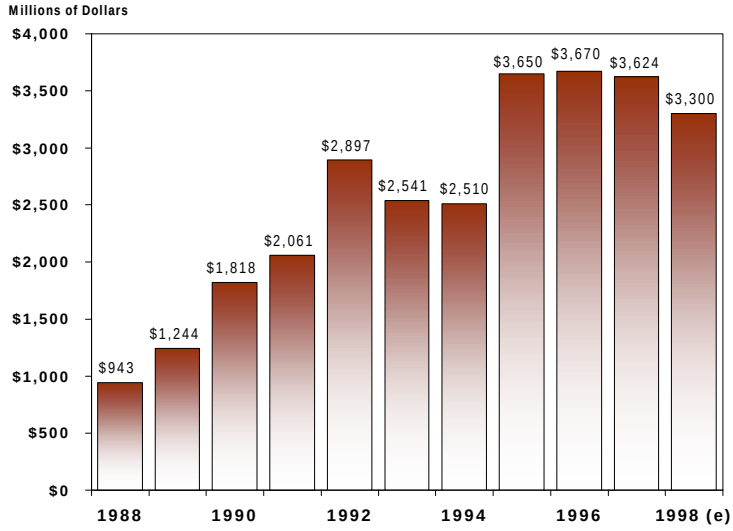
## Factors Causing Reduced Rates of Growth in Utah

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.

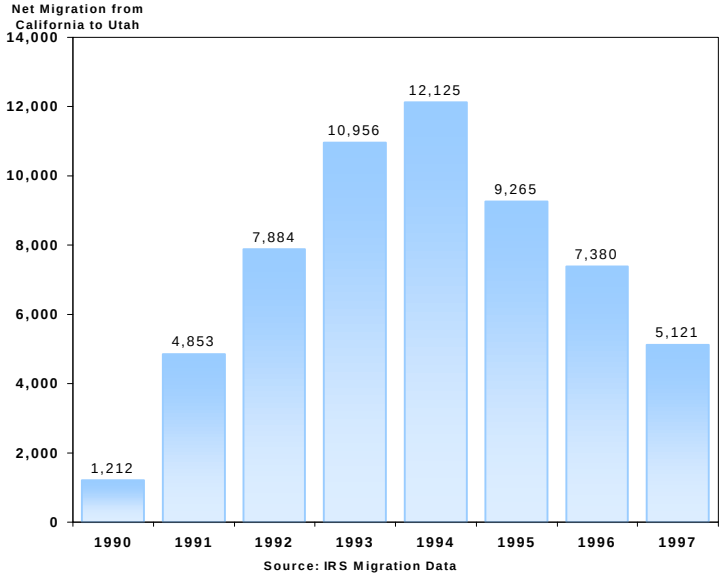
**California's Continued Recovery.** The single most important state to the overall performance of the West, and Utah, is California. California has approximately half of the region's population and more than half of the region's gross state product. Although job growth in California has dropped in recent 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.

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




Source: U.S. Census Bureau, Massachusetts Institute for Social and Economic Research, and Governor's Office of Planning and Budget

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




Source: IRS Migration Data

## 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.

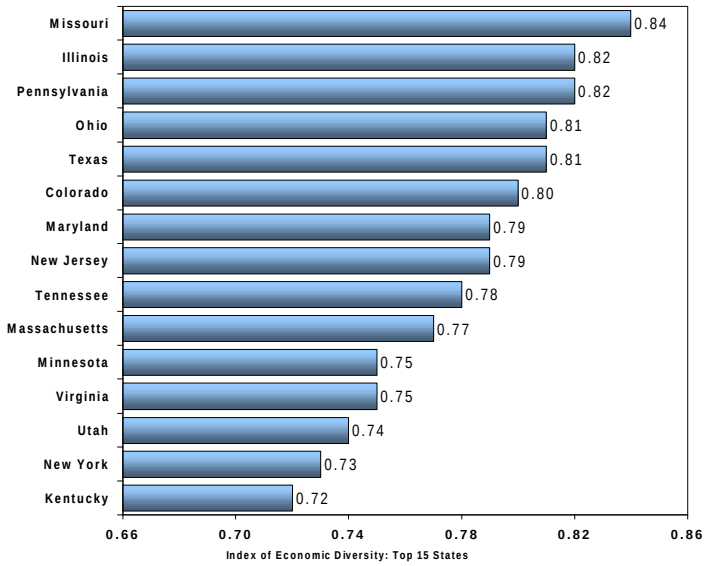
**Economic Fundamentals Remain.** Utah continues to possess good economic fundamentals. These fundamentals include a high quality work force, an attractive business climate, and a well-diversified economic structure. These strengths combine with record-setting investments in the transportation infrastructure 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 work-force 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.

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




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 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.

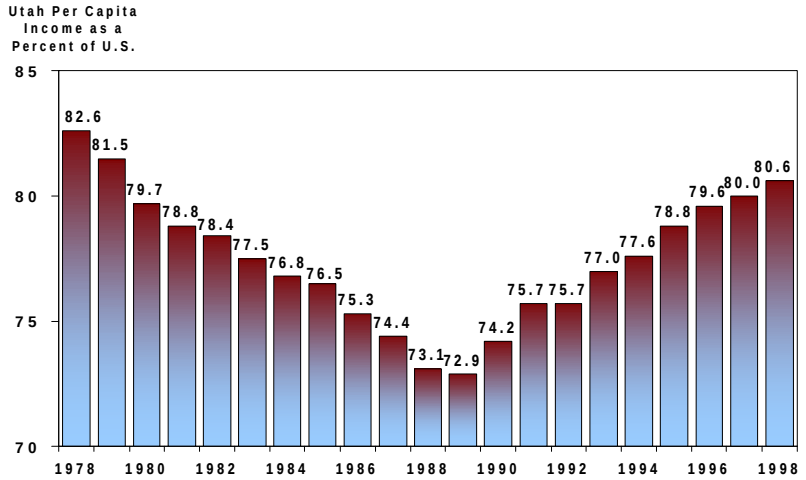
Utah's per capita income, while substantially lower than the U.S. average because of the young population, has shown steady growth relative to the U.S. for the past nine years. In 1989, Utah's per capita income of $20,246 was 72.9% of the U.S. average, but by 1998 had increased to 80%. The state's per 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.

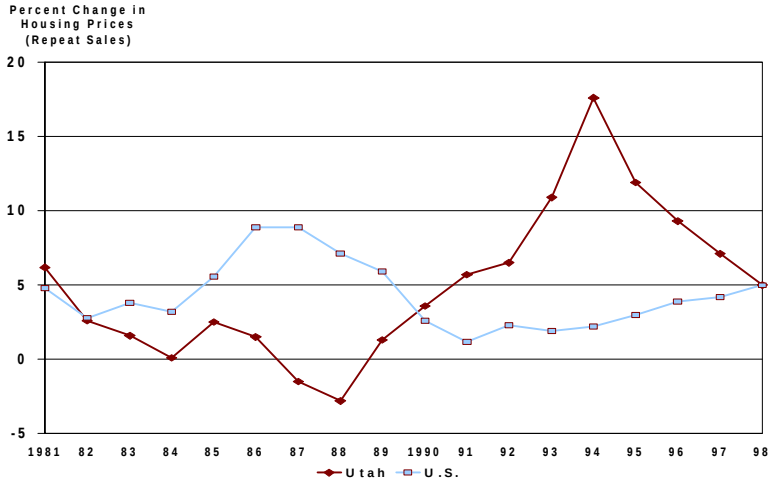
**Modest Growth Helps with Growth Challenges.** Net in-migration to the state has declined dramatically from the recent peak of approximately 23,000 in 1994 to just over 2,000 persons in 1998. Less migration results in lower population growth. Utah's population reached an estimated 2,083,238 persons 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*



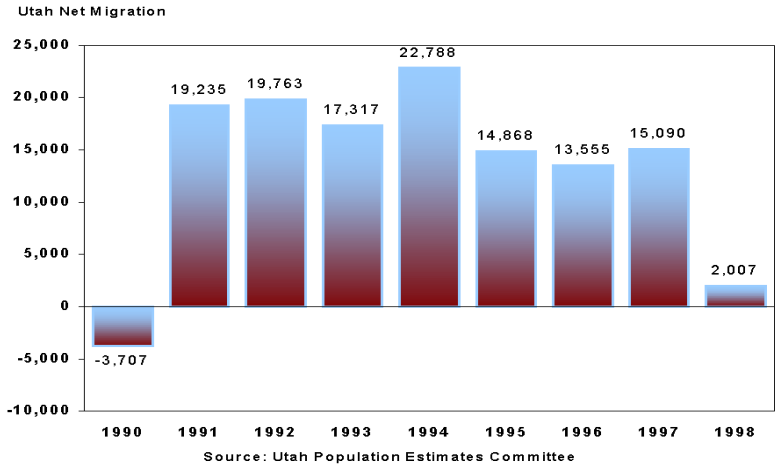

Source: U.S. Department of Commerce, Bureau of Economic Analysis, and Governor's Office of Planning and Budget

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




Source: Office of Federal Housing Enterprise Oversight

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




Source: Utah Population Estimates Committee

## 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.

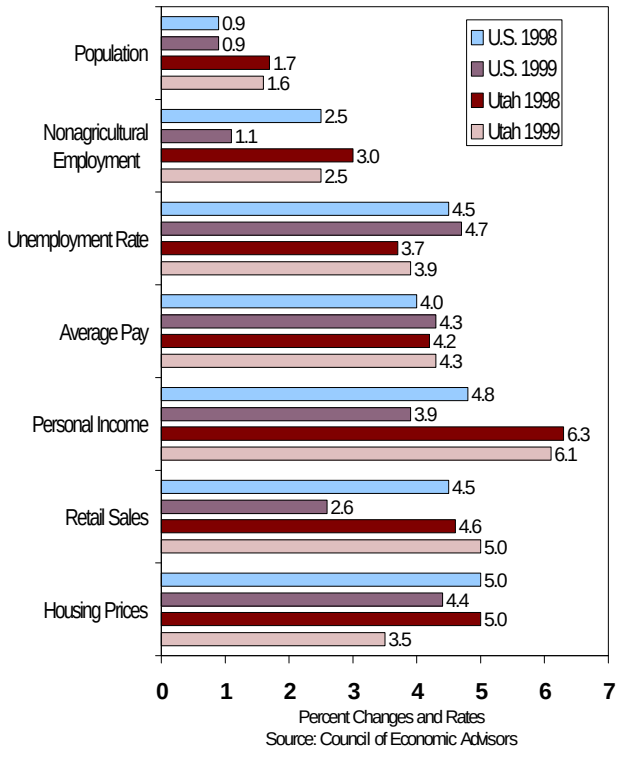
## 1999 Outlook

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***



Source: Council of Economic Advisors

## 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.

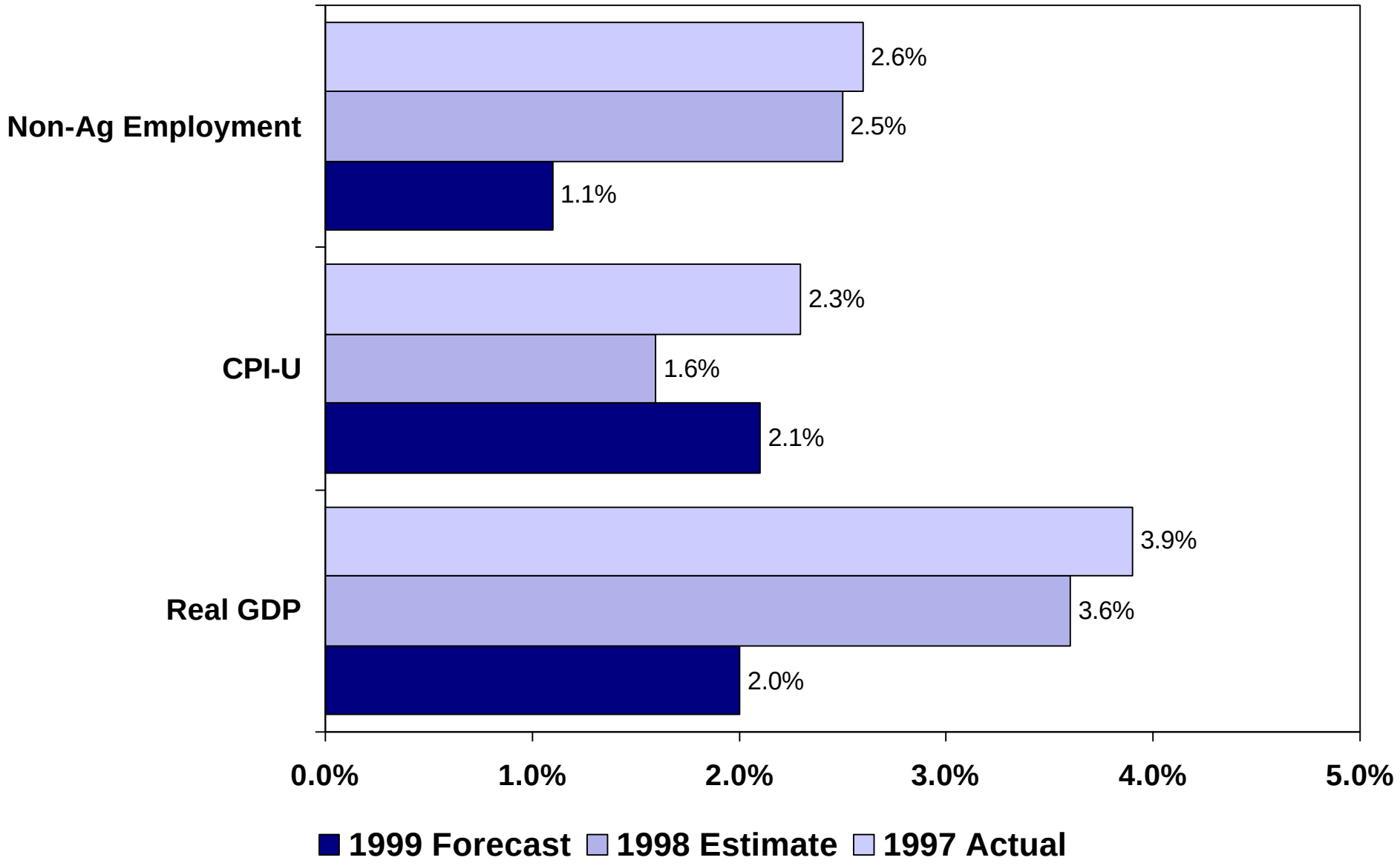
**International Financial Crises.** World economic problems continue to deepen with an estimated 45% of the global economy in recession.[1] These problems are centered in Asia where a serious financial crisis exists. Japan, which comprises 70% of the gross domestic product in the Asian economy, is in 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--Anual 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 in1998 included, but were not limited to layoffs at the following:

| | |
|---|---|
| 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

[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

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 contacting 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.

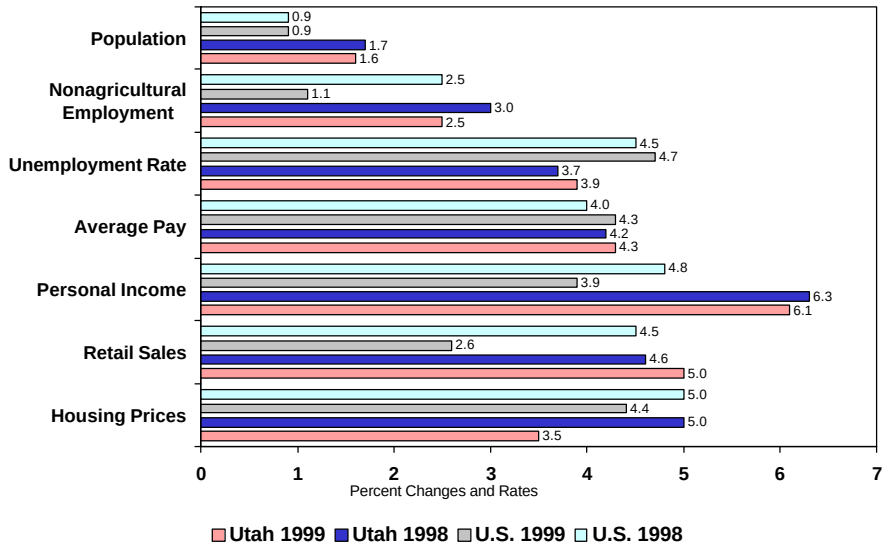
According to 1998 U.S. Census Bureau data, Utah has the third lowest poverty rate among the states. And, Utah ranks seventh in the nation in 10 categories measuring the health and well-being of children.[1]

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. ✻

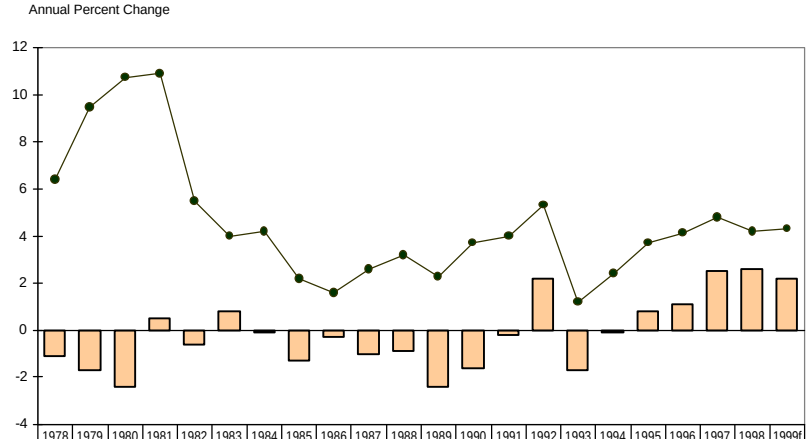
[1] *1998 Kids Count Data Book*, Annie E. Casey Foundation.

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




**Source: Council of Economic Advisors**

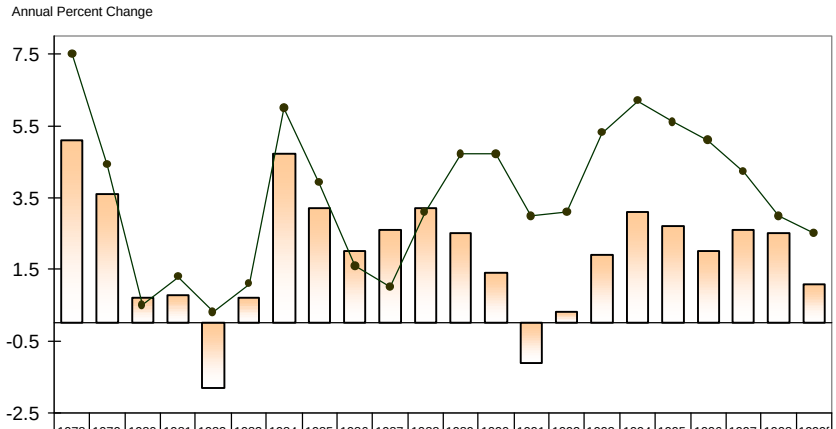
## Utah Actual and Inflation-Adjusted
## Average Annual Pay




| | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999f |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Real Avg Pay | -1.1 | -1.7 | -2.4 | 0.5 | -0.6 | 0.8 | -0.1 | -1.3 | -0.3 | -1.0 | -0.9 | -2.4 | -1.6 | -0.2 | 2.2 | -1.7 | -0.1 | 0.8 | 1.1 | 2.5 | 2.6 | 2.2 |
| Actual Pay | 6.4 | 9.5 | 10.7 | 10.9 | 5.5 | 4.0 | 4.2 | 2.2 | 1.6 | 2.6 | 3.2 | 2.3 | 3.7 | 4.0 | 5.3 | 1.2 | 2.4 | 3.7 | 4.1 | 4.8 | 4.2 | 4.3 |

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

## Utah and U.S. Job Growth Rates




| | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999f |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U.S. Jobs | 5.1 | 3.6 | 0.7 | 0.8 | -1.8 | 0.7 | 4.7 | 3.2 | 2.0 | 2.6 | 3.2 | 2.5 | 1.4 | -1.1 | 0.3 | 1.9 | 3.1 | 2.7 | 2.0 | 2.6 | 2.5 | 1.1 |
| Utah Jobs | 7.5 | 4.4 | 0.5 | 1.3 | 0.3 | 1.1 | 6.0 | 3.9 | 1.6 | 1.0 | 3.1 | 4.7 | 4.7 | 3.0 | 3.1 | 5.3 | 6.2 | 5.6 | 5.1 | 4.2 | 3.0 | 2.5 |

**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 ACTUAL | 1997 ACTUAL | 1998 ESTIMATES | 1999 FORECAST | % CHG 1996-97 | % CHG 1997-98 | % CHG 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 though 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 sector 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 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

[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.

[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.

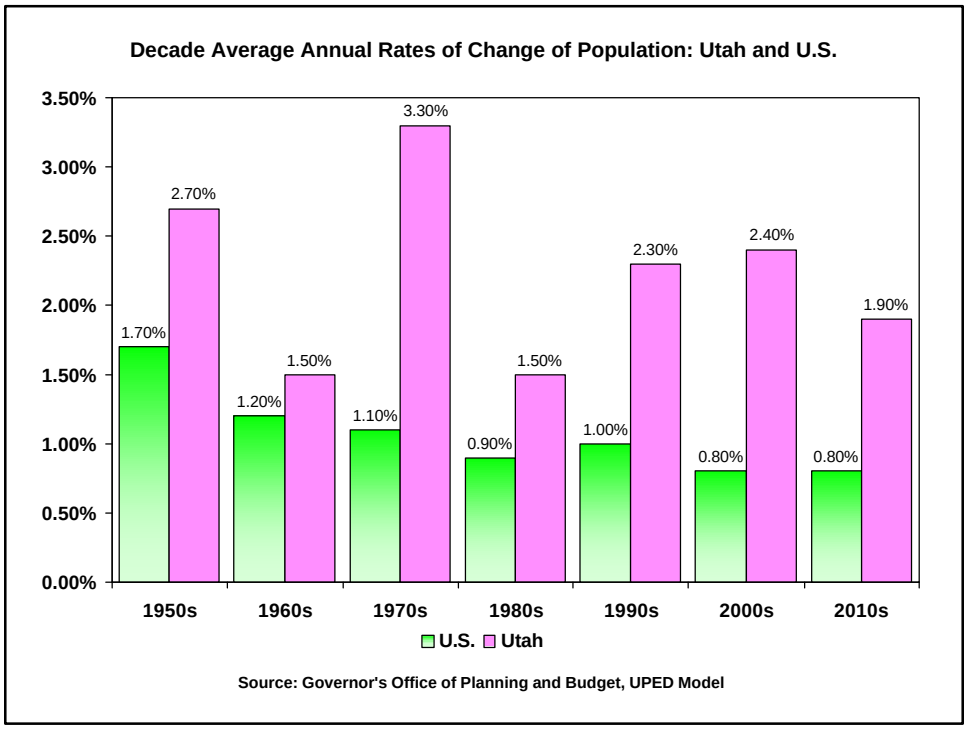
**Households.** Household growth is projected to be more rapid than population growth, although the growth rate differentials vary from county to county. The rankings of counties by growth rates of households in the 1990 to 2020 period differs slightly from that of population. In terms of rates of growth, 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.

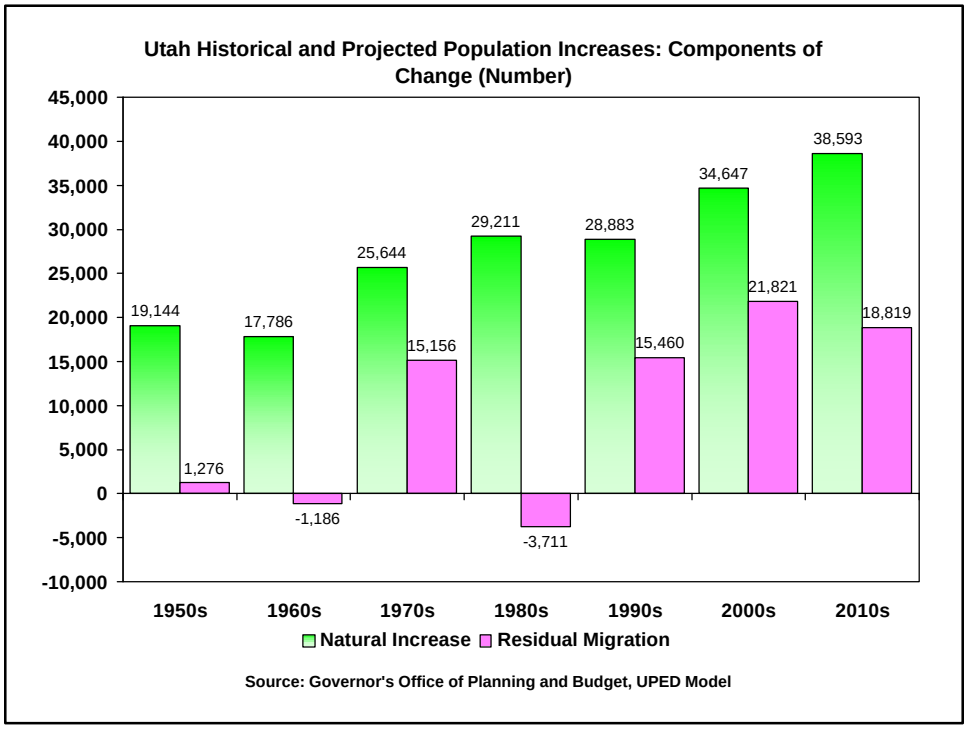
**Employment.** Employment growth is projected to be most rapid from 1990 to 2020 for Washington, Kane, Iron, Summit, Beaver, and Wasatch counties, while the largest number of jobs created in the 1990 to 2020 are projected for Salt Lake, Utah, Weber, Davis, and Washington counties.

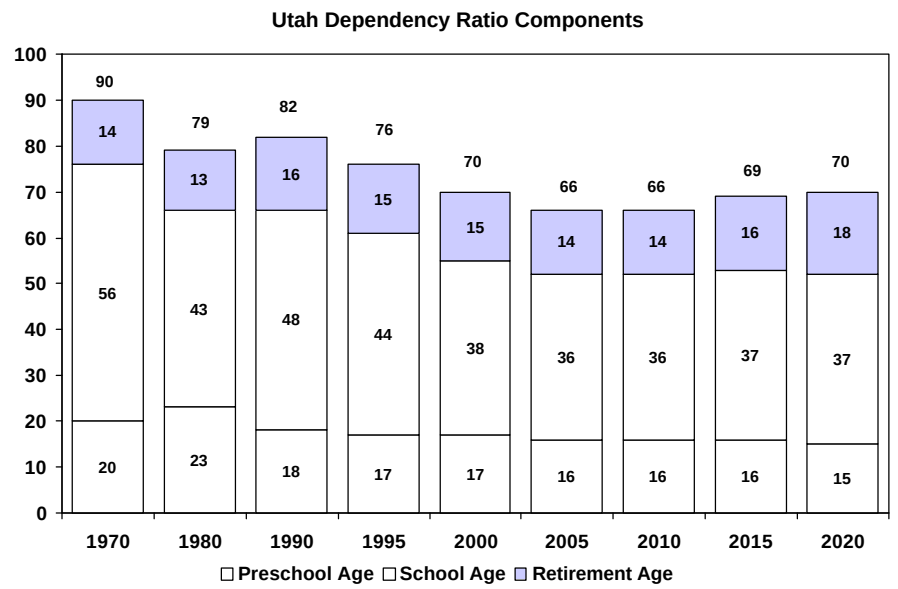
For most counties the Hachman Index is projected to increase from 1980 to 2020. The exceptions are Cache, Box Elder, Beaver, and Piute. The state's largest counties have Hachman Indices closest to one: Salt Lake, Utah, and Weber. Emery county's Hachman Index indicates its sectoral distribution is most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

## Additional Information

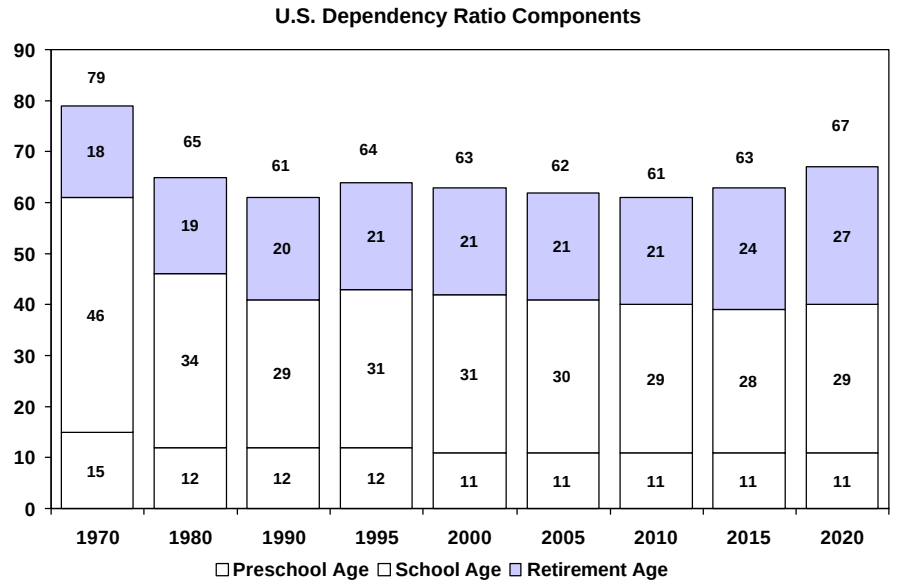
For additional historical and projected economic and demographic information, visit the web site: www.qget.state.ut.us/projections/.


Decade Average Annual Rates of Change of Population: Utah and U.S.
3.50%
3.00%
2.50%
2.00%
1.50%
1.00%
0.50%
0.00%
1.70%
2.70%
1.20%
1.50%
1.10%
3.30%
0.90%
1.50%
1.00%
2.30%
0.80%
2.40%
0.80%
1.90%
1950s
1960s
1970s
1980s
1990s
2000s
2010s
U.S.
Utah
Source: Governor's Office of Planning and Budget, UPED Model

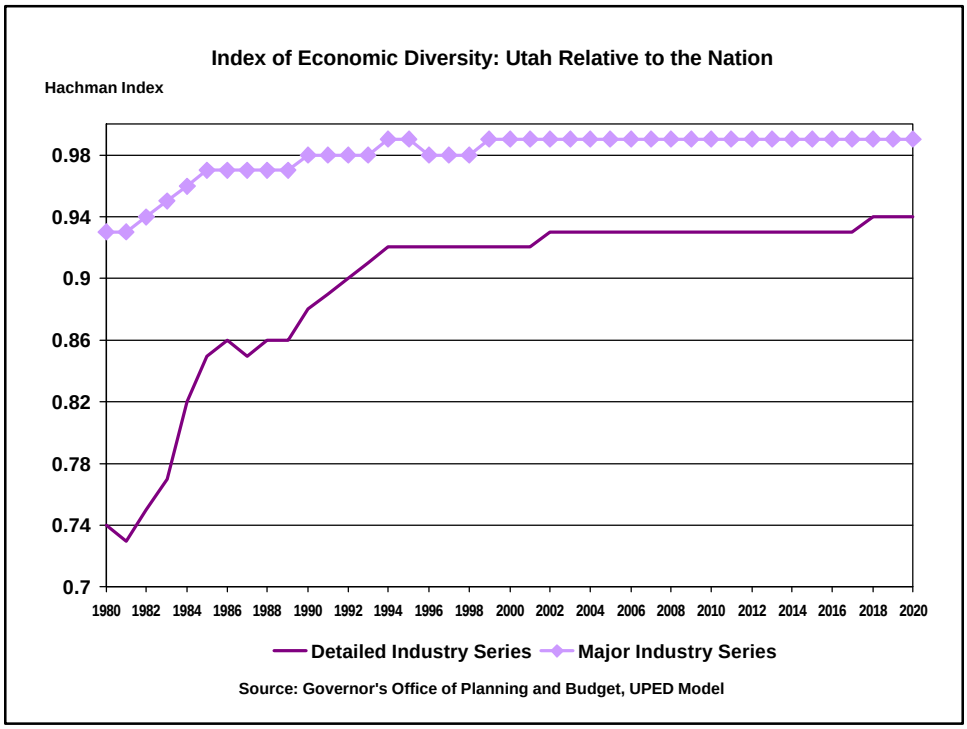

Utah Historical and Projected Population Increases: Components of Change (Number)
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
-5,000
-10,000
19,144
1,276
17,786
-1,186
25,644
15,156
29,211
-3,711
28,883
15,460
34,647
21,821
38,593
18,819
1950s
1960s
1970s
1980s
1990s
2000s
2010s
Natural Increase
Residual Migration
Source: Governor's Office of Planning and Budget, UPED Model



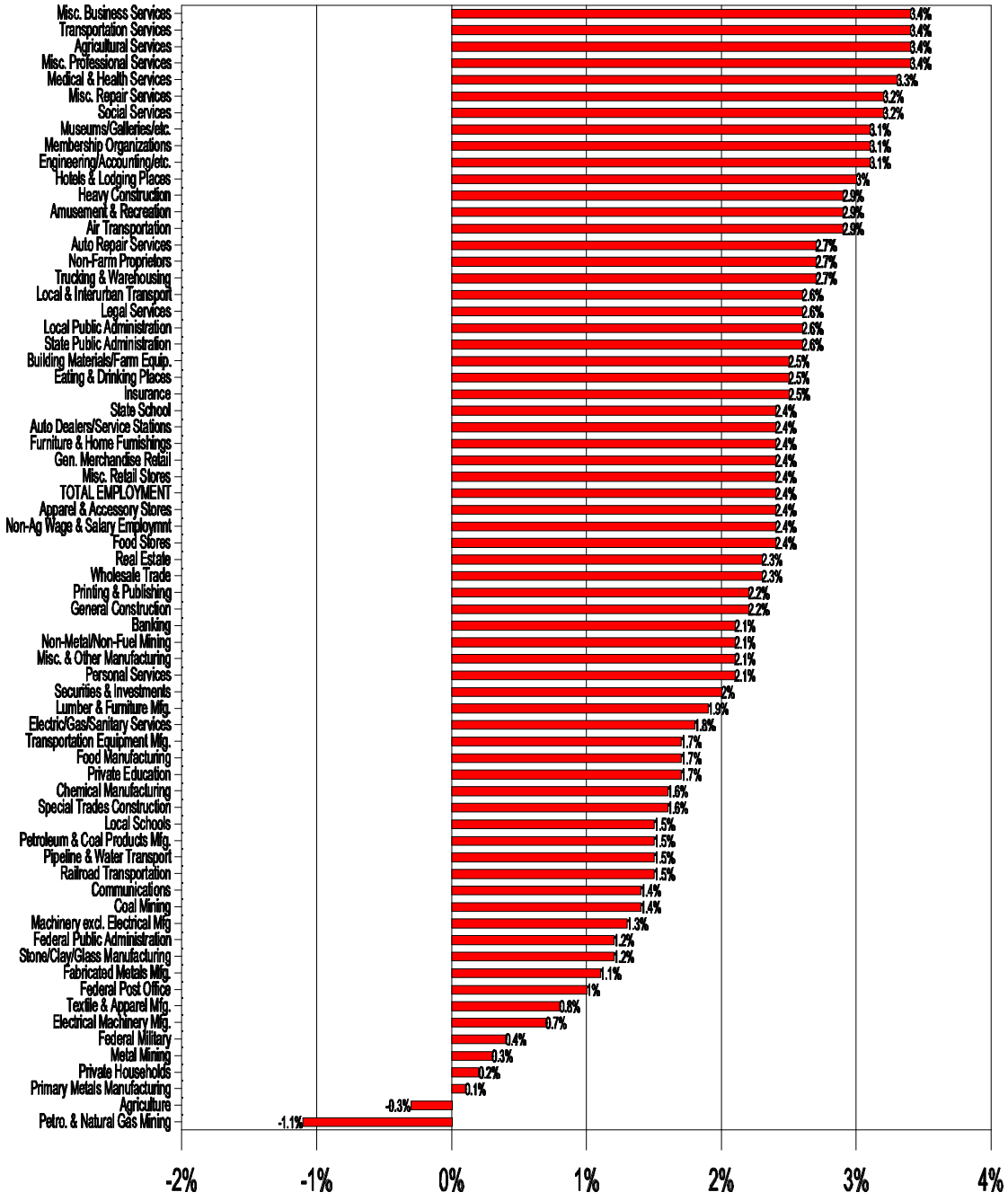

Note: These ratios show the number of non-working age persons in each component for every one hundred persons of working-age (ages 16 through 64).
Source: Governor's Office of Planning and Budget, UPED Model




Note: These ratios show the number of non-working age persons in each component for every one hundred persons of working-age (ages 16 through 64).
Source: Governor's Office of Planning and Budget, UPED Model

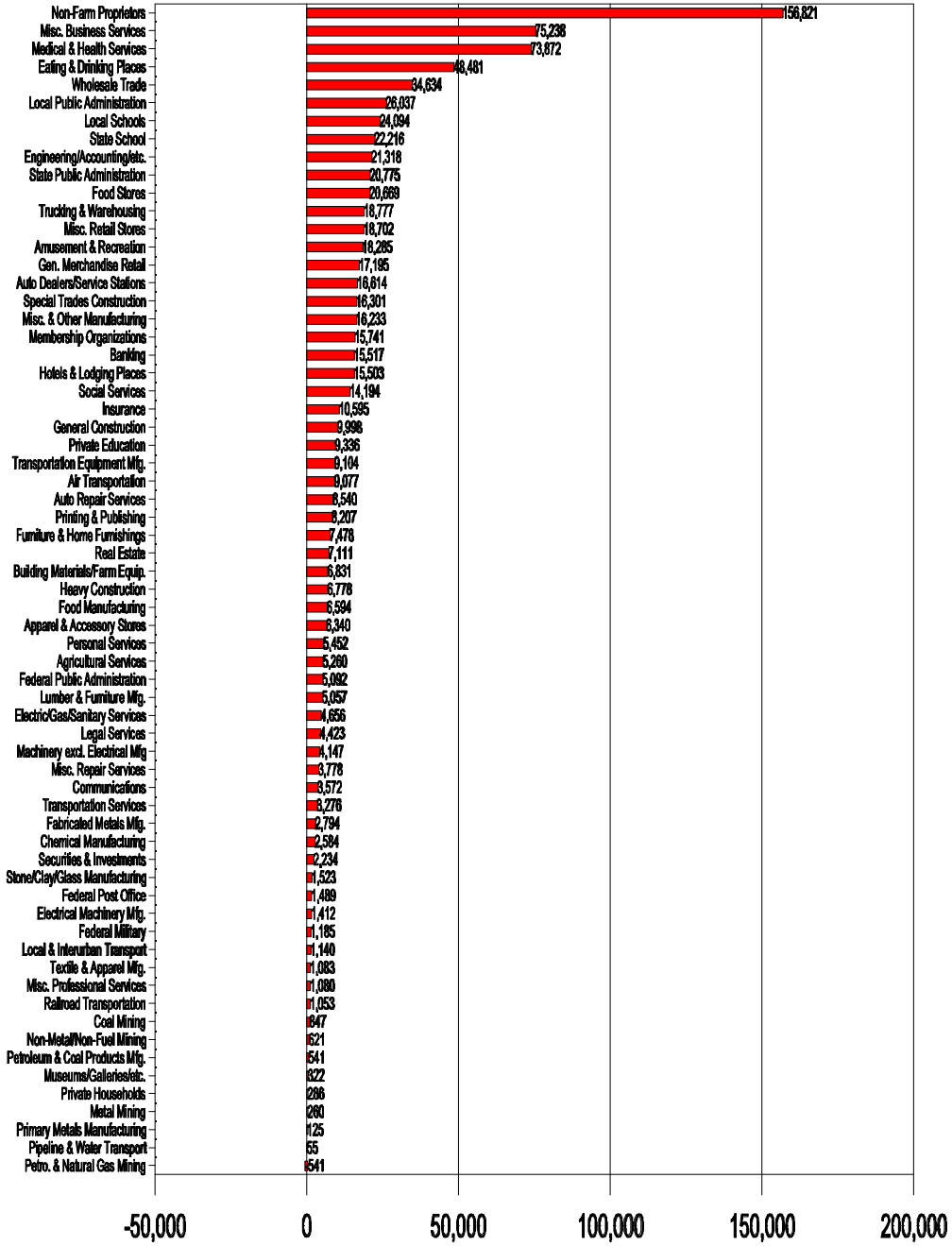

Index of Economic Diversity: Utah Relative to the Nation
Hachman Index
0.98
0.94
0.9
0.86
0.82
0.78
0.74
0.7
1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Detailed Industry Series
Major Industry Series
Source: Governor's Office of Planning and 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

| | Population | | School Age Population | | Total Employment | | Non-Ag Payroll Employment | | Households | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | 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 April1 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 April1 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 April1 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 April1 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 | 1980 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 | AARC 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 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* | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 | Index Value Change 1980 to 2020 | Index Value Percent Change 1980 to 2020 | 1980 Rank | 2020 Rank | Rank Change 1980 to 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Salt Lake | 0.94 | 0.95 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.02 | 2.6% | 1 | 2 | -1 |
| Utah | 0.92 | 0.92 | 0.91 | 0.92 | 0.93 | 0.94 | 0.94 | 0.94 | 0.94 | 0.02 | 2.5% | 2 | 3 | -1 |
| Weber | 0.91 | 0.93 | 0.92 | 0.94 | 0.95 | 0.96 | 0.96 | 0.96 | 0.96 | 0.05 | 5.2% | 3 | 1 | 2 |
| Cache | 0.83 | 0.80 | 0.80 | 0.83 | 0.77 | 0.77 | 0.76 | 0.76 | 0.75 | (0.08) | -9.6% | 4 | 12 | -8 |
| Washington | 0.82 | 0.85 | 0.89 | 0.85 | 0.86 | 0.89 | 0.90 | 0.90 | 0.90 | 0.08 | 9.9% | 5 | 5 | 0 |
| Iron | 0.80 | 0.83 | 0.83 | 0.89 | 0.91 | 0.90 | 0.90 | 0.89 | 0.89 | 0.09 | 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 | (0.21) | -29.1% | 7 | 23 | -16 |
| Kane | 0.72 | 0.71 | 0.75 | 0.80 | 0.81 | 0.82 | 0.83 | 0.84 | 0.84 | 0.12 | 17.3% | 8 | 9 | -1 |
| Davis | 0.69 | 0.71 | 0.80 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.92 | 0.23 | 33.0% | 9 | 4 | 5 |
| Juab | 0.67 | 0.56 | 0.55 | 0.72 | 0.75 | 0.78 | 0.81 | 0.83 | 0.85 | 0.17 | 26.0% | 10 | 8 | 2 |
| Sevier | 0.61 | 0.66 | 0.61 | 0.64 | 0.64 | 0.64 | 0.63 | 0.66 | 0.67 | 0.05 | 8.7% | 11 | 15 | -4 |
| Wasatch | 0.60 | 0.57 | 0.65 | 0.68 | 0.71 | 0.75 | 0.77 | 0.78 | 0.79 | 0.19 | 31.9% | 12 | 10 | 2 |
| Beaver | 0.50 | 0.50 | 0.46 | 0.50 | 0.25 | 0.25 | 0.27 | 0.29 | 0.31 | (0.19) | -38.2% | 13 | 26 | -13 |
| Sanpete | 0.49 | 0.48 | 0.46 | 0.53 | 0.57 | 0.60 | 0.63 | 0.65 | 0.68 | 0.19 | 38.2% | 14 | 14 | 0 |
| Morgan | 0.48 | 0.37 | 0.35 | 0.41 | 0.41 | 0.43 | 0.45 | 0.47 | 0.49 | 0.01 | 2.9% | 15 | 24 | -9 |
| Summit | 0.42 | 0.76 | 0.80 | 0.86 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.45 | 108.1% | 16 | 7 | 9 |
| Garfield | 0.40 | 0.57 | 0.59 | 0.66 | 0.55 | 0.57 | 0.58 | 0.60 | 0.61 | 0.20 | 50.5% | 17 | 17 | 0 |
| Tooele | 0.40 | 0.46 | 0.49 | 0.70 | 0.70 | 0.71 | 0.71 | 0.72 | 0.72 | 0.32 | 80.5% | 18 | 13 | 5 |
| Daggett | 0.34 | 0.43 | 0.48 | 0.50 | 0.54 | 0.55 | 0.56 | 0.56 | 0.57 | 0.23 | 67.3% | 19 | 19 | 0 |
| Millard | 0.33 | 0.31 | 0.42 | 0.43 | 0.44 | 0.46 | 0.48 | 0.51 | 0.52 | 0.20 | 60.4% | 20 | 22 | -2 |
| Wayne | 0.32 | 0.25 | 0.26 | 0.38 | 0.41 | 0.45 | 0.49 | 0.53 | 0.56 | 0.24 | 76.4% | 21 | 20 | 1 |
| Piute | 0.25 | 0.17 | 0.15 | 0.13 | 0.15 | 0.17 | 0.18 | 0.20 | 0.21 | (0.04) | -14.7% | 22 | 27 | -5 |
| Rich | 0.23 | 0.20 | 0.19 | 0.24 | 0.24 | 0.26 | 0.28 | 0.30 | 0.31 | 0.08 | 35.3% | 23 | 25 | -2 |
| Grand | 0.22 | 0.41 | 0.61 | 0.76 | 0.76 | 0.77 | 0.77 | 0.78 | 0.78 | 0.56 | 249.5% | 24 | 11 | 13 |
| Duchesne | 0.21 | 0.32 | 0.33 | 0.33 | 0.38 | 0.44 | 0.50 | 0.55 | 0.58 | 0.37 | 171.4% | 25 | 18 | 7 |
| Uintah | 0.21 | 0.27 | 0.26 | 0.27 | 0.32 | 0.37 | 0.43 | 0.49 | 0.53 | 0.32 | 147.7% | 26 | 21 | 5 |
| Carbon | 0.15 | 0.23 | 0.20 | 0.28 | 0.23 | 0.19 | 0.18 | 0.20 | 0.21 | 0.05 | 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 | 0.53 | 505.4% | 28 | 16 | 12 |
| Emery | 0.06 | 0.12 | 0.11 | 0.11 | 0.09 | 0.08 | 0.06 | 0.07 | 0.07 | 0.01 | 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.

## Overview[1]

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 32$^{nd}$ 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 23$^{rd}$ 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 16$^{th}$.

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 than 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 in 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.

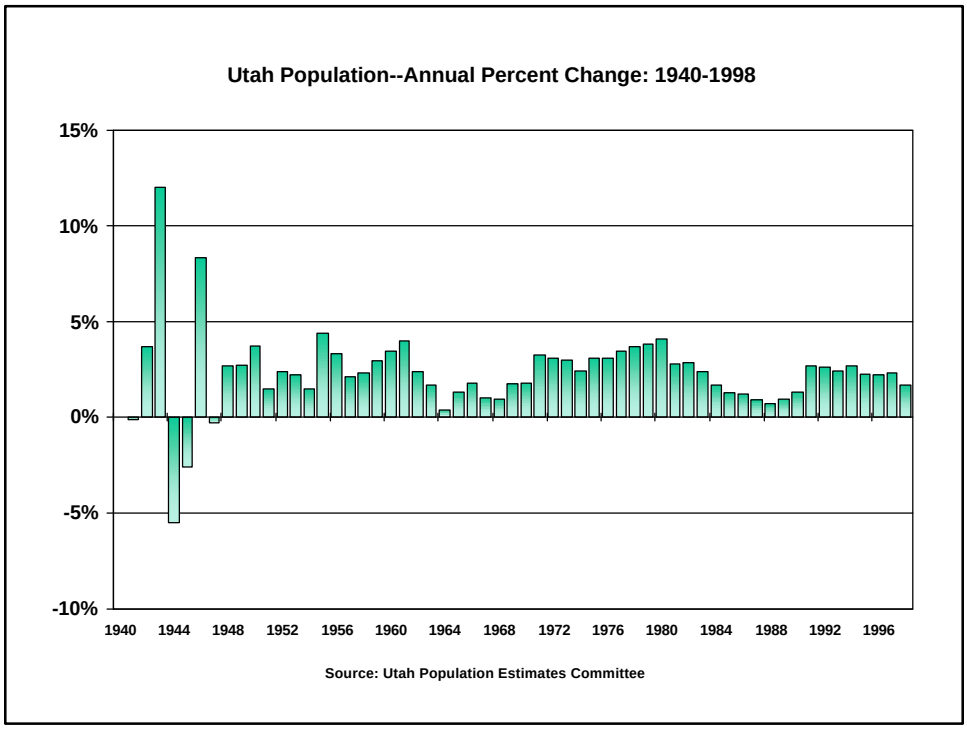
in-migration to and out-migration from the state, although the age structure certainly affects and is affected by migration itself. Regional differences in economic opportunity; quality of life; wages; cost of living; and access to goods, services, education, and amenities are factors that motivate people 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.

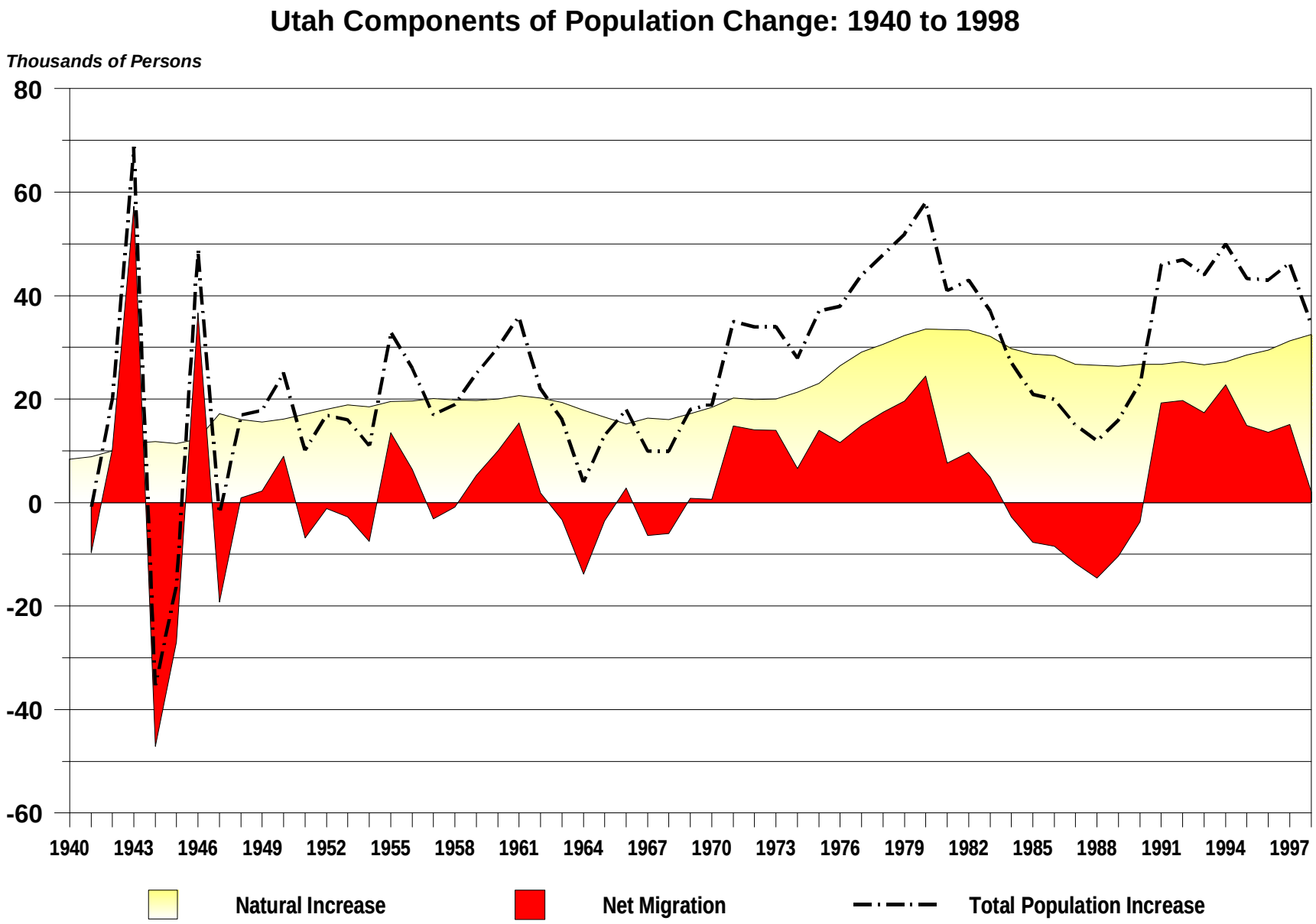
## County Race and Hispanic Origins Estimates, State Household, and City Population Estimates

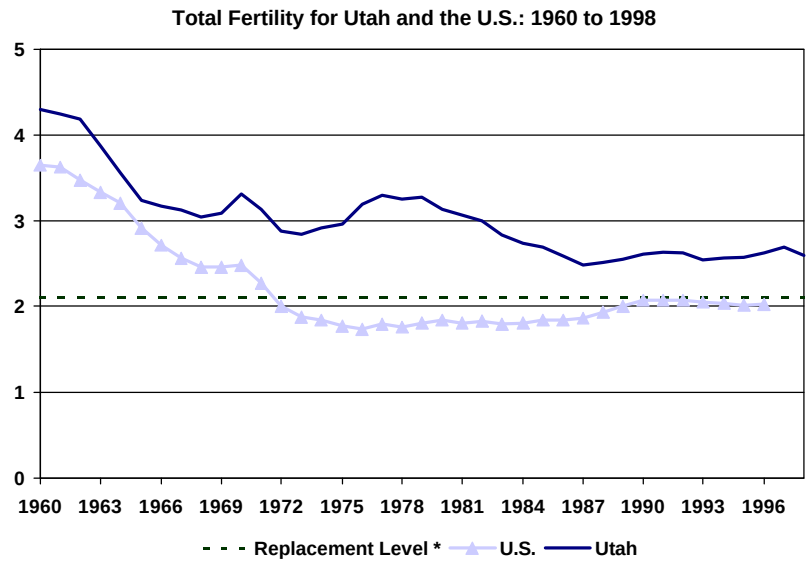
The most recent Census Bureau county level estimates of population, race and Hispanic origin are included in this chapter as are Census Bureau state household estimates and city population estimates. Although Utah is less racially and ethnically diverse than the nation, it is, over time, becoming more 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
15%
10%
5%
0%
-5%
-10%
1940
1944
1948
1952
1956
1960
1964
1968
1972
1976
1980
1984
1988
1992
1996
Source: Utah Population Estimates Committee


Utah Components of Population Change: 1940 to 1998
Thousands of Persons
80
60
40
20
0
-20
-40
-60
1940
1943
1946
1949
1952
1955
1958
1961
1964
1967
1970
1973
1976
1979
1982
1985
1988
1991
1994
1997
Natural Increase
Net Migration
Total Population Increase




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

| | Utah | | | U.S. | | |
|---|---|---|---|---|---|---|
| Year | 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) | (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

| | All Ages | | Under Age 5 | | | Ages 5-17 | | | Ages 18-64 | | | Ages 65+ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rank | State | Population | State | Population | Percent of Total | State | Population | Percent of Total | State | Population | Percent of Total | State | Population | Percent of Total | State | Median Age |
| | 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 | 351,595 | 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 | State | Pre-School Age per 100 of Working Age | State | School Age per 100 of Working Age | State | Retirement Age per 100 of Working Age | State | Total Non-Working Age per 100 of Working Age |
|---|---|---|---|---|---|---|---|---|
| | 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 to1996

| | 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 |
|---|---|---|---|---|---|---|---|---|---|
| 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

-continued-

| | 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

-continued-

| | 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

-continued-

| | 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 Midvales'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

-continued-

| | 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 29.4000 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 5,300jobs 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.

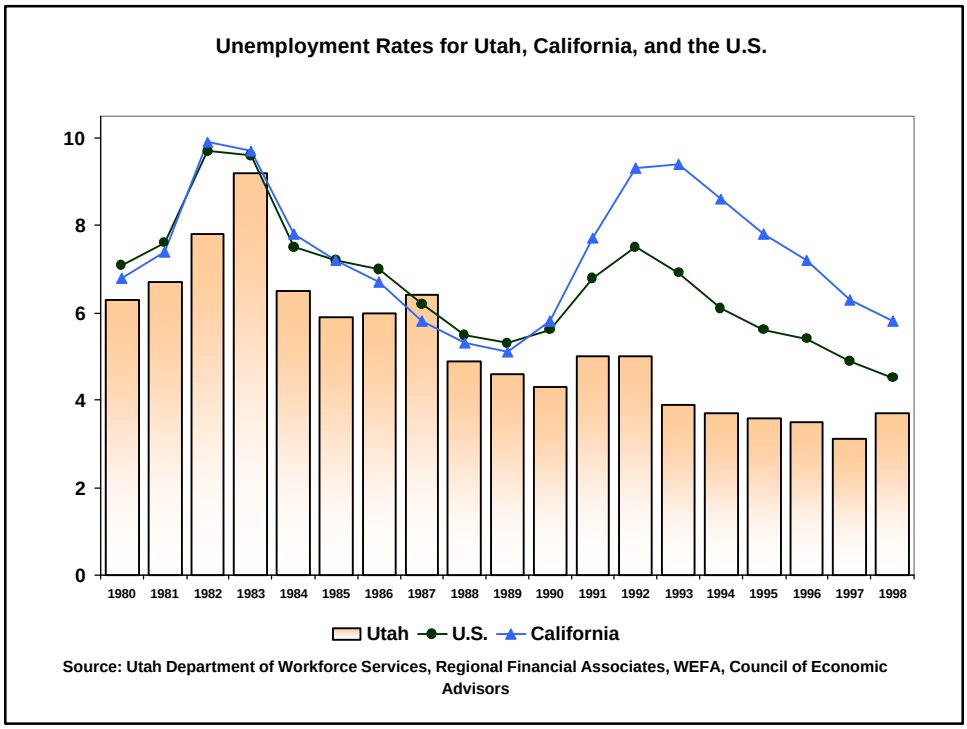
*The Utah Job Outlook*, available from the Utah Department of Workforce Services, reports the projections of employment by occupation for Utah. Projections identify the occupations in demand over the 1998-2003 period in Utah and each of the nine districts.

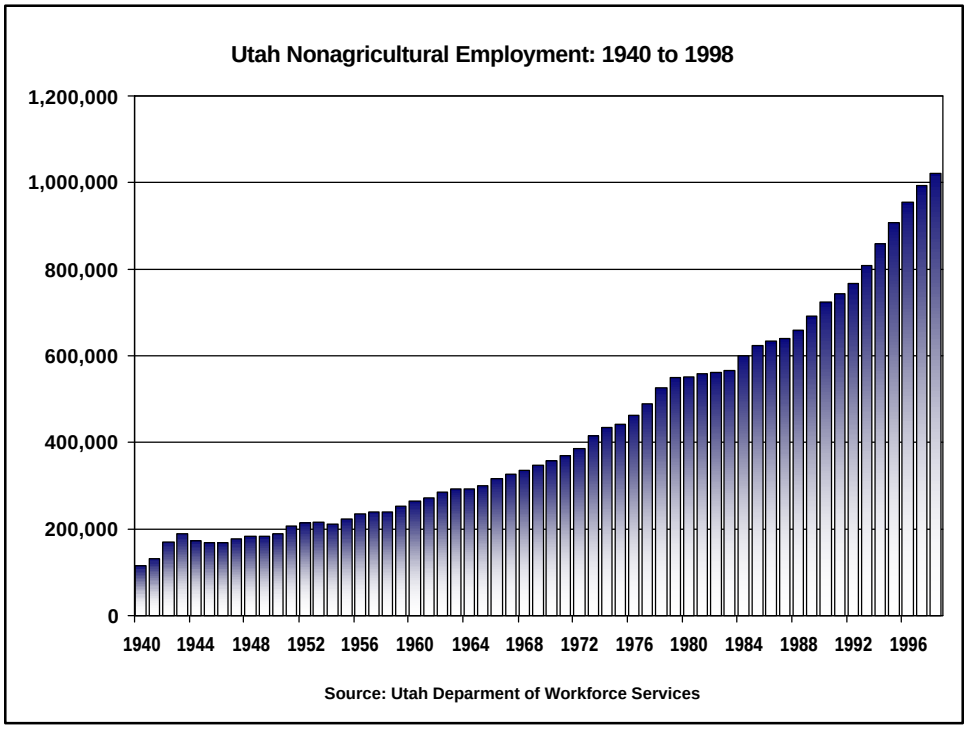
## Significant Issues

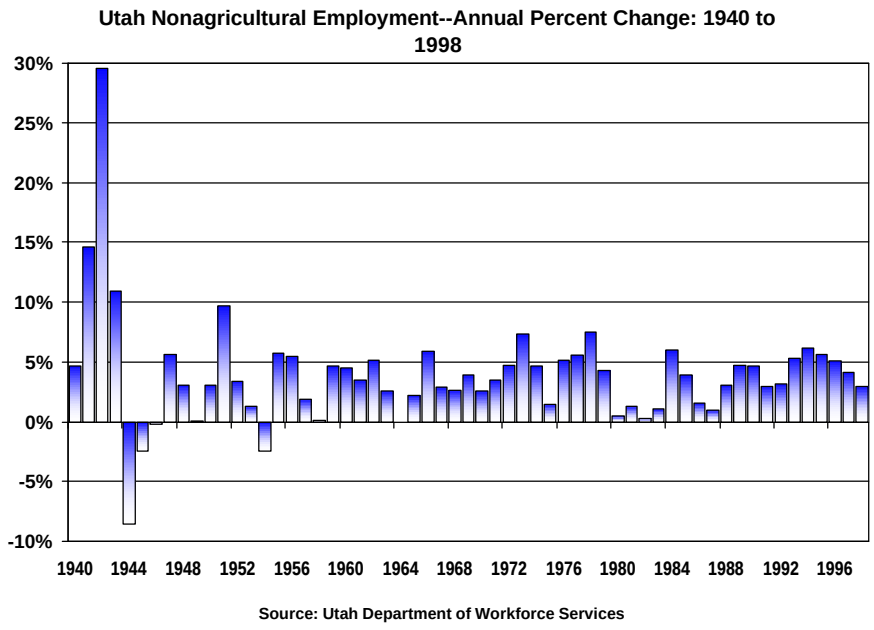
**Labor Shortages.** With job growth in Utah slowing to slightly lower than the long-term average, and unemployment increasing somewhat from its very low 1997 level, labor shortages are a diminishing problem. In the metropolitan counties and in certain occupations spot shortages still exist, but this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

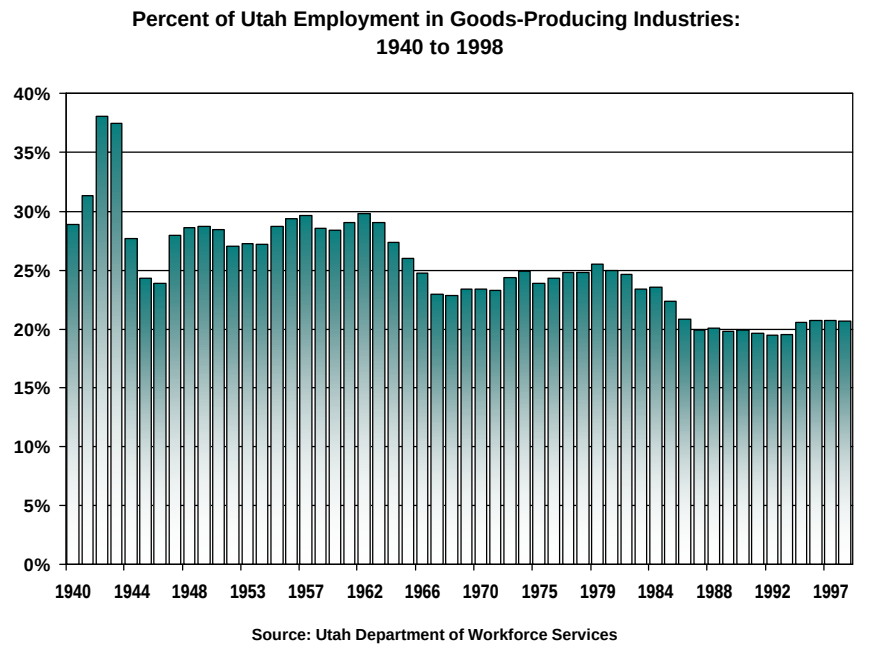
## Conclusion

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. ✻

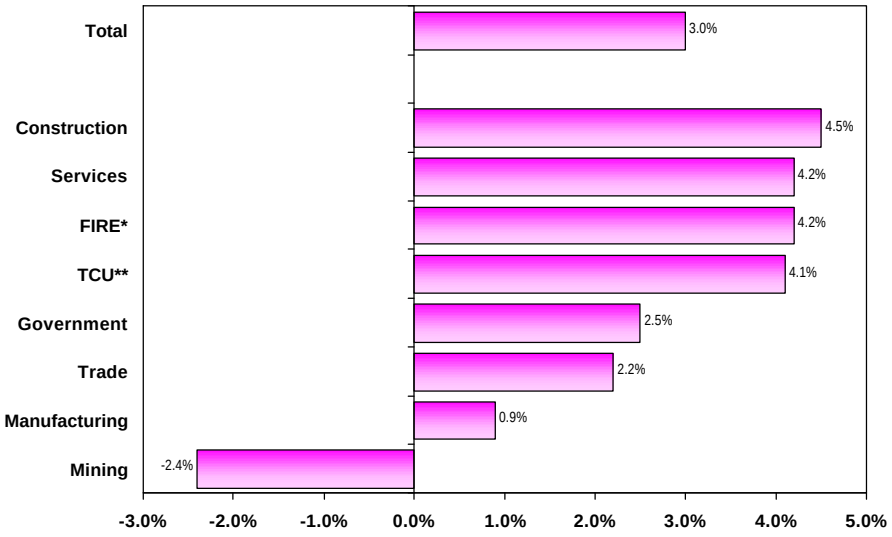

Unemployment Rates for Utah, California, and the U.S.
10
8
6
4
2
0
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
Utah
U.S.
California
Source: Utah Department of Workforce Services, Regional Financial Associates, WEFA, Council of Economic Advisors


Utah Nonagricultural Employment: 1940 to 1998
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
1940
1944
1948
1952
1956
1960
1964
1968
1972
1976
1980
1984
1988
1992
1996
Source: Utah Deparment of Workforce Services


Utah Nonagricultural Employment--Annual Percent Change: 1940 to 1998
30%
25%
20%
15%
10%
5%
0%
-5%
-10%
1940
1944
1948
1952
1956
1960
1964
1968
1972
1976
1980
1984
1988
1992
1996
Source: Utah Department of Workforce Services

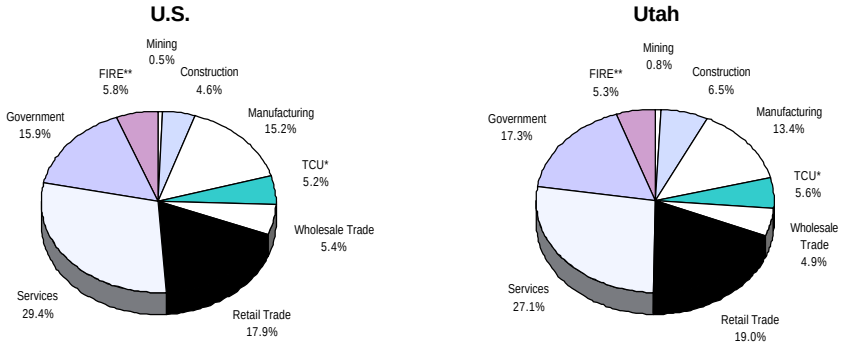

Percent of Utah Employment in Goods-Producing Industries: 1940 to 1998
40%
35%
30%
25%
20%
15%
10%
5%
0%
1940
1944
1948
1953
1957
1962
1966
1970
1975
1979
1984
1988
1992
1997
Source: Utah Department of Workforce Services

## Utah Percent Change in Employment by Industry, 1997-1998




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

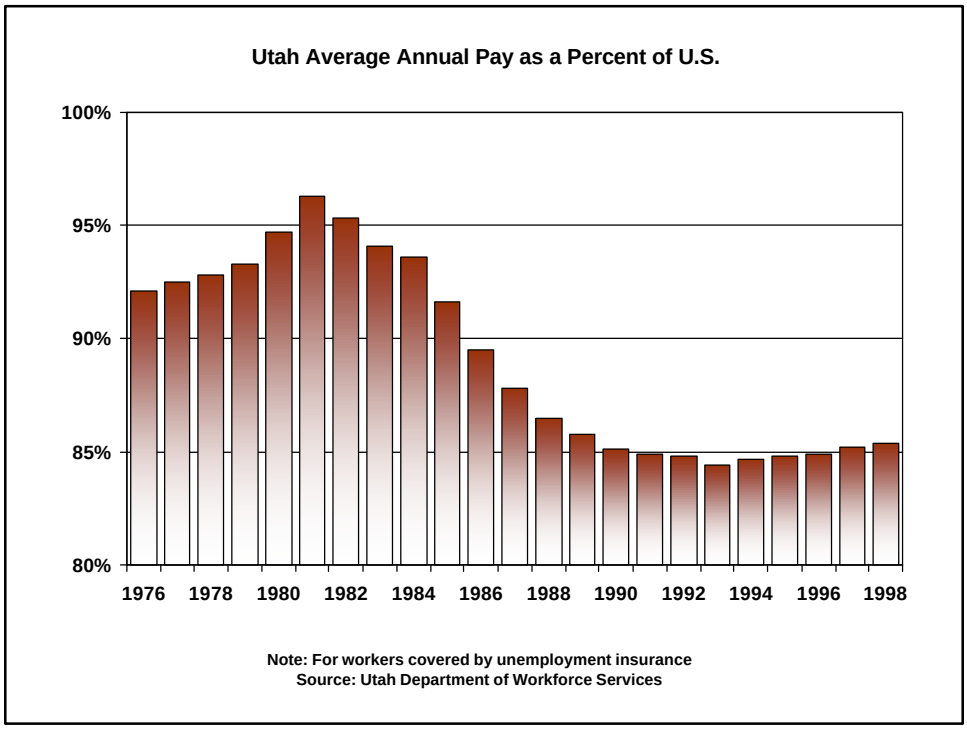
## U.S. and Utah Nonagricultural Employment by Industry: 1997

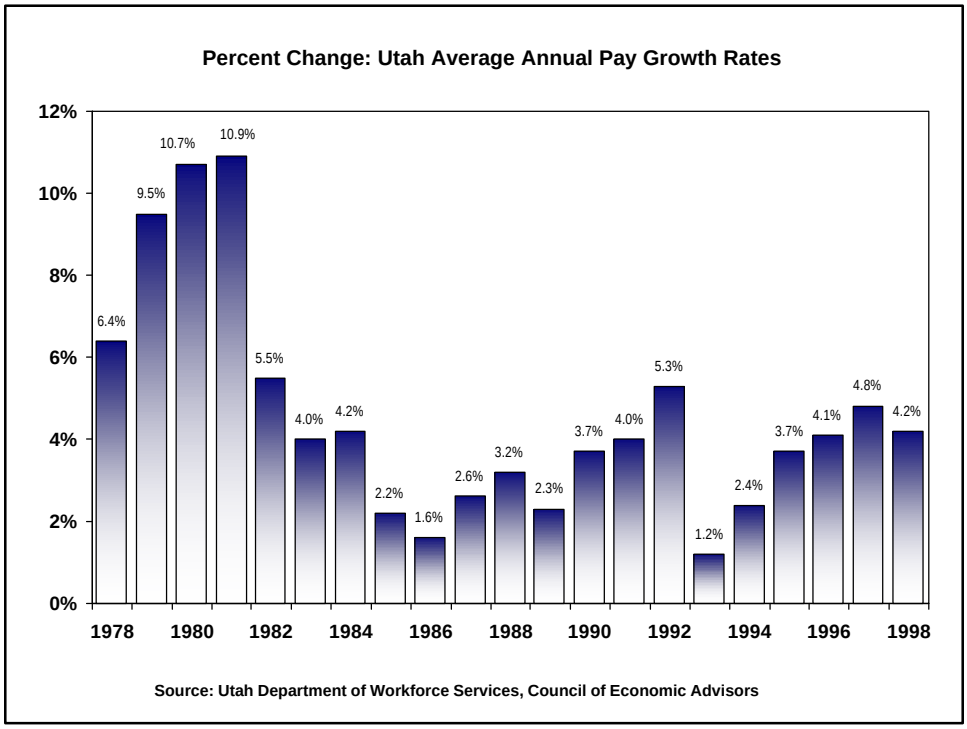


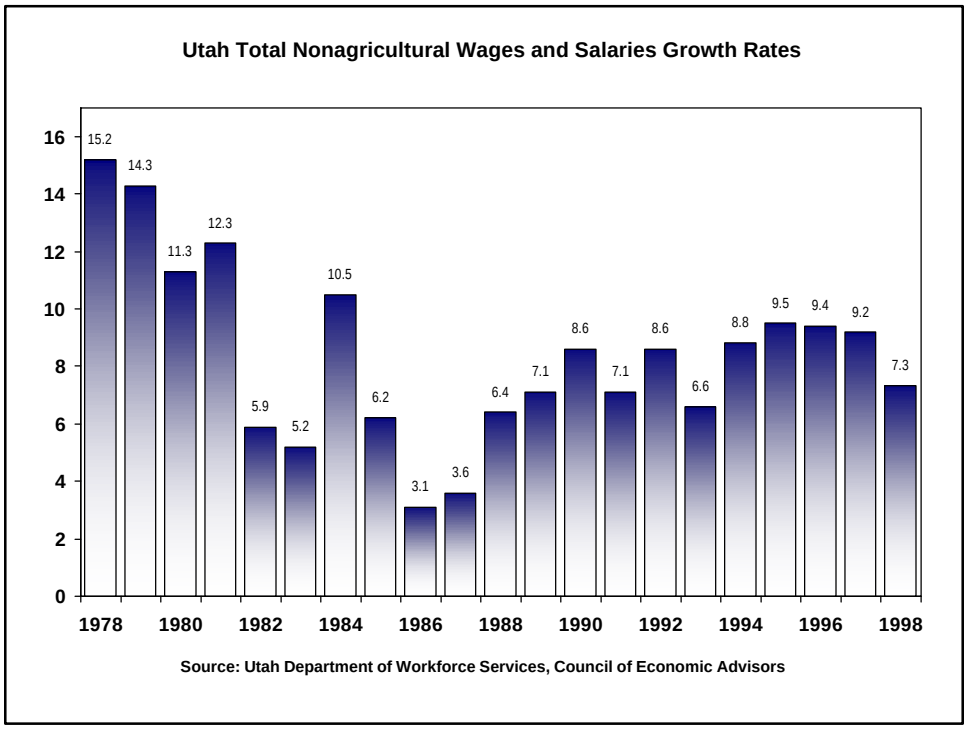

***Transportation, Communication and Utilities**

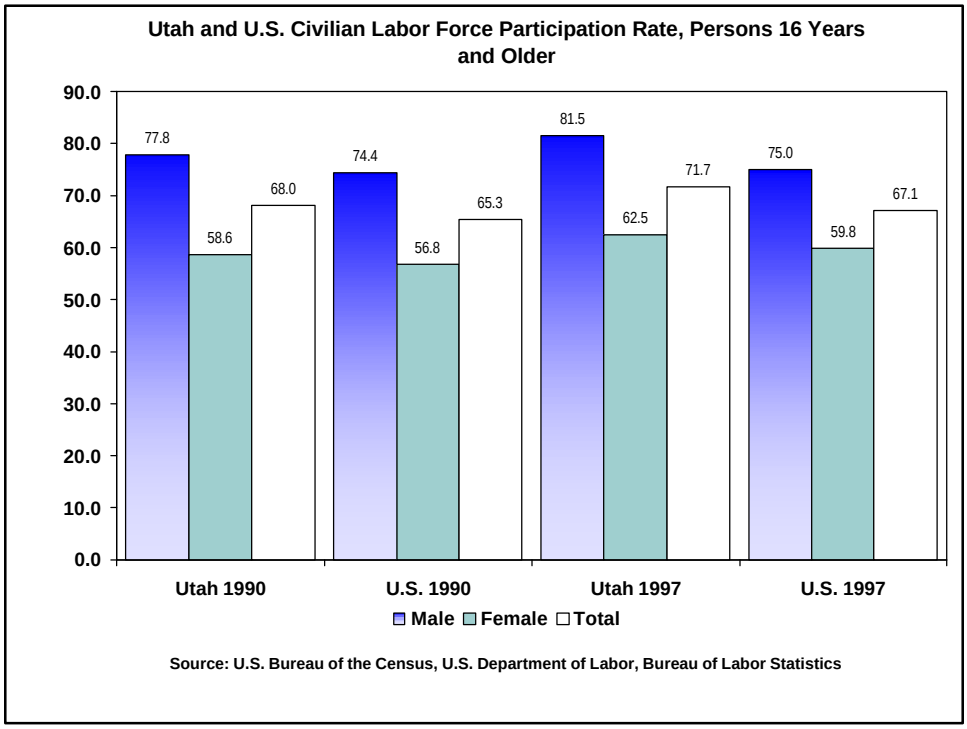
****Finance, Insurance and Real Estate**

**Source: Utah Department of Workforce Services**


Utah Average Annual Pay as a Percent of U.S.
100%
95%
90%
85%
80%
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
Note: For workers covered by unemployment insurance
Source: Utah Department of Workforce Services


Percent Change: Utah Average Annual Pay Growth Rates
12%
10%
8%
6%
4%
2%
0%
6.4%
9.5%
10.7%
10.9%
5.5%
4.0%
4.2%
2.2%
1.6%
2.6%
3.2%
2.3%
3.7%
4.0%
5.3%
1.2%
2.4%
3.7%
4.1%
4.8%
4.2%
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
Source: Utah Department of Workforce Services, Council of Economic Advisors


Utah Total Nonagricultural Wages and Salaries Growth Rates
16
14
12
10
8
6
4
2
0
15.2
14.3
11.3
12.3
5.9
5.2
10.5
6.2
3.1
3.6
6.4
7.1
8.6
7.1
8.6
6.6
8.8
9.5
9.4
9.2
7.3
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
Source: Utah Department of Workforce Services, Council of Economic Advisors


Utah and U.S. Civilian Labor Force Participation Rate, Persons 16 Years and Older
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
77.8
58.6
68.0
74.4
56.8
65.3
81.5
62.5
71.7
75.0
59.8
67.1
Utah 1990
U.S. 1990
Utah 1997
U.S. 1997
Male
Female
Total
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

| | Total Employment | | | Industry Percent of Total | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Number | Percent Change | Increase | Mining | Constru. | Manufact. | Trans.Comm. Pub.Util. | Trade | Fin.Ins.& Real Est. | Services | Govt. | Unemployment Rates |
| 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 |

Sorurce: 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 1998 | Employment 2003 | Annual Average Job Openings Total | Annual Average Job Openings Due to Growth | Annual Average Job Openings 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.

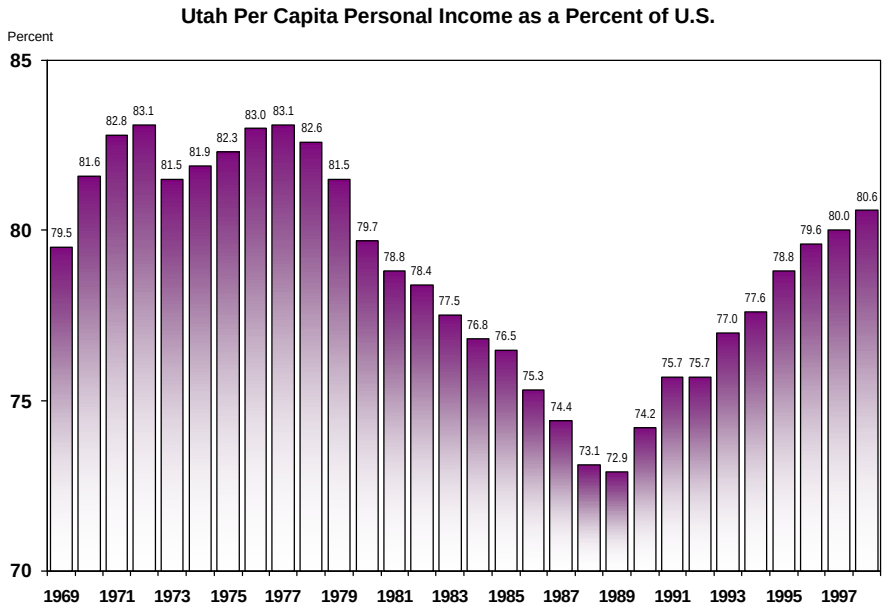
**County Personal and Per Capita Income.** Five of Utah's 29 counties posted double-digit 1996-1997 growth in total personal income, a modest improvement over 1996 when three counties did so. This rapid growth is generally tied to rapid increases in nonagricultural wages, which is typically the largest 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.




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 1995-96 | Percentage Change 1996-97 | 1997 Percentage Distribution Utah | 1997 Percentage Distribution 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 contrb. 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

| | Total Personal Income (millions of dollars) | | Growth Rates | | Per Capita Personal Income (dollars) | | |
|---|---|---|---|---|---|---|---|
| Year | Utah | U.S. | Utah | U.S. | Utah | U.S. | Utah as % of 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 1995-96 | Percent Change 1996-97 | 1997 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

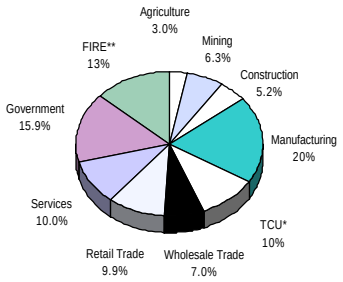
Gross State Product can be used to measure aggregate production in a state. For Utah this aggregate production has shown solid increases over the past ten years. This growth should continue at a somewhat slower pace in the future. GSP can also be utilized to show the change in industry composition over 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.*

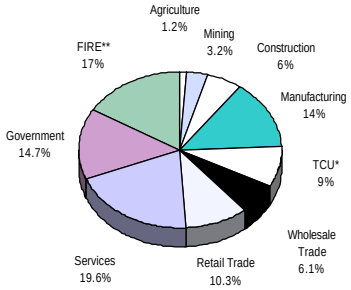
[2] See J. Stephen Landefeld and Robert P. Perker, "BEA's Chain Indexes, Times Series, and Measures of Long-Term Economic Growth," *Survey of Current Business 77* (May 1997): 58-68; and Howard L Friedenberg and Richard M. Beemiller, "Comprehensive Revision of Gross State Product by Industry, 1977-94,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

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

**1965**




**1996**



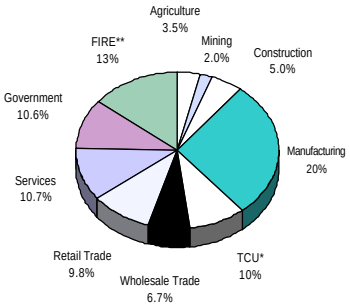

***Transportation, Communication and Utilities**

****Finance, Insurance and Real Estate**

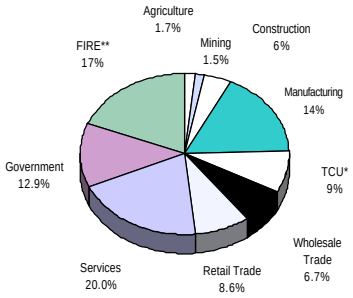
**Source: U.S. Department of Commerce, Bureau of Economic Analysis**

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

**1965**




**1996**

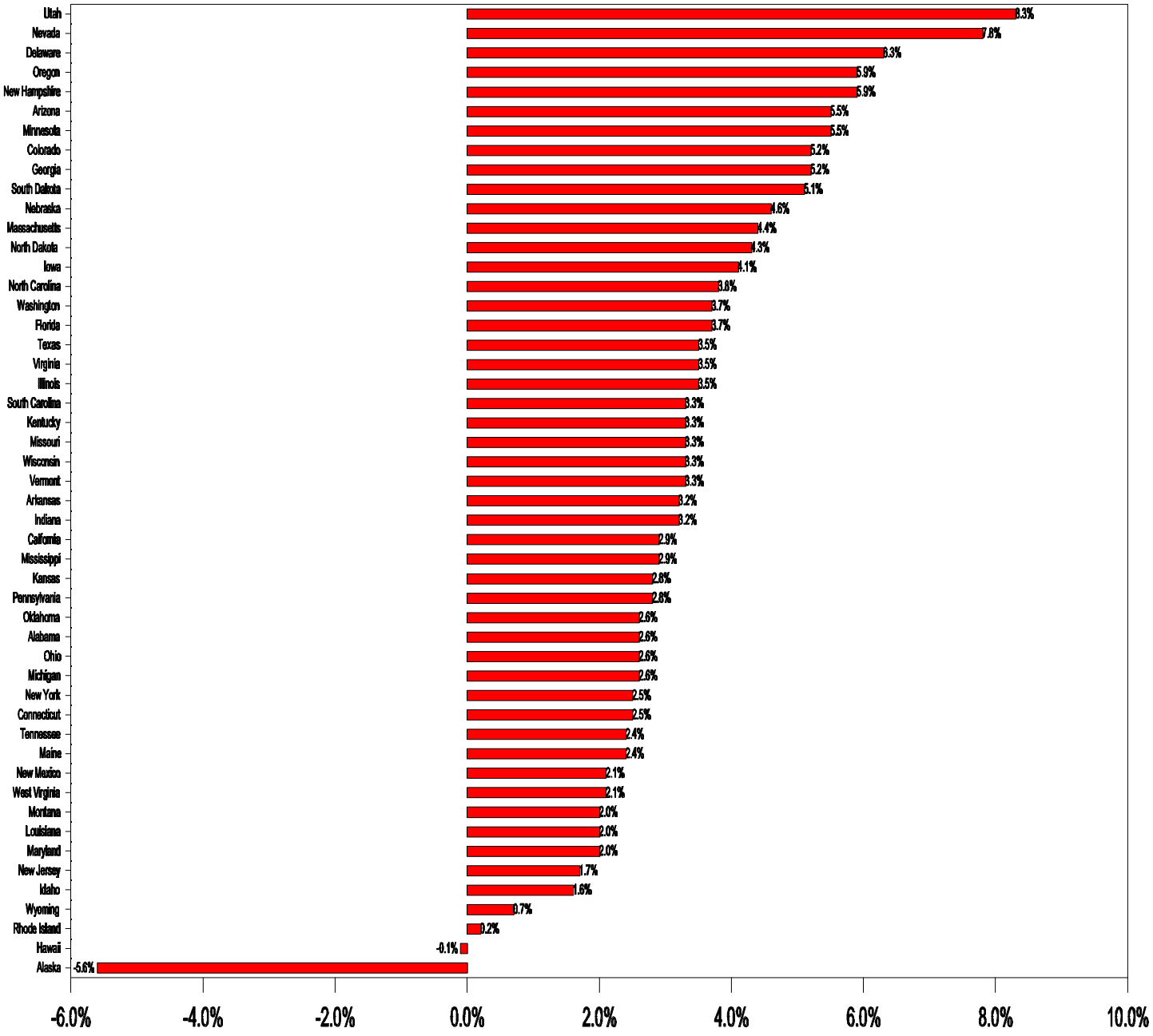



***Transportation, Communication and Utilities**

****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.

[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.

[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.

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

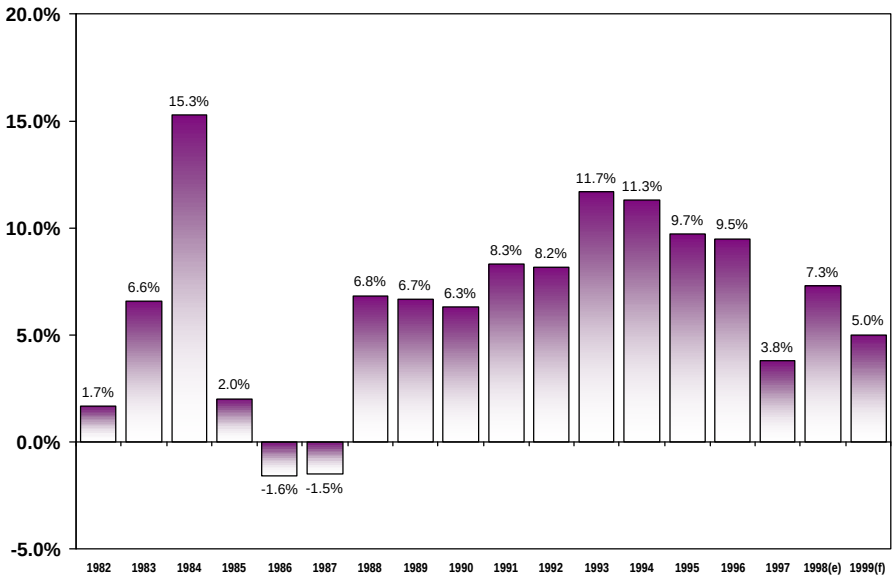
Taxable sales growth improved in 1998 for most of Utah's counties. Salt Lake County, whose growth rate sets the pace for much of Utah, will record sales growth of more than 10% in 1998. About 2.5% of this growth is attributable, however, to instructions from the Tax Commission to out-of-state vendors 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. ✻

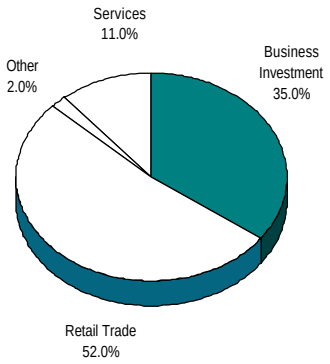
## Annual Percent Change in Gross Taxable Sales: 1982 to 1999



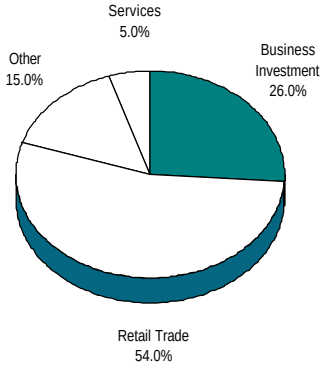

**Source: Utah State Tax Commission**

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

**1984**
**$12.3 billion**




**1999**
**$30.2 billion**




**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,For- | 10 | 10 | 13 | 23 | 19 | 13 | 17 | 26 | 24 | 23 | |
| estry & Fishing | | 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. | 1,351 | 1,644 | 1,407 | 1,552 | 1,657 | 1,776 | 1,935 | 2,062 | 2,251 | 2,435 | |
| & Public Utilities | | 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

| | Dollar Amount (millions) | | | | | | | | Percent Change | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| County | 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 led 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.

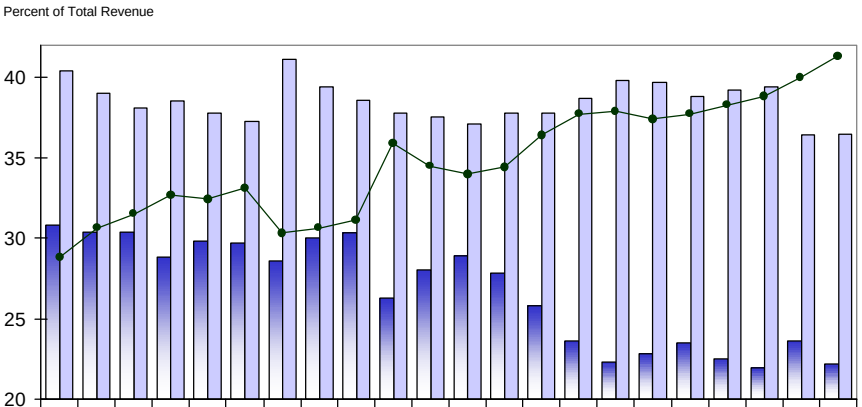
## Tax Collection Rankings

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*

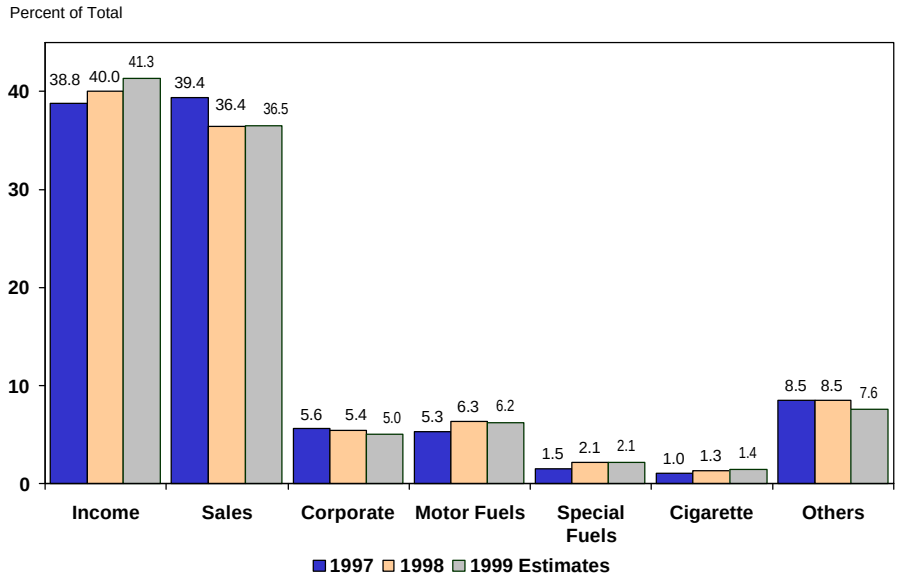



| | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Others | 30.8 | 30.4 | 30.4 | 28.8 | 29.8 | 29.7 | 28.6 | 30.0 | 30.3 | 26.3 | 28.0 | 28.9 | 27.8 | 25.8 | 23.6 | 22.3 | 22.8 | 23.5 | 22.5 | 21.9 | 23.6 | 22.2 |
| Sales | 40.4 | 39.0 | 38.1 | 38.5 | 37.8 | 37.3 | 41.1 | 39.4 | 38.6 | 37.8 | 37.5 | 37.1 | 37.8 | 37.8 | 38.7 | 39.8 | 39.7 | 38.8 | 39.2 | 39.4 | 36.4 | 36.5 |
| Income | 28.8 | 30.6 | 31.5 | 32.7 | 32.4 | 33.1 | 30.3 | 30.6 | 31.1 | 35.9 | 34.5 | 34.0 | 34.4 | 36.4 | 37.7 | 37.9 | 37.4 | 37.7 | 38.3 | 38.8 | 40.0 | 41.3 |

*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.

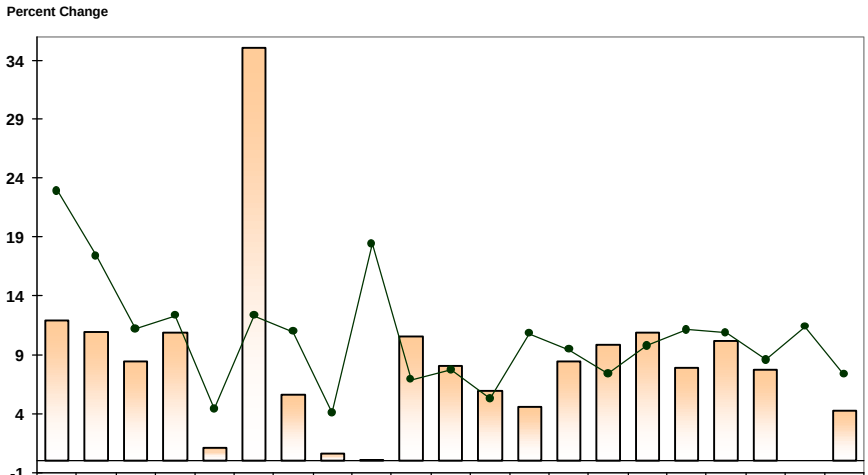
**Source: Utah State Tax Commission, Governor's Office of Planning and Budget**

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




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

## Percent Change in Sales and Income Tax Collections

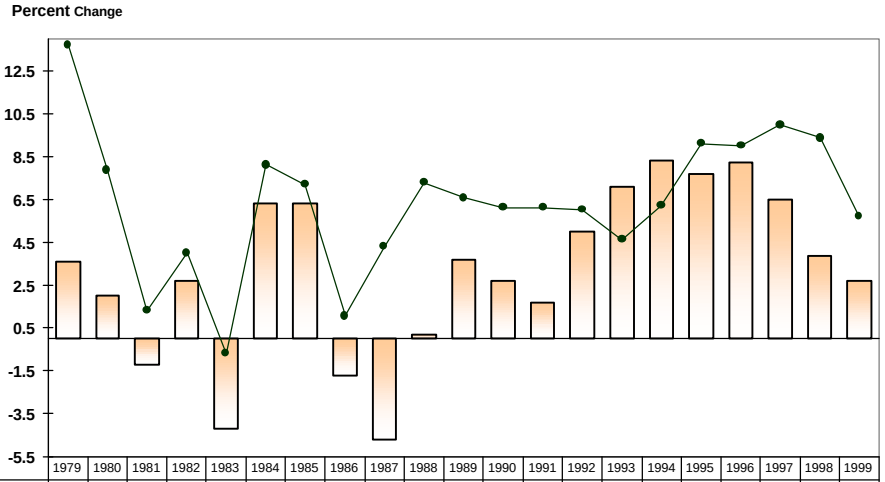



| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 11.9 | 11.0 | 8.4 | 10.9 | 1.1 | 35.1 | 5.6 | 0.6 | 0.1 | 10.5 | 8.1 | 6.0 | 4.6 | 8.4 | 9.9 | 10.9 | 7.9 | 10.2 | 7.7 | 0.0 | 4.3 |
| Income | 22.9 | 17.4 | 11.2 | 12.3 | 4.4 | 12.3 | 11.0 | 4.1 | 18.4 | 6.9 | 7.7 | 5.3 | 10.8 | 9.4 | 7.4 | 9.8 | 11.1 | 10.9 | 8.6 | 11.4 | 7.3 |

**Fiscal Years**

**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

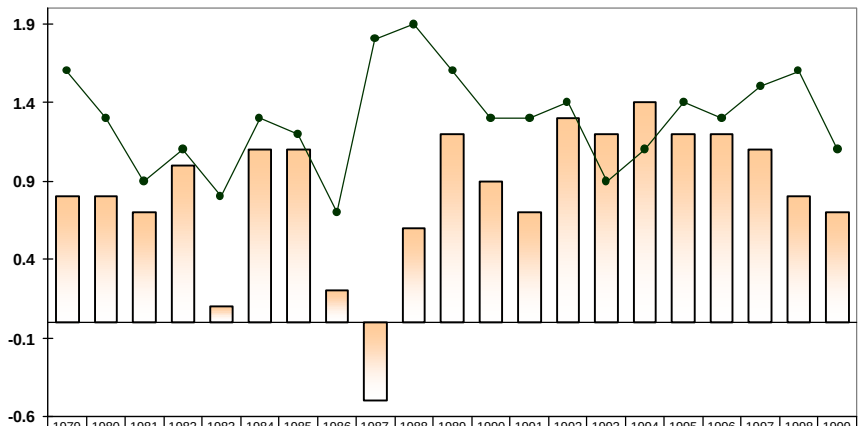



| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 3.6 | 2.0 | -1.2 | 2.7 | -4.2 | 6.3 | 6.3 | -1.7 | -4.7 | 0.2 | 3.7 | 2.7 | 1.7 | 5.0 | 7.1 | 8.3 | 7.7 | 8.2 | 6.5 | 3.9 | 2.7 |
| Income | 13.7 | 7.9 | 1.3 | 4.0 | -0.7 | 8.1 | 7.2 | 1.1 | 4.3 | 7.3 | 6.6 | 6.1 | 6.1 | 6.0 | 4.6 | 6.2 | 9.1 | 9.0 | 10.0 | 9.4 | 5.7 |

**Fiscal Years**

**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)




| | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 0.8 | 0.8 | 0.7 | 1.0 | 0.1 | 1.1 | 1.1 | 0.2 | -0.5 | 0.6 | 1.2 | 0.9 | 0.7 | 1.3 | 1.2 | 1.4 | 1.2 | 1.2 | 1.1 | 0.8 | 0.7 |
| Income | 1.6 | 1.3 | 0.9 | 1.1 | 0.8 | 1.3 | 1.2 | 0.7 | 1.8 | 1.9 | 1.6 | 1.3 | 1.3 | 1.4 | 0.9 | 1.1 | 1.4 | 1.3 | 1.5 | 1.6 | 1.1 |

**Fiscal Years**

**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 Phillipines, 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.

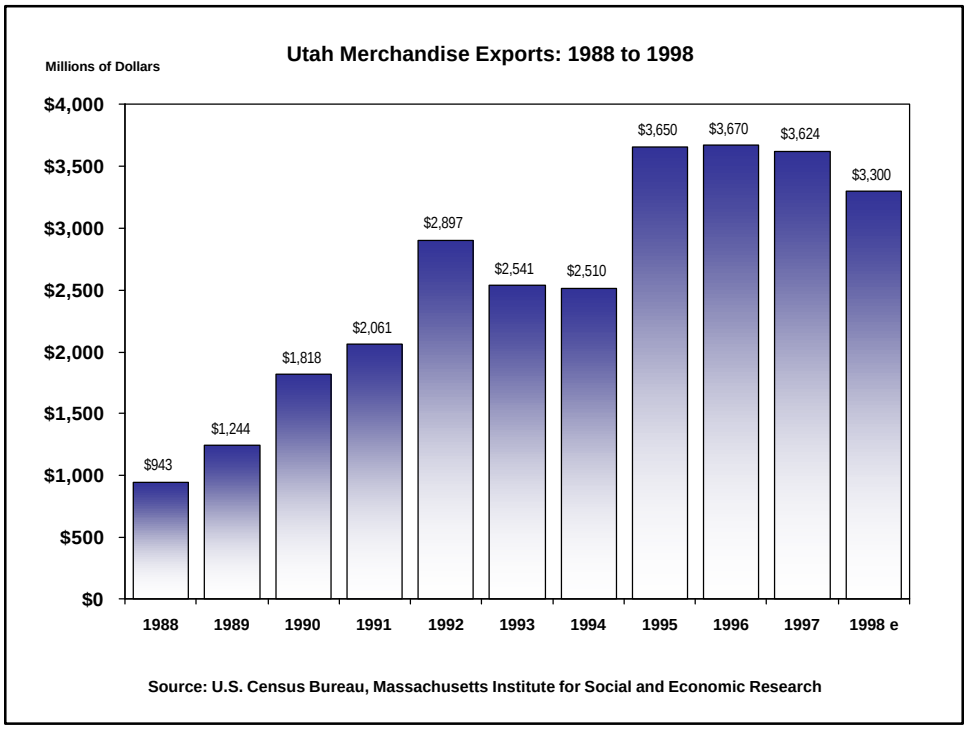
On the downside, although it appears now as if the Asian economies have bottomed out, if they continue to decline, then Utah's exports to Asia and elsewhere could fall below $2 billion, where they were in 1990. If the Japanese economy contracts at an accelerating rate for the next several years, say 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.

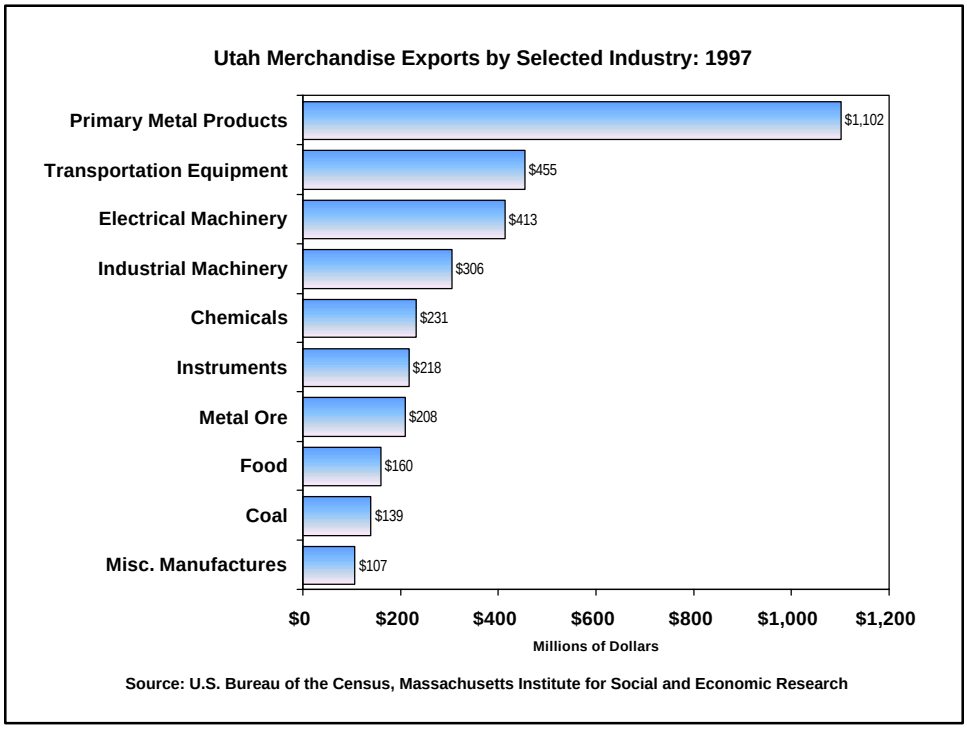
**Limitations of Data.** The export data presented have been generated by the U.S. Census Bureau, Foreign Trade Division and have been adjusted by the Massachusetts Institute for Social and Economic Research (MISER). There are two main reasons why this data series, called "Origin of Movement," may substantially 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.

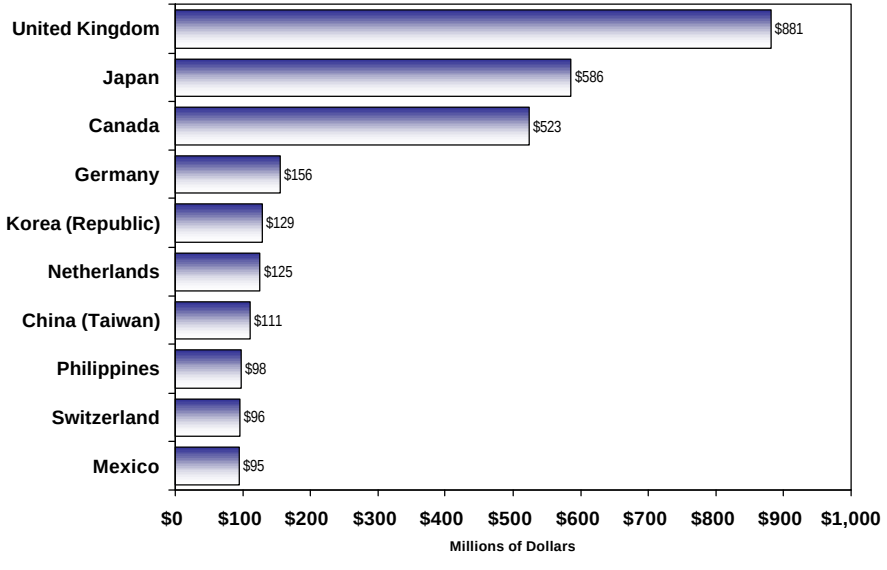
## Conclusion

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: 1988 to 1998
Millions of Dollars
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$943
$1,244
$1,818
$2,061
$2,897
$2,541
$2,510
$3,650
$3,670
$3,624
$3,300
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998 e
Source: U.S. Census Bureau, Massachusetts Institute for Social and Economic Research


Utah Merchandise Exports by Selected Industry: 1997
Primary Metal Products
$1,102
Transportation Equipment
$455
Electrical Machinery
$413
Industrial Machinery
$306
Chemicals
$231
Instruments
$218
Metal Ore
$208
Food
$160
Coal
$139
Misc. Manufactures
$107
$0
$200
$400
$600
$800
$1,000
$1,200
Millions of Dollars
Source: U.S. Bureau of the Census, Massachusetts Institute for Social and Economic Research

## 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 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | First 3 Quarters 1998 | Industry as a Percent of 1998 Total | Percent Change 1995-96 | Percent Change 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 | | | | | | | Third Quarter | | | Year to Date Third Quarter | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1997 Percent of Total | 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 | 1994 | 1995 | 1996 | 1997 | First Three Quarters to Date 1997 | First Three Quarters to Date 1998 | Growth Rates 1996-97 Annual | Growth Rates 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.

# ✻ Prices, Inflation, Cost of Living

## 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

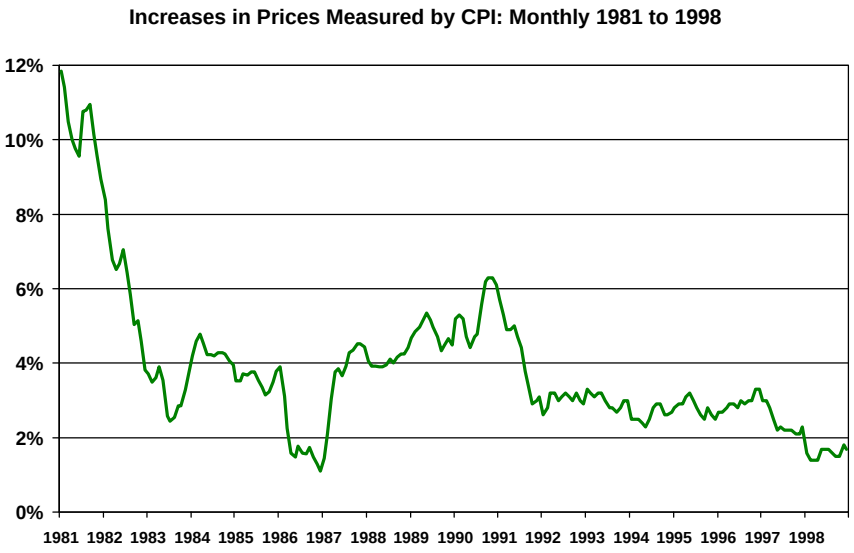
The national Consumer Price Index for Urban Consumers (CPI-U) in 1999 is forecast to increase 2.1%, slightly higher than in 1998. Imported goods from Asia and other parts of the world will be considerably less expensive, and prices of computer-related products should also continue their lower-cost trend. 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

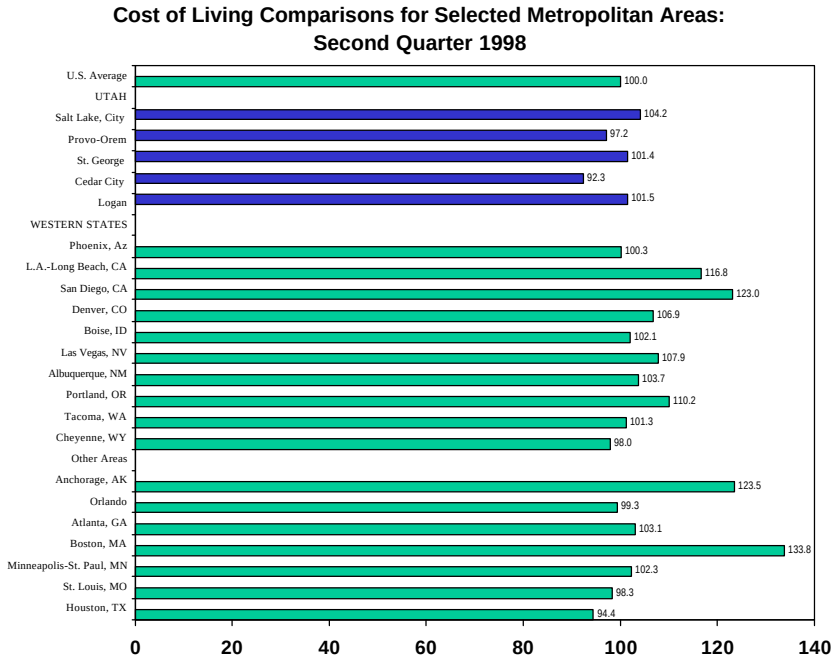
**No Statewide Measure of Inflation.** Measuring and understanding price changes over time and cost of living for a point in time are critical to understanding economic issues. In Utah there is no statistically significant, statewide measure of inflation (price change over time). The federal Bureau of 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. ✻

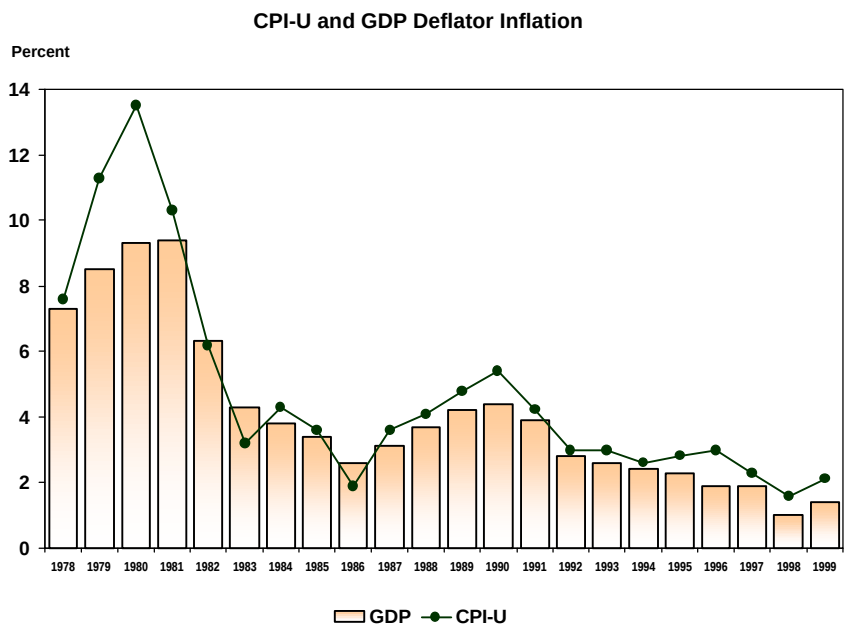



Source: U.S. Department of Labor




Index 100 = U.S. Average

Source: American Chamber of Commerce Researchers Association (ACCRA)




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 | Dec.-Dec | Annual Avg. Percent 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 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Educational Attainment, Persons 25 Years Old and Over, 1998: | | | |
| | 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) | | High School or Higher (3) | | Bachelor's Degree or Higher (3) | |
| | Rate | Rank | Rate | Rank | (1,000) | Rank | Percent | Rank | 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 Colombia | 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) | | Death Rate per 100,000 People, 1995: 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 Colombia | 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 Unisured Rates".

## Indicators of Public Assistance/Poverty and Homeownershi

| | 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 Colombia | 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".

## 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 419,704, 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 Colombia. 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.

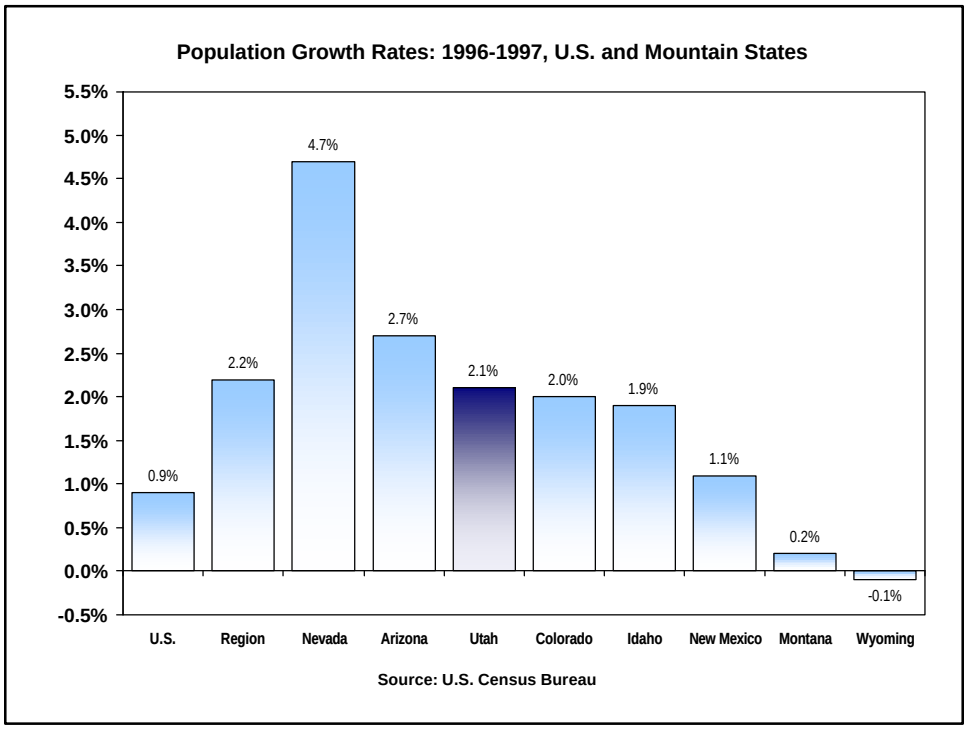
The mountain state's average annual unemployment rate of 4.3% for 1997 was below the national average of 4.9%. From October 1997 to October 1998, the mountain state's experienced an unemployment rate of 3.9% compared to 4.2% for the nation, showing that this region is still doing well economically. Nevertheless, 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.

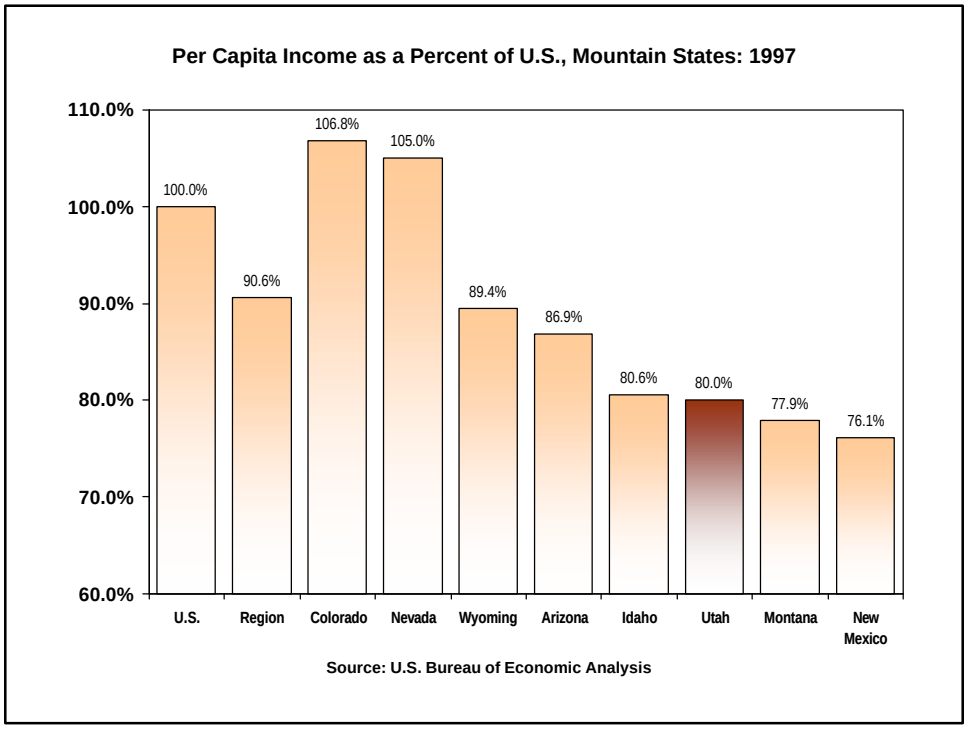
## Poverty Rates

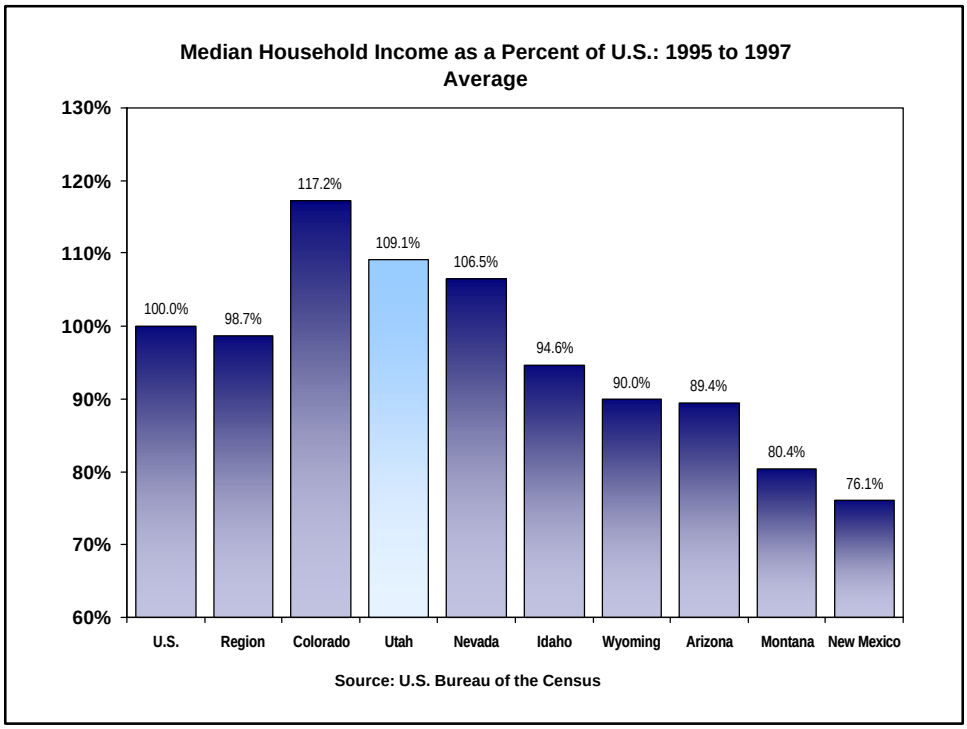
In 1997, the mountain states had a poverty rate of 13.5%, slightly above the national average of 13.3%. As with median household income, there is a substantial spread among the eight mountain states in poverty rates. Using a three-year average for 1995-97, the mountain states ranged in poverty rates 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%.

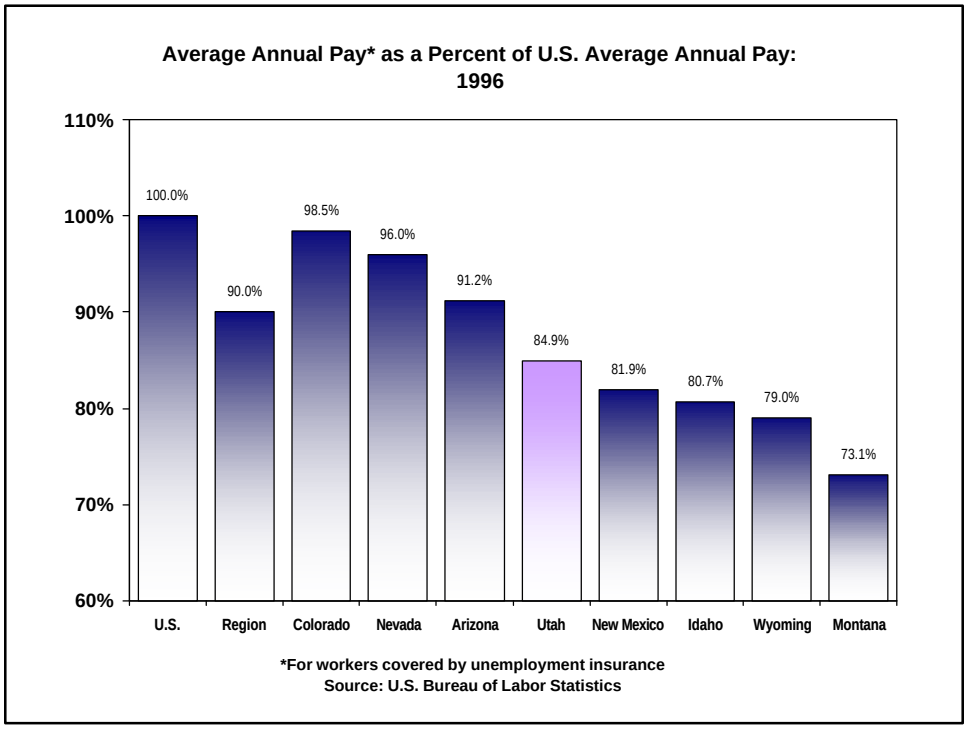
## Conclusion

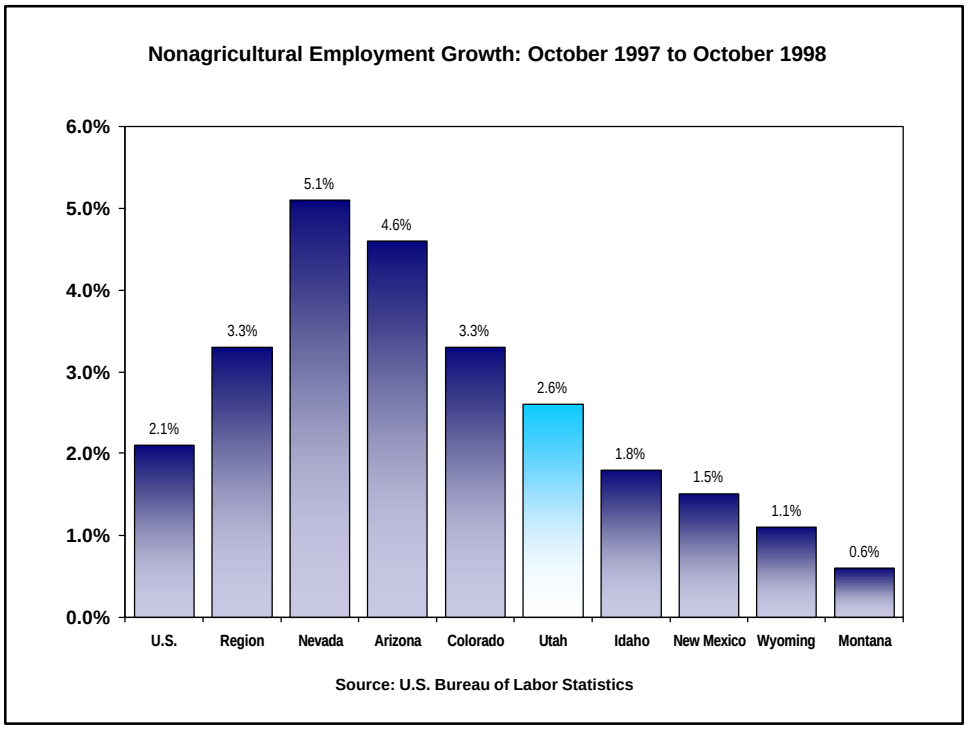
The national economy remains strong. From 1992 to 1997. the nation's employment growth rate grew by an annual average rate of 2.4%. From September 1997 to September 1998, it grew by 2.5%. Most mountain states also show employment growth rates that are still strong. Arizona, Nevada, Colorado, and Utah 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. ✻

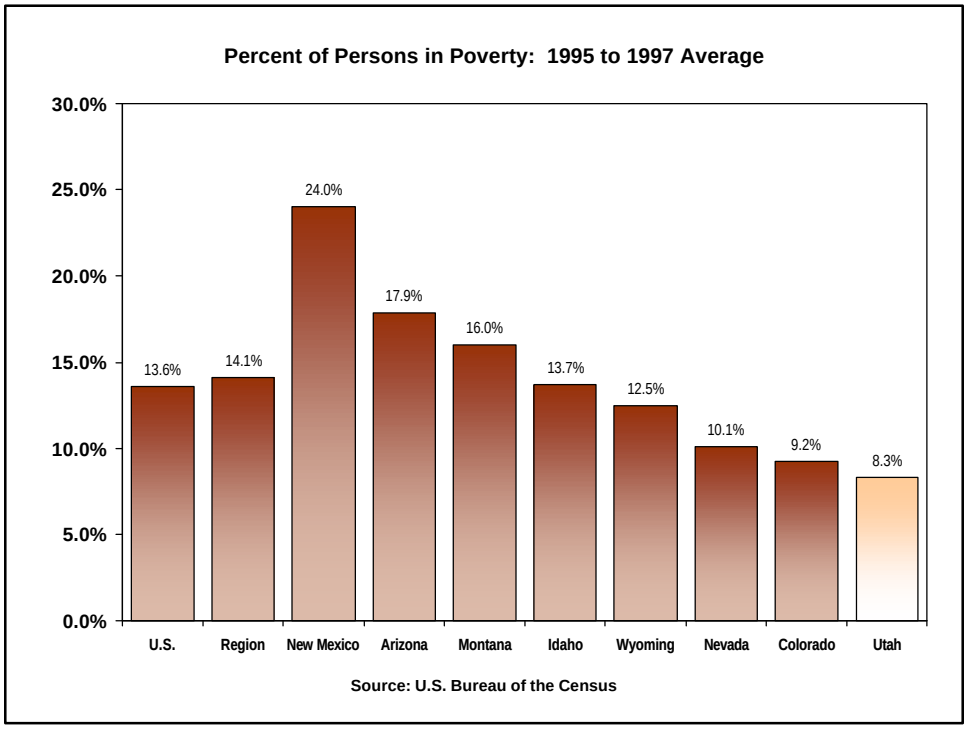

Population Growth Rates: 1996-1997, U.S. and Mountain States
5.5%
5.0%
4.5%
4.0%
3.5%
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
-0.5%
0.9%
2.2%
4.7%
2.7%
2.1%
2.0%
1.9%
1.1%
0.2%
-0.1%
U.S.
Region
Nevada
Arizona
Utah
Colorado
Idaho
New Mexico
Montana
Wyoming
Source: U.S. Census Bureau


Per Capita Income as a Percent of U.S., Mountain States: 1997
110.0%
100.0%
90.0%
80.0%
70.0%
60.0%
100.0%
90.6%
106.8%
105.0%
89.4%
86.9%
80.6%
80.0%
77.9%
76.1%
U.S.
Region
Colorado
Nevada
Wyoming
Arizona
Idaho
Utah
Montana
New Mexico
Source: U.S. Bureau of Economic Analysis


Median Household Income as a Percent of U.S.: 1995 to 1997
Average
130%
120%
110%
100%
90%
80%
70%
60%
100.0%
98.7%
117.2%
109.1%
106.5%
94.6%
90.0%
89.4%
80.4%
76.1%
U.S.
Region
Colorado
Utah
Nevada
Idaho
Wyoming
Arizona
Montana
New Mexico
Source: U.S. Bureau of the Census


Average Annual Pay* as a Percent of U.S. Average Annual Pay:
1996
110%
100%
90%
80%
70%
60%
100.0%
90.0%
98.5%
96.0%
91.2%
84.9%
81.9%
80.7%
79.0%
73.1%
U.S.
Region
Colorado
Nevada
Arizona
Utah
New Mexico
Idaho
Wyoming
Montana
*For workers covered by unemployment insurance
Source: U.S. Bureau of Labor Statistics


Nonagricultural Employment Growth: October 1997 to October 1998
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
2.1%
3.3%
5.1%
4.6%
3.3%
2.6%
1.8%
1.5%
1.1%
0.6%
U.S.
Region
Nevada
Arizona
Colorado
Utah
Idaho
New Mexico
Wyoming
Montana
Source: U.S. Bureau of Labor Statistics


Percent of Persons in Poverty: 1995 to 1997 Average
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
13.6%
14.1%
24.0%
17.9%
16.0%
13.7%
12.5%
10.1%
9.2%
8.3%
U.S.
Region
New Mexico
Arizona
Montana
Idaho
Wyoming
Nevada
Colorado
Utah
Source: U.S. Bureau of the Census

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

| Division/State | Population (July 1 Estimates) 1992 (thousands) | 1996 (thousands) | 1997 (thousands) | Rates of Population Change: Avg. Ann. Growth Rate 1992-97 | Percent Change 1996-97 | Households (July 1 Estimates) 1996 (thousands) | Persons per Household | Rankings: Rank by Population 1997 | Rank by Avg. Ann. Growth Rate 1992-97 | Rank by Percent Change 1996-97 | Rank by 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 1992 (millions) | Total Personal Income 1996 (millions) | Total Personal Income 1997 (millions) | Rates of Total Personal Income Change: Avg. Ann. Growth Rat 1992-97 | Rates of Total Personal Income Change: Percent Change 1996-97 | Total Personal Income (saar): 2nd Quarter 1997 (millions) | Total Personal Income (saar): 2nd Quarter 1998 (millions) | Total Personal Income (saar): Percent Change 1997-98 | Rankings: Rank by Total Personal Income 1997 | Rankings: Rank by Avg. Ann. Growth Rate 1992-97 | Rankings: Rank by Percent Change 1996-97 | Rankings: Rank by Percent Change (saar) 1997-98 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 1992 | Per Capita Personal Income 1996 | Per Capita Personal Income 1997 | Rates of Per Capita Personal Income Change: Avg. Ann. Grwth Rate 1992-97 | Rates of Per Capita Personal Income Change: Percent Change 1996-97 | Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1992 | Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1996 | Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1997 | Rankings: Rank by Per Capita Personal Income 1997 | Rankings: Rank by Average Annual Grwth Rate 1992-97 | Rankings: 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) 1992 | 1996 | 1997 | Rates of Change for Total Personal Income per Household: Avg. Ann. Grwth Rat 1992-97 | Percent Change 1996-97 | Total Personal Income per Household as a Percent of U.S. Personal Income per Household 1992 | 1996 | 1997 | Rankings: 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 | | 1995-1996 | 1996-1997 | | | | 1995-1997 | | | |
| | Amount | Amount | Amount | Standard Error | Amount | Amount | Standard Error | Two-year Average Difference | Pct. Chg. | Amount | Standard Error | Amount Rank | As a % of the U.S. |
| 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 1991 | Average Annual Pay 1995 | Average Annual Pay 1996 | Rates of Change for Average Annual Pay: Avg. Ann. Grwth Rate 1991-96 | Rates of Change for Average Annual Pay: Percent Change 1995-96 | Average Annual Pay as a Percent of U.S. Average Annual Pay 1991 | Average Annual Pay as a Percent of U.S. Average Annual Pay 1995 | Average Annual Pay as a Percent of U.S. Average Annual Pay 1996 | Rankings: Rank by Average Annual Pay 1996 | Rankings: Rank by Avg. Ann. Grwth Rate 1991-96 | Rankings: 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 1992 (thousands) | 1996 (thousands) | 1997 (thousands) | Rates of Change for Employees on Nonagricultural Payrolls: Avg. Ann. Grwth Rate 1992-97 | Percent Change 1996-97 | Employees on Nonagricultural Payrolls (not seasonally adjusted): October 1997 (thousands) | October 1998(p) (thousands) | Percent Change 1997-98 | Rankings: Rank by Employees on Nonag. Payrolls 1997 | Rank by Average Annual Grwth Rate 1992-97 | Rank by Percent Change 1996-97 | Rank by Percent Change (unadjust.) 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% | 13371.2 | 13743.7 | 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 1992 | Unemployment Rate 1996 | Unemployment Rate 1997 | Unemployment Rate Percent Change 1992-97 | Unemployment Rate Percent Change 1996-97 | Unemployment Rate (not seasonally adjusted) October 1997 | Unemployment Rate (not seasonally adjusted) October 1998(p) | Rankings by Unemployment Rate 1992 | Rankings by Unemployment Rate 1996 | Rankings by Unemployment Rate 1997 | Rankings by Unemployment Rate (unadjust.) 1997 | Rankings by Unemployment Rate (unadjust.) 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 | | | 1995-1997 | | |
| | Amount | Amount | Amount | Standard Error | Amount | Amount | Standard Error | Two-year Average Difference | Amount | Standard Error | Amount Rank |
| 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.

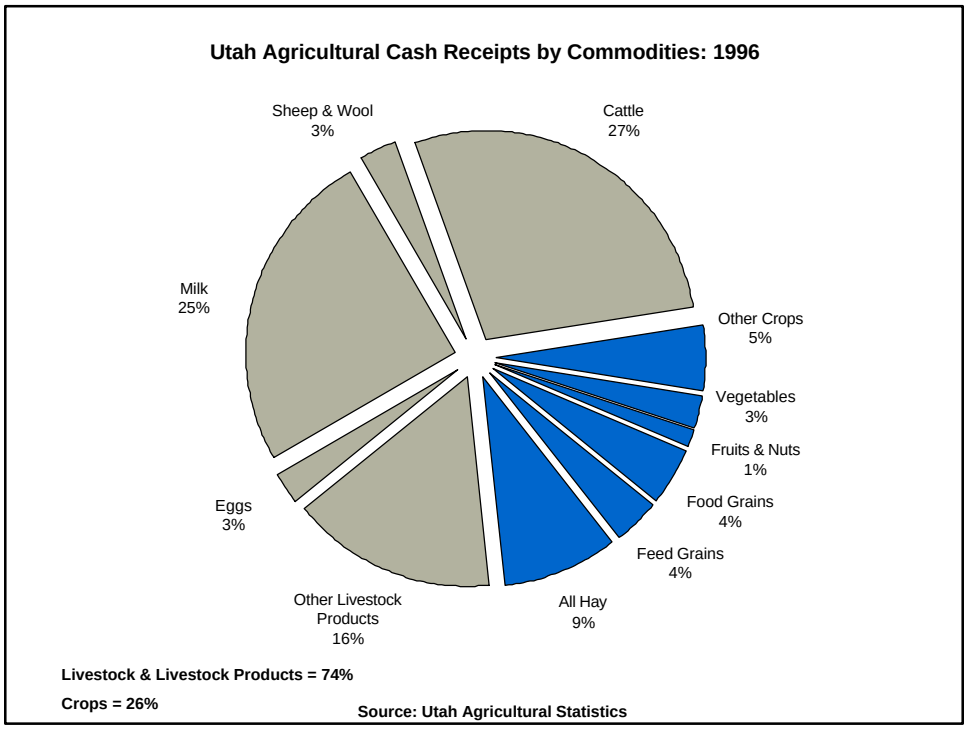
**Livestock Production.** The production of most livestock declined in Utah for 1998 as compared to 1997. Sheep production nationally continued to rapidly decline, but the decline has not been as rapid in Utah. However, this could change easily as profit margins for lamb production remain narrow and 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.

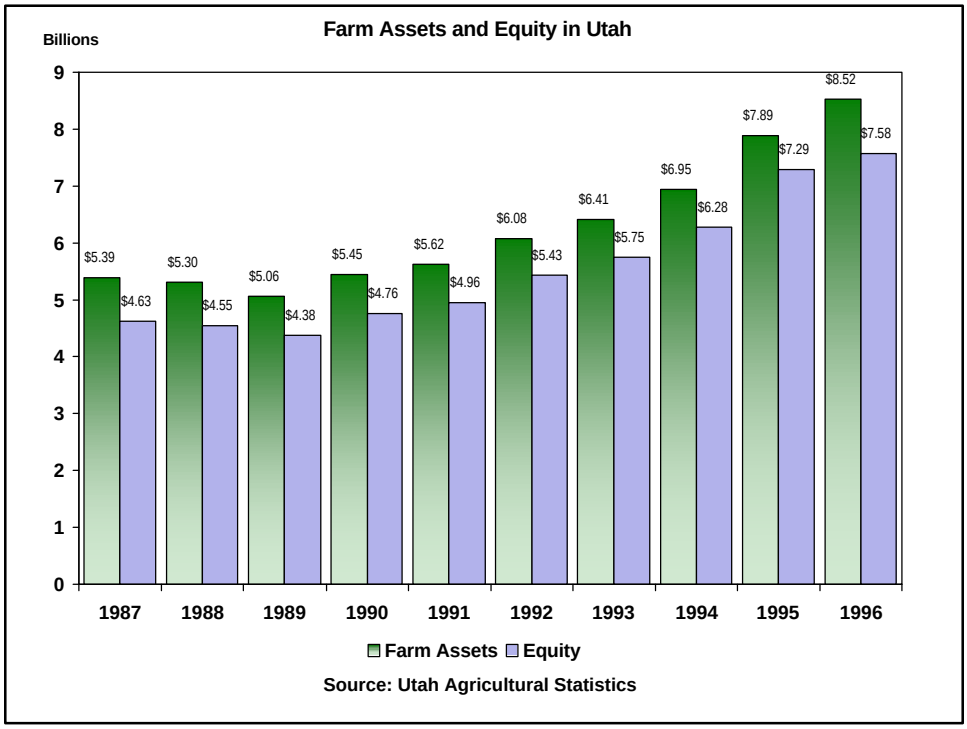
## County Perspective

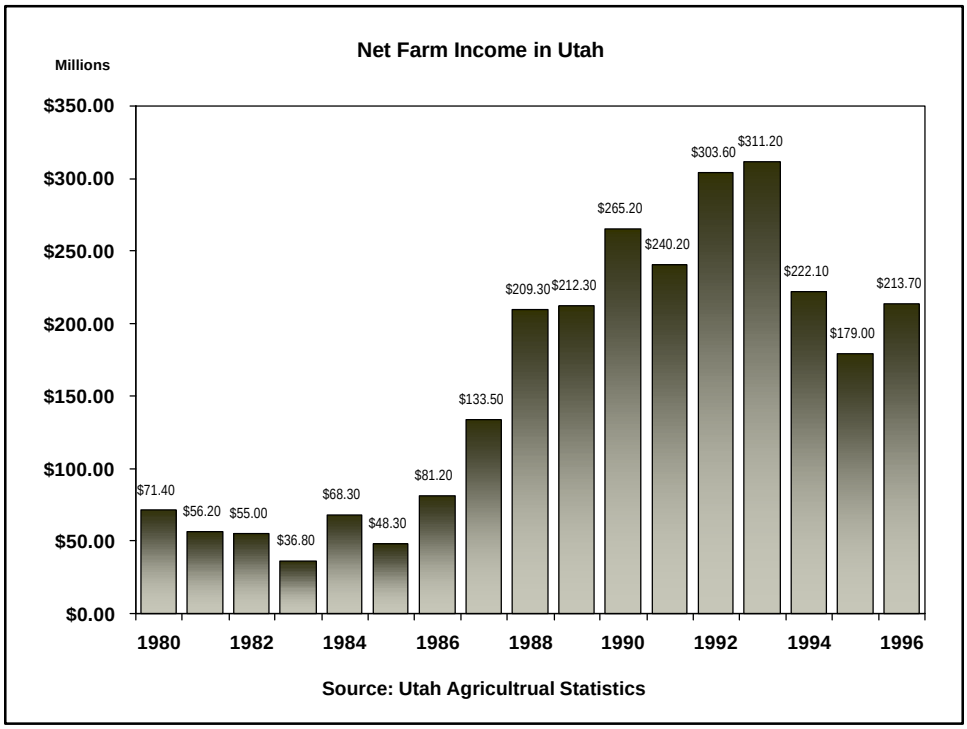
The primary production counties are Cache, Box Elder, Millard, Sanpete, and Utah counties. These counties will continue to dominate production but changes in relative importance are occurring. For example, Utah county has been and continues to be the largest fruit production county of the state. But, 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.

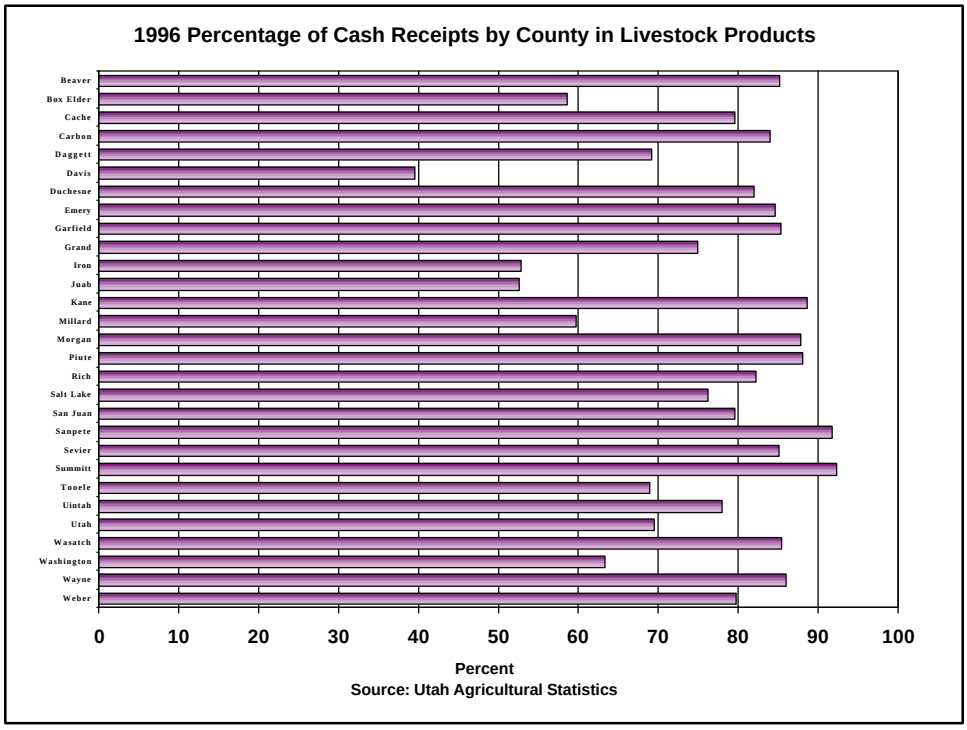
The production of livestock and livestock products dominates agricultural production in most counties. In many of these counties this is synonymous with the production of cattle and calves. This is especially true in counties such as Rich, Daggett, Kane, Garfield, Emery, Wayne, and Piute where other 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.

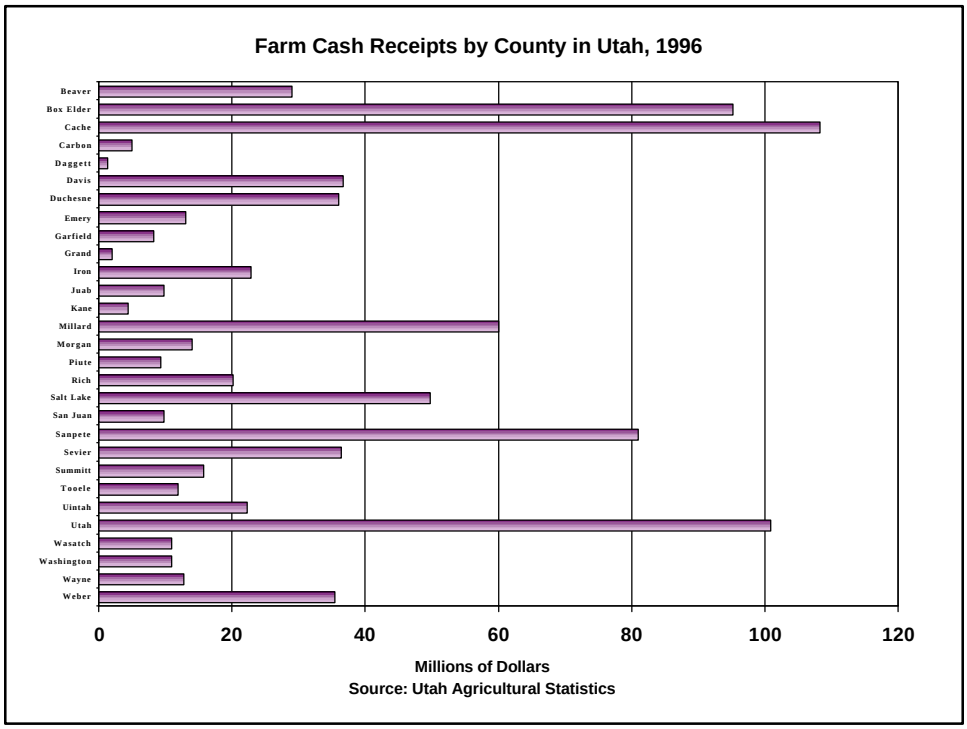
A number of recent developments will likely have an impact on agricultural production in some counties. For example, construction has been started on a cereal production plant in Box Elder county. It is anticipated that this plant, which is owned by Malt-O-Meal, will be in operation in the year 2000. 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
Sheep & Wool 3%
Cattle 27%
Milk 25%
Other Crops 5%
Vegetables 3%
Fruits & Nuts 1%
Food Grains 4%
Feed Grains 4%
All Hay 9%
Other Livestock Products 16%
Eggs 3%
Livestock & Livestock Products = 74%
Crops = 26%
Source: Utah Agricultural Statistics


Farm Assets and Equity in Utah
Billions
0
1
2
3
4
5
6
7
8
9
$5.39
$4.63
$5.30
$4.55
$5.06
$4.38
$5.45
$4.76
$5.62
$4.96
$6.08
$5.43
$6.41
$5.75
$6.95
$6.28
$7.89
$7.29
$8.52
$7.58
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
Farm Assets
Equity
Source: Utah Agricultural Statistics


Net Farm Income in Utah
Millions
$350.00
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$0.00
$71.40
$56.20
$55.00
$36.80
$68.30
$48.30
$81.20
$133.50
$209.30
$212.30
$265.20
$240.20
$303.60
$311.20
$222.10
$179.00
$213.70
1980
1982
1984
1986
1988
1990
1992
1994
1996
Source: Utah Agricultrual Statistics


1996 Percentage of Cash Receipts by County in Livestock Products
Beaver
Box Elder
Cache
Carbon
Daggett
Davis
Duchesne
Emery
Garfield
Grand
Iron
Juab
Kane
Millard
Morgan
Piute
Rich
Salt Lake
San Juan
Sanpete
Sevier
Summitt
Tooele
Uintah
Utah
Wasatch
Washington
Wayne
Weber
0
10
20
30
40
50
60
70
80
90
100
Percent
Source: Utah Agricultural Statistics


Farm Cash Receipts by County in Utah, 1996
Beaver
Box Elder
Cache
Carbon
Daggett
Davis
Duchesne
Emery
Garfield
Grand
Iron
Juab
Kane
Millard
Morgan
Piute
Rich
Salt Lake
San Juan
Sanpete
Sevier
Summitt
Tooele
Uintah
Utah
Wasatch
Washington
Wayne
Weber
0
20
40
60
80
100
120
Millions of Dollars
Source: Utah Agricultural Statistics

## 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 |
| Vegtables | 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

| | 1992 | | | 1993 | | | 1994 | | | 1995 | | | 1996 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| County | 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 |
| Washinggton | 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 increasing 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.

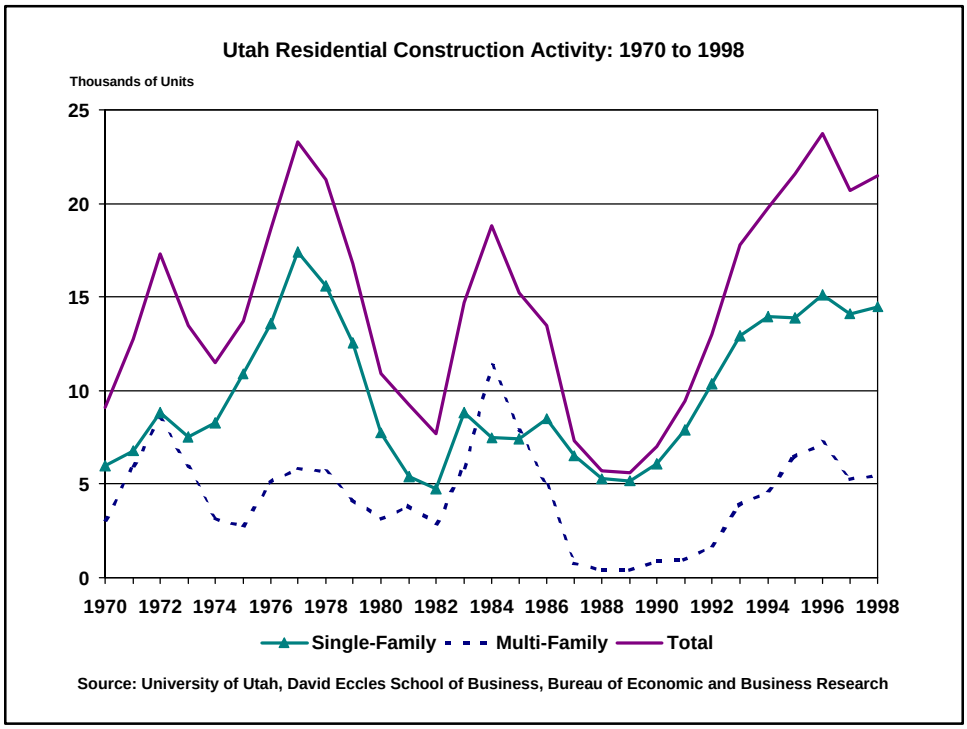
## Significant Issues

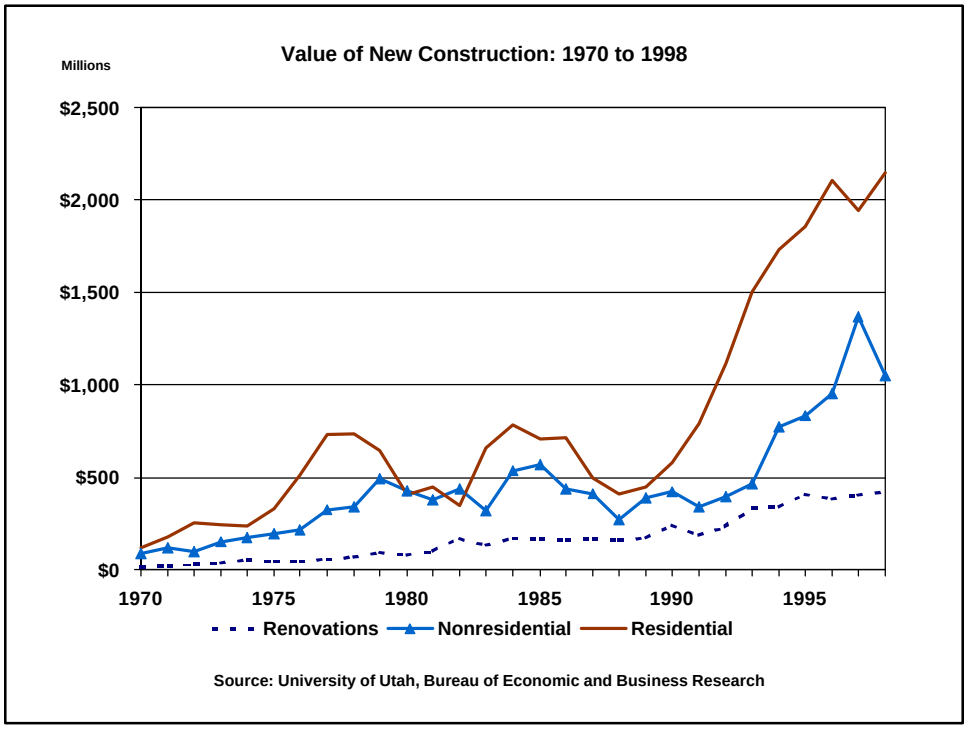
**Overbuilding.** In recent years, the value of new construction for retail stores, mercantile and restaurants has been substantial. Since 1994 the construction of retail facilities has averaged more than $150 million annually, raising the possibility of overbuilding, particularly in light of several 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.

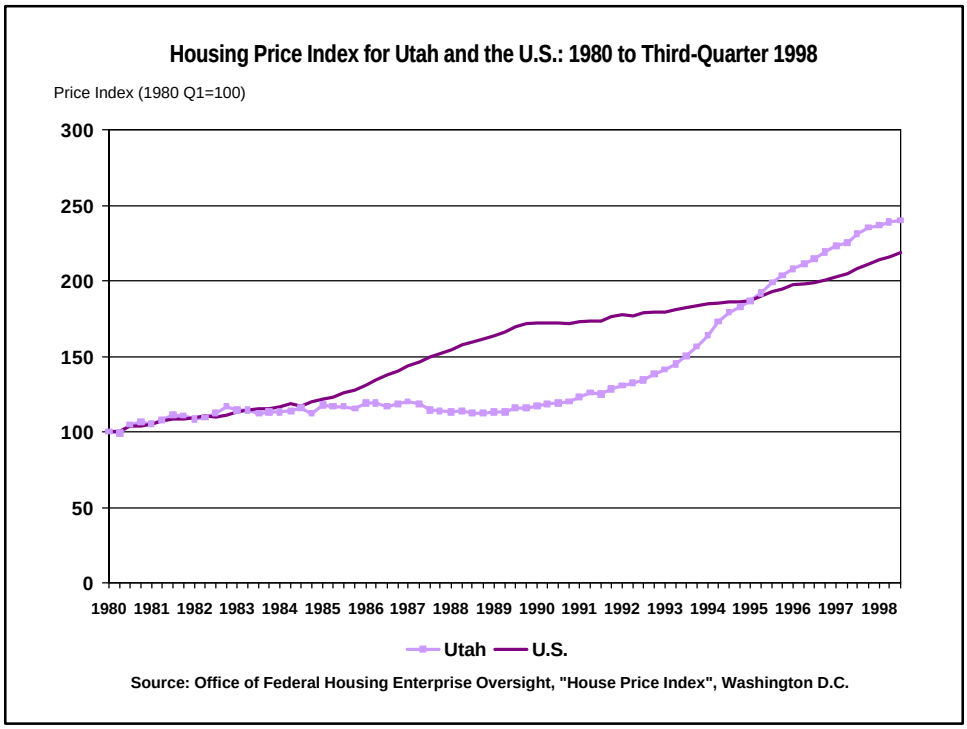
**Olympics Related Construction.** Between 1997 and 2001, the construction of Olympic related facilities could generate as much as $700 million in construction activity including; the Olympic Village ($120 million), media housing ($90 million), expansion at Snowbasin and Park City resorts ($250 million), 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. ✻


Utah Residential Construction Activity: 1970 to 1998
Thousands of Units
25
20
15
10
5
0
1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998
Single-Family
Multi-Family
Total
Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research


Value of New Construction: 1970 to 1998
Millions
$2,500
$2,000
$1,500
$1,000
$500
$0
1970 1975 1980 1985 1990 1995
Renovations
Nonresidential
Residential
Source: University of Utah, Bureau of Economic and Business Research


Housing Price Index for Utah and the U.S.: 1980 to Third-Quarter 1998
Price Index (1980 Q1=100)
300
250
200
150
100
50
0
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998
Utah
U.S.
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

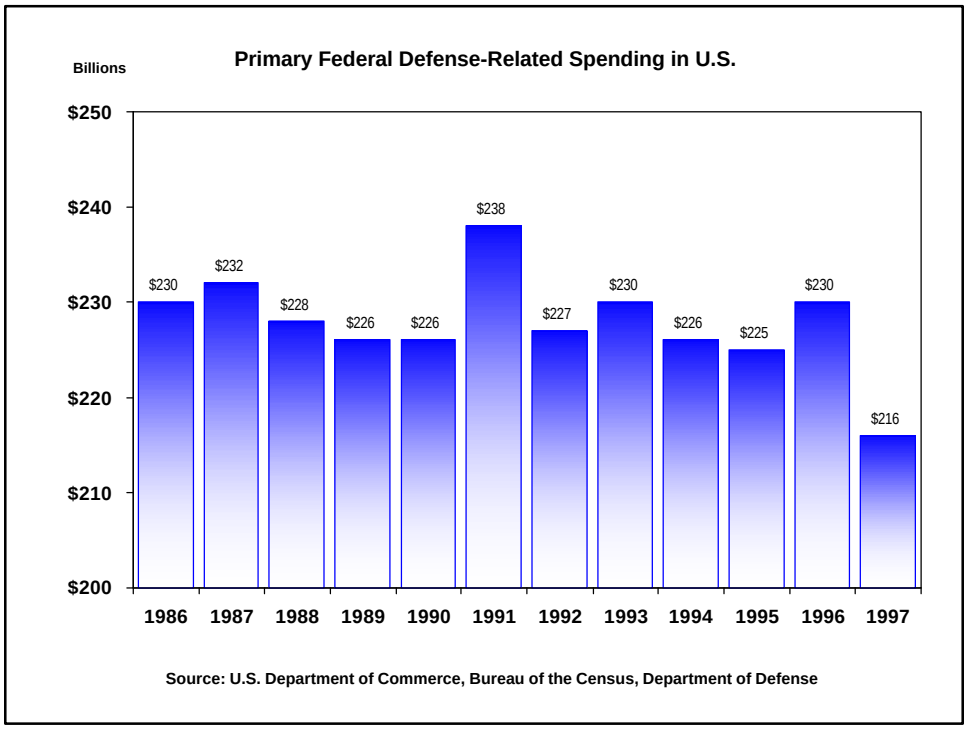
Hill Air Force Base, the state's largest basic employer and center of Utah's defense industry, was recently awarded a contract valued at $1.58 billion over nine years. The award was a direct result of the upcoming closures of Kelly Air Force Base in California, and McClellan Air Force Base in Texas. 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.

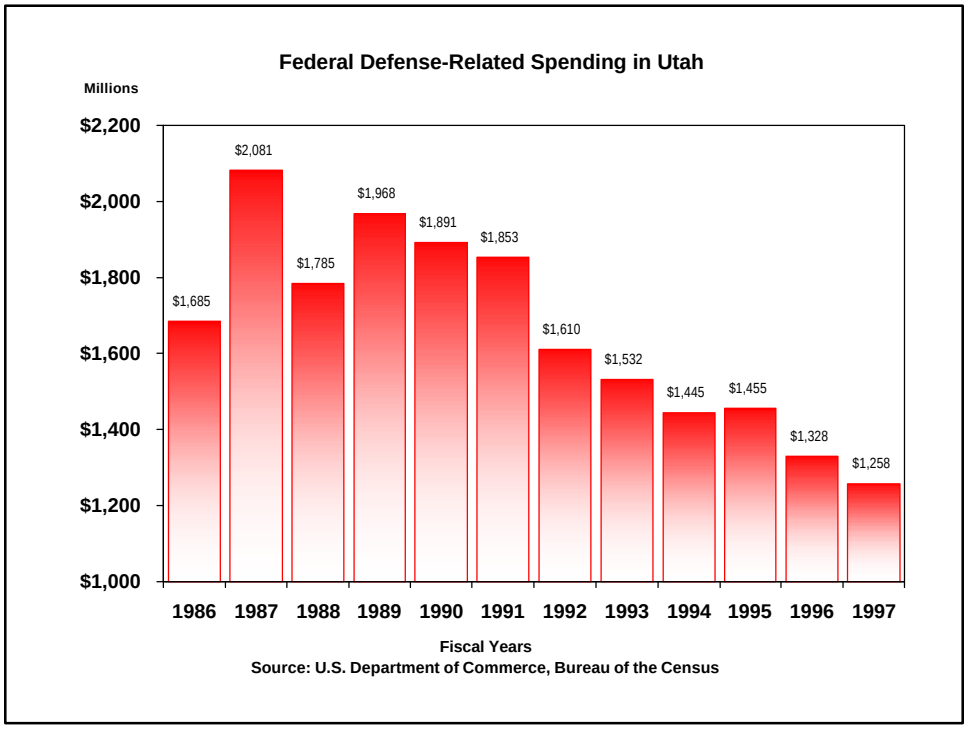
Defense Depot Ogden (DDO) was designated for closure by the Defense Base Closure and Realignment Commission (BRAC) in 1995, and was officially closed in September 1997 after 56 years of operation. Ogden City currently subleases the empty buildings for business and warehouse space, and has negotiated 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 Federal Defense-Related Spending in U.S.
Billions
$250
$240
$230
$220
$210
$200
$230
$232
$228
$226
$226
$238
$227
$230
$226
$225
$230
$216
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Source: U.S. Department of Commerce, Bureau of the Census, Department of Defense


Federal Defense-Related Spending in Utah
Millions
$2,200
$2,000
$1,800
$1,600
$1,400
$1,200
$1,000
$1,685
$2,081
$1,785
$1,968
$1,891
$1,853
$1,610
$1,532
$1,445
$1,455
$1,328
$1,258
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Fiscal Years
Source: U.S. Department of Commerce, Bureau of the Census

## 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

| | 1997 | | | | 1996 | Change in Total Spending from 1996 to 1997 | |
|---|---|---|---|---|---|---|---|
| County | 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 Overview[1]

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 industial 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 $U_3O_8$ 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 continued 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 ($MoS_2$) 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.

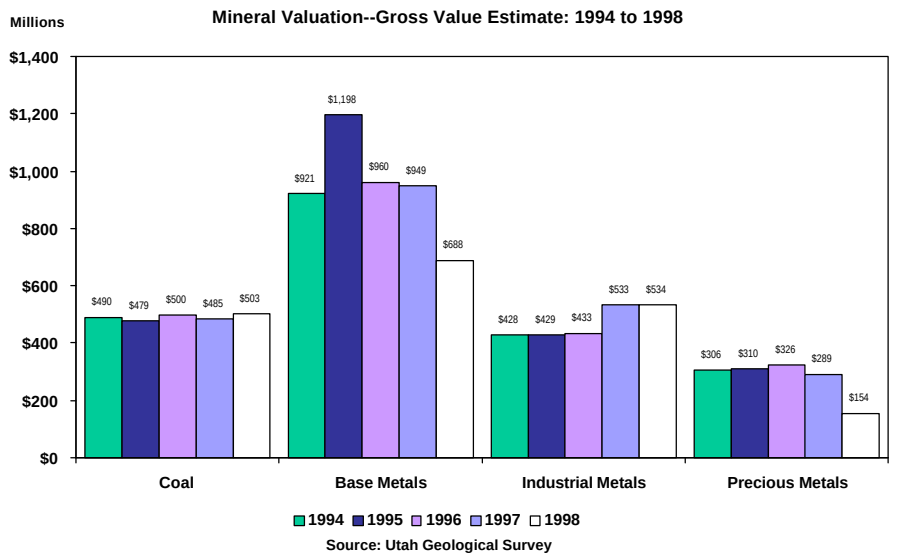
## Significant Issues

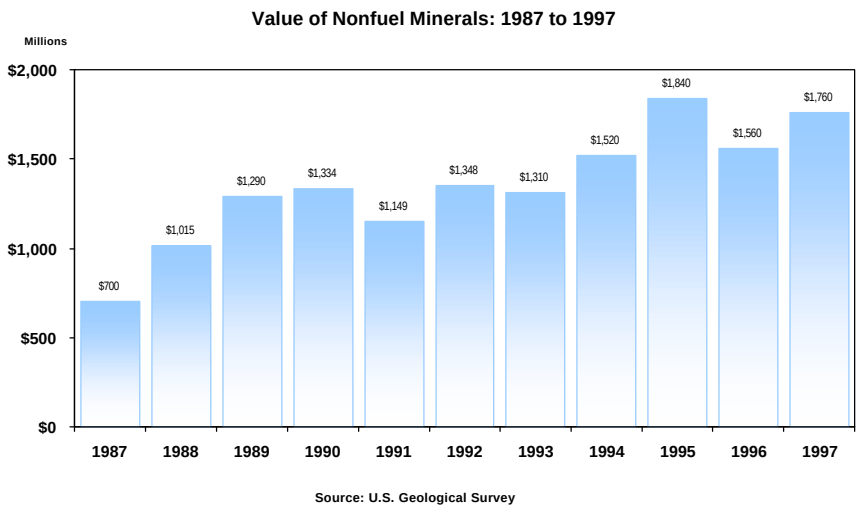
Significant issues which will affect the long-term viability of Utah's mineral industry are: (1) the uncertainty about mine permit requirements and royalty rates in proposed changes to the 1872 Mining Law, (2) the limited availability of public lands open for mineral exploration due to federal withdrawals 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. ✻


Mineral Valuation--Gross Value Estimate: 1994 to 1998
Millions
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
$490
$479
$500
$485
$503
$921
$1,198
$960
$949
$688
$428
$429
$433
$533
$534
$306
$310
$326
$289
$154
Coal
Base Metals
Industrial Metals
Precious Metals
1994
1995
1996
1997
1998
Source: Utah Geological Survey


Value of Nonfuel Minerals: 1987 to 1997
Millions
$2,000
$1,500
$1,000
$500
$0
$700
$1,015
$1,290
$1,334
$1,149
$1,348
$1,310
$1,520
$1,840
$1,560
$1,760
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
Source: U.S. Geological Survey

## Supply and Disposition of Crude Oil (Thousand Barrels) in Utah: 1980-1998

| | Supply | | | Disposition | | | |
|---|---|---|---|---|---|---|---|
| Year | 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

| | Supply | | | Consumption by Product | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | Refined in Utah | Imports | Refinery Stocks | Motor Fuel | Aviation Fuel | Distillates | Other | Total | Exports |
| 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

| | Supply | | | Consumption by End Use | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | 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

| | Supply | | | | Consumption by End Use | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | 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 Consuption of Electricity (Gigawatthours) in Utah: 1980-1998

| | Net Generation by Fuel Type | | | | | Consumption by End Use | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | 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

| | Field Price (dollars per unit) | | | Average End-Use Price (dollars per unit) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Petroleum Products | | | | | | | |
| Year | Coal (tons) | Crude Oil (barrels) | Natural Gas (mcf) | Coal (tons) | No. 2 Distillate (gallons) | Motor Fuel (gallons) | Natural Gas Residential (mcf) | Natural Gas Commercial (mcf) | Natural Gas Industrial (mcf) | Electric Power Residential (kWh) | Electric Power Commercial (kWh) | Electric Power Industrial (kWh) |
| 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 was 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 prepacked 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 Tecnologies (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 decade[1]. 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 million[6] 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

[1] Salt Lake Convention & Visitors Bureau *1998 Marketing Plan*

[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.

during the Games;

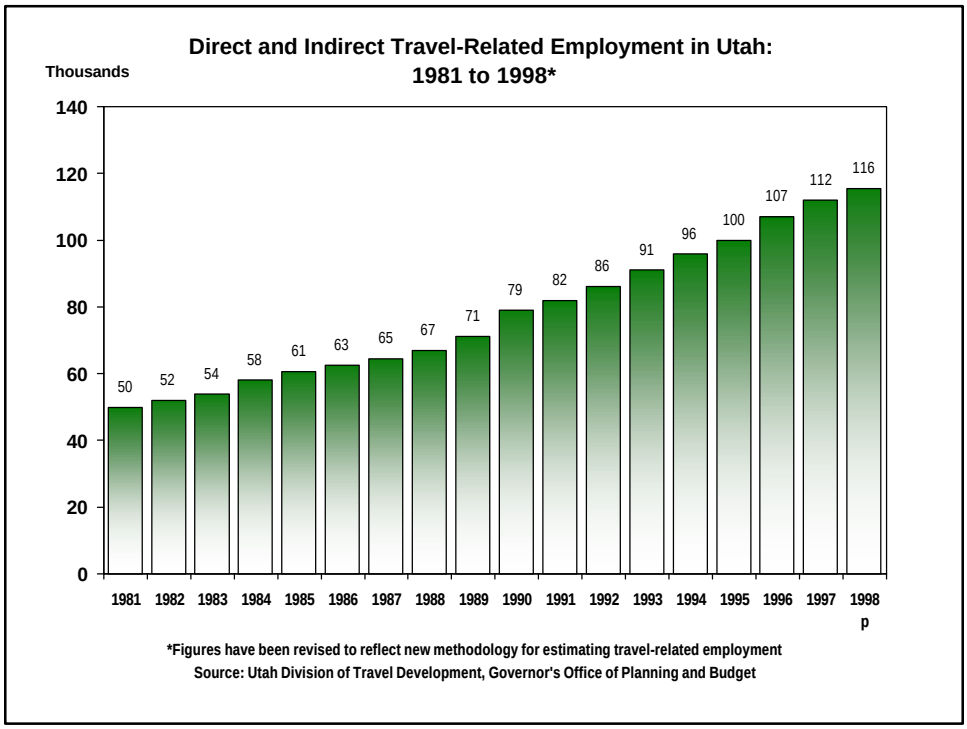
- Visitors not paying for lodging are estimated to spend $176 per day during the Games;
- Based on 1.2 million visitor days, total visitor spending is estimated at $311 million;
- Net visitor spending of $123 million is calculated by subtracting $83 million for displaced visitor spending, and $105 million for the portion of spending created outside Utah, from the total estimate of $311 million.

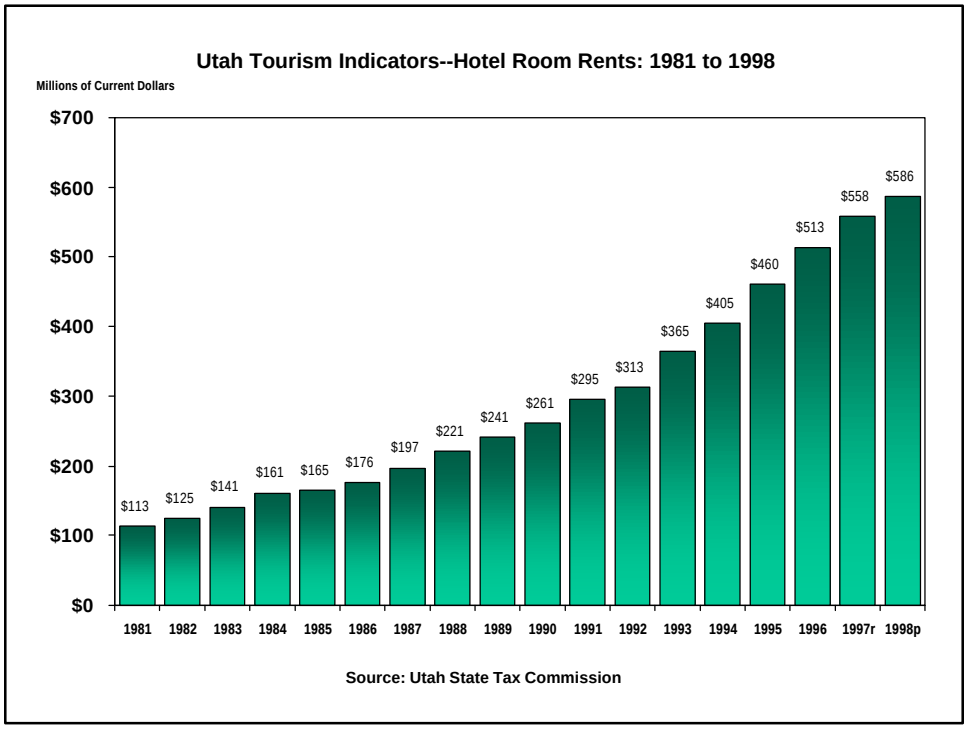
Because of the Olympics, a number of longer term projects that would have occurred without the Olympics are being accelerated. Hotel construction, greatly speared by high occupancy rates would have occurred over a ten-year period instead of the current five-year trajectory. It is assumed that 25% of 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.

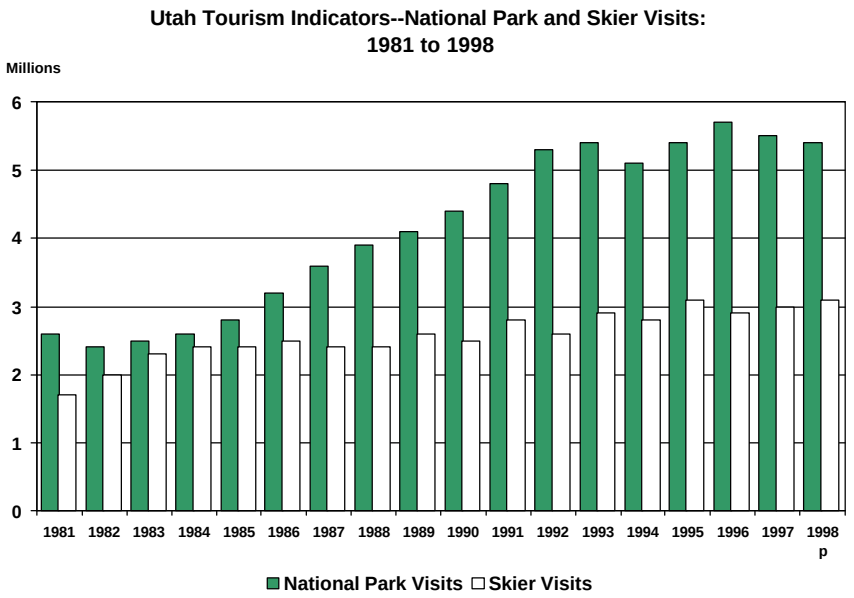
## Conclusion

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. ✻


Direct and Indirect Travel-Related Employment in Utah:
1981 to 1998*
Thousands
140
120
100
80
60
40
20
0
50
52
54
58
61
63
65
67
71
79
82
86
91
96
100
107
112
116
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998 p
*Figures have been revised to reflect new methodology for estimating travel-related employment
Source: Utah Division of Travel Development, Governor's Office of Planning and Budget


Utah Tourism Indicators--Hotel Room Rents: 1981 to 1998
Millions of Current Dollars
$700
$600
$500
$400
$300
$200
$100
$0
$113
$125
$141
$161
$165
$176
$197
$221
$241
$261
$295
$313
$365
$405
$460
$513
$558
$586
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997r
1998p
Source: Utah State Tax Commission




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 Transporation, 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. Utahns' 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 budget[1]. 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 $) Utah | Expenditures (in thousands $) U.S. | Percent Change Utah | Percent Change U.S. | Per Capita Expenditures** Utah | Per Capita Expenditures** U.S. | Per Capita Expenditures** Utah as a % of U.S. | Expenditures as a Percent of TPI*** Utah | Expenditures as a Percent of TPI*** 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.

## Models[1]

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 trip[3] 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

| | Measure | Current*** | A | B | C | D |
|---|---|---|---|---|---|---|
| | | Scenarios | | | | |
| **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 | Persons per Residential Acre | 6.0 | 5.0 | 5.6 | 7.6 | 8.2 |
| Total Developed Area | Square Miles | 431 | 840 | 755 | 557 | 516 |
| New Land Developed (1998 to 2020) | Square Miles | --- | 409 | 325 | 126 | 85 |
| Agricultural Land Consumed (1998 to 2020) | Square Miles | --- | 174 | 143 | 65 | 43 |
| Average Lot Size | Single Family, Residential Acre | 0.32 | 0.37 | 0.35 | 0.29 | 0.27 |
| **Housing Type** | | | | | | |
| Single Family | Percent of Total | 68% | 77% | 75% | 68% | 62% |
| Town House | Percent of Total | 4% | 4% | 4% | 7% | 9% |
| Multiple Family | Percent of Total | 28% | 19% | 21% | 25% | 29% |
| **Transportation*** | | | | | | |
| Vehicle Miles Traveled | Millions | 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** | Miles per Hour | 25.7 | 22.9 | 20.0 | 20.9 | 19.8 |
| Average Trip Time** | Minutes | 18.5 | 21.5 | 23.2 | 22.0 | 22.8 |
| Transit Share of Work Trips** | Percent of Total | 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 | Tons per Day | 1,869 | 2,660 | 2,511 | 2,501 | 2,512 |
| Air Quality Score | Lower Score = Better Air Quality | --- | 9 | 7 | 6 | 8 |
| **Water** | | | | | | |
| Water Demand | Acre Feet | 698,800 | 1,025,900 | 954,200 | 808,600 | 770,500 |
| Per Capita Water Use | Gallons per Day | 319 | 303 | 279 | 231 | 218 |
| **Infrastructure Costs** | | | | | | |
| Regional Water | Billions of 1999 Dollars | --- | 0.6 | 0.6 | 0.5 | 0.5 |
| Regional Transit | Billions of 1999 Dollars | --- | 0.6 | 0.6 | 2.3 | 4.7 |
| Regional Roads | Billions of 1999 Dollars | --- | 17 | 10.7 | 10.1 | 10.6 |
| Municipal and Developer | Billions of 1999 Dollars | --- | 19.4 | 17.8 | 9.2 | 7.2 |
| Total | Billions of 1999 Dollars | --- | 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 Overview[1]

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 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

[1] This chapter includes a summary of highway and transit transportation funding. The presentation begin with highways and is followed by transit.

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 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 received 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 |

**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 Constructor's 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 cos,, 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 adpoted 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 Airport[1] 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 (Airport[2]). 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 summaries 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. ✻