1996

Economic Report to The Governor

STATE OF UTAH

MICHAEL O. LEAVITT, GOVERNOR

James Coles Office Hours

Monday	Tuesday	Wednesday	Thursday	Friday
12:30am-5pm	9am–4pm	12:30pm-5:30pm	9am-1pm	12:30pm-5:30pm

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I am compelled once again to communicate with those for whom I perform laundry services. I do not perform closet or re-hanging clothes services. PLEASE, do not place into the dirty clothes, items which are not necessarily dirty. This refers to clothes which may have been worn once or twice, but are not dirty, nor sweaty. Please wear the clothes until they are soiled or stink. Washing them every time they come off the shelf or off the hanger is environmentally wasteful, costly and contributes to excessive wear of the fabrics.

Also, this document will serve notice that no more wash will be done until Saturday, December 28, 1996. Be clean, be neat, be tidy but don't lay everything that comes off your body into the "dirty" clothes receptacle. Only underwear and sox should routinely be changed daily!!! We appreciate your compliance to this simple request.

With love,

Your devoted laundry executive, 679 Terrace Hills Drive.

12-19-96

Winter Quarter Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
9-10:30 Study / ISP 11-12 Class 12:30-5 Work 6-9 Class 10pm Weights	9–4 Work 9pmWeights	9-10:30 Study / ISP 11-12 Class 12:30–2 NHS 2:30-5:30 Work 7–9pm Work 9pm Weights	9-1pm Work 1:30-5 NHS 9pm Hoop	9-10:30 Study / ISP 11-12 Class 12:30-5:30 Work

1/5 Gardeners 8pm

YOUR NAME

Your street address
City, State, and Zip
(415) xxx-xxxx

OBJECTIVE

A position as Director of Whatever, focusing on this and that areas.

HIGHLIGHTS

- Number of years experience in work* at all relevant to the objective above.
- Credentials or education or training, relevant to this objective.
- A key accomplishment** that shows you're a "hot candidate" for this job.
- A strength** or characteristic** of yours, that's important to you and relevant to this job.
- Something else the employer should know ... a skill**, a trait**, an accomplishment**.

including unpaid work* * reflected in the details below, of course*

RELEVANT EXPERIENCE

199x-present COMPANY NAME
Job Title
A two-line overview of your essential role in this company, including the kind of products or services you dealt with.
- An accomplishment from THIS job, illustrating a skill needed in the NEW job.
- Another accomplishment from this job, illustrating a skill needed in the new job.
- Another activity from this job, illustrating a skill needed in the new job.

198x-xx COMPANY NAME
Job Title
A two-line overview of your essential role in this company, including the kind of products or services you dealt with.
- An accomplishment from THIS job, illustrating a skill needed in the NEW job.
- Another accomplishment from this job, illustrating a skill needed in the new job.
- Another activity from this job, illustrating a skill needed in the new job.

198x-xx COMPANY NAME
Job Title
A two-line overview of your essential role in this company, including the kind of products or services you dealt with.
- An accomplishment from THIS job, illustrating a skill needed in the NEW job:
  - A substatement that elaborates on one step in the process of the accomplishment above.
  - A substatement elaborating on another step in the process of the accomplishment above.

197x-xx COMPANY NAME
Job Title
A two-line overview of your essential role in this company, including the kind of products or services you dealt with.
- An accomplishment from THIS job, illustrating a skill needed in the NEW job.
- Another activity from this job, illustrating a skill needed in the new job.

EDUCATION

University of So-and-So, Podunk City
B.A., Basket Weaving, 1989

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1996

Economic Report To The Governor

State of Utah
Michael O. Leavitt, Governor

Third Printing
January 1996

Governor's Office of Planning and Budget
116 State Capitol
Salt Lake City, UT 84114

MICHAEL O. LEAVITT
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114-0601

OLENE S. WALKER
LIEUTENANT GOVERNOR

January 8, 1996

My Fellow Utahns:

I am pleased to accept this annual report on Utah's economic performance. I want to thank the State Economic Coordinating Committee for preparing this careful assessment of the past year and helping to develop and disseminate a consistent foundation of economic data and analysis.

As I have met with state economists and reviewed the economic data, I am impressed and humbled by the prosperity of the era. The Economic Coordinating Committee has aptly characterized the past several years as a golden period for the Utah economy. These are the best of times. We celebrate our centennial year with low unemployment, rising incomes, and a budget surplus. And while some would credit Utah's economic performance to good fortune or timing -- and there is some of this -- I know the explanation runs deeper. The explanation is found in our people. The productivity of Utah's workers, the wise investments of Utah's entrepreneurs, the first-rate performance of Utah's teachers, the success of Utah companies in the global economy, and the prudent choices made by Utah's leaders are just some, of the many, explanations for our economic accomplishments. I congratulate the residents of this state for their contributions to our collective economic success.

During 1995, we survived the Base Realignment and Closure Commission's decisions, learned that Salt Lake City would host the 2002 Winter Olympics and permitted construction for $2.9 billion in projects. More issues will impact us during 1996. The restructuring of the federal government already is, and will continue, to affect our economy. Growth will continue to be a dominant issue. And, seeing that the benefits of Utah's current economic abundance are extended to all segments of society is another major challenge.

I welcome the feedback of all Utahns as we confront these and other issues. Thank you for this opportunity to provide public service. I look forward to the coming year.

Sincerely,

Michael O. Leavitt

Michael O. Leavitt
Governor

☆ Preface

The 1996 *Economic Report to the Governor* is the culmination of months of work by the State Economic Coordinating Committee to monitor the economy, gather data, analyze trends, and forecast the future. The ultimate purpose of this document is to build consensus among the state's economic community so that decision-makers can make judgements based on a consistent foundation of economic data and analysis. The *Economic Report* has been published annually since 1986.

This year's report is the Centennial Edition and includes a general discussion about long-term projections and the planning process. A special chapter on Utah's economic history has also been included. Other chapters focus on the national and state outlook, economic development activities, economic indicators, and selected industries.

Since the Economic Committee authors this report in December and there is often a quarter or more of lag time before economic data become final, much of the data for 1995 is a preliminary estimate based on the most current data available as of December 8, 1995. Revised and final estimates can be obtained from the contributors to this *Economic Report.*

The membership of the Economic Coordinating Committee includes representatives from the following organizations:

Governor's Office of Planning and Budget
Utah Department of Employment Security
Utah State Tax Commission
Utah Department of Natural Resources
Utah Department of Community and Economic Development
Legislative Fiscal Analyst's Office
Utah Foundation
Bureau of Economic and Business Research, University of Utah
Economics Department, Utah State University
Department of Economics, Weber State University
Department of Managerial Economics, Brigham Young University
First Security Bank
Key Bank

The *Economic Report* can be obtained electronically through UTAHNET--the State of Utah's Online Bulletin Board Service--by calling (801) 538-3383 or (800) 882-4638 and joining the conference for GOPB On-Line. Portions of this report are also available on the Governor's Office of Planning and Budget World Wide Web homepage at www.state.ut.us/. Paper copies are for sale for $15.00. Contact the Governor's Office of Planning and Budget, Demographic and Economic Analysis section, to obtain copies or receive help with inquiries about the *Economic Report* at 116 State Capitol, Salt Lake City, Utah 84114, (801) 538-1036. ☆

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☆ Contributors

☆ **Governor's Office of Planning and Budget**
Lynne N. Koga, CPA, Director
Brad T. Barber, State Planning Coordinator / Chairman, Economic Coordinating Committee
Natalie Gochnour, Director of Demographic and Economic Analysis
David Abel, Research Analyst
Aaron Clark, Research Analyst
Peter Donner, Economist
Eileen Frisbey, Executive Secretary
Camille Hacking, Executive Secretary
Lee King, Senior Planner
Julie Johnsson, Research Analyst
Kirin McInnis, Research Analyst
Pam Perlich, Economist
Ross Reeve, Research Consultant
Lance Rovig, Senior Economist
Jennifer Taylor, Research Analyst
Mari Lou Wood, Editor

☆ **Utah Department of Employment Security**
William R. Horner, Director, Labor Market Information
Lecia Parks Langston, Supervising Economist
John Matthews, Labor Market Economist
Kenneth E. Jensen, Labor Market Economist

☆ **Utah Department of Community and Economic Development**
Douglass Jex, Research Director
Randy Rogers, Utah Travel Council

☆ **Utah State Tax Commission**
Roger Tew, Tax Commissioner
Doug Macdonald, Chief Economist
Tom Williams, Senior Economist
Leslee Katayama, Economist

☆ **University of Utah, Bureau of Economic and Business Research**
R. Thayne Robson, Director
Frank Hachman, Associate Director
Boyd Fjeldsted, Senior Research Economist
Jan Crispin-Little, Research Analyst
Austin Sargent, Research Analyst
Jim Wood, Research Analyst

☆ **Utah Department of Natural Resources, Office of Energy and Resource Planning**
Jeff Burks, Director, Energy and Resource Planning
F.R. Djahanbani, Senior Energy Analyst
Mylitta Barrett, Statistician
Kevin Duffy-Deno, Senior Economist
Thomas Brill, Economist
James Galanis, Economist

☆ **First Security Bank Corporation**
Kelly K. Matthews, Senior Vice President and Economist

☆ **KeyCorp**
Deana L. Froerer, Vice President and Regional Economist

☆ **Utah Foundation**
Michael E. Christensen, Executive Director
Jim Robson, Research Analyst

☆ **Utah State University**
Bruce Godfrey, Professor of Economics

☆ **Utah Geological Survey**
Roger Lee Bon, Geologist

Executive Summary

☆ Executive Summary

Utah celebrates 100 years of statehood this year. This commemoration occurs in extremely prosperous times. In this, the centennial edition of the *Economic Report to the Governor*, rapid job growth, low unemployment, a construction boom, rising incomes, and fiscal health characterize the period. The 1990s have proven to be a booming time for Utah's economy and an appropriate time to celebrate.

When Utah became a state in 1896, the economy was substantially different. The two pillars of the economy were agriculture and mining. Rail transportation also played a central role in the state's early economic development. Economic conditions at the time of statehood were unstable because the mining industry experienced booms and busts and the success of agriculture depended on weather conditions.

The Utah economy of today, however, is larger, more complex, and more diverse. The historic context for the development of Utah's economy includes two World Wars, the Great Depression, natural resource booms and busts, federal investment in infrastructure and national defense, a series of recessions and expansions, and the emergence of the information age and global economy. New industries such as tourism, computer hardware and software, health care, and a wide variety of educational, legal, financial, and business services have all emerged. The evolution of the state's economy continues with the introduction of more industries, the decline in others, and compelling forces that shape the future.

The 1996 *Economic Report to the Governor* documents the stellar economy of the past year, reviews the history of previous years, and provides an outlook for the future. Much of this analysis is based on an underlying awareness of several pivotal forces that are transforming the state and nation. These forces have helped forge Utah's current period of economic prosperity and will continue to have a dominant affect on Utah's economy as the state confronts the challenges of the future.

In addition, Utah's current economic expansion is occurring within a national and regional context, as well as being influenced by the specific themes of vigorous job growth, rising incomes, and strong fiscal performance. Finally, labor shortages, housing affordability, and managing growth are emerging as important challenges for the future.

Forces Shaping Utah

Utah's economic performance, like that of all states, is impacted by dominant, overlying forces that mold and shape the economy. While there are many forces impacting Utah, five of the most important ones are:

- ☆ The economic emergence of the Mountain Region[1]
- ☆ The dominant influence of California's business climate
- ☆ Technological innovations
- ☆ Restructuring of the federal government
- ☆ International economic markets and competition

These and other forces are alluded to throughout this *Economic Report*, as they help explain, and in other cases augment, the facts and figures described. These forces are still developing and evolving. The full impact of them has not been realized. The ultimate impact, in terms of impacting the wealth of Utah's citizens, will continue for years to come.

National and Regional Context

Slower growth, modest employment gains, and low inflation characterize U.S. economic performance in 1995. The current expansion enters its fifth year spurred by fiscal restraint, healthy corporate balance

[1] Includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

sheets, and rapid technological advances. Global competition has helped keep inflation in check as low cost alternatives are available for virtually any type of production. President Bill Clinton and the U.S. Congress continue to debate and work to restructure the federal government, including a priority of fiscal restraint.

The Mountain Region is in the midst of a four year economic boom and leads the nation in economic vitality and growth. From 1989 to 1994, the Mountain Region's employment growth rate sailed at 3.6 times the national average. Throughout the region the rates of population and personal income growth exceed that of the nation. The current broad-based expansion is stronger than any region in the U.S. and demonstrates that the Mountain region is benefiting from the larger forces impacting the national and state economies. Economic performance in Utah has not been isolated, but instead has been a part of this larger regional prosperity.

Utah's Current Economic Prosperity

Utah is currently in the midst of exceptional economic times. The defining feature of this period is vigorous job growth. This job growth is driven by a booming construction sector, stellar performance in manufacturing, and growth in the private sector. Broad-based job growth is making Utah's economy more diverse. Other characteristics of the period include rising incomes, strong fiscal performance, and in-migration.

Vigorous Job Growth

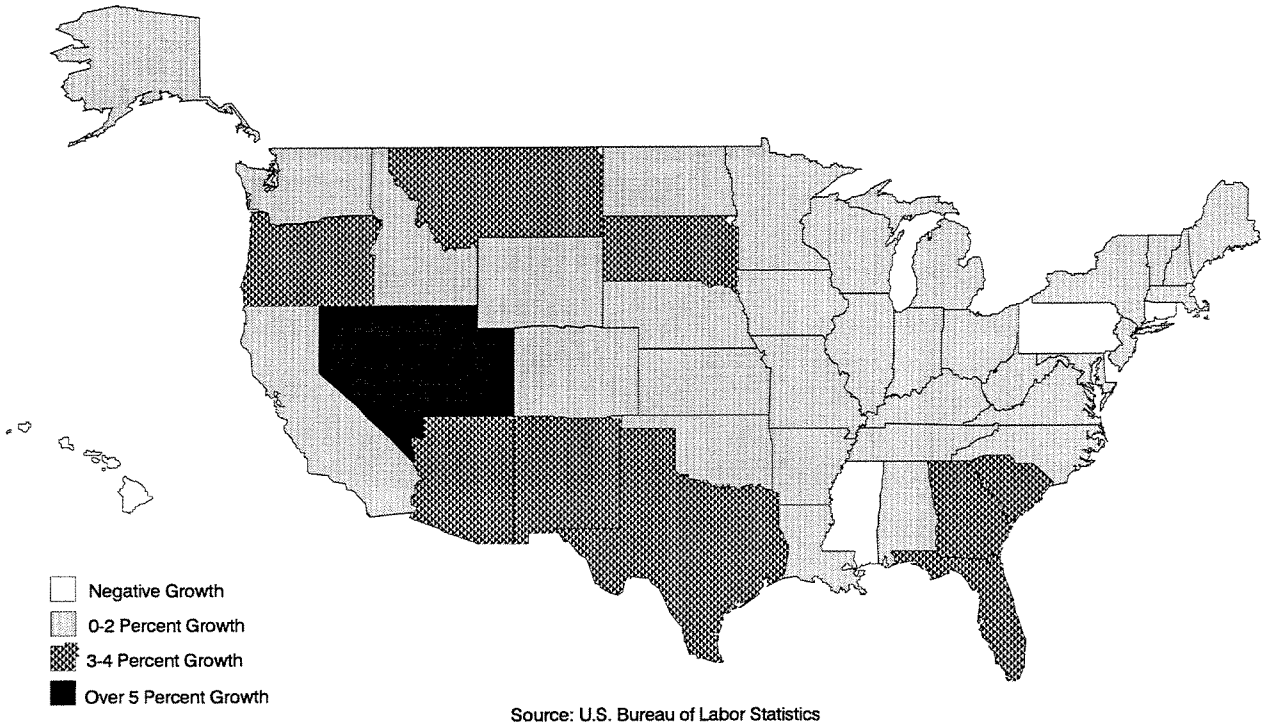
With 1995's job growth rate of 5.7 percent, Utah has now experienced three consecutive years of job growth rates in excess of 5 percent and eight consecutive years of job growth rates of 3.0 percent or higher. During much of 1995, Utah's rate of job growth measured three times that of the nation. The most recent comparative data for all states (October 1994 to October 1995) show Utah to be the second fastest job growth rate state in the country. In total, 49,000 jobs were created during 1995 and the unemployment rate of 3.6 percent is the lowest in nearly four decades. Figure A provides job growth rates by state.

Construction continues to fuel Utah's current economic expansion. Dwelling unit permits exceeded 20,000 in 1995 for the first time since 1978. The value of residential construction reached an all-time high of $1.72 billion. Nonresidential construction values also reached an all-time high of $800 million. Large projects such as Kennecott's modernization, a conference center in Ogden, and a new high school in Cedar City bolstered values. While not appearing in permit data until 1996, the construction associated with the Micron facility, Courts Complex, and American Stores headquarters all started in 1995. Figure B provides the values of residential and nonresidential construction in Utah.

Utah's manufacturing sector defied national and historical trends to post a 6.8 percent job growth rate from 1994 to 1995. This pace of job growth is astounding considering cutbacks in defense and that manufacturing jobs nationally actually declined during the last half of 1995. Micron's announcement of a $2.5 billion manufacturing facility should help keep manufacturing growing in Utah through the rest of the decade. Figure C provides employment growth rates by major industry.

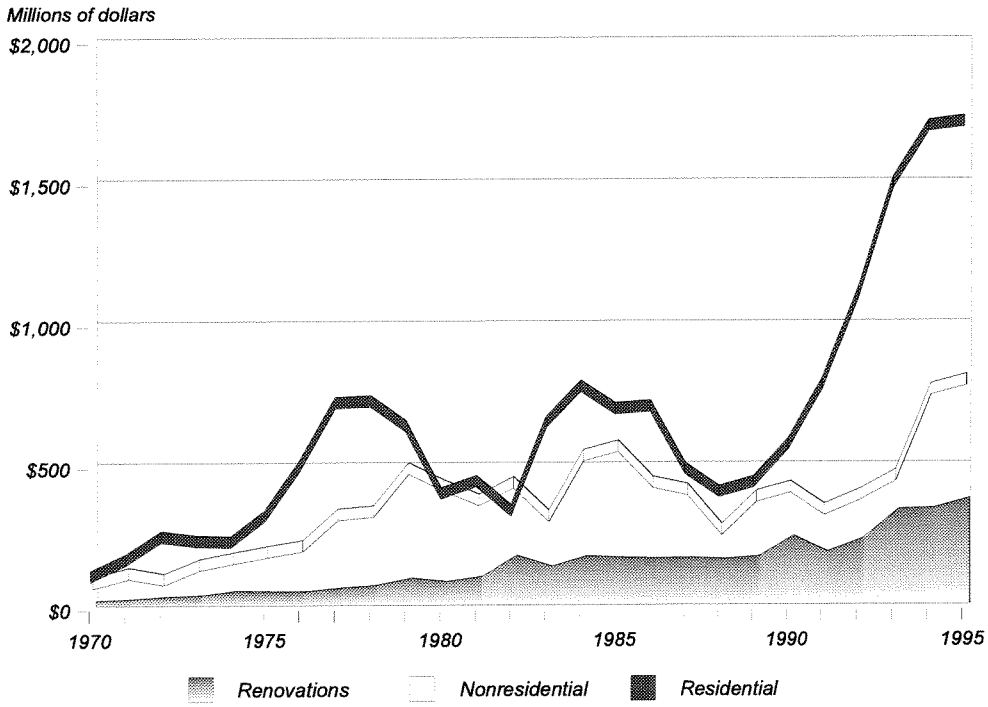
The job growth rate of the private sector continues to outpace the growth in government by more than three times. During 1995, the private sector increased at 6.6 percent, compared to public sector growth of 1.7 percent. While an important explanation for this disparity is the decline in federal government employment that has been occurring because of defense and non-defense deficit reduction measures, state and local government employment has also been increasing at lower levels than the private sector. During 1995 state government employment increased by 3.0 percent, less than half the growth rate in the private sector. Local government increased by an even smaller rate of 2.8 percent. Figure D compares private sector job growth rates with the public sector.

Figure A
Employment Growth by State: October 1994 to October 1995



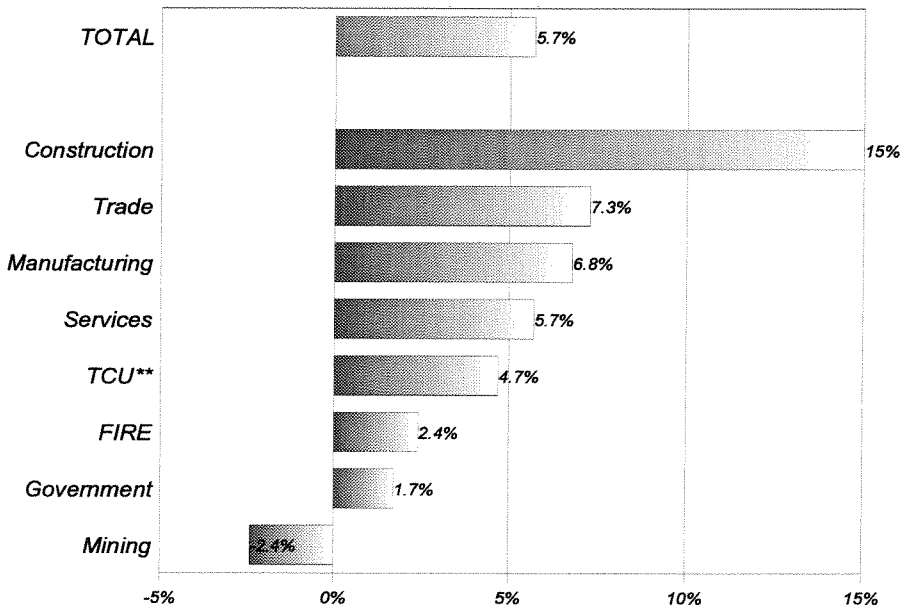
Source: U.S. Bureau of Labor Statistics

Figure B
Value of New Construction: 1970 to 1995



Source: University of Utah Bureau of Economic and Business Research

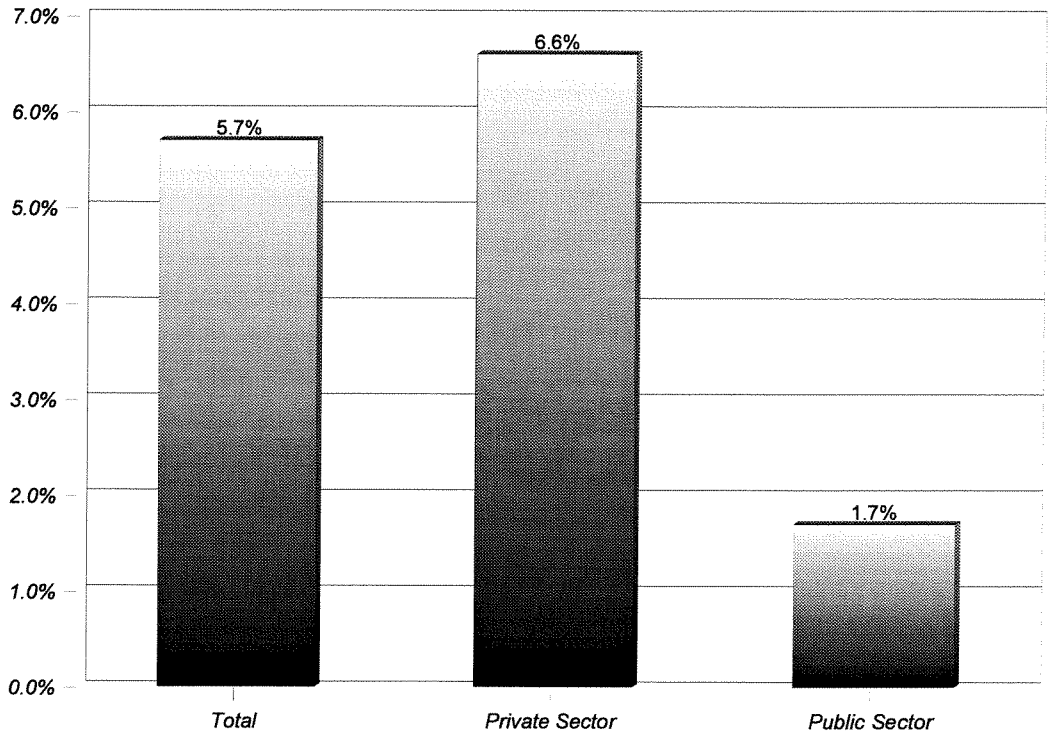
Figure C
Utah Job Growth Rates by Industry: 1994 to 1995



*Finance Insurance and Real Estate
**Transportation, Communications and Utilities

Source: Utah Department of Employment Security

Figure D
Employment Growth Rate--Total, Private Sector, and Public Sector: 1995



Source: Utah Department of Employment Security, Labor Market Information

Rising Incomes

Some of the best news for Utah workers and consumers during 1995 are rising incomes. A variety of measures combine to show that many Utahns' pocketbooks are benefitting from the current economic expansion. Utah's inflation-adjusted average wage increased during 1995; while nationally, wage growth was lower than inflation for the third consecutive year. Utah's per capita income increased again relative to the nation for the seventh consecutive year. Utah's average annual pay also increased with respect to the nation in 1995. Finally, Utah's personal income growth ranked second among states from second quarter 1994 to second quarter 1995. Figures E and F provide indications of Utahns' rising incomes.

Strong Fiscal Performance

Utah's economic success has also created fiscal success in the form of plentiful government revenues and tax reductions. *Financial World Magazine* ranked Utah as the best managed state in the nation during 1995. The nation's bond rating agencies continue to grade Utah's credit worthiness triple-A, the highest rating available. Taxable sales have been in a growth mode for more than seven years and the growth rate in tax collections in FY1995 is higher than at any time for which records are readily available.[2] As a result of Utah's economic and fiscal success, the Utah Legislature approved tax cuts totaling $181 million during the 1994 and 1995 legislative sessions.

Challenges

Utah's current boom, however, has begun to put inevitable strains on the state's infrastructure and resources. Signs of these strains include higher housing prices, labor shortages, low unemployment rates, and upward pressure on wages. In addition, growth strains such as traffic congestion, air quality concerns, and water development are of great interest. The state sponsored a growth summit in December 1995 to begin formal ongoing efforts to preserve a century of quality in Utah. A special chapter on meeting the challenges of growth is included in this *Economic Report*.

Labor Shortages

Labor shortages occur when employers have difficulty finding employees. As in-migration slowed and jobs continued to grow during 1995, many firms found it difficult to attract workers. Shortages were particularly acute in Salt Lake, Summit, Utah, and Washington Counties. The biggest problems occurred in construction where a dearth of skilled construction workers was evident. A positive aspect of Utah's tight labor market is higher wages for Utahns. Figure G shows net migration in Utah.

Housing Affordability

Housing prices have risen dramatically in Utah in the last several years. From 1989 to 1994, the median sales price of existing homes in the Salt Lake Metropolitan Area increased 41 percent, the largest percentage change of selected metropolitan areas. The median price of a home in the Salt Lake area of $116,900 is now higher than the national median. Of particular interest is housing for low-income Utahns. Rental rates have increased much faster than incomes. The average rental rate for a two-bedroom/two-bathroom unit increased by 50 percent from 1992 to 1995. Rising rent burdens have forced many low income households to double-up. Local opposition to multi-family units places further pressure on rental rates. Still, several thousand apartments will be built in 1996 which will help reduce the apartment shortage. Even with this added construction, however, an estimated 60,000 very low income renters in Utah do not receive housing assistance and require decent and affordable housing. Extending the benefits of economic growth to this segment of society is another important challenge confronting Utah's citizens.

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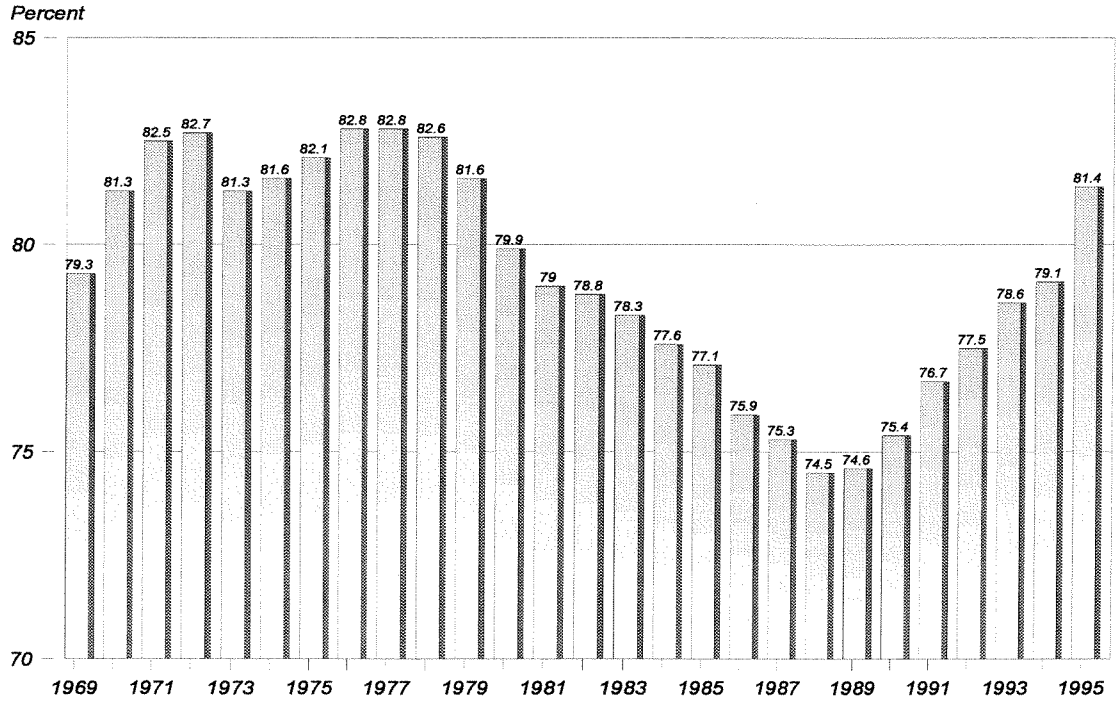
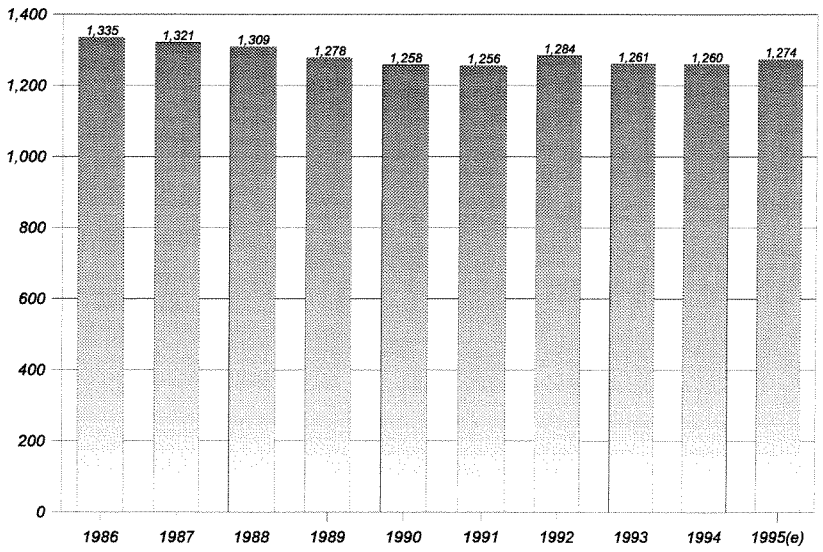
[2]This is rate, base, and inflation adjusted cash collections of unrestricted revenues in the general fund, uniform school fund, transportation fund, and mineral lease payments.

Figure E
Utah Per Capita Personal Income as a Percent of U.S.: 1969 to 1995



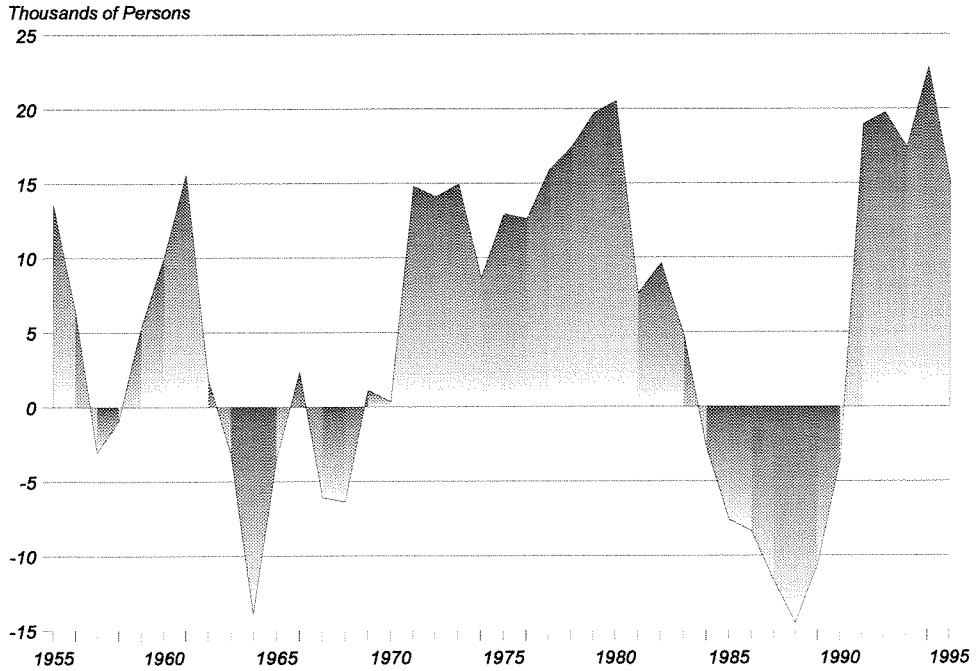
Source: U.S. Bureau of Economic Analysis and Governor's Office of Planning and Budget

Figure F
Utah Nonagricultural Average Monthly Wages: 1986 to 1995
(Constant Dollars using CPI-U)



Source: Utah Department of Employment Security

Figure G
Net Migration in Utah: 1955 to 1995



Source: Utah Population Estimates Committee

Figure H
Utah Economic Indicators--Annual Percent Change: Actual, Estimate, and Forecast

Source: Utah State Economic Coordinating Committee

Growth

The economic benefits of growth, as well as the overall quality of life enjoyed in Utah, can only continue if the state's infrastructure and other resources are adequate to handle increased demands. For transportation needs alone planners have identified $2.5 billion worth of unfunded projects. Water and wastewater funding requests over the next decade amount to $2.5 billion as well. Open space and habitat for wildlife are also of concern, as is air quality. Since 1990, all of Utah's metropolitan counties have exceeded the national air quality standards for one or more pollutants. These and other growth-related issues are and will continue to be an important challenge.

Outlook

Utah's current prosperity should continue in 1996. Utah's young, educated workforce and strong work ethic help businesses succeed in Utah. Utah also has low business taxes, a reasonable regulatory environment, and solid transportation, communication, and utility infrastructure. In addition to these factors, business location and expansion decisions are favorably influenced by Utah's respected universities, healthy lifestyles, and recreation opportunities.

While economic growth will slow slightly in 1996, the positive features of the current expansion should more than offset the down-side risks of 1996. These risks include continued federal budget and employment cutbacks, building moratoriums and restrictions, and lower net migration. Less affordable housing, higher apartment and commercial rents, and an improved economic and business climate in California will also dampen economic activity in Utah in 1996. The 1996 forecast calls for a continuation of the currently flourishing economy with a job growth rate of 5.4 percent, personal income growth rate of 9.3 percent, and population growth rate of 2.1 percent. Table A provides the short-term outlook for Utah and the nation. Figure H illustrates the Utah forecast for key indicators.

Table A
U.S. and Utah Actual and Estimated Economic Indicators: November 1995

U.S. AND UTAH INDICATORS	UNITS	1993 Actual	1994 Actual	1995 Estimate	1996 Forecast	% CHG 93-94	% CHG 94-95	% CHG 95-96
PRODUCTION AND SPENDING								
U.S. Real Gross Domestic Product	Billion 1987$	5,134.5	5,344.0	5,520.3	5,658.3	4.1	3.3	2.5
U.S. Real Personal Consumption	Billion 1987$	3,458.7	3,579.8	3,687.1	3,768.3	3.5	3.0	2.2
U.S. Real Bus. Fixed Investment	Billion 1987$	591.6	672.6	770.2	824.1	13.7	14.5	7.0
U.S. Real Defense Spending	Billion 1987$	243.7	226.6	214.9	207.6	-7.0	-5.2	-3.4
U.S. Real Exports	Billion 1987$	602.5	656.7	727.7	794.6	9.0	10.8	9.2
U.S. Industrial Production Index	1987=100	112.1	118.0	122.2	125.2	5.3	3.5	2.5
Utah Coal Production	Million Tons	21.7	24.1	25.0	25.6	11.1	3.7	2.4
Utah Oil Production	Million Barrels	21.8	20.7	19.9	18.4	-5.0	-3.9	-7.5
Utah Natural Gas Production (Sales)	Billion Cubic Feet	137.9	161.0	160.0	160.0	16.8	-0.6	0.0
Utah Copper Production	Million Pounds	676.8	683.6	646.0	624.0	1.0	-5.5	-3.4
SALES AND CONSTRUCTION								
U.S. New Auto and Truck Sales	Millions	13.9	15.1	14.7	14.7	8.5	-2.2	-0.3
U.S. Housing Starts	Millions	1.30	1.45	1.34	1.41	11.5	-7.4	5.2
U.S. Residential Construction	Billion Dollars	250.6	283.2	286.6	301.5	13.0	1.2	5.2
U.S. Nonresidential Structures	Billion Dollars	173.4	182.8	205.1	214.5	5.4	12.2	4.6
U.S. Retail Sales	Billion Dollars	2,072.6	2,233.6	2,358.7	2,481.3	7.8	5.6	5.2
Utah New Auto and Truck Sales	Thousands	68.8	75.9	79.7	82.5	10.3	5.0	3.5
Utah Dwelling Unit Permits	Thousands	17.8	19.5	20.2	21.5	9.3	3.8	6.4
Utah Residential Permit Value	Million Dollars	1,504.4	1,704.1	1,720.0	1,900.0	13.3	0.9	10.5
Utah Average Unit Value	Thousands	84.5	87.5	85.1	88.4	3.6	-2.7	3.8
Utah Nonresidential Permit Value	Million Dollars	463.7	766.5	800.0	2,500.0	65.3	4.4	212.5
Utah Taxable Retail Sales	Million Dollars	10,994	12,097	13,060	14,162	10.0	8.0	8.4
Utah Gross Taxable Sales	Million Dollars	19,341	21,527	23,493	25,673	11.3	9.1	9.3
DEMOGRAPHICS AND SENTIMENT								
U.S. Fiscal Year Resident Population	Millions	257.8	260.3	262.8	265.2	1.0	1.0	0.9
U.S. Consumer Sentiment of U.S.	1966=100	82.8	92.2	93.3	92.5	11.4	1.1	-0.8
Utah Fiscal Year Population	Thousands	1,866.0	1,916.0	1,959.0	2,001.0	2.7	2.2	2.1
Utah Fiscal Year Net Migration	Thousands	17.4	22.8	15.1	14.0	na	na	na
Utah Consumer Sentiment of Utah	1966=100	85.3	95.8	105.9	105.1	12.3	10.6	-0.8
PROFITS AND PRICES								
U.S. Corp. Profits Before Tax	Billion Dollars	462.4	524.4	561.6	581.8	13.4	7.1	3.6
U.S. Domestic Profits Less F.R.	Billion Dollars	374.9	427.2	451.6	490.9	14.0	5.7	8.7
U.S. Oil Ref. Acquis. Cost	$ Per Barrel	16.4	15.5	17.2	17.8	-5.4	10.6	3.7
U.S. Coal Price Index	1982=100	96.1	96.7	94.1	93.4	0.6	-2.7	-0.7
U.S. Steel Scrap	$ Per Metric Ton	112.4	132.5	135.0	136.0	17.9	1.9	0.7
Utah Coal Prices	$ Per Short Ton	21.2	20.1	21.6	21.9	-5.2	7.5	1.4
Utah Oil Prices	$ Per Barrel	17.5	16.4	17.5	17.9	-6.3	6.7	2.3
Utah Natural Gas Prices	$ Per MCF	1.85	1.52	1.16	1.19	-17.8	-23.7	2.6
Utah Copper Prices	$ Per Pound	0.85	1.07	1.35	1.20	25.9	26.2	-11.1
INFLATION, MONEY AND INTEREST								
U.S. CPI Urban Consumers	1982-84=100	144.6	148.3	152.4	156.2	2.6	2.8	2.5
U.S. GDP Implicit Deflator	1987=100	123.5	126.1	128.2	130.8	2.1	1.7	2.0
U.S. Money Supply (M2)	Billion Dollars	3,539.6	3,606.9	3,707.8	3,926.6	1.9	2.8	5.9
U.S. Real M2 Money Supply (GDP)	Billion 1987$	2,866.1	2,860.5	2,891.4	3,002.0	-0.2	1.1	3.8
U.S. Federal Funds Rate	Percent	3.02	4.20	5.82	5.20	na	na	na
U.S. Bank Prime Rate	Percent	6.00	7.14	8.82	8.20	na	na	na
U.S. Prime Less Federal Funds	Percent	2.98	2.94	3.00	3.00	na	na	na
U.S. Prime Less CPI-U	Percent	3.00	4.58	6.05	5.70	na	na	na
U.S. 3-Month Treasury Bills	Percent	3.00	4.25	5.49	5.20	na	na	na
U.S. T-Bond Rate, 30-Year	Percent	6.60	7.37	6.95	6.44	na	na	na
U.S. Mortgage Rates, Fixed FHLMC	Percent	7.3	8.4	8.0	7.6	na	na	na
EMPLOYMENT, WAGES AND INCOME								
U.S. Establishment Employment (BLS)	Millions	110.7	114.0	116.7	118.4	3.0	2.3	1.5
U.S. Average Annual Pay (BLS)	Dollars	26,361	26,939	27,676	28,413	2.2	2.7	2.7
U.S. Total Wages & Salaries (BLS)	Billion Dollars	2,919	3,072	3,229	3,364	5.2	5.1	4.2
U.S. Personal Income (BEA)	Billion Dollars	5,364	5,649	5,948	6,216	5.3	5.3	4.5
U.S. Unemployment Rate	Percent	6.8	6.1	5.6	5.8	na	na	na
Utah Nonagricultural Employment (DES)	Thousands	809.7	859.6	908.6	957.7	6.2	5.7	5.4
Utah Average Nonagriculture Wage (DES)	Dollars	21,874	22,408	23,320	24,183	2.4	4.1	3.7
Utah Total Nonagriculture Wages (DES)	Million Dollars	17,711	19,262	21,188	23,159	8.8	10.0	9.3
Utah Personal Income (BEA)	Million Dollars	30,415	32,763	35,875	39,212	7.7	9.5	9.3
Utah Unemployment Rate	Percent	3.9	3.7	3.6	3.5	na	na	na

☆ Section Highlights

Economic Outlook

National Outlook

Slower growth, modest employment gains, and low inflation characterized U.S. economic performance in 1995. The current U.S. expansion entered its fifth year in early 1995. The current climate of fiscal restraint, healthy corporate balance sheets, and rapid technological advances, will help continue the current expansion at a slow, but steady, pace. U.S. economic performance in 1996 should be characterized by modest employment growth, low inflation, and attractive interest rates.

Utah Outlook

The Utah economy is expected to experience solid, above-average growth in 1996. Employment is forecast to increase 5.4 percent. Construction should remain strong due to low vacancy rates, high hotel occupancy rates, low interest rates, and continued in-migration. The average wage is expected to grow faster than inflation for the second year in a row. Economic growth in 1996, however, is forecast to slow slightly because of continued federal cutbacks, a less affordable housing market, and an improved economy and business climate in California.

Utah's Future--the Long View

The demographic attributes that have characterized Utah in the past (the youthful and rapidly growing population) are projected to continue will into the next century. The relative strength of the economy is expected to continue as well. Although there will be some convergence with national demographic and economic trends, Utah's population and employment growth rates are projected to continue to out-pace those of the nation for the 1996 through 2020 period. Utah's population, which was 1.96 million in 1995, is projected to reach 2.13 million by the year 2000 and 3.11 million by the year 2020. While sustained net in-migration is expected over the projection period, approximately 70 percent of the expected growth in population will be generated internally. Because employment growth should continue to be brisk, Utahns should be able to stay in the state to work and live.

Economic Development Activities

The Department of Community and Economic Development's mission is to seek ways to enhance the strength and diversity of the Utah economy and to raise the average wages paid to Utahns. This goal can be reached by attracting companies that pay higher than average wages, increasing the productivity of Utah's workers, and lowering the costs of doing business in Utah. The Economic Development Department is using this period of exceptional growth to explore more difficult and less visible, but hopefully more durable, opportunities to strengthen the Utah economy.

Economic Indicators

Labor Market Activity

In 1995, Utah added 49,000 new nonfarm jobs for a growth rate of 5.7 percent, the third consecutive year of job growth rates over 5.0 percent. The state's nonfarm job growth rate doubled the U.S. average. The 1995 unemployment rate of 3.6 percent is the lowest in nearly four decades. Construction registered the highest growth rate of any major industry, increasing by 15.0 percent. Mining and federal government were the only major industries to experience employment declines. The average Utahn's earnings increased faster than inflation during 1996.

Personal Income

Utah's 1995 total personal income is forecast to be $35.9 billion, up 9.5 percent from the 1994 total. This reflects a substantial increase from 1994's growth of 7.7 percent. Moreover, Utah's 1995 personal income grew faster than U.S. personal income growth of 5.3 percent. Utah's per capita personal income is estimated to be $18,400 in 1995. From 1990 to 1995, Utah's inflation-adjusted per capita income has increased by about $2,000, compared to an $800 increase for that of the nation's. Utah's per capita personal income ranks 46th among the states, but Utah's relative ranking improves considerably when adjusting for the young population.

Gross State Product

Utah's 1995 gross state product is estimated by Regional Financial Associates to be $47.0 billion. The most recent estimate of gross state product for Utah released by the U.S. Bureau of Economic Analysis is for 1992 and shows Utah at $35.6 billion.

Demographics

Utah is demographically unique among states because of its young population, longer life expectancies, high fertility rates, and large household sizes. Utah's 1995 population is estimated at 1,959,000, a growth of 43,000 people and a 2.2 percent increase over 1994. Natural increase accounted for 65 percent of the new growth and net in-migration the remainder. The estimated net in-migration for 1995 is 15,139. Approximately 77 percent of Utah's population is concentrated along the Wasatch Front, a metropolitan area comprised of Salt Lake, Davis, Weber, and Utah Counties. During 1995, the rate of population growth was highest in Washington County at 8.1 percent, followed by Iron County, 6.7 percent, and Summit County, 6.2 percent. Utah ranks first in the percent of the population under 18 years of age at 35.2 percent. Utah's median age of 26.7 is the youngest in the country and the household size of 3.15 is the largest in the country.

Social Indicators

Quality of life and social well being are difficult to measure because of the subjective nature of the measurements and the lack of good data. The Utah Quality of Life Survey, which considers 14 separate life domains, shows Utahn's quality of life was slightly higher in 1994 than 1993. Two other sources of interest are the growth summit survey, which was conducted in conjunction with the state's Growth Summit, and the Kids Count Project, which includes a collection of indicators about the well-being of children. Information from these sources, as well as social indicators on crime, education, health, housing, and poverty/social assistance, provide a data context for considering quality of life and social well-being.

Prices, Inflation, and Cost of Living

The pace of inflation remained highly favorable in 1995. Throughout 1995, the year-to-year consumer price index varied between 2.5 to 3.2 percent, for an average annual increase of 2.8 percent. The gross domestic product implicit price deflator increased 1.7 percent. Utah's cost-of-living index in selected cities remained near the national average. The second quarter 1995 composite index (national average equals 100) for Salt Lake City was 99.6; Provo-Orem, 97.7; Cedar City, 94.9; St. George, 100.6; and Logan, 101.7.

International Merchandise Exports

The value of Utah's 1994 international merchandise exports decreased by 1.2 percent from 1993 levels to $2.51 billion. The value of merchandise exports for 1993 had fallen by 12.3 percent from the record 1992 level. The fluctuations in the value of Utah's merchandise exports are primarily attributable to price fluctuations in the primary metal market, which continues to be Utah's largest merchandise export industry in terms of value. Utah's largest merchandise export industries in 1994 were primary metals, metallic ores, electrical equipment, and transportation equipment. Utah's largest markets for merchandise exports are in eastern Asia, Canada, and Europe.

Gross Taxable Sales

Utah's gross taxable sales are estimated to have increased by 9.1 percent in 1995. This growth continues a seven year trend of growth in excess of inflation. Estimates for 1995 for the growth rates for the major components of gross taxable sales are 8.8 percent for retail nondurable goods, 6.4 percent for retail durable goods, 8.7 percent for business investment, and 13.4 percent for services.

Tax Collections

Fiscal year 1995 was the strongest year for revenue collections in recent history. Unrestricted revenues in the state's general fund, uniform school fund, transportation fund, and mineral lease account increased in a rate, base, and inflation-adjusted amount of 10.4 percent. As a result, the Legislature approved tax cuts totaling $181 million during FY1994 and FY1995. The largest portion of this tax reduction is a $141 million property tax cut that occurred when the legislature raised the residential exemption, lowered the minimum school program rate, and reduced the assessing and collection rate. At the end of FY1995, the state's Budget Reserve Account had a balance of $65.7 million. State appropriations are limited by a formula that reflects the average changes in personal income and combined changes in population and inflation. The Governor's budget recommendations and the final appropriations enacted by the Legislature have been in strict compliance with this law since its inception in FY1989.

Regional/National Comparisons

The 1990s have been a period of sustained economic growth for the Mountain Region. The mountain region is in the midst of a four-year economic boom and leads the nation in economic vitality and growth. In 1994, among the eight mountain states, Utah ranked second in nonfarm employment growth, fifth in population growth, fourth in average annual pay as a percent of the U.S. average, and third in personal income per household.

Industry Focus

Agriculture

Utah's above average snowpack and wet spring had a significant impact on the agricultural industry in 1995. Relative high prices coupled with above average levels of production resulted in increased revenues for grain producers. These increases, however, were detrimental to dairymen and feedlot operators. Circle Four farms in Beaver County has made Utah the largest hog producing state in the west. Another development, Danon yogurt, is being constructed. This plant will have the capacity to process 10 percent of the milk currently produced in Utah. The growth from 16 million in 1987 to 47 million in 1992 in Utah's nursery and greenhouse business is also of importance to the agriculture industry.

Construction and Housing

Both residential and nonresidential construction reached record levels during 1995. Population growth enhanced by net in-migration, strong economic and job growth, low vacancy rates, and low mortgage interest rates, all contributed to this record year. New dwelling unit permits surpassed the 20,000 mark for the first time since 1978. Nonresidential construction was boosted by several major projects during 1995: $31.6 million for the Kennecott Copper modernization, $13.9 million for the new conference center in Ogden, and $13.6 million for a high school in Cedar City. Several other large projects such as Micron, the Courts Complex, and the American Stores Tower also contributed to construction growth during 1995, even though permits for these projects will be reflected in 1996 data. The value of total construction (residential, nonresidential, and renovations) in 1995 totaled a record $2.9 billion.

Housing prices have risen dramatically in Utah in the last several years. From 1989 to 1994, the median sales price of existing homes in the Salt Lake Metropolitan Area increased 41 percent, the largest percentage change of selected metropolitan areas. The median price of a home in the Salt Lake area of $116,900 is now higher than the national median. Of particular interest is housing for low-income Utahns.

Rental rates have increased much faster than incomes. The average rental rate for a two-bedroom/two-bathroom unit increased by 50 percent from 1992 to 1995. An estimated 60,000 very low income renters in Utah do not receive housing assistance and require decent and affordable housing.

Defense

Utah continues to be negatively impacted by declining defense spending. Defense-related spending has fallen from a peak of approximately $2.56 billion in fiscal year 1986 to about $1.50 billion in 1994. Despite this downsizing, the defense industry still contributes significantly to the Utah economy. Of greatest importance during 1995 was the announcement by the Base Realignment and Closure Commission that the Ogden Air Logistics Center at Hill Air Force Base would be realigned rather than closed. The net effect of this realignment is still uncertain, but it appears the major bulk of employment at Hill Air Force Base is secure for the near future. The Closure Commission did recommend the cessation of all operations at the Defense Distribution Depot Ogden. A reduction of approximately 1,000 civilian jobs will result. The 1993 Closure Commission recommended that Tooele Army Depot be realigned. Currently, the Tooele Army Depot employs 995 civilian defense personnel and this level is expected to remain.

Energy and Minerals

The value of Utah energy production is estimated to be $1.3 billion in 1995. Coal is the largest primary energy source in the state, followed by natural gas, and crude oil. Coal production reached an all time high of 25 million tons in 1995. Utah's coal industry is currently benefiting from increased demand because of the requirements of the Clean Air Act, extremely high productivity, and higher demand from both Pacific Rim countries and the electric utilities in the eastern United States. Utah production of natural gas declined in 1995. Utah crude oil production continued its eight-year decline, even though oil prices increased in 1995.

The value of mineral production reached an all-time high in 1995 of $2.5 billion. Prices for base metals rose sharply in 1995, while prices for coal and precious metals showed only slight improvements. Utah ranks seventh among states in the value of nonfuel minerals. Utah ranks first in beryllium and gilsonite; second in potash and copper; third in gold, iron ore, and molybdenum; fourth in magnesium and phosphate rock; sixth in salt; 11th in oil and gas production; and 14th in coal production.

High Technology

Employment in Utah's high technology industry declined for the second consecutive year. While aerospace employment has been steadily declining for the past nine years, employment growth in the software sector has compensated for this loss. However, intense competition in the software sector causes concern. The single most noteworthy event of the software sector during 1995 was Novell's purchase of WordPerfect in February 1994. This consolidation resulted in layoffs of 1,500 to 2,000 people. A fair number of these workers found employment at other worldwide computer-related companies or formed their own businesses. Novell has also announced its intention to sell WordPerfect, causing additional uncertainty. The high tech star during 1995 was the biomedical/medical products group. Since 1993, employment growth in this group has averaged 12.0 percent per year. Another star performer is Morton International, a manufacturer of automobile safety products including airbags. The company presently employs 5,200 workers and has plans to hire more. The addition of Micron and continued expansion of Morton International bodes well for high tech employment in the next few years.

Tourism, Travel, and Recreation

Utah's tourism industry reached another record year in 1995. Most traveler destinations and parks experienced the highest level of visitation ever. An estimated 15.5 million out-of-state visitors came to Utah during 1995, spending approximately $3.6 billion. This figure compares to $3.4 billion in 1994. The travel industry accounts for roughly 73,000 jobs and contributes an estimated $262 million for state and local governments. The hotel/motel occupancy rate in the metropolitan area average above 80 percent for the year, despite steady additions to the number of beds. Arches National Park, Rainbow Bridge National

Monument, and Hovenweep National Monument experienced double-digit increases in recreation visits over 1994. The 1994-1995 ski season was a record year for skier visits, snowfall, and length of season.

Special Topics

Meeting the Challenges of Growth

The State of Utah has experienced unprecedented growth in recent years and projections are that this trend will continue and may even accelerate. The economic development and other benefits of this growth, as well as the overall quality of life enjoyed here in Utah, can continue only so long as the state's infrastructure and other resources are adequate to handle the increased demands. As the number of people and vehicles grow, the pressures on the infrastructure and resources such as transportation facilities, housing, and schools multiply. This results in a diminished ability to accommodate a rapidly growing economy and population. The state has an opportunity now to do the planning and implement growth management, air quality, water, and transportation strategies that will benefit the state. The state's Growth Summit began the formal efforts to preserve a century of quality in Utah.

Utah Economic History

Utah's economy has changed dramatically in the 100 years since statehood. Back in 1896, mining, agriculture, and the railroads were the mainstays of the economy. But since statehood, Utah's economy has forged a path through the Great Depression, two World Wars, natural resource booms and busts, a series of contractions and expansions, substantial federal involvement, and the emergence of the information age and global economy. The Utah economy of today includes new industries such as tourism, computer hardware and software, health care, and a wide variety of services. Although there are a number of factors that are important to the state's economic development over the past 100 years, the State Economic Coordinating Committee recognizes the development of Utah's natural resources and the policies and investments of the federal government as two dominant and defining factors. Natural resource development includes mining and production of copper, coal, oil, natural gas, uranium, and renewable resources. Federal government involvement includes public investments during the Great Depression, funding for Utah's military installations, federal defense procurement, and expenditures for highways, water projects, management of federal land, and federal employment. Utah's current tax structure has been an inevitable outcome of these and other economic events. ☆

Economic Outlook

☆ National Outlook

The Economy in 1995: Slower but Steady

Slower growth, modest employment gains, and low inflation characterized U.S. economic performance in 1995. The broadest measure of overall economic activity--U.S. Gross Domestic Product (or GDP)--grew at a 2.0 percent real annual rate in the first half of 1995. A third quarter resurgence to a 4.2 percent real annual rate, offset by weaker performance in the fourth quarter, suggests that U.S. economic growth will register just above 3.0 percent for the year. The annual rate of economic growth eased back significantly from the 4.1 percent pace achieved in 1994, but remains above the Federal Reserve's target rate of 2.5 percent real GDP growth. The "target rate" is considered to be a sustainable rate of economic growth not likely to generate inflationary pressures.

The Expansion Continues

The current U.S. expansion, measured by quarterly periods of positive economic growth, entered its fifth year in early 1995. While this expansion is somewhat comparable to the expansions of the 1960s and 1980s, several factors (highlighted in a recent study from *Regional Financial Associates*) set this period apart. While "tradition" indicates an economic downturn would be likely at this point in the cycle, the current expansion may have additional "staying power".

Fiscal Restraint

In past expansions, increases in government spending (President Lindon B. Johnson's "Great Society" program in the 1960s and the 1980s military build-up under President Ronald Reagan's administration) played a major role in fueling economic growth. The current expansion, in contrast, is marked by an emphasis on fiscal restraint. As shown in Table 1, government purchases as a percent of total GDP continue to decline and inflation-adjusted growth in government spending is flat. Also in real terms, the sub-category of defense spending has declined as much as 7.0 percent over the past two years.

Congressional actions to reduce the level of the budget deficit and, consequently, the rate of growth in the national debt, are central to the current political debate. Today's debt-conscious financial markets view this development favorably. A tighter fiscal agenda is expected to free additional money for private sector investment, translating into a better long-term outlook for new investment and business growth. Partly as a result, both bond and stock markets have recorded strong performances in 1995. With 1996 a presidential election year, the political debate should remain focused on responsible fiscal policy throughout next year.

Debt Financing

A second factor differentiating current economic activity from previous expansions is the role of debt. In the 1960s, debt emerged as a stimulus to economic growth. Corporations went from carrying zero debt on corporate balance sheets to roughly 10 percent. Debt financing exploded in the 1980s. Corporations willingly leveraged balance sheets, shifting from an average of 25 percent debt financing to 33 percent. On the consumer side, the introduction of credit cards gave consumer debt a small role in the 1960s expansion. In the 1980s, however, consumer spending was a major economic stimulus as many Americans took on higher and higher levels of debt for a nationwide "spending spree".

While there are concerns today about consumer debt, current levels are generally below those reached in the 1980s. With low unemployment across most parts of the U.S., the risk that many consumers will lose their source of "regular income"--a major contributor to default--is minimized. Low interest rates also help offset the economic slowdown associated with higher levels of consumer debt. On the corporate side, strong earnings have generally provided companies with a debt-free source of new investment dollars. This investment, combined with only moderately-leveraged balance sheets, bodes well for continued economic growth.

Technology

The explosive growth in technology is a third factor setting apart the current expansion. As shown in Table 1, business investment grew at a phenomenal 14.5 percent annual rate in 1995. Through the first half of the 1990s, business investment climbed at double-digit rates. The price paid for information technology--which currently accounts for nearly 50 percent of business fixed investment--continues to decline in price. Computer prices have fallen an average of 12 percent per year over the past decade. With "upgrades" continually being "released", technology's potential to boost business investment and economic growth is unprecedented.

The Outlook for 1996

Given the climate of fiscal restraint, healthy corporate balance sheets, and rapid technological advances, the expansion of the 1990s has the potential to continue through 1996 and into 1997. The economic expansion remains on solid ground and is likely to continue its slow--but steady--pace. The U.S. economic performance in 1996 should be characterized by modest employment growth, low inflation, and attractive interest rates.

Gross Domestic Product

The outlook for growth in GDP--encompassing the activity of individuals, business, and government--offers our broadest measure of future economic performance. An important point to keep in mind when forecasting future GDP growth is the role of the consumer. As shown in Table 1, personal consumption expenditure (which measures consumer spending for both durable and non-durable goods and services) accounts for roughly two-thirds of all economic activity. Slow wage growth and increasing debt loads have acted to slow growth in consumer spending. Given the consumer's dominant role in economic growth, this general slowdown will serve to hold GDP growth near 2.5 percent in 1996.[3]

Interest Rates

After increases in both long-term and short-term interest rates in 1994, U.S. interest rates generally trended downward throughout most of 1995. The Federal Reserve's ("the Fed's") tightening moves, intended to slow 1994's strong (and potentially inflationary) pace of economic growth, culminated in early 1995, bringing the federal funds rate to 6.0 percent and the U.S. prime rate to 9.0 percent. As economic growth slowed from a 2.7 percent real annual rate in the first quarter of 1995 to 1.3 percent in second quarter 1995, the Fed shifted course and lowered the federal funds rate a quarter percent in July of 1995. By "easing" to 5.75 percent, the Fed signaled their intent to stimulate economic growth through lower interest rates, if and when the pace of growth falls below the 2.5 percent target GDP growth rate. With third-quarter economic growth registering at 4.2 percent, the Fed held the federal funds rate constant at 5.75 into December of 1995. With few signs of inflation in either the current or longer-term horizon, long-term rates have declined throughout most of 1995.

Looking toward 1996, the Federal Reserve is expected to lower short-term rates if and when a credible budget plan is approved by Congress and the Administration. Financial markets have signaled their confidence that inflation will remain under control. Given the movement toward this result, 1996 may offer both lower short-term and long-term interest rates. Additional moves by the Fed to ease monetary policy should result in a 5.2 percent average for the 1996 federal funds rate. The prime rate is expected to move closer to 8.0 percent while long-term mortgage rates move below 8.0 percent. Lower interest rates should help boost economic growth despite the anticipated curtailment in government purchases.

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[3] A revised method of calculating GDP--the chain-weighted GDP--is expected to lower the reported rate of economic growth 0.5 to 0.8 percent annually. On a relative basis, however, economic growth is expected to remain steady.

Inflation

With nearly four years of inflation below 3.0 percent, the U.S. continues to see its best low inflation performance since the early 1960s. Consumer inflation for 1995, measured by the annual change in the consumer price index, registered at 2.8 percent.

While the current favorable inflation environment results from a wide range of factors, two issues are particularly significant in explaining recent price performance. First, although wage and salary growth is generally keeping pace with inflation, the growth is averaging below 3.0 percent. With smaller wage increases, consumers have become increasingly unwilling to pay higher prices and increasingly willing to shop at "discount" retail establishments. This "cost-consciousness" has been a significant factor in holding down consumer price increases. The global economy is a second factor impacting inflationary pressures. Excess global capacity, particularly in emerging market economies, offers a low-cost alternative for virtually any type of production. Hence, although demand may remain steady, attempts to increase prices are often thwarted when buyers seek alternate, lower-cost suppliers. Overall, the "value-priced" mentality, combined with growing global options, should continue to hold down inflationary pressures. Consumer inflation is expected to register another year of sub-3.0 percent performance with 1996 consumer prices expected to increase only 2.5 percent.

The Employment Situation

The strong 3.0 percent pace of job creation experienced in 1994 eased back in 1995 to 2.3 percent growth. The U.S. added 2.7 million net new positions during 1995 (versus roughly 3.3 million in 1994). Job growth is expected to slow to 1.5 percent in 1996. Employment prospects will be most encouraging for individuals with specialized skills, particularly in the high-tech areas. Unskilled workers will find only limited opportunities and these opportunities will only become more limited as technology plays a larger and larger role in defining U.S. employment prospects. The U.S. jobless rate moved lower throughout 1995, averaging 5.6 percent for the year. Employment cutbacks continue as many industries undergo "consolidation" but steady employment growth, combined with generally slow labor force growth, should act to keep the U.S. rate of unemployment below 6.0 percent through 1996. ☆

Table 1
Components of U.S. Gross Domestic Product (GDP): 1994 to 1996

	Percent of Total GDP			Annual Percent Change		
Category	1994	1995	1996(e)	1994	1995	1996(e)
Personal Consumption	67.0	67.0	66.8	3.5	3.0	2.2
Business Fixed Investment	12.6	14.0	14.5	13.7	14.5	7.0
Government Purchases	17.3	16.8	16.3	-0.8	0.1	0.5
Defense Spending	4.2	3.8	3.5	-7.0	-5.2	-3.4
Exports	12.3	13.2	14.0	9.0	10.8	9.2
Total Gross Domestic Product				4.1%	3.3%	2.5%
Total GDP (trillions of 1987 dollars)	$5,344.0	$5520.3	$5658.3			

(e)= SECC estimate.

Source: State of Utah Economic Coordinating Committee.

☆ Utah Outlook

Background

The Utah economy grew faster than the national economy as measured by inflation and population-adjusted (real per capita) personal income growth from 1985 to 1995. Utah's real-per-capita income as a percent of the nation's also increased; and, Utah's rate of job growth was more than double that of the nation over this 10-year span. On the other hand, the inflation-adjusted average wage in Utah declined over the past ten years.

Employment growth slowed slightly in 1995 to 5.7 percent; but the average wage in Utah grew faster than Consumer Price Index (CPI) inflation after two consecutive years of slower growth. By comparison, the growth in the national average wage fell behind inflation growth for the third year in a row.

Utah continued to receive favorable rankings and press coverage in 1995. Between October 1994 and October 1995 Utah had the second fastest growth in the nation in non-agricultural employment. *Financial World* ranked Utah the best managed state in the nation; and, Morgan Quitno Press ranked Utah as the number one most livable state. *Forbes ASAP* ranked the Salt Lake area as the best place in the nation for "smart companies" to do business; and, *U.S. News and World Report* ranked BYU as the best education value.

The Utah economy is expected to experience solid, above-average growth in 1996 of 5.4 percent. Nonagricultural wages, personal income, net migration, and population in Utah are all expected to show solid growth through 1996. Average wage growth is also expected to grow faster than CPI inflation in 1996 for the second consecutive year.

Major factors behind Utah's favorable economic and revenue outlook include the announcement that Hill Air Force Base (among Utah's largest employers) will not be closed. Salt Lake City was selected as the site for the 2002 Winter Olympics, and the $2.5 billion Micron computer chip factory is now undergoing construction.

Construction should remain strong in 1996 due to low office, industrial, and apartment vacancy rates, high hotel occupancy rates, new business and government projects, low interest rates, and continued strong net in-migration. Nonetheless, economic growth is expected to slow slightly in Utah in 1996 due to federal cutbacks; building moratoriums and restrictions; lower net in-migration; a tighter labor market; a less affordable housing market; higher apartment and commercial rents; and, an improved economy and business climate in California (California dominates the flow of interstate migration to and from Utah).

Still, the most likely outcome is that Utah's economy should continue to do well into 1996 for many of the same reasons it did well in 1995. Utah has a pro-business regulatory environment; low business taxes; and a solid utility, communications, education and transportation infrastructure. Utah also has numerous recreational opportunities; a youthful and educated labor force; good universities; healthy lifestyles; and, a strong work ethic that should continue to favorably influence business location and expansion decisions.

The Previous Ten Years

Population and Personal Income

Utah's population grew 18.9 percent, while the nation's population only grew 10.4 percent, from 1985 to 1995 according to the U.S. Bureau of the Census. Consumer price inflation-(CPI-U) adjusted personal income grew even faster in Utah (41.3 percent) than in the nation (24.6 percent) over this time period. Consequently, the Utah economy grew more than the national economy as measured by inflation and population-adjusted (real per capita) personal income growth from 1985 to 1995. Real per capita (inflation

and population-adjusted) personal income grew 18.7 percent from $15,500 to $18,400 in Utah; whereas, the growth was only 12.4 percent, from $20,100 to $22,600, nationwide (in 1995 dollars).

Utah's real per capita income as a percent of the nation's also increased over the previous ten-year period. In 1985, real per capita income was 77.1 percent and in 1995, 81.4 percent. Real per capita income in Utah as a percent of the nation's, however, reached a record low (since 1950) of 74.5 percent in 1988. Since then real per capita income has increased steadily for each of the last seven years, from 74.5 percent in 1988 to 81.4 percent in 1995.

Real per capita income in Utah should remain considerably below the national average in the foreseeable future due to the large percentage of the population comprised of individuals below the age of 18 and over the age of 64. Most recent (1994) Bureau of the Census data show that each 100 of Utah's working-age population (those 18 to 64) had to support 15 more dependents than each 100 of the nation's working-age population.

Average Wages

Although real per capita income increased over the past ten years, the average yearly wage in Utah, adjusted for CPI-U inflation, decreased 4.8 percent from $24,900 to $23,700 in 1995 dollars, as measured by the U.S. Bureau of Labor Statistics (BLS). By comparison, the national inflation-adjusted, average annual wage increased 1.8 percent from $27,200 to $27,700 according to BLS annual pay data for persons covered under unemployment insurance laws. Inflation-adjusted average wage growth in Utah may have decreased due to more part-time workers, less unionization, a higher rate of labor force participation by women, and more entry level (younger) workers in Utah than in the nation.

Possible explanations for real per capita income within Utah increasing, while the inflation-adjusted average wage in the state declined, include: increasing labor force participation rates (more female jobholders); stronger growth in nonwage than in wage, sources of income; and, a greater percentage of entry-level, part-time, or dual-job workers. Total personal income (wage and nonwage income) grew 100.1 percent over the last ten years while total nonagricultural wages (wage income alone) grew at a slightly slower rate of 96.3 percent.

Employment Growth

Lower inflation-adjusted average wage growth in Utah than in the nation over this 10-year period helped stimulate stronger employment growth in Utah. Total nonagricultural job growth in Utah increased 45.5 percent over the past ten years for an average annual growth rate of around 3.8 percent. This surpasses Utah's average yearly growth rate since 1950 of about 3.5 percent. By comparison, job growth in the nation from 1985 to 1995 is estimated to be 19.8 percent for an average of about 1.8 percent per year. Thus, Utah's rate of job growth was more than double that of the nation over this time period.

Structural Employment Changes

From 1985 to 1995 the state's economy continued to undergo structural changes, away from government jobs and goods-producing industries, toward private employment and services-producing industries. It is estimated that the state added about 284,100 jobs from 1985 to 1995 with 91 percent of the growth, 257,700 jobs, occurring in private-sector industries. Annual growth in private-sector jobs is estimated to have averaged 4.3 percent over the past ten years. Private employment increased from 77.9 percent of total jobs to 81.9 percent from 1985 to 1995. By comparison, private employment only made up 70 percent of total employment as recently as 1967.

The private sector is composed of goods-producing and services-producing industries. It is estimated that goods-producing industries (mining, construction, and manufacturing) decreased from 22.3 percent to 20.7 percent of total employment from 1985 to 1995. This compares to a high of 29.8 percent in 1962, and a low of 19.5 percent in 1992.

The Utah economy became much more diversified and similar to the nation's economic structure from 1983 to 1993 (the latest 10-year period for which data are available). Utah's employment makeup went from being 81.4 percent similar to the nation's employment structure, to 91.4 percent similar in makeup over this time period. This increased diversification makes Utah less vulnerable to economic downturns and restructuring in goods-producing industries.

Goods-Producing Industries

Most of the goods-producing percentage decline over the previous ten years occurred in mining and durable manufacturing. Mining is estimated to have actually lost 1,600 jobs from 1985 to 1995, a decrease from 1.6 percent of total employment to 0.9 percent. In contrast, mining made up 6.9 percent of total employment in 1957. Utah's mining sector averaged an employment loss of about 1.8 percent per annum over the previous ten years.

Construction employment increased from 5.7 percent of total employment in 1985 to 6.1 percent in 1995. But this was after hitting a record low (since 1950) of 3.7 percent in 1989. Construction added 19,900 jobs over the previous ten years; but added 30,400 jobs since 1988. Construction employment has grown for each of the last seven years.

Services-Producing Industries

Non-government, services-producing industries (transportation, communications, and public utilities; wholesale and retail trade; services; and finance, insurance, and real estate) increased from 55.6 percent in 1985 to 61.2 percent of total employment in 1995. Retail trade grew at an average annual rate of 4.5 percent over the past ten years, and is estimated to have gained 62,700 jobs, increasing from 18 percent to 19.3 percent of total employment. Services gained around 106,000 jobs and increased from 21 percent of total employment in 1985 to 26.1 percent in 1995. During this period annual growth in services averaged 6.1 percent, the highest growth rate for all industries.

Government Industries

The government sector added about 26,400 jobs over the decade, but decreased in the share of total jobs from 22.1 percent in 1985 to 18.1 percent in 1995. Local government added 19,300 jobs over this period but declined from 9.9 percent of total jobs to 9.0 percent. State government added 14,700 jobs while its percent of total employment declined from 5.8 percent to 5.6 percent. Federal employment actually decreased by 7,600 jobs, due to defense cutbacks that began in 1991, and declined from 6.3 percent of total employment to only 3.5 percent.

Structural Changes and Average Wages

The declines in high-paying federal government, mining and durable manufacturing jobs are most likely contributing factors (among many) to the decline in inflation-adjusted wages in Utah over the past ten years. Except for construction, most of the industries that experienced percentage-of-total employment gains over the past ten years pay lower wages than does mining, durable manufacturing, and the federal government. These lower-paying industries include finance, insurance and real estate; services; retail trade; and nondurable manufacturing.

Recent Conditions

Total nonagricultural employment in Utah grew 6.2 percent in 1994, for a second place national ranking. This increase was moderately higher than the 5.3 percent of 1993. Most of the growth in 1994 came from the private sector at 7.4 percent, compared to 1.3 percent for the public sector. Employment growth slowed slightly in 1995 to 5.7 percent. Private-sector growth in 1995 was 6.6 percent and government growth was 1.7 percent. Industries with growth rates above the 5.7 percent average for 1995 include construction at 15.0 percent; durable manufacturing at 7.1 percent; nondurable manufacturing at 6.2 percent; retail trade at 7.5 percent; and, services at 5.7 percent. All other industries grew at a rate below

5.7 percent. Only mining and federal government employment showed losses in employment at -2.4 and -2.8 percent respectively.

Average wages in Utah grew faster than CPI inflation in 1995 after two consecutive years of slower growth. The average wage adjusted for inflation increased 1.2 percent in Utah in 1995. By comparison, the growth in the national average wage fell behind inflation growth for the third year in a row.

New Firm Openings and Expansions

New firm openings and major expansions of existing firms with 100 or more workers in 1995 included, but were not limited to: South Towne Mall, Mill-Grow Greenhouse, American Pacific Corporation, Litton Industries, Huntsman Chemical Corporation, O.E.A., Packard Bell, L & B Recycling, Fingerhut, Holly Products, Fibrebond, U.S. Postal Service, Fred Meyer, Continental Airlines, CDP Technologies, AVG, Capstone Entertainment, Orbit Sprinklers, Boise Cascade, Banner Aerospace, Clover Club, Factory Stores of America, Solaray Inc., Envirotech Pumpsystems, E-Systems/Montek, Fidelity Investments, Packaging Corporation of America, America Online, Matrixx Marketing, McDonnell Douglas, and England Logistics.

Contractions and closures with 100 or more workers in 1995 included, but were not limited to: layoffs at Tooele Army Depot, Hill Air Force Base, Defense Depot Ogden, US West, First Interstate Bancorp, Novell, Associated Foods, Evans and Sutherland, Pyke Manufacturing Company, Tri-Miller Packing Company, Morton International, Kennecott, PacifiCorp, Navtech, Hercules, and Silo.

Media Report / Ranking

Utah continued to receive favorable rankings and press coverage in 1995. Between October 1994 and October 1995, at 5.3 percent, Utah had the second fastest growth in the nation in nonagricultural employment. And, Utah ranked second in total personal income growth, at 1.8 percent, between first quarter 1995 and second quarter 1995.

In its September 26, 1995 analysis of "the state of the states," *Financial World* ranked Utah the best managed state in the nation. *Financial World* cited Utah as having the best financial reporting in the nation, a performance measurement system which encourages state employees to focus on results, and a solid infrastructure maintenance program. In concert with the report from *Financial World*, the State of Utah continued to receive triple-A bond rating from the nation's leading bond rating agencies--Moody's Investor Services, Standard and Poors, and Fitch in 1995.

In its annual comparison of the 50 states, Morgan Quitno Press ranked Utah as the number one most livable state in the nation. The ranking is based on 42 indexes, including such disparate items as crime rates, student-teacher ratios, tax rates, prison-incarceration rates, and the number of sunny days. While Utah has one of the worst prison-incarceration rates in the nation, one of the lowest per capita personal incomes, and one of the highest state and local government debt burdens, the state ranked in the top ten on 16 of Morgan Quitno's indexes, ranking first on percent of population to graduate from college, second on job growth, and third on the unemployment rate, per capita energy expenditures, the infant mortality rate, and drunk-driving fatalities.

In addition to being a great place to live, Utah is also a great place to do business and get an education. In its February 27, 1995 issue, *Forbes ASAP* ranked the Salt Lake area as the best place in the nation for "smart companies" to do business. Citing a strong work ethic and sensible regulatory environment, *Forbes ASAP* felt the Salt Lake area was the top city in the country for nurturing businesses that must compete in today's speed-of-light economy.

In its September 25, 1995 issue, *U.S. News and World Report* ranked BYU as the best education value. Based on its assessment of the quality of education offerred at BYU, *U.S. News and World Report* felt that the $7,400 tuition cost makes BYU the best buy in the nation.

Housing Costs and Vacancies

Housing prices have risen dramatically in Utah in the last several years. According to the National Association of Realtors, between 1989 and 1994 the median sales price of existing homes in the Salt Lake City metropolitan area increased 41 percent from $69,400 to $98,000. This increase was the largest percentage change of selected metropolitan areas in the country.

And, existing home prices increased to $116,900, or by 13.3 percent for third quarter 1995 over third quarter 1994, the ninth largest increase among areas surveyed by the Realtors' Association. This increase made homes in the Salt Lake area slightly more expensive than the $116,200 national median price. It also meant that Salt Lake metro area homes became the 38th most expensive amoung the 136 areas surveyed.

Office-vacancy rates declined to around 6 percent in mid-1995 according to Wallace Associates and Consolidated Realty. According to Commerce Properties, industrial space vacancies were only about 4 percent in mid-1995. And, PKF Consulting reported that Salt Lake City had the highest hotel-occupancy rates (84.5 percent) in the nation during the first quarter of 1995.

Outlook

The Utah economy is expected to experience solid, above-average growth in 1996. The State of Utah Economic Coordinating Committee expects employment to grow at about 5.4 percent in 1996. The historic (1950-95) average job growth rate in Utah is about 3.5 percent. Regional Financial Associates (RFA) forecast in November 1995 that Utah would rank second in the nation for 1996.

Nonagricultural wages, personal income, net migration, and population in Utah are all expected to show solid growth through 1996. Population growth should increase at 2.1 percent; total nonagricultural wages and personal income should increase by 9.3 percent in 1996. Average wage growth is also expected to grow faster than CPI inflation in 1996 for the second consecutive year. The average wage adjusted for inflation increased 1.2 percent in 1995, and will again grow by 1.2 percent in 1996.

Major factors behind Utah's favorable economic and revenue outlook include the announcement that Hill Air Force Base (Utah's largest employer) will not be closed, the selection of Salt Lake City as the site for the 2002 Winter Olympics, and the $2.5 billion Micron computer chip factory just now undergoing construction. In addition, several companies have announced permanent workforce expansions and new firm openings in 1996. These expansions and openings include, but are not limited to: Micron, Matrixx Marketing, TheraTech, American Pacific, Smithfield Foods, Fingerhut, American Stores, Certified Vacations, Dannon, Roadway Packaging, America Online, McDonnell Douglas, Equifax Payment Systems, England-Corsair, USANA, Teltrust, Morton International, Prime Option, and Alliant Techsystems.

Construction should also remain strong in 1996 due to low office, industrial, and apartment vacancy rates, high hotel occupancy rates, new business and government projects, low interest rates, and continued strong net in-migration. Large construction projects in 1996 will include, but not be limited to: Micron's Computer Chip Factory; Kennecott's Tailings Project; State of Utah Justice Center, American Towers, and Gateway buildings in downtown Salt Lake City; Airport Control Tower; Huntsman Cancer Institute; Thanksgiving Point; Orem Medical Center; Weber Center; West Valley Hockey Arena; Salt Lake County Jail; Provo One Freedom Center; Murray Corporate Center; Central Utah Project; Lake Park Corporate Centre; Prowswood-Pegasus Luxury Apartments; Geneva's Air Separation Plant; Dannon's Yogurt Plant; and, the startup of the I-15 Interstate Expansion.

Nonetheless, economic growth is expected to slow slightly in Utah in 1996 due to federal cutbacks; building moratoriums and restrictions; lower net in-migration; a tighter labor market; a less affordable housing market; higher apartment and commercial rents; and, an improved economy and business climate in California. Ballard Medical of Draper recently decided to build a new manufacturing plant in Idaho due to a lack of employees in Utah necessary to meet the company's short-term needs.

The most likely outcome is that Utah's economy should continue to do well into 1996 for many of the same reasons it did well in 1995. Utah has a pro-business regulatory environment; low business taxes; and a solid utility, communications, education and transportation infrastructure. Utah also has numerous recreational opportunities; a youthful and educated labor force; good universities; healthy lifestyles; and, a strong work ethic that should continue to favorably influence business location and expansion decisions. ☆

☆ Utah's Future--The Long View

> (S)tanding against the assertion of the absolute impossibility of knowing the future is the absolute necessity of a picture of the future if behavior is to have any sense. One cannot act purposefully in any small respect except within a picture of what the world will be like when the action produces its effects.[4]

This Centennial Edition of the *Economic Report to the Governor* provides an opportunity to step outside the bounds of a standard discussion of the state's official long-term economic and demographic projections and to examine certain larger conceptual and practical issues. The present essay, which is quite broad in scope, begins with the state's official projections, presented against the background of Utah's demographic and economic characteristics. Following this is a general description of the current planning environment and the role of long term projections within the planning process. The state's official projections are then considered within the context of the uncertainty that informs and frames the projections enterprise generally. In the final section, the general parameters of the ongoing re-engineering of the projection process are identified.

The Official Projection Series

Detailed descriptions of the current official projections for the State of Utah to the year 2020 are presented elsewhere.[5] For the present purposes, the most essential features and results of these projections are presented here. Figure 1 and Tables 2 through 5 present the major results of these projections.

It is important to note that these projections are produced in much detail, and it is this level of detail that provides some of the most useful information to planners. Detailed employment (66 industries) and demographic (single year of age and sex) information is generated at the county level. Only aggregate state results are presented here.

The Context of Utah's Current Growth

Utah's population growth rate has for many years been among the most rapid in the nation. More recently, the state's economy, which has been characterized as "booming," has generated among the most rapid rates of employment growth, and this, in turn, has contributed to population increase as people move to the state for economic opportunities. The rapid growth of the state's population results from the combination of several factors. First, Utah's population is quite young; a larger share of the population is in childbearing years than is the case nationally. Second, Utah women have had (and continue to have) higher fertility rates than do women in the nation as a whole. This means that, on average, Utah women tend to have more children per woman as compared to the nation. Third, Utahns have lower death rates, partly because the population is younger (mortality rates are lower for younger people), but also because life expectancy is longer for residents of the state. More recently, the robust economy and the accompanying demand for labor has resulted in a large in-migration to the state. This has reinforced the already relatively rapid growth rate of the population of the state. The current growth cycle poses challenges for Utah planners in terms of quality of life concerns and increasing requirements for infrastructure and services. Governor Leavitt's Growth Summit has provided a forum for the consideration of selected aspects of these concerns.

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[4]Nathan Keyfitz, "The Social and Political Context of Population Forecasting," *Readings in Population Research Methodology*, Vol. 5, p. 17-2, (Chicago: Social Development Center, for the United Nations Population Fund), 1993.

[5] *State of Utah Economic and Demographic Projections 1994.* (Demographic and Economic Analysis Section, Governor's Office of Planning and Budget), 1994; and *State of Utah Economic and Demographic Projections: 1994: Highlights.* (Demographic and Economic Analysis Section, Governor's Office of Planning and Budget), 1994.

The official projection series indicates that the demographic attributes that have characterized Utah in the past (the youthful and rapidly growing population) will continue, as will the relative strength of the economy. Although there will be some convergence with national demographic and economic trends, Utah's population and employment growth rates are projected to continue to outpace those of the nation for the 1990 through 2020 period.

State Level Population Projections

Total Population: Levels and Trends

Utah's population, which was 1.73 million in 1990, is projected to reach 2.13 million by the year 2000, 2.60 million by the year 2010, and 3.11 million by the year 2020. The average annual amounts of population increase for each of the next three decades are projected to be about 40,100 per year for the 1990s, 47,400 per year for the first decade of the new century, and 50,800 per year for the 2010s. The magnitude of average annual amounts of population increase projected for the 1990s is nearly equal to that of the 1970s. Although the projected average annual growth rate decelerates from 2.1 percent per year in the 1990s to 1.8 percent per year in the 2010s, these growth rates are over double those projected for the nation as a whole.

Components of Change

The increases in Utah's population over the projection period (1990-2020) occur primarily because of natural increase (i.e., the amount by which annual births exceed annual deaths). Natural increase accounts for about 71 percent of the total population increase projected for the next three decades. The number of births per year is projected to average 39,400 in the 1990s, 48,100 in the 2000s, and 54,100 in the 2010s. This compares to projected annual deaths of 10,800 for the 1990s, 14,200 for the 2000s, and 18,100 for the 2010s. The ratio of births to deaths is projected to decline from 3.6 to 1 in the 1990s to 3.0 to 1 for the 2010s.

The balance of the state's projected population increase, about 29 percent, occurs because of net in-migration.[6] Approximately 400,000 of the 1.4 million population increase over the 30 year projection period (1990-2020) can be attributed to net in-migration. Net in-migration occurs when 1) there is enough job creation to accommodate residents who are new entrants to the labor force, and 2) there is additional job creation such that in-migration is necessary to satisfy labor demand within the state.[7] Net in-migration is projected to be continuous in Utah over the next three decades, averaging about 11,500 per year in the 1990s, 13,500 per year in the first decade of the new century, and 14,800 per year in the 2010s.

State Level Employment Projections

Employment Growth

The sustained net in-migration is projected because job creation is also projected to remain relatively rapid over the next three decades. Total employment is projected to increase by 778,100 (from 791,700 in 1990 to 1,569,800 in 2020). This figure is a projected increase of 778,100 jobs or nearly a doubling of employment in the state. Utah's total employment is projected to grow at an average annual rate of 2.9 percent in the 1990s, 2.2 percent in the first decade of the new century, and 1.8 percent in the 2010s. The corresponding employment growth rates for the U.S. are projected to be about half that of Utah.

Employment growth is projected for every major industry in Utah over the next three decades. Further, average annual growth rates in every major industry for Utah from 1990 to 2020 are expected to be higher than for those same industries at the national level. Of the ten major industries, services is projected to

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[6]Net migration is gross in-migration less gross out-migration. Positive net in-migration occurs when more people move into the state than move out of the state for a given period of time.

[7]Openings in the labor market are also created when residents leave the labor force.

have the highest average annual growth rate of all major industries in both Utah and the nation over the next three decades. The projected average annual rate of change for 1990 through 2020 for Utah's service sector is 3.1 percent and for the national service sector, 1.7 percent. Services and trade are currently the two largest industries (in terms of employment) in Utah. This fact, combined with the rapid rates of projected employment growth, mean that, together, services and trade are projected to contribute over half (56.3 percent) of the new jobs created in the state in the next three decades.

Employment Shares

While there is a net increase in the total employment in all ten major industries projected for the 1990 to 2020 period for Utah, the relative shares of the various industries are projected to shift over the period (Figure 2). The major changes are a significant increase in the service sector's share and a significant decrease in the government sector's share of the state's employment. For both Utah and the nation, the share of employment is projected to increase in construction, services, and non-farm proprietors. Declining shares of employment are projected for agriculture, mining, manufacturing, TCPU, trade, FIRE, and government for as well. The most striking difference between Utah and the U.S. in terms of shifting employment shares projected for the 1990 to 2020 period is Utah's much larger reduction in the share of government sector employment, the much smaller increase in the share of employment in the service sector, and a smaller reduction in the manufacturing share of employment when compared to the nation.

Although the direction of shifts in composition of employment by industry are projected to be similar for Utah and the U.S., the initial 1990 and projected 2020 distributions of employment by industry are different for Utah and the U.S. The projected 2020 distribution of employment for Utah is more similar to that of the nation than is the 1990 distribution.

In 1990 the most significant difference between the industrial composition of Utah and the U.S. was the relatively larger concentration of employment in the government sector and relatively smaller concentration of employment in manufacturing and FIRE for Utah when compared to the nation. Utah also had a slightly greater share of employment in agriculture; mining; transportation, communications, and utilities (TCU); and trade, and a somewhat smaller proportion in the other three major industries than the nation (i.e., construction, services, and non-farm proprietors).

The most significant differences between the employment shares for the projected industrial composition in 2020 of Utah and the U.S. are the relatively larger concentrations of Utah's employment in manufacturing, TCU, and trade and the relatively smaller share of Utah's employment in services than the nation. Utah is also projected to have a slightly larger share of employment in mining and government, a somewhat smaller share of employment in construction, FIRE, and non-farm proprietors, and an equal share of employment in agriculture when compared to the nation. This is the combined result of the differential shifts in industrial composition between Utah and the U.S. in the projections period and the initial differences in the composition of employment between the two.

Planning and Projections in the Current State Context

> We, the people of Utah, stand at the edge of a new frontier. In a world of rapid economic, social, environmental, and technological change, we confront bold challenges and rich opportunities.[8]

Forces Reshaping Utah

The present era is characterized by rapid and extensive changes that have far reaching implications for the people of Utah. Among the forces reshaping Utah are technological innovations (particularly those in information technology); intensifying international competition and the new international division of labor;

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[8]The Vision Statement for the State of Utah. Utah Tomorrow Strategic Planning Committee. *Utah Tomorrow Strategic Plan: 1995 Annual Report*, p. vi.

federal government restructuring accompanied by a shift of responsibilities to the states;defense downsizing; and the continued economic stagnation and/or restructuring elsewhere coincident with the "economic emergence" and restructuring of the intermountain west. A result of the disparity in economic opportunity has been the in-migration of people, industry, and commerce to the state.

> Utah is at a critical juncture. The state of the state is excellent; citizens find Utah a uniquely pleasant and prosperous place to live. However, we as state government and citizens need to seriously consider what Utah will look like 25 years from now. In order to preserve Utah's distinctive strengths, Governor Leavitt believes it is essential that leaders and citizens alike have and promote a clear, cohesive vision of the future of the State.[9]

Coordinated, integrated planning in the current environment is particularly difficult, partly because of the vast amount of new information that is generated on a continuous basis. Beyond this, the forces that are reshaping Utah may have complementary, contradictory, or independent effects with respect to each other; these cross effects may change over time. Planning in this context is not simply reactive; the response to these forces, which simultaneously present opportunity and challenge, will either encourage or deflect particular changes, and, in consequence, will directly affect the future quality of life for the citizens in the state. Planning is particularly crucial in times of rapid change. And, developing a vision of the future that accounts for 1) current conditions and constraints, 2) potential future events and forces, and 3) an idea of a reasonable and desired future is of the greatest importance for planning purposes.

Accurately identifying and effectively responding to these challenges and opportunities requires a well-founded view of the future as the basis for planning. The long-term economic and demographic projections produced in the Governor's Office of Planning and Budget are a major component of the state's institutionalized view of the future and these serve as a basis for the allocation of state resources into the future. These projections are also used in other state planning processes and model systems. Among others, this projection process provides an organized, understandable, and consistent view of the future in terms of fundamental, underlying, economic and demographic processes.

State Planning Process

The current statewide planning coordination process is extensive.[10] It encompasses the full range of planning levels from the meta-planning vision (Utah Tomorrow State Strategic Planning Process) to the very grounded (the Local Government Comprehensive Planning Project, for example).

> The "planning process" fostered by the Governor's Office of Planning and Budget (GOPB) is characterized by a cluster of complementary activities, each of which recognizes that the planning process in Utah State government is simply an attempt to coordinate the particular planning processes undertaken by respective State agencies.
>
> The planning process, then, is a matrix, in which the Office of Planning and Budget acts as a switching system, transmitting information for and about planning... The components of the matrix represent the gears driving this information exchange: the annual State Planning Forum; the State Planning Report; ongoing policy coordination activities; annual planning meetings with State agencies; and information (data) exchange mechanisms.[11]

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[9] *1994 State Planning Report: "A Generation of Planners"*, p. I-1. (Governor's Office of Planning and Budget), 1994. This document is the definitive source of information on planning organizations and their functions within the state.

[10] "The Utah Planning Process" in *1994 State Planning Report: "A Generation of Planners"*, pp. III-1 to III-31. (Governor's Office of Planning and Budget), 1994.

[11] *1994 State Planning Report: "A Generation of Planners"*, page III-1 through III-2. (Governor's Office of Planning and Budget), 1994.

The GOPB Projections Process

Much of the information that flows through the Governor's Office of Planning and Budget is, in some form, reflected or represented in the projections process. These projections, and the process that generates them, provide a framework for thinking about and analyzing the future. The projections program, which is housed in the Demographic and Economic Analysis Section of the Governor's Office of Planning and Budget, is both informed by and provides analytical and informational support to these many planning processes. As Governor Leavitt has noted, "(t)he key to managing the business of government is a solid base of information."[12] The projections program is a foundational element of the information that supports the state's planning efforts.

The two mutually supportive components of the projections process are the analytical framework and the information about specific events and conditions at the local level. The analytical framework is provided by the State of Utah Demographic and Economic Model System. Within this larger system, the Utah Process Economic and Demographic Impact Model (UPED) provides the analytical foundation and the associated theoretical underpinnings that serve to explain, and assist in evaluation of, alternative development futures for Utah. While it is this model system that provides the "power behind the scenes," it is the proper interpretation of conditions at the local level that provides the specifics to the planning process; this is the result of the interface between state and local planners and analysts. Both are essential elements for the production of quality, long-term projections.

The projections process includes the model system; the production of projections; and the interpretation, presentation, and distribution of the output. GOPB is currently involved in reengineering this process. The innovations will take advantage of developments in information technology (e.g., increased computational power, improvement in modeling tools, and the extension and transformation of communications mediums, particularly the Internet). The purpose of this redesign effort is to provide improved information and analyses to the planning process. The policy directives to which this research is responding are primarily Utah Tomorrow, Technology 2000, and Governor Leavitt's priorities.

Uncertainty: Migration Scenarios as an Illustration

In times of great change, planning becomes more difficult because there is a wider range of possibilities for the future. As the environment becomes more uncertain, planning for the future becomes all the more crucial. This uncertainty, which is an unavoidable aspect of planning, can, to some extent, be systematically treated by the projection process. The following discussion, which is indicative of the research direction of the GOPB projections program, is included here to concretely illustrate the relationship between planning and uncertainty and the contribution of an analytical projections system to understanding the planning environment.

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[12]Governor Leavitt's introductory letter for the *1994 State Planning Report.* (*1994 State Planning Report: "A Generation of Planners",* front leaf. (Governor's Office of Planning and Budget), 1994.)

Uncertainty: The Rationale For Planning

> "(T)he matter of uncertainty must not be considered incidental to the long range planning and budgeting procedure; it is central to it..."[13]

Consideration of the future is, in general, a prerequisite of purposeful human behavior, because actions will differ according to expectations about the future as well as because actions today affect outcomes in the future. Decisions made by individuals and organizations are conditional on particular visions of the future. Although the future cannot be known, experiences (history) teaches that not all futures are equally likely. Some outcomes are more probable than others. In a decision-making context, especially one in which resources are allocated, information about the future, including the likelihood of outcomes, is valuable. Pursuing certain actions also affects the course of events and may alter the likelihood that certain other events will occur. Information about the effects (impacts) of particular events or courses of action is also useful to decision-makers. The fact of uncertainty provides both the rationale for planning and a conceptual framework for viewing the future in the decision-making context.

Strategic Planning Models: Making Practical Sense of Uncertainty

Formal analytical model systems are utilized to structure and evaluate information about the future. Strategic planning models should capture the essence of how the relevant system works and the ways in which it is affected by external forces and constraints. These types of simulation models may be used to generate forecasts and projections about possible paths of future events or to evaluate how particular events could alter the course of the future. Ideally a model of this type describes and simulates the essential features of the structure of and causal linkages and interrelationships within a system as well as the dynamic relationships between the system and external conditions and processes.

The State of Utah has devoted considerable resources over the past three decades to the development, maintenance, and application of a strategic planning model. The Utah Process Economic and Demographic Impact Model (UPED) is the formal analytical model that generates long-term economic and demographic projections that are the basis for planning the allocation of state capital and operating resources. UPED is a structural equation, economic-demographic model that relates changes in the level of economic activity and changes in the structure of the economy to changes in composition, size, and location of the population (and vice versa).

Models like UPED are valuable to decision-makers for a number of reasons. Perhaps most importantly, the connections between causes and consequences are formally recognized. In addition, the information requirements of the models themselves result in a more thorough consideration of the context of the decision. Further, the relative likelihood of various outcomes and the events and actions that could lead to these outcomes are identified for the decision-maker. Finally, the fact of uncertainty about the future and the implications of this for the various decisions are illuminated. Here the distinction between forecasts and projections is particularly important.

Forecasts are generally presented as predictive of the future. In contrast, projections are often presented as the working out of various assumptions about the future. Projections allow for alternative scenarios, responses, and opportunities to be formally modeled with the consequences for the future resulting from the analysis. An understanding of the range of reasonable possibilities is of great relevance to planners. This ability to consider the implications of various combinations of events and actions (or inaction) is of much greater utility to decision makers than is a singular forecast. Uncertainty may be incorporated into either forecasts or projections, although the practical interpretation may differ.

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[13]Craig Bigler, Rhead S. Bowman, Douglas W. Kirk, and Rodger L. Weaver. *Report on the Development of the Utah Process: A Procedure for Planning Coordination Through Forecasting and Evaluating Alternative State Futures and Summary Report and Recommendations*, p. 15. (Office of Utah State Planning Coordinator, Office of Governor Calvin L. Rampton), 1972.

Uncertainty and Population Projections: Migration as an Illustration

The information summarized in Figure 3 and the discussion that follows further illustrate the importance of explicit consideration of uncertainty in the planning context. The graphs in Figure 3 present four population paths. The official projections are given as is the zero employment-related migration case. The latter presents the population path if, given the other assumptions implicit in the official projection series, there were no people migrating to or from Utah for economic reasons.[14] Employment- related migration is, at present, quite high as there are not enough workers in the state to satisfy the demand for labor.[15] The other two paths are suggestive of a range of reasonable variation in the population series. These are the upper and lower bounds of a 95 percent confidence interval around the population series. Given a standard interpretation, the further a path is from the official projection path, the less likely the occurrence of the path. The position of these implies that the zero employment-related migration population path is not likely. This means that, given the assumptions in the projection series, there should be adequate employment generated over the next 25 years to provide jobs for the youth of the state who enter the labor force.

Consideration of these various paths provides decision-makers with additional information. These confidence intervals are the bounds of reasonable possibilities for future paths of population, given the assumptions that are contained in the projections and the historical variation in the population series. Unforeseen events could occur that could either accelerate or decelerate anticipated population growth. The "reasonable range" of paths raises the question of what events could lead to the higher or lower paths. Strategic planning simulation models allow for the exploration of alternative circumstances and their effects on projection paths.

The UPED model generates a whole range of detailed demographic and economic information. For the present purposes only migration, which is one of the outputs of the model, is considered as an illustration of the more general point. The implications of these different population paths for total net migration in the 1995 to 2020 period is shown in Figure 4. Given the current set of projections, the upper bound of the confidence interval implies roughly 160,000 or 5 percent more people living in the state by the year 2020 than would be the case in the official projection series. About 70 percent of these additional persons would be in-migrants to the state.[16] The lower confidence interval population path is essentially a symmetrical case to the upper bound. The zero employment related migration case would result in a small net migration from the state in the 1995 to 2020 period, with a negative 400,000 person population impact. These ranges around the official projection series raise the question: How should this uncertainty be factored into the planning process? More to the point, what combination of events would lead to the higher or lower growth paths? What actions could affect the various growth paths? Here contingency planning and the analysis of the effects of these alternative actions should be conducted.

This type of information is useful to decision-makers in several ways. First, it makes explicit in the planning process that the future is neither fixed or known and there is continuity between the past and the future; there is a range of reasonable futures so that, for planning purposes, certain other futures may be ruled as unlikely (although possible). Second, decision-makers may consider what combination of events could lead to either higher or lower growth paths in the "reasonable range;" a strategic planning simulation model is of great utility in this regard. Third, given the historical variation in the growth path and the inferred reasonable range of outcomes in the future, the decision-maker is given additional information relevant to planning. A point forecast presented without discussion of the relative likelihood of this outcome is of much less value. In some planning contexts, the decision-maker may be compelled to plan infrastructure or service capacity for the upper bound of the reasonable range, while in other situations it makes sense to

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[14]Net employment-related migration is zero. There may be positive gross out- and in-flows of employment related migration of equal magnitude.

[15]The zero employment related migration case associated with these projections is explained in greater detail in *State of Utah Economic and Demographic Projections: 1994: Highlights,* pp. 7-8. (Demographic and Economic Analysis Section, Governor's Office of Planning and Budget), 1994.

[16]Total net in migration or residual migration.

plan for the lower bound or the expected value. Finally, where projections, rather than forecasts, are being generated, decision-makers may, given proper analytical tools, consider how different events and/or contingency actions would move the projected path within the relevant range. An understanding of the possible combination of events that could lead to higher or lower growth paths allows planners to consider contingency actions to accommodate, facilitate, or discourage any of these.

Planning Directions: The Basis of Continued Innovations in The Projection Process

Governor Michael O. Leavitt's Directives

Governor Leavitt has challenged those in Utah State government to reinvent their work processes and products to provide better services to the public and to ensure that the public interest is protected in these times of rapid change.

> We have begun to build the infrastructure of the future. We must continue.[17]
>
> To ensure that state government in Utah is responsive to the ever changing needs of its citizens and to meet the planning challenges of the 90s, I have asked agency leaders to focus on integrating their planning activities on a statewide basis and across all levels of government.[18]
>
> I want to issue some general challenges to leaders and employees in state government ... I challenge all of us to change the way we think. Operating in the information ecosystem will require a new mindset. We must be willing to change, to restructure, and re-invent...(W)e must begin thinking technology, thinking new applications and ways of doing things, if we are to make this vision a reality.[19]

Utah Tomorrow Objectives

Utah Tomorrow, which is the State's Strategic Planning program, has as a major objective the integration of planning throughout the state. Further, Utah Tomorrow identifies these objectives for state government:[20]

- ☆ Improve citizen access to government information.
- ☆ Develop government services based on input from customers/citizens on their needs and interests.
- ☆ Improve communication, coordination, and partnerships among state, local, and federal government agencies.
- ☆ Provide information and services via the electronic highway.
- ☆ Reduce the costs of government.

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[17]One of Governor's Leavitt's six priorities outlined in a speech given July 21, 1994. Michael O. Leavitt. "Utah's Niche: Quiet Quality."

[18]Excerpt from Governor Leavitt's introductory letter for the *1994 State Planning Report.* (*1994 State Planning Report: "A Generation of Planners",* front leaf. (Governor's Office of Planning and Budget), 1994.)

[19]Michael O. Leavitt. "Electronic Highway Speech," November 8, 1993.

[20]*Utah Tomorrow Strategic Plan: 1995 Annual Report,* pp. 51-54.

Redesign of the State's Projection Process

The current re-engineering of the projection process is a continuation of a three-decade long legacy of innovations and developments in state planning and the projection program.[21] The purpose of these innovations is to provide decision-makers throughout the state with improved information. These are intended to meet demands of the times, the directives of Governor Leavitt, and the planning priorities of the state, and, to utilize the emerging possibilities presented by innovations in information technology.

The general areas of innovation in the projection program are further development of 1) the model system, 2) information on local conditions and developments, 3) interpretation, presentation, and distribution of the results of the projections. For all of these purposes, increased capabilities of information technology, on both the computational and communications side, will be utilized.

The continuing restructuring of the state's projections process proceeds according to these directives and objectives, and, as such, is an integral component of the larger re-engineering process in state government. ☆

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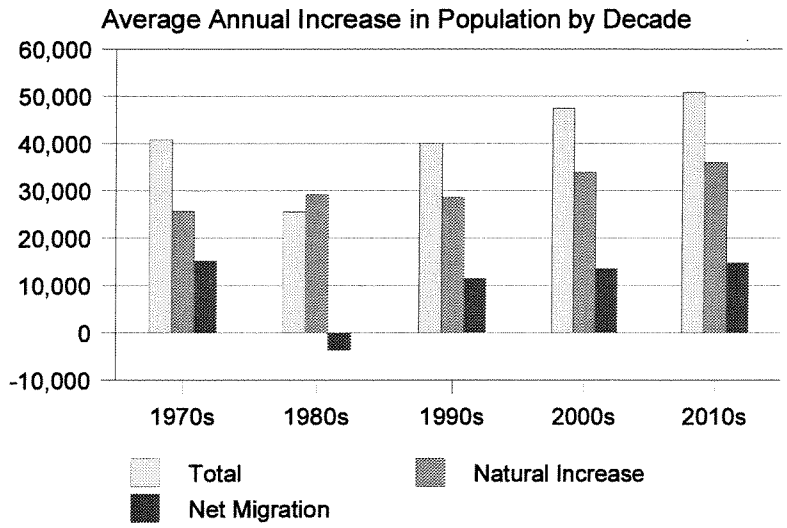
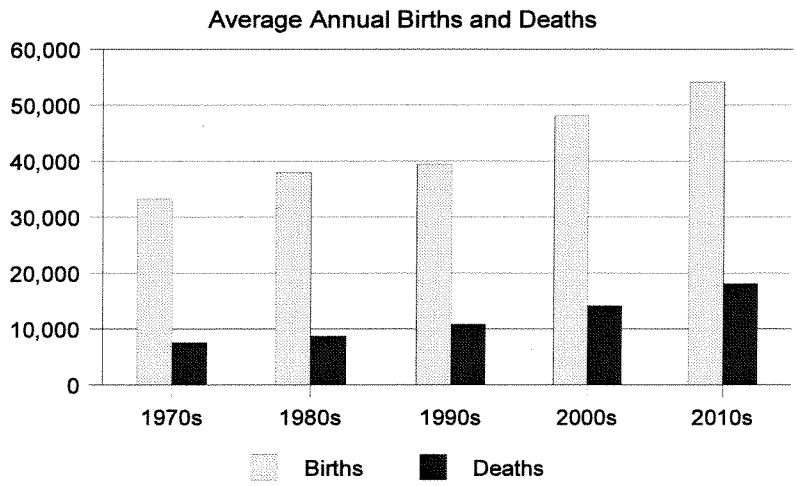
[21]For a systematic treatment of the literature associated with this history, see Brenda Wadsworth, "Projection System History: Annotated Bibliography", pp. 40-46, in T. Ross Reeve and Pam Perlich, *State of Utah Demographic and Economic Projection Model System*, (Demographic and Economic Analysis Section, Governor's Office of Planning and Budget), 1995. This document also contains a variety of detailed information on the structure and logic of the entire model system, with particular emphasis on UPED.

Figure 1
Utah Historical and Projected Population Increase, Components of Change 1970-2020



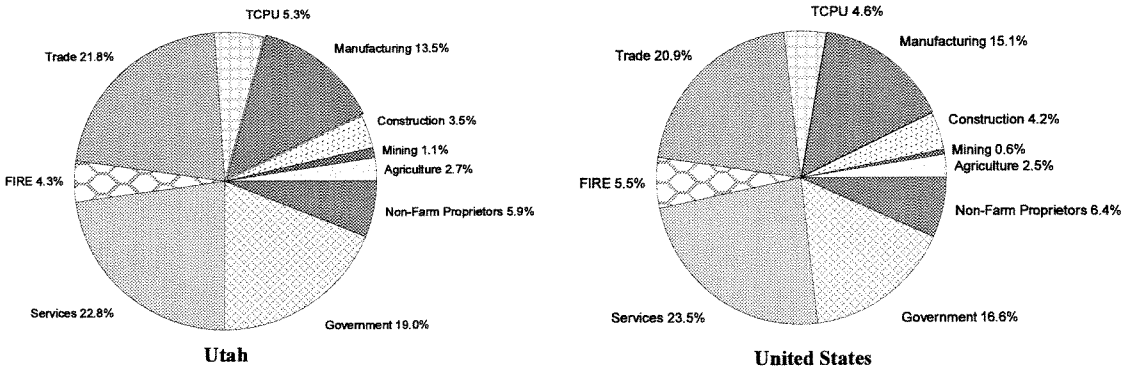


Components of Change: Summary: 1970-2020

Decade	Average Annual Amount of Increase	Average Annual Births	Average Annual Deaths	Average Annual Natural Increase	Average Annual Net Migration	Births to Deaths Ratio	Natural Increase As % of Total	Migration As % of Total Increase
1970s	40,800	33,203	7,559	25,644	15,156	4.4	62.9%	37.1%
1980s	25,510	37,937	8,726	29,211	(3,711)	4.3	114.5%	-14.5%
1990s	40,091	39,446	10,843	28,603	11,489	3.6	71.3%	28.7%
2000s	47,436	48,088	14,176	33,912	13,524	3.4	71.5%	28.5%
2010s	50,806	54,120	18,093	36,027	14,779	3	70.9%	29.1%

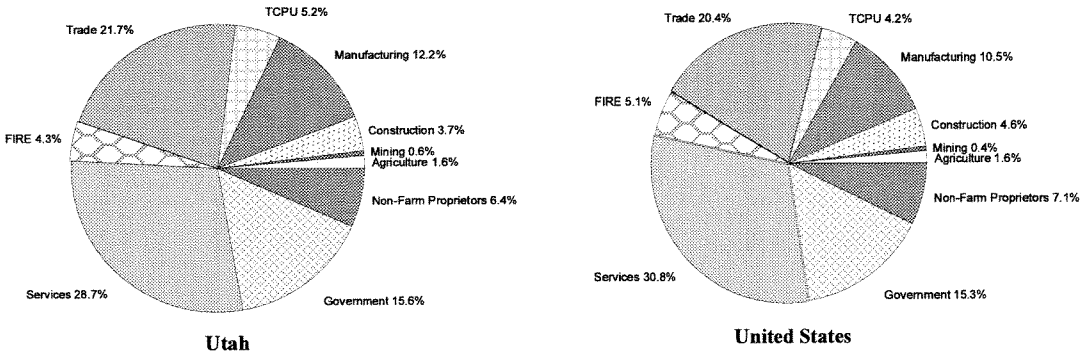
Source: Governor's Office of Planning and Budget

Figure 2
Employment by Industry Share--U.S. and Utah: 1990 and 2020



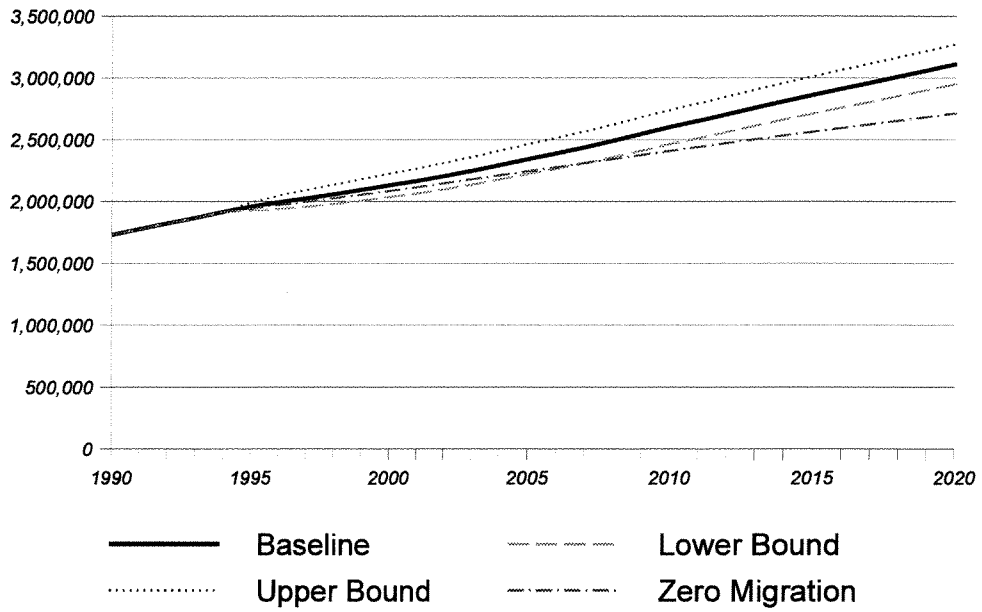
Source: Governor's Office of Planning and Budget, Demographic and Economic Analysis Section

Employment by Industry Share: Utah and the United States: 2020



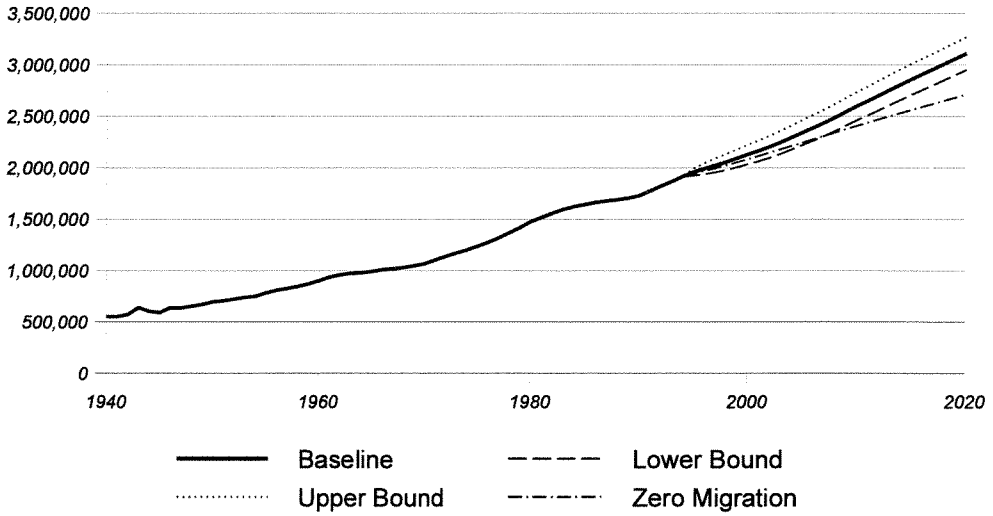
Source: Governor's Office of Planning and Budget, Demographic and Economic Analysis Section

Figure 3
Utah Population--History and Projections



*Zero Migration is zero employment related migration

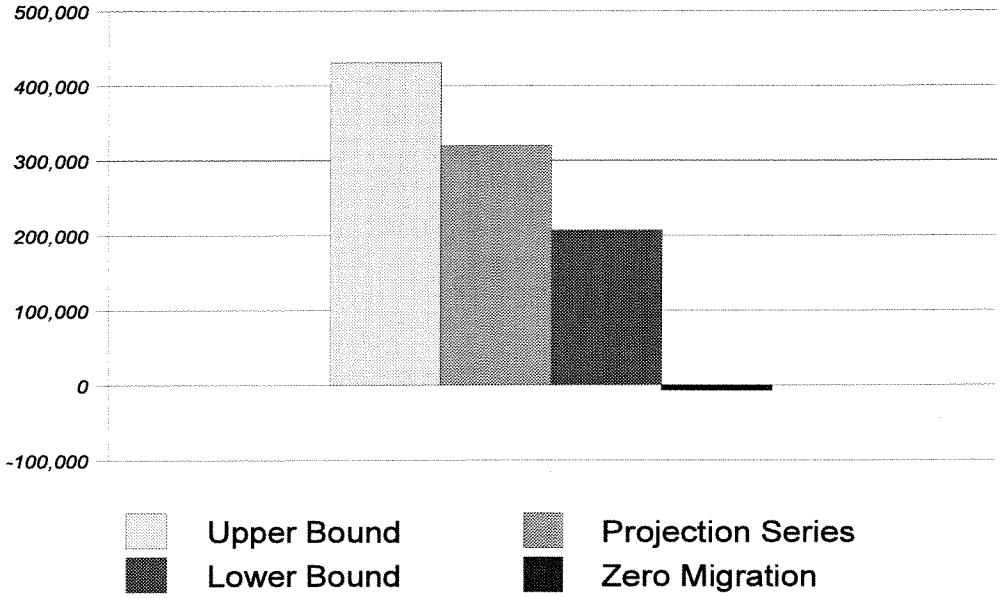
Source: Governor's Office of Planning and Budget



*Zero Migration is zero employment related migration

Source: Governor's Office of Planning and Budget

Figure 4
Cumulative Migration: 1995 to 2020
Official, Intervals, Zero Migration



*Zero Migration is zero employment related migration

Source: Governor's Office of Planning and Budget

Table 2
Utah Economic and Demographic Projections Summary: 1990 to 2020

Year	Total Population	Percent Change	School Age Population (Ages 5-17)	Percent Change	Total Employment	Percent Change	Nonag. Wage and Salary Employment	Percent Change	Households	Percent Change
1990	1,729,100	--	456,783	--	791,746	--	726,277	--	539,184	--
1991	1,775,505	2.7	468,342	2.5	813,585	2.8	747,788	3.0	558,722	3.6
1992	1,821,951	2.6	480,461	2.6	838,620	3.1	771,270	3.1	574,514	2.8
1993	1,866,452	2.4	488,937	1.8	883,367	5.3	812,345	5.3	591,300	2.9
1994	1,915,197	2.6	493,361	0.9	920,207	4.2	847,651	4.3	610,961	3.3
1995	1,957,691	2.2	494,940	0.3	951,331	3.4	876,493	3.4	628,526	2.9
1996	1,991,811	1.7	494,654	-0.1	974,876	2.5	898,108	2.5	643,832	2.4
1997	2,023,856	1.6	493,247	-0.3	996,838	2.3	918,341	2.3	658,465	2.3
1998	2,056,274	1.6	490,328	-0.6	1,015,698	1.9	935,657	1.9	673,496	2.3
1999	2,092,948	1.8	489,022	-0.3	1,036,383	2.0	954,640	2.0	689,818	2.4
2000	2,130,008	1.8	489,629	0.1	1,058,191	2.1	974,689	2.1	706,401	2.4
2001	2,164,844	1.6	491,155	0.3	1,079,260	2.0	994,051	2.0	722,237	2.2
2002	2,203,607	1.8	494,927	0.8	1,101,755	2.1	1,014,740	2.1	739,155	2.3
2003	2,247,554	2.0	501,225	1.3	1,125,918	2.2	1,036,978	2.2	757,756	2.5
2004	2,294,270	2.1	508,988	1.5	1,151,235	2.2	1,060,330	2.3	776,995	2.5
2005	2,343,126	2.1	518,578	1.9	1,177,465	2.3	1,084,585	2.3	796,953	2.6
2006	2,390,587	2.0	528,736	2.0	1,203,024	2.2	1,108,277	2.2	816,255	2.4
2007	2,438,542	2.0	539,767	2.1	1,229,057	2.2	1,132,489	2.2	835,233	2.3
2008	2,492,564	2.2	551,674	2.2	1,256,950	2.3	1,158,451	2.3	856,397	2.5
2009	2,549,146	2.3	564,086	2.2	1,285,628	2.3	1,185,169	2.3	878,329	2.6
2010	2,604,366	2.2	576,706	2.2	1,313,865	2.2	1,211,507	2.2	899,840	2.4
2011	2,653,960	1.9	589,223	2.2	1,339,875	2.0	1,235,783	2.0	919,541	2.2
2012	2,707,126	2.0	602,086	2.2	1,366,620	2.0	1,260,725	2.0	940,359	2.3
2013	2,760,733	2.0	614,461	2.1	1,393,247	1.9	1,285,553	2.0	961,462	2.2
2014	2,812,452	1.9	626,221	1.9	1,419,096	1.9	1,309,663	1.9	981,941	2.1
2015	2,863,426	1.8	637,527	1.8	1,444,623	1.8	1,333,485	1.8	1,002,514	2.1
2016	2,914,179	1.8	648,329	1.7	1,469,943	1.8	1,357,125	1.8	1,023,263	2.1
2017	2,962,302	1.7	658,013	1.5	1,494,444	1.7	1,380,012	1.7	1,043,128	1.9
2018	3,012,774	1.7	667,483	1.4	1,519,609	1.7	1,403,519	1.7	1,063,925	2.0
2019	3,062,658	1.7	676,244	1.3	1,544,625	1.6	1,426,886	1.7	1,084,538	1.9
2020	3,112,425	1.6	684,414	1.2	1,569,842	1.6	1,450,456	1.7	1,105,264	1.9

Note: These long-term projections were originally published in 1994 and are not always consistent with the short-term forecasts presented in other tables in this report. The population totals are also slightly different than the totals shown in Table 5 because of revisions at the county-level incorporated in December, 1995.

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

Table 3
Utah Population Projections by Age Group: 1990, 2000, 2010, and 2020

Age Group	Population by Age Group 1990	2000	2010	2020
0-4	172,252	210,054	253,872	279,948
5-17	456,783	489,629	576,706	684,414
18-29	337,682	430,739	481,754	533,131
30-39	261,192	292,441	375,098	435,529
40-64	345,459	519,565	685,328	838,089
65+	149,482	187,580	231,608	341,314
16-24	259,670	344,826	348,785	412,159
15-44	789,887	983,663	1,128,035	1,330,067
Total	1,722,850	2,130,008	2,604,366	3,112,425
Median Age	25	26	28	30
Dependency Ratio	82	71	69	72

Age Group	Age Group as a Percent of Total Population 1990	2000	2010	2020
0-4	10.0%	9.9%	9.7%	9.0%
5-17	26.5%	23.0%	22.1%	22.0%
18-29	19.6%	20.2%	18.5%	17.1%
30-39	15.2%	13.7%	14.4%	14.0%
40-64	20.1%	24.4%	26.3%	26.9%
65+	8.7%	8.8%	8.9%	11.0%
16-24	15.1%	16.2%	13.4%	13.2%
15-44	45.8%	46.2%	43.3%	42.7%
Total	100.0%	100.0%	100.0%	100.0%

Source: U.S. Bureau of the Census (1990) and Governor's Office of Planning and Budget, UPED Model (2000-2020).

Table 4
Utah Employment Projections by Industry: 1990, 2000, 2010, and 2020

Industry	1990 Number of Jobs	1990 Percent of Total	2000 Number of Jobs	2000 Percent of Total	2010 Number of Jobs	2010 Percent of Total	2020 Number of Jobs	2020 Percent of Total	Annual Growth
Agriculture (1)	21,276	2.7%	22,819	2.2%	23,826	1.8%	24,454	1.6%	0.5%
Mining	8,603	1.1%	8,841	0.8%	9,191	0.7%	9,583	0.6%	0.4%
Construction	27,926	3.5%	39,474	3.7%	48,282	3.7%	58,450	3.7%	2.5%
Manufacturing	107,100	13.5%	131,045	12.4%	159,785	12.2%	192,179	12.2%	2.0%
TCU (2)	42,283	5.3%	55,287	5.2%	67,386	5.1%	81,127	5.2%	2.2%
Trade	172,391	21.8%	231,794	21.9%	287,561	21.9%	340,229	21.7%	2.3%
FIRE (3)	34,134	4.3%	46,850	4.4%	57,485	4.4%	67,167	4.3%	2.3%
Services (4)	180,924	22.9%	272,955	25.8%	359,072	27.3%	450,918	28.7%	3.1%
Government	150,556	19.0%	184,268	17.4%	217,562	16.6%	244,990	15.6%	1.6%
Non-farm Proprietors (5)	46,549	5.9%	64,850	6.1%	83,709	6.4%	100,735	6.4%	2.6%
Total Employment	791,742		1,058,183		1,313,859		1,569,832		2.3%
Non Agricultural Wage & Salary Emp. (1)	723,629	91.4%	974,682	92.1%	1,211,499	92.2%	1,450,446	92.4%	2.3%

(1) Both Agriculture and Non-Ag Wage & Salary Employment include Agricultural Services.
(2) Transportation, Communications and Utilities.
(3) Finance, Insurance and Real Estate.
(4) Includes Private Household employment; excludes Agricultural Services employment.
(5) Estimated based on 1990 Census data.

Source: Utah Department of Employment Security and Governor's Office of Planning and Budget, UPED Model.

Table 5
Utah Population Projections by County and District: Selected Years

MCD/County	Estimates 1990	Estimates 1995(p)	Projections 2000	2005	2010	2015	2020	*AARC 1990-2020
BEAR RIVER	108,393	120,960	127,236	138,078	152,450	164,103	176,185	1.63%
Box Elder	36,485	38,907	41,974	45,356	49,903	53,555	57,346	1.52%
Cache	70,183	80,247	83,439	90,817	100,528	108,440	116,636	1.71%
Rich	1,725	1,806	1,823	1,905	2,019	2,108	2,203	0.82%
WASATCH FRONT	1,104,356	1,233,567	1,343,654	1,472,631	1,633,016	1,809,251	1,976,531	1.96%
Davis	187,941	215,977	236,016	259,226	287,728	318,795	348,036	2.08%
Morgan	5,528	6,496	6,812	7,400	8,188	9,100	10,014	2.00%
Salt Lake	725,956	806,280	875,526	957,681	1,060,782	1,174,612	1,283,001	1.92%
Tooele	26,601	29,550	32,626	37,989	44,565	52,050	59,817	2.74%
Weber	158,330	175,264	192,674	210,335	231,753	254,694	275,663	1.87%
MOUNTAINLAND	289,197	342,185	379,987	416,205	459,982	491,611	529,260	2.04%
Summit	15,518	22,380	25,882	30,756	36,591	43,190	50,022	3.98%
Utah	263,590	307,621	340,877	370,984	407,438	431,464	461,056	1.88%
Wasatch	10,089	12,184	13,228	14,465	15,953	16,957	18,182	1.98%
CENTRAL	52,294	59,295	62,357	67,042	73,235	78,113	80,206	1.44%
Juab	5,817	7,150	8,448	8,967	9,476	10,013	10,198	1.89%
Millard	11,333	11,926	12,093	12,730	13,689	14,344	14,488	0.82%
Piute	1,277	1,422	1,535	1,579	1,652	1,697	1,695	0.95%
Sanpete	16,259	19,239	19,613	21,261	23,472	25,189	25,998	1.58%
Sevier	15,431	17,259	18,081	19,717	21,879	23,584	24,437	1.54%
Wayne	2,177	2,299	2,587	2,788	3,067	3,286	3,390	1.49%
SOUTHWEST	83,263	110,877	132,938	160,838	189,208	216,453	242,009	3.62%
Beaver	4,765	5,347	8,251	8,994	9,615	10,055	10,331	2.61%
Garfield	3,980	4,308	4,645	5,090	5,486	5,804	6,047	1.40%
Iron	20,789	26,858	30,750	35,477	40,108	44,362	48,180	2.84%
Kane	5,169	5,889	6,856	8,255	9,675	11,039	12,317	2.94%
Washington	48,560	68,475	82,436	103,022	124,324	145,193	165,134	4.16%
UINTAH BASIN	35,546	38,656	39,700	42,848	47,657	51,590	53,643	1.38%
Daggett	690	768	737	794	881	952	988	1.20%
Duchesne	12,645	13,548	13,656	14,552	16,016	17,185	17,734	1.13%
Uintah	22,211	24,340	25,307	27,502	30,760	33,453	34,921	1.52%
SOUTHEAST	49,801	53,643	54,483	57,319	62,164	67,475	71,535	1.21%
Carbon	20,228	21,056	21,320	22,300	24,116	26,014	27,433	1.02%
Emery	10,332	10,726	10,360	10,628	11,302	12,017	12,512	0.64%
Grand	6,620	8,356	9,260	10,598	12,293	14,028	15,492	2.87%
San Juan	12,621	13,505	13,543	13,793	14,453	15,416	16,098	0.81%
STATE OF UTAH	1,722,850	1,959,183	2,140,355	2,354,961	2,617,712	2,878,596	3,129,369	2.01%

*AARC = Average Annual Rate of Change

(p)= preliminary 1995 Utah Population Estimates Committee estimates.

Note: These projections include revisions made in December, 1995 in three counties that have experienced higher levels of growth than the official projections published in 1994. These counties are Iron, Juab, and Tooele. Because of these revisions, the state and multi-county district totals in this table do not match the official projections described in the narrative and included in the other tables and figures in this section.

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

Economic Development Activities

☆ Economic Development Activities

Introduction

Although issues associated with managing growth have dominated public discussion in 1995, an economic development perspective places Utah's recent, exceptional economic growth in a more long-term context. It is estimated that Utah must create between 20,000 and 30,000 jobs annually just to keep up with the number of Utahns seeking work, without people moving to the state. An over-abundance of workers, while good for companies seeking inexpensive labor, is one reason Utah has been unable to close the wage gap, compared to the U.S. average, that opened in the early 1970s with the restructuring of the Utah economy. Indeed, recently released IRS data from 1993 show that the median income of migrants out of Utah was higher than that of in-migrants. These data would seem to indicate that from the late 1980s until fairly recently, not only was there net out-migration from the state, but Utah was exporting its skilled workers.

However, Utah is now ending its eighth year of employment growth over 3.0 percent per year, with the unemployment rates under 5 percent over the same period. Moreover, in recent years the population of Utah has grown by over 40,000 per year, with about one third being due to in-migration. And while population growth of this magnitude is not unprecedented, the combination and duration of strong labor force and employment growth coupled with low unemployment rates is unmatched. With the Winter Olympics, the Micron facility, and other recently announced development projects, the major threat to continued economic growth in the near term may be a lack of labor. Reports of labor shortages in lower-wage, construction, and specialized high-tech occupations are becoming common.

Metro / Non-Metro Areas

While this level of growth raises concerns about labor shortages and strains on the state's infrastructure, it also provides the opportunity to address issues of labor quality rather than just job quantity, and the tax revenues to devote to infrastructure needs. In addition, the recent economic boom in the state has also emphasized some distinct differences between the metropolitan and non-metro areas of the state in their economic development needs and opportunities.

On the one hand, the metropolitan Wasatch Front is characterized by a large, growing, well educated labor force with a broad range of skills. It has an extensive infrastructure of interstate and local roads, rail connections, a large international airport, access to electric, gas, and communications utilities, and a broad range of education services. There is also a well-developed network of economic development and other support organizations, and a broad range of available economic development tools. The magnitude of recent growth, however, which has been primarily concentrated along the Wasatch Front, has put strains on this infrastructure and led to other associated concerns such as air quality and competition for suitable land, water, and facilities. And, as noted, the tight labor market has led to labor shortages and the beginnings of wage acceleration in certain occupations. This trend hits hardest on small employers and those with lower employee skill requirements.

On the other hand, the rural non-metropolitan areas of the state generally have the land and natural resources. They have a lower cost of living and an available pool of labor. However, while the rural labor force possesses a quality comparable to the metropolitan areas, the pool of skills is often not as broad and deep, and its relatively small size places limits on the types of potential economic development projects. Also, physical infrastructure is often lacking or inadequate for many projects. Finally, most rural areas lack the support network of economic development and related agencies and professionals to assist in planning for and developing projects.

DCED's Mission

The Department of Community and Economic Development's mission is to seek ways to enhance the strength and diversity of the Utah economy, and to raise the average wages paid to Utahns. In general,

there are three ways this can happen. The first is by attracting companies to Utah that pay higher than average wages; second, the state may seek to increase the number and/or productivity of Utah's skilled workers; and third, the state may look for ways to lower the other costs of doing business in Utah. DCED, in coordination with a variety of public and private organizations, is using this period of exceptional growth to explore some of the more difficult and less visible, but hopefully more durable, opportunities to strengthen the economy of Utah.

Attracting New Companies to Utah

The first method listed, attracting new companies to move into the state, has always been the area of most visible effort for economic development programs. However, unfocused "smoke-stack chasing" is relatively ineffective in the long term, tends to result in increasingly unjustifiable incentives and inducements for companies to move, and as a result is harmful to the overall state economy. DCED therefore targets specific companies that fit within the state's identified industry clusters and that pay higher than average wages. The state's other major economic development organizations similarly concentrate on recruiting companies belonging to industries in which their areas enjoy a comparative advantage. Utah has been quite successful in its recruitment efforts and Micron's decision to open a computer chip manufacturing facility in Utah is the most recent (and noticed) example of the positive aspects of this strategy.

Use of Incentives

Indeed, the state has been so successful recently, that this very success has led to concern over the use of incentives to attract new companies. What is an economic development incentive? In the broadest terms, it could be considered anything which would attract a company to locate to a particular site. Incentives may be a favorable tax structure, tax abatements, gifts of real estate or cash, attractive utility rates, community infrastructure, a highly productive labor force, available educational or training opportunities, or any number of other factors which affect a business' ability to be profitable.

When applying this broad definition of economic development incentives, Utah and its communities rate well in the areas of labor force, education and utility rates. However, as mentioned above, the local community's infrastructure is too often inadequate to handle larger projects without major upgrades. And when it comes to the high stakes of "buying jobs" that some states engage in, Utah is not even in the game. Nevertheless, community alarm is often sounded when incentives appear to be gifts of dollar, real estate and/or tax reductions for the benefit of a single company. In giving this type of incentive, community leaders must weigh the benefit of having the company within their boundaries against the cost of the incentives. This decision requires a vision of the future as well as a willingness to accept the risks involved.

At the state level, in fact, Utah's only cash incentive is the Industrial Assistance Fund, which may be used by any company, existing or new, that meets the criteria of the program. The fund is limited in resources, never having more than $10 million total. The money is loaned to a company with payments made in terms of credits for jobs created and Utah products and services purchased. If a company does not earn the necessary credits, a cash payment is required to make up the difference. In an effort to more effectively meet the needs of non-metropolitan areas, the IAF legislation was modified in 1994. In many cases the eligibility criteria for assistance may be waived for companies willing to move or expand into the non-metropolitan areas of the state.

Contact at State Level

Besides direct business attraction, the state has many economic development resources that can help local governments. Perhaps one of the potentially most far-reaching new economic development initiatives targeted to the rural areas of the state is the fostering of project and/or area specific economic development teams. These teams may include, depending on the project or need, state and local economic and community development professionals, utility companies, banks, site developers, realtors, educators, and many others. In fact, the intent is to call upon whatever resource is necessary for a given project.

For example, in response to the Circle 4 Farms development (hog-rearing), the Department of Community and Economic Development has been invited to assist Beaver and Iron Counties in assessing and evaluating the local impacts of industrial development. After meeting with local officials, the Department determined that the best way to provide the needed information and services to the local areas was through a point contact at the state level. This one person will have access to other state programs for information and assistance and will be able to make him/herself available to local councils, committees, and officials, and to be a part of their leadership efforts

Local Action Teams

Local action teams are being established with members from the local government entities. Local action teams will collect available data and use the information to analyze their communities. In coordination with local industry, the state will project the potential labor force demands and associated populations related to the various growth scenarios, and these will be used to estimate infrastructure and service needs and to forecast the associated impacts for the various communities.

Beaver County has established an action team which has met several times to begin to address their local needs. To date, a state housing program specialist, a county housing authority director, and a banking official have met with the team. The team has also arranged for a landscape design group from a university to meet with a local community, examined ways to conduct a study of housing needs, and looked into financing a transportation strategy; all of which would be an expansion of the county's master plan. Further goals are to explore a special improvement district to provide community services, beginning with a road improvement district.

Local Economic Development Initiatives

A complementary effort is the Local Economic Development Initiatives (LEDI) program. LEDI were begun in 1994 to provide resources to well-defined economic development efforts tied to local strategic plans. LEDI is a project oriented program. LEDI monies may be used with other funding sources to help achieve high priority local goals. Each project must be 1) tied to a local county economic development strategic plan, 2) be supported by county elected officials (commissioners), and 3) have specific economic development outcomes (e.g., job creation, new investment, or other community wealth creation).

Successful projects during the past year have included planning for the impacts of major economic development projects such as the Circle 4 Farms hog rearing and processing project centered in Beaver County and the Micron plant in Lehi. Other initiatives have included dairy industry promotion in Millard County, entrepreneurial development, the study of various value added opportunities- from tar sands and natural gas development to fruit products, promotional brochures and booklets, and target industry studies. Joint projects involving groups of counties have also been funded.

Thus, while industry targeting and company recruitment remain a key economic development activity, the related functions of community and infrastructure planning and development are receiving heightened attention and resources.

Increasing Worker Productivity

The second area, increasing the productivity of Utah's workers, is not by strict definition a responsibility of economic development programs. However, the current labor market has led DCED to explore ways in which it can encourage the public and private sectors to work together to raise the productivity of Utah's work force.

Custom Fit training is the most well known current effort to supplement the state's already considerable investment in education, by providing employers and workers with company specific job skills. To supplement this type of effort, and in response to the local business community, DCED and the Utah Partnership commissioned a just completed survey of Utah businesses. The purpose of the survey is to 1) measure the degree to which there is a shortage of workers for existing companies as well as for

companies entering the Utah marketplace, and 2) determine the degree to which Utah employers face a workforce that lacks life skills, basic technical skills, and specific technical skills for certain jobs. The goal is to use this information to examine Utah's current labor force and training programs and identify areas of critical need that can be addressed through the combined efforts of the public and private sectors.

Lowering Business Costs/Increasing Efficiency

Helping Utah companies remain competitive by lowering other costs of doing business and increasing their efficiency is the third area of initiative. The most obvious economic development tool in this area is the sales tax exemption for manufacturing equipment, intended to encourage continued investment in productive capital and technology.

Also, in 1995 the Centers of Excellence Program has received proposals from 15 researchers seeking planning grants which could eventually lead to the establishment of new centers at our colleges and universities. Planning grants are awarded for a period of up to one year and enable researchers to conduct market studies and other feasibility analysis to determine if their technologies can be successfully commercialized.

Utah Business Resource Centers

The state is also launching some new programs to promote and facilitate the dissemination of resources to Utah's business community. First, the Utah Small Business Development Centers are being restructured. The goal is to provide Utah's businesses access to comprehensive resources and information regarding business planning, marketing research, manufacturing technology, capital availability, and State business development programs. The objectives are to strengthen the small business community and their contribution to the economy of the state; leverage resource assistance to more small businesses by utilizing a partnership with the Small Business Administration, Utah's higher education institutions, and other resource providers; and to create a broader based delivery system utilizing co-location of information and resources in one-stop centers as part of a statewide network of Utah Business Resource Centers.

Services will include: furnishing limited individual counseling to small businesses; Providing expert ancillary "circuit riders" in specific business disciplines who will rotate throughout the state; maintaining access to current business information and resource databases; establishing a working relationship with private sector professionals as a referral source; utilizing the resources of higher education to provide small businesses with specific business application training; utilizing technology, wherever possible, to provide orientation and general business organization information to clients; and, where possible, co-locate other business resource providers at regional centers (e.g., Utah Manufacturing Extension Program, Small Business Innovation Research, Utah Technology Finance Corporation, Procurement, Information Technology kiosks, One Stop Career Centers, and International Export Assistance).

Utah Manufacturing Extension Program

Second, the Department of Community and Economic Development, in coordination with Brigham Young University, Weber State University, and Utah State University, has formed a partnership resulting in funding for the Utah Manufacturing Extension Program (UMEP). The partnership will be funded for 6 years by a $5.8 million federal grant from the Commerce Department's National Institute of Standards and Technology. DCED will also be contributing $100,000 in seed money to the program, while the institutions will provide a combination of in-kind and cash match.

UMEP is a statewide network organized to enhance the productivity and technological performance of the more than 2,700 small and medium-sized Utah manufacturers. UMEP will provide seven full-time and/or part-time field engineers who will be located at the Utah Business Resource Centers throughout the state at all public higher education facilities. These field engineers will be the primary contact with industry and will assist in resolving near-term problems. Major projects will be referred to UMEP's project engineers who will utilize a spectrum of resources and services to support UMEP.

Utah Agribusiness Council

Finally, other economic development activities targeting the needs of the non-metropolitan areas are efforts to add value to local resources. Such an approach capitalizes on local economic advantages and places emphasis on internal development, both key issues in successful rural economic development.

To support this value-added resource development, Governor Leavitt established the Utah Agribusiness Council. This advisory board, staffed by state personnel, provides input on ways to add value to Utah agribusiness resources. Major focus has been placed on the need to better extend information on markets, technology and resources from our urban centers and universities to Utah's agribusiness community.

Examples of Utah Agribusiness Council projects include the compilation of an interactive Utah Agribusiness database, publication of the Green Pages: A Guide to Utah Agribusiness Financial Resources and development of the Utah Cyber Fair, an Internet electronic homepage identifying agribusiness resources, promoting on-line commerce and encouraging electronic networking.

Conclusion

Utah has the opportunity, during this decade of exceptionally strong economic growth, to achieve qualitative and long-term benefits to our economy. It is critical that, at a time when the luxury exists of doing more than merely trying to provide enough jobs for the citizens of Utah, state economic development activities be directed toward insuring Utah maintains both its competitive advantages and its quality of life. The efforts outlined above are a step in that direction. ☆

Economic Indicators

☆ Employment, Wages, Labor Force

Highlights

- ☆ Utah's 1995 unemployment rate was 3.6 percent.
- ☆ Robust job growth in 1995 helped push Utah's jobless rate to the lowest level registered since 1956.
- ☆ In 1995, 49,000 new nonfarm jobs were added for a growth rate of 5.7 percent—the third straight year of 5-percent-plus expansion.
- ☆ Utah continued to have one of the best state records for employment growth in the nation. The state's nonfarm job growth rate doubled the U.S. average.
- ☆ Construction showed the highest growth rate (15 percent) of any major industry (for the fifth year in a row), while trade added the highest number (14,900) of net new jobs.
- ☆ Mining was the only major industry to experience employment declines (200 positions).
- ☆ Public sector expansion remained relatively slow because of defense cutbacks and only moderate state and local government gains.
- ☆ Total wages were up 10 percent, while the average monthly wage expanded 4.1 percent in 1995.
- ☆ The strong rise in wages meant the average Utahn's earnings grew faster than inflation for only the second time in the last 10 years.
- ☆ Roughly 74 percent of the noninstitutionalized population 16 years and older was in the labor force in 1994. Utah's strong economy enticed many workers into the labor force.
- ☆ Young people, women, and men all show higher rates of labor force participation than their national counterparts.
- ☆ Utahns are more likely to work part-time than the U.S. labor force in general.

The Utah Labor Market

Although some economists thought Utah's employment growth rates defied gravity, job expansion slowed in 1995. Following on the heels of 6.2 percent growth in 1994, a 1995 nonfarm job expansion rate of 5.7 might seem rather unglamorous. Yet, Utah added 49,000 net new jobs and continued to rank as the second fastest growing state in the nation. In fact, during much of 1995, Utah's growth rate measured three times greater than the national figure.

And, although job growth tapered off in 1995, "labor shortage" seemed the cry of many of Utah's employers. The year 1995, marks the third straight year of employment growth above 5 percent. As in-migration slowed and jobs continued to grow, many firms found it difficult to attract workers. Shortages were particularly acute in Salt Lake, Summit, Utah, and Washington Counties. Enough positions opened up in the mid-range category that many workers moved out of their low-wage jobs. In addition, the boom in construction jobs produced a dearth of skilled construction workers. These scarcities enticed many workers (particularly women) to join the labor force and also pushed up wages in the affected labor categories.

Not surprisingly, unemployment declined from 3.7 in 1994 to 3.6 percent in 1995. Joblessness in Utah has not measured so low since 1956--nearly four decades! Throughout the year, Utah consistently maintained one of the lowest unemployment rates in the nation--registering roughly 2 points below the U.S. average. With the exception of a dip to 3.1 percent in March, joblessness followed a trend of slow decline. An average of 36,000 individuals were out of work each month during 1995.

Nonfarm Jobs

During 1995, Utah added 49,000 new nonfarm jobs for a growth rate of 5.7 percent--five-tenths of a point lower than in 1994 (6.2 percent). And, while the national labor market made very strong improvements, Utah rate of job expansion still measured two-and-one-half times greater than the U.S. average. The only major sector to lose jobs was mining where employment dropped by 200 positions.

After four years of double-digit growth, it might seem unlikely that the construction industry could grow much more. However, construction managed to produce 7,200 new jobs for a growth rate of 15 percent. Residential building slowed, but very strong commercial expansion picked up the slack adding more and more construction jobs.

Manufacturing's 6.8 percent, 7,900 job expansion during 1995 was just another indicator of Utah's economic well-being. Manufacturing suffered tremendously during the 1990s between a national recession and cuts in defense-spending. But 1995 was certainly this industry's year. Just contrast Utah's performance to that of the nation. During the last half of 1995, the United States actually lost manufacturing jobs. Both durable and nondurable goods production shared in the employment increases as new companies located in Utah and older firms expanded. And, Micron's announcement of a new Utah plant should help keep manufacturing growing through the rest of the decade. Both the growth in construction and manufacturing provide good news for Utah wage earners since both industries pay higher-than-average wages.

Transportation/communications/utilities added 2,300 new jobs in 1995 for a moderate growth rate of 4.7 percent. Trucking and warehousing accounted for the vast majority of new jobs while utilities and airlines experienced sluggish expansion.

In 1995, trade employment growth outdistanced the traditional producer of the most new jobs--services. The trade industry added 14,900 new jobs to Utah's economy for a growth rate of over 7 percent. This expansion remained broad-based and can be traced, at least partially to the need for additional services from in-migrants and to people buying goods and services to go with their newly constructed houses. However, eating and drinking places showed some of the largest job gains.

The service industry created 12,900 new jobs during 1995, for a growth rate of 5.7 percent. Despite layoffs at WordPerfect, computer services continued to expand at a respectable rate. Other major contributors to this rapid expansion included business services (particularly employee leasing firms, "temp agencies", and telephone marketing businesses), engineering/management services, personal/amusement services, and health services.

Given the phenomenal growth of the finance/insurance/real estate industry generated during the low interest rate mortgage frenzy of 1994, 1995 might have experienced the bust side of the boom. However, while growth slowed from 12.6 percent in 1994 to 2.4 percent in 1995, the industry did continue to add jobs. Expansion in several financial services companies with large telephone support centers helped offset losses in the mortgage industry.

Federal defense employment cutbacks continued to plague growth in the public sector. Government did add 2,800 new jobs in 1995 despite the loss of roughly 1,500 federal defense jobs. Fortunately, a high percentage of the federal cutbacks were accomplished through early retirements and attrition. This meant that the cutbacks did not have a major effect on the unemployment rate. Moderate growth on the part of state and local governments more than offset the losses in federal employment. Both state and local governments grew slower than the economy in general. Given the strong population growth in Utah during the past several years, this is a remarkable feat for the public sector. The government sector ended 1994 with a growth rate just under 2 percent.

Wages

Final 1995 figures are expected to show an increase of roughly 10 percent in total nonfarm wages. This growth registers 1.2 points higher than the 1994 increase of 8.8 percent. And changes in Utah's average monthly wage reflected the pattern in total wages. The State's 1995 average monthly wage will be about $23,300--up over 4 percent from 1994. This marks only the second time during the past 10 years that average wage increases in Utah have outpaced increases in inflation. Despite a sound economy, growth in wages for Utahns covered under unemployment insurance laws has not kept pace with national wage increases. Utah annual pay as a percentage of U.S. annual pay has declined from a high of 96 percent in 1981 to a low of 84.4 percent in 1993. However, the declines have moderated substantially during the

1990s. And, Utah's annual pay as a percent of U.S. pay actually increased to 84.7 percent in 1994--the first uptick since 1980.

The loss of high paying goods-producing jobs in the early and mid-80s helped contribute to this 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 in general. 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. In addition, a lower cost of living helps offset the lower average wage.

Who were Utah's major employers? At the end of 1994, with roughly 15,000 employees, the University of Utah (including the hospital) kept the top employer spot. Other top employers included other major universities, school districts, government entities, a major defense contractor, a food store chain, a department store, a software company, and an airline. Hill Air Force Base--for many years Utah's top employer--remained in the number three spot it occupied from 1991 through 1994. Major retail chains, utilities, health care services, large manufacturing firms, and banks are often found in the top 100 companies. For a full list, consult the tables of Utah employers included in this chapter.

Labor Force Characteristics

What was the composition of Utah's labor force in 1994 (the most recent data available)? Roughly 74 percent of the State's civilian, noninstitutionalized population--over the age of 16--participated in the labor force during the year. This "participation rate" ranks significantly higher than the national average of 66 percent. Both Utah women and Utah men are more likely to take part in the labor market than their national counterparts. In addition, Utah teenagers showed a very high propensity toward labor force participation. Roughly 68 percent of Utah's population 16-19 years old are part of the labor force compared to 52 percent nationally. In fact, Utah has the third highest rate of teenage labor force participation in the nation (after Minnesota and Iowa).

Participation has increased notably over the past several years rising almost 4 percentage points since 1992. A strong economy and many new jobs have enticed many individuals who had previously removed themselves from the labor force to join those working or looking for work. Many of these individuals have been Utah women.

Who Works?

Data suggest that individuals between the ages of 20 and 54 were most likely to be in the State's work force. Men between the ages of 25 and 34 were the most likely to work. However, women between the ages of 20 and 24 participated in the labor force at the highest rate for females.

More Likely to Work

Just why are Utahns more likely to work than their national counterparts? Is it just Utah's much touted work ethic? Utah has a relatively young population, and young people are most likely to work--particularly given recent trends toward early retirement. Plus, Utah's young people are much more likely to work than U.S. teenagers in general. Utah's teenage (16-19 year-olds) participation rate generally runs more than 15 percentage points above the national average. In addition, Utah's relatively large families and lower than average wages may require families to embrace more than one wage earner. These factors coupled with Utahns' relatively higher education levels and "work ethic" account for most of the difference between Utah and U.S. participation rates.

The Marriage Factor

Single (never married) Utahns are most likely to work. However, never married men are less likely to work than married men, while single women are more likely to work than married females. Those in the "other marital status" group (separated, divorced, widowed) are least likely (of both sexes) to be labor force

members. Of course, this "other" group includes a larger number of older people--participation rates include those over 65.

Where Do They Work?

Roughly 98 percent of experienced Utah workers (individuals as opposed to jobs which were discussed previously in this narrative) are employed in nonagricultural industries. Agriculture accounts for less than 3 percent of experienced workers, while about 7 percent of Utahns are self-employed.

Why Are They Unemployed?

Almost 30 percent of the unemployed had lost their jobs--down substantially from 1992 when 46 percent had lost their positions. On the other hand, job leavers increased substantially from 17 percent in 1992 to 23 percent in 1994. Re-entrants skyrocketed as many women took advantage of the strong economy to look for work. In 1992, only about one-fourth of unemployed workers were re-entrants compared to 40 percent in 1994.

Occupational Outlook

Occupational employment projections of jobs in the State reflect the robust nature of the Utah economy. The occupations in demand are directly related to the some 300 industries employing over a million employees working in the nearly 50,000 establishments in Utah.

Occupational Composition of Utah Jobs

Of the eight major occupational categories representing the 700 job title projections, the production, operating, and maintenance group account for one in every four jobs. This is far the largest category in terms of the number of jobs and number of different job titles. Over 43,000 of the total 190,000 new jobs estimated over the 1996 to 2001 period will be in this category. The professional and clerical categories each account for 16 percent of total employment in Utah with the professional group contributing over 35,000 new positions, and clerical with 25,000 new jobs over the 1996 to 2001 time period. These three job groups account for nearly six of every ten jobs.

Service related occupations claim about 15 percent of the total job pie along with 12 percent in the sales occupational category. Managerial and administrative positions add another seven percent to the total with the technical and agricultural related occupations accounting for five and 2.4 percent respectively.

Employment Trends

Rates of job creation vary by occupational category. Occupational categories that will experience rates above average will be service, technical, professional, sales, and managerial. Job groups with less than average employment growth are production, clerical, and agriculture.

Job Openings--the Measure of Labor Demand

The growth of employment in an occupation provides only a portion of the true measure of labor demand in the market. Job openings are vacancies created by growth in employment ***and*** vacancies resulting from the need to replace workers who leave current employment positions for another occupation. Together, these two components quantify the demand for an occupation. Each year over the next five years over 60,000 job openings will occur. About 38,000 of these will result from employment growth and another 22,000 will originate from the need to replace current workers who change occupations.

In terms of the eight occupational categories, the production related jobs will offer the most potential with an average of 14,500 job openings per year. Service occupations will add another 11,500 annually with professional, sales, and clerical categories each contributing between 8,000 and 10,000 job opportunities. The managerial and technical groups will each add about 3,000 to 4,000 vacancies per year. Agricultural positions will number just over 1,000.

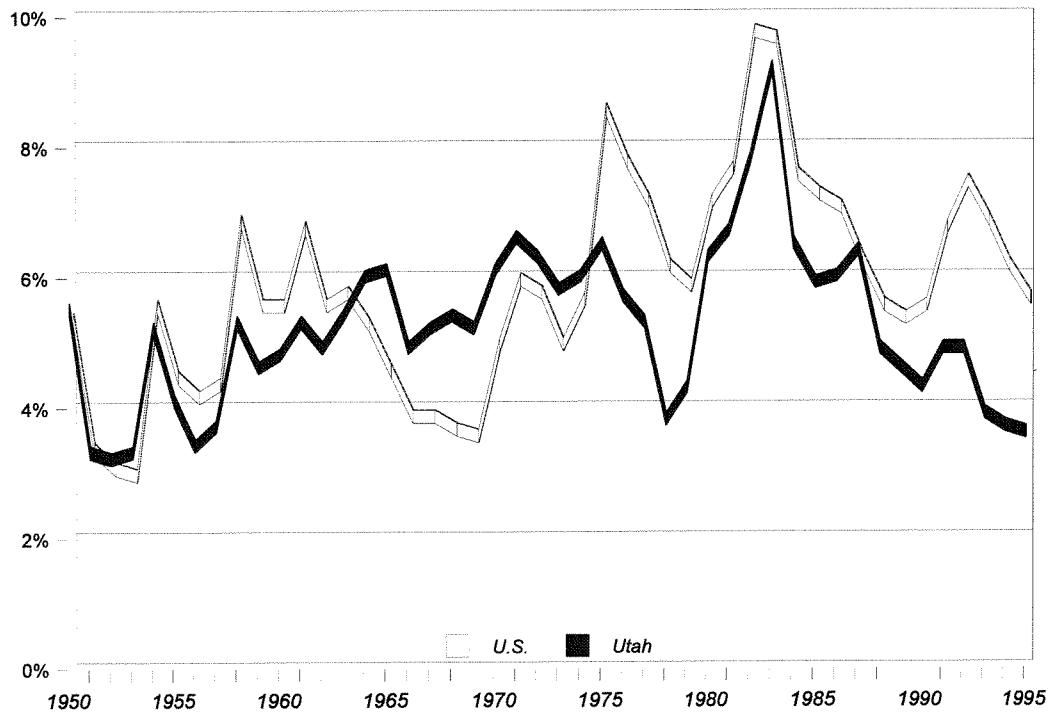
Education, Training, and Experience Requirements of Utah Jobs

About 21 percent of jobs in the State require at least a bachelor's degree or more, based on a new method of assigning training levels to occupations from the Bureau of Labor Statistics. This new education/training/experience classification system, when linked with occupational employment projections for Utah results in the following percentages of Utah jobs and education, training, and experience requirements: associate degree (4 percent); postsecondary vocational training (6 percent); work-related experience (8 percent); long term (one year or more) on-the-job training (11 percent); moderate term (one month to one year) on-the-job training (12 percent); and short term (less than one month) informal on-the-job training (39 percent).

Conclusion

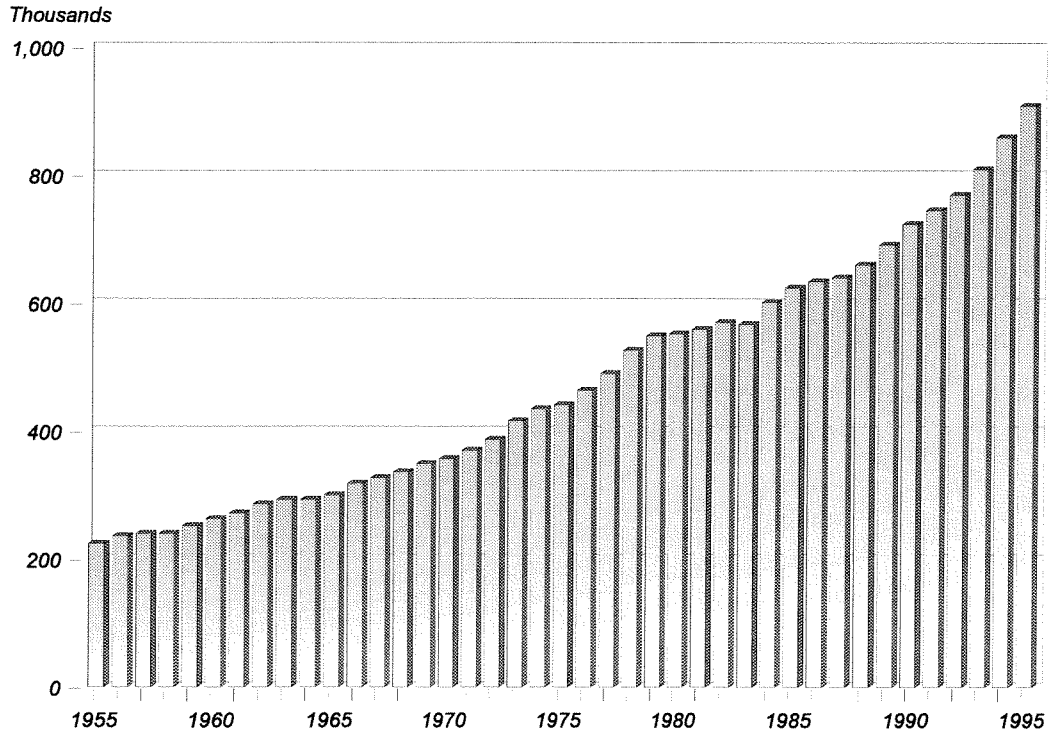
While Utah experienced slower nonfarm job growth in 1995 than in 1994, its labor market experience remained sound. Unemployment dropped and labor shortages plagued certain sectors. This helped to push up the average Utahn's wage faster than inflation could tear down purchasing power. And, the robust nature of Utah's manufacturing and construction sectors indicated the strength of Utah's economy. ☆

Figure 5
U.S. and Utah Unemployment Rates: 1950 to 1995



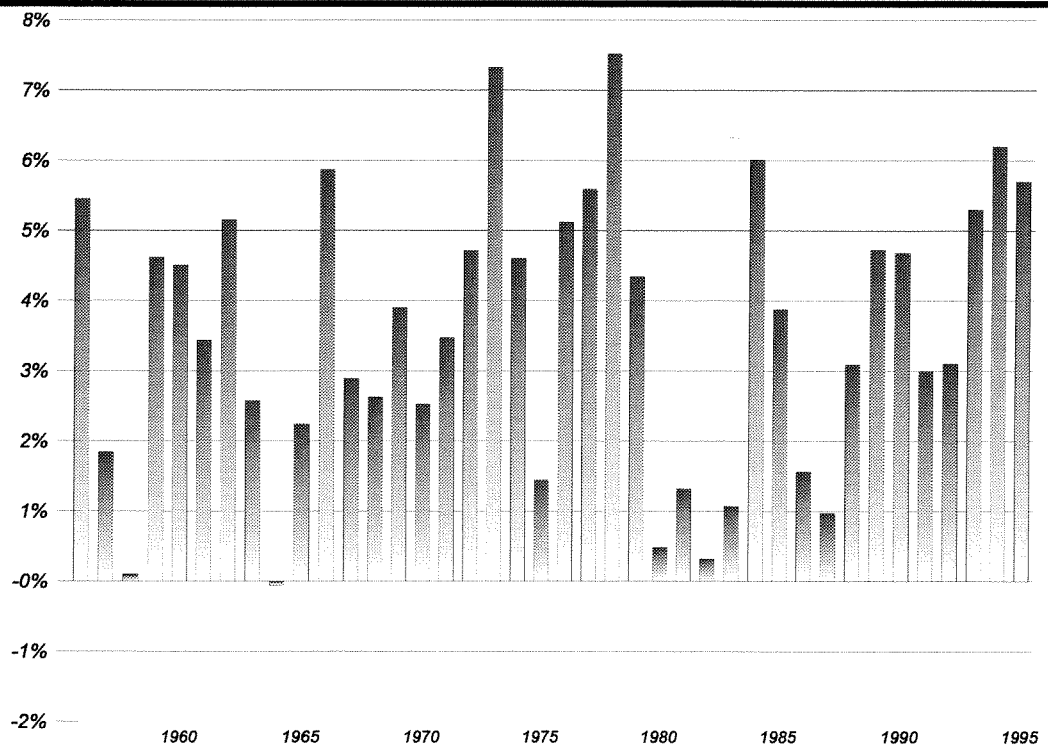
Source: Utah Department of Employment Security

Figure 6
Utah Nonagricultural Employment: 1955 to 1995



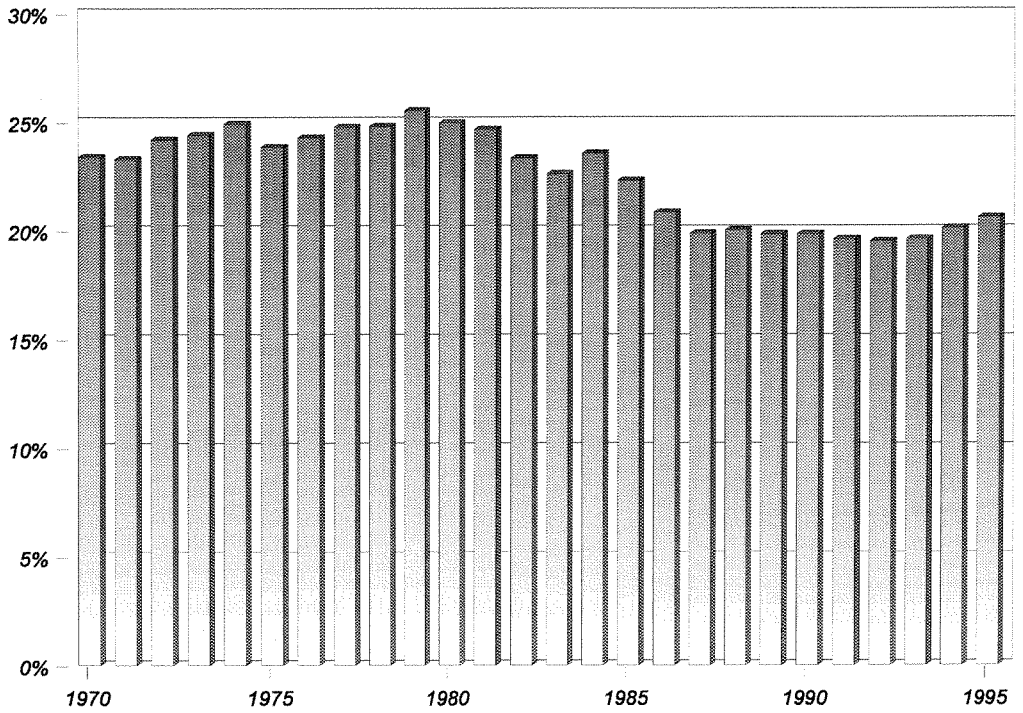
Source: Utah Department of Employment Security

Figure 7
Utah Nonagricultural Employment--Annual Percent Change: 1955 to 1995



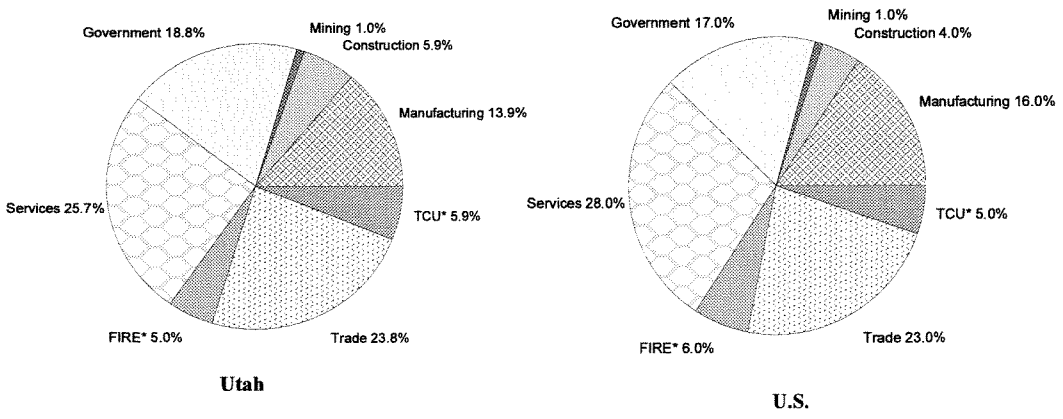
Source: Utah Department of Employment Security

Figure 8
Percent of Employment in Goods-Producing Industries: 1970 to 1995



Source: Utah Department of Employment Security

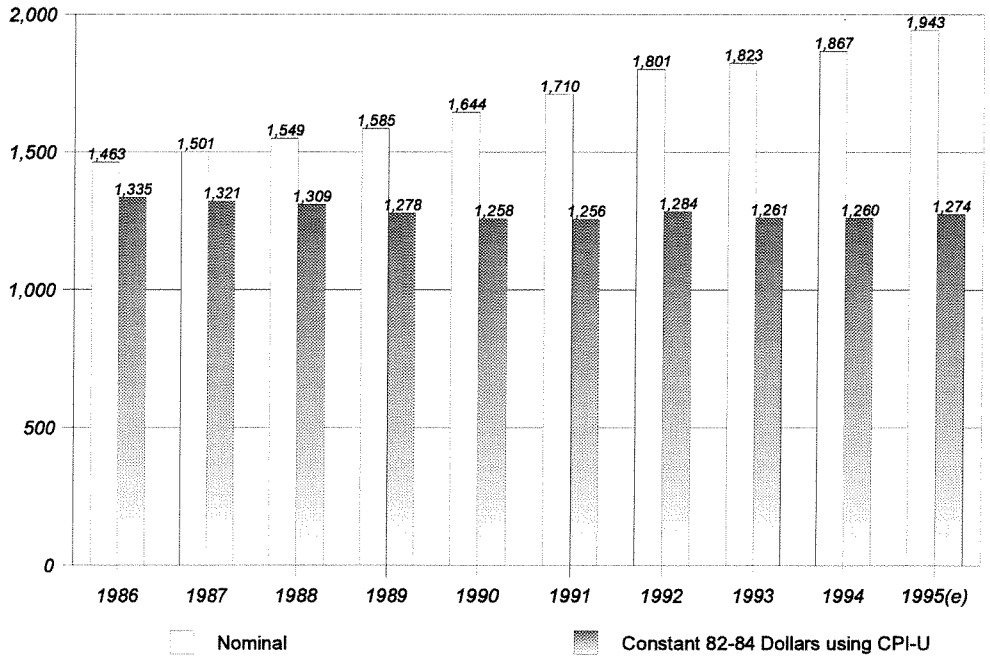
Figure 9
Utah and U.S. Employment by Industry: 1994



* Transportation, Communications and Utilities
**Finance, Insurance and Real Estate

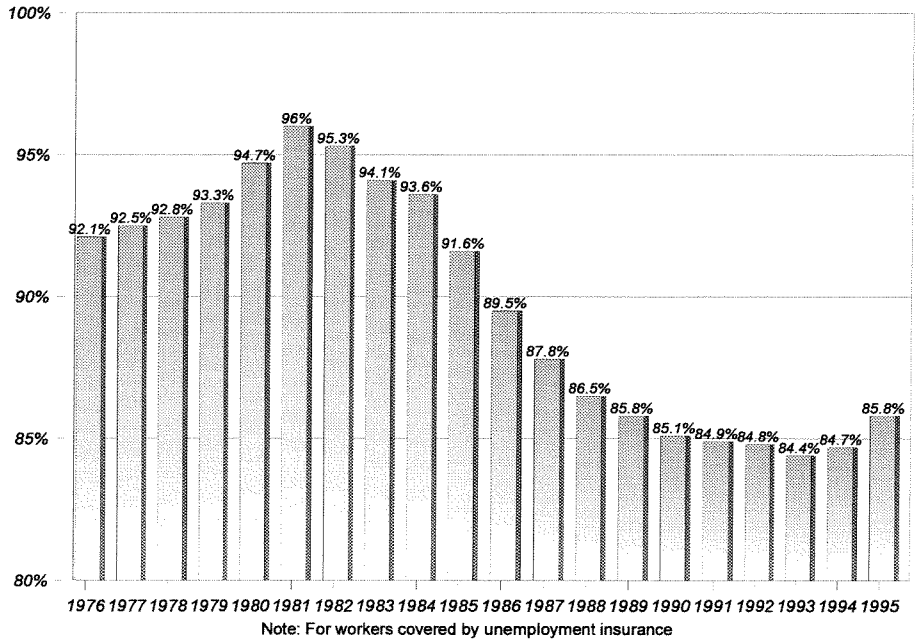
Source: Utah Department of Employment Security

Figure 10
Utah Nonagricultural Average Monthly Wages: 1986 to 1995



Source: Utah Department of Employment Security

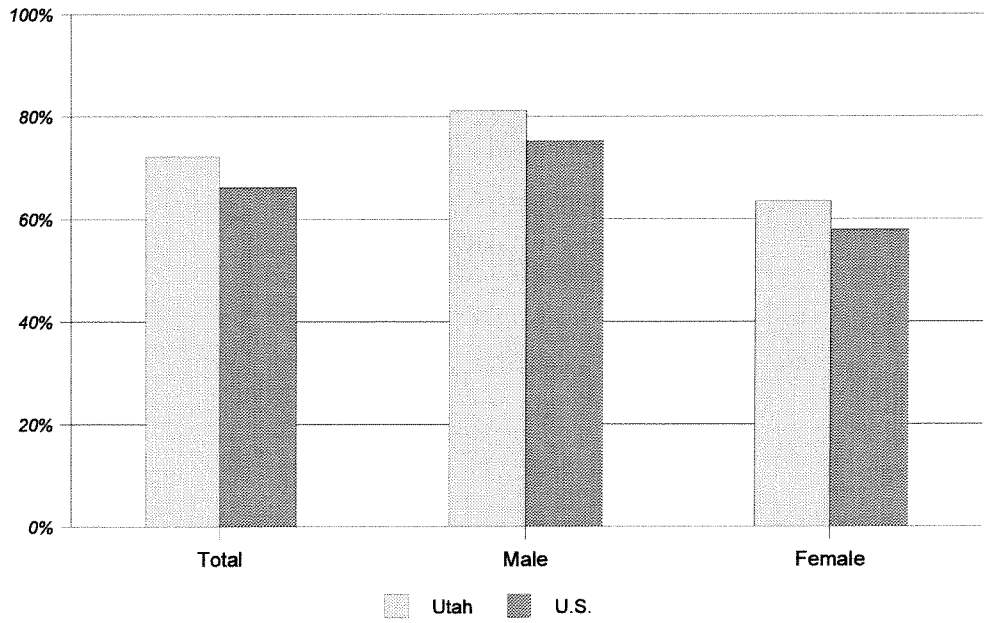
Figure 11
Utah Average Annual Pay as a Percent of U.S.: 1976 to 1994



Note: For workers covered by unemployment insurance

Source: Utah Department of Employment Security

Figure 12
Utah and U.S. Labor Force Participation Rates: 1994



Source: U.S. Bureau of Labor Statistics

Table 6
Labor Force, Employed, and Unemployed Persons by District and County: 1994

Planning District and County	Civilian Labor Force	Total Employed	Unemployed	Unemployment Rate
State Total	974,000	938,000	36,000	3.7%
Bear River	58,249	56,214	2,035	3.5%
Box Elder	17,292	16,530	762	4.4%
Cache	40,059	38,815	1,244	3.1%
Rich	898	869	29	3.2%
Wasatch Front	642,549	619,983	22,566	3.5%
North	195,954	188,218	7,736	3.9%
Davis	102,801	99,323	3,478	3.4%
Morgan	2,905	2,772	133	4.6%
Weber	90,248	86,123	4,125	4.6%
South	446,595	431,765	14,830	3.3%
Salt Lake	434,080	419,856	14,224	3.3%
Tooele	12,515	11,909	606	4.8%
Mountainland	159,781	154,408	5,373	3.4%
Summit	10,785	10,309	476	4.4%
Utah	143,381	138,767	4,614	3.2%
Wasatch	5,615	5,332	283	5.0%
Central	24,253	22,980	1,273	5.2%
Juab	3,245	3,096	149	4.6%
Millard	4,688	4,468	220	4.7%
Piute	477	435	42	8.8%
Sanpete	7,310	6,877	433	5.9%
Sevier	7,325	6,976	349	4.8%
Wayne	1,208	1,128	80	6.6%
Southwestern	50,307	48,274	2,033	4.0%
Beaver	2,171	2,084	87	4.0%
Garfield	2,520	2,296	224	8.9%
Iron	12,072	11,617	455	3.8%
Kane	3,174	2,936	238	7.5%
Washington	30,370	29,341	1,029	3.4%
Uintah Basin	16,013	14,846	1,167	7.3%
Daggett	486	465	21	4.3%
Duchesne	5,620	5,135	485	8.6%
Uintah	9,907	9,246	661	6.7%
Southeastern	22,854	21,298	1,556	6.8%
Carbon	9,061	8,455	606	6.7%
Emery	4,058	3,771	287	7.1%
Grand	4,750	4,453	297	6.3%
San Juan	4,985	4,619	366	7.3%

Source: Utah Department of Employment Security, Labor Market Information Services.

Table 7
Utah Unemployment Rates by District and County: 1985 to 1994

District/County	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994(p)
State Total	5.9	6.0	6.4	4.9	4.6	4.3	4.9	4.9	3.9	3.7
Bear River	4.8	4.3	4.5	3.8	3.8	4.4	4.4	4.6	3.7	3.5
Box Elder	4.5	4.1	4.3	3.8	3.8	4.3	4.6	5.4	4.7	4.4
Cache	5.1	4.4	4.5	3.8	3.9	4.5	4.4	4.3	3.2	3.1
Rich	3.7	5.1	5.8	4.0	2.0	1.6	3.3	4.0	2.6	3.2
Wasatch Front	5.3	5.4	5.8	4.7	4.5	4.0	4.6	4.7	3.6	3.5
North	4.9	5.5	6.0	5.1	5.0	4.4	4.9	5.2	4.2	3.9
Davis	4.0	4.8	5.3	4.4	4.3	3.8	4.3	4.3	3.4	3.4
Morgan	6.5	7.2	8.3	7.0	8.2	4.2	5.2	5.3	4.9	4.6
Weber	5.9	6.2	6.7	5.8	5.6	5.1	5.5	6.1	5.0	4.6
South	5.5	5.3	5.7	4.5	4.3	3.8	4.5	4.5	3.4	3.3
Salt Lake	5.5	5.3	5.6	4.5	4.3	3.7	4.4	4.5	3.3	3.3
Tooele	6.0	6.3	7.4	5.6	4.6	5.0	5.2	5.8	4.7	4.8
Mountainland	6.8	6.7	7.3	4.6	4.6	4.6	5.1	4.7	3.6	3.4
Summit	7.8	8.6	8.6	6.5	6.2	5.6	6.8	6.5	4.8	4.4
Utah	6.5	6.3	6.9	4.3	4.3	4.5	4.8	4.4	3.5	3.2
Wasatch	11.3	13.3	13.5	8.7	8.3	5.8	7.6	7.3	5.5	5.0
Central	8.9	10.2	10.0	7.9	7.2	6.3	7.6	7.5	5.4	5.2
Juab	15.5	15.8	15.3	9.7	7.7	5.3	5.6	7.4	5.4	4.6
Millard	5.5	6.6	7.5	5.6	5.2	4.2	5.2	6.0	4.9	4.7
Piute	13.3	14.8	12.6	12.7	7.6	7.2	10.0	8.0	6.0	8.8
Sanpete	13.2	14.9	13.4	11.2	10.4	9.3	10.3	9.1	5.9	5.9
Sevier	7.4	7.9	7.4	6.0	5.6	5.0	7.0	6.8	5.1	4.8
Wayne	8.1	9.4	9.4	6.9	6.4	7.5	8.5	7.9	6.5	6.6
Southwestern	6.0	5.9	6.3	4.9	4.9	4.8	5.5	5.5	4.1	4.0
Beaver	6.1	6.8	6.3	5.4	5.3	4.3	4.7	4.9	4.5	4.0
Garfield	13.5	12.3	12.2	8.6	9.5	8.1	10.2	12.5	8.6	8.9
Iron	6.2	6.3	6.5	4.9	4.7	4.9	5.0	4.6	3.7	3.8
Kane	8.6	7.1	7.6	6.1	6.9	6.0	7.7	8.5	6.7	7.5
Washington	4.7	4.8	5.4	4.4	4.3	4.3	5.1	4.9	3.6	3.4
Uintah Basin	9.1	13.1	13.2	9.2	8.5	6.1	6.6	7.8	6.9	7.3
Daggett	3.9	4.1	3.4	2.8	2.0	1.1	2.6	3.8	3.8	4.3
Duchesne	10.5	15.4	16.4	12.0	10.6	7.4	7.8	8.8	7.8	8.6
Uintah	8.5	12.0	11.8	8.0	7.7	5.6	6.1	7.4	6.5	6.7
Southeastern	10.9	10.7	10.9	8.6	8.1	6.8	8.1	8.6	6.5	6.8
Carbon	10.0	10.1	10.3	8.5	8.2	6.6	7.6	8.8	6.5	6.7
Emery	12.9	12.6	14.9	9.3	7.6	6.9	8.6	8.3	7.1	7.1
Grand	13.1	12.9	11.0	8.8	9.5	6.4	6.9	7.4	6.1	6.3
San Juan	9.0	8.2	8.4	7.9	7.4	7.4	9.6	9.4	6.4	7.3

(p) = preliminary

Source: Utah Department of Employment Security, Labor Market Information Services.

Table 8
Utah Labor Force, Nonagricultural Jobs and Wages: 1986 to 1995

Category	Absolute Amounts					Percent Changes						
	1991	1992	1993	1994	1995(p)	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Civilian Labor Force (thousands)	844.0	866.0	917.0	974.0	994.0	4.0	3.7	3.2	2.6	5.9	6.3	1.7
Employed	802.0	823.0	882.0	938.0	958.0	4.2	4.1	2.4	2.6	7.2	6.3	2.1
Unemployed	41.0	43.0	35.0	36.0	36.0	0.0	-5.4	17.1	4.9	-18.6	2.9	-5.6
Unemployment Rate	4.9%	4.9%	3.9%	3.7%	3.6%							
Nonagricultural Jobs (thousands)	745.2	768.6	809.7	859.6	908.6	4.7	4.7	3.0	3.1	5.3	6.2	5.7
Mining	8.6	8.5	8.3	8.3	8.1	0.0	6.2	0.0	-1.2	-2.4	0.0	-2.4
Construction	31.5	34.9	39.7	48.2	55.4	3.6	7.3	13.3	10.8	13.8	21.9	15.0
Manufacturing	105.7	106.2	110.5	116.6	124.5	4.1	3.9	-1.3	0.5	4.0	4.9	6.8
Trans., Comm., and Util.	42.4	43.9	47.1	49.4	51.7	3.8	3.4	0.2	3.5	7.3	4.9	4.7
Trade	178.8	184.4	191.5	205.4	220.3	6.3	3.6	3.7	3.1	3.9	6.4	7.3
Finance, Ins., and Real Estate	35.8	37.3	41.4	45.9	47.0	0.0	2.1	5.0	4.2	11.0	12.6	2.4
Services	188.4	196.4	211.8	224.4	237.3	7.2	8.1	4.2	4.2	7.8	6.3	5.7
Government	154.0	156.9	159.4	161.4	164.2	2.5	2.9	2.3	1.9	1.6	1.8	1.7
Nonagricultural Wages (millions)	$15,294	$16,611	$17,711	$19,262	$21,188	7.1	8.6	7.1	8.6	6.6	8.8	10.0
Average Monthly Wage	$1,710	$1,801	$1,823	$1,867	$1,943	2.3	3.7	4.0	5.3	1.2	2.4	4.1
Adjusted for Inflation (1982-84 $)	$1,256	$1,284	$1,261	$1,260	$1,274	-2.4	-1.6	-0.2	2.2	-1.7	-0.1	1.2

(p) = preliminary

Source: Utah Department of Employment Security.

Table 9
Utah Nonagricultural Jobs by Industry and by District and County: 1994

District/County	Total	Mining	Construction	Manufacturing	Trans., Comm., & Utilities	Trade	Finance Ins.,& Real Estate	Services	Government
State Total	859,626	8,309	48,186	116,627	49,353	205,429	45,917	224,371	161,434
Bear River	51,520	58	2,212	19,067	1,191	9,362	1,200	7,181	11,249
Box Elder	16,701	46	594	8,845	354	2,959	312	1,439	2,152
Cache	34,376	12	1,615	10,213	830	6,326	846	5,630	8,904
Rich	443	0	3	9	7	77	42	112	193
Wasatch Front	590,371	3,368	32,869	74,574	39,732	143,369	38,013	149,238	109,208
North	142,704	112	8,378	21,355	4,424	33,574	5,512	31,223	38,126
Davis	67,569	104	4,519	9,444	2,322	17,033	2,748	12,794	18,605
Morgan	1,209	0	133	237	12	399	23	61	344
Weber	73,926	8	3,726	11,674	2,090	16,142	2,741	18,368	19,177
South	447,667	3,256	24,491	53,219	35,308	109,795	32,501	118,015	71,082
Salt Lake	438,085	3,024	23,943	52,163	34,270	108,241	32,336	116,784	67,324
Tooele	9,582	232	548	1,056	1,038	1,554	165	1,231	3,758
Mountainland	130,112	175	7,668	16,709	2,495	30,149	4,337	49,774	18,805
Summit	11,143	110	651	787	273	3,722	946	3,223	1,431
Utah	116,037	62	6,706	15,788	2,125	25,562	3,326	45,816	16,652
Wasatch	2,932	3	311	134	97	865	65	735	722
Central	17,481	519	658	1,765	1,449	4,143	400	3,000	5,547
Juab	2,135	19	112	321	54	560	39	495	535
Millard	3,544	168	85	150	707	836	60	538	1,000
Piute	206	0	1	18	14	22	6	9	136
Sanpete	5,108	2	173	754	169	1,012	154	699	2,145
Sevier	5,778	330	249	481	487	1,591	134	1,078	1,428
Wayne	710	0	38	41	18	122	7	181	303
Southwestern	38,931	284	3,638	3,158	1,733	11,437	1,410	9,279	7,992
Beaver	1,551	13	51	90	150	474	39	206	528
Garfield	1,762	27	60	117	87	255	21	681	514
Iron	10,263	17	578	969	329	2,721	322	2,304	3,023
Kane	2,047	14	75	42	34	589	44	713	536
Washington	23,308	213	2,874	1,940	1,133	7,398	984	5,375	3,391
Uintah Basin	12,084	1,596	381	499	1,118	2,749	209	2,087	3,445
Daggett	428	0	28	3	39	51	0	89	218
Duchesne	4,279	490	141	281	494	850	96	429	1,498
Uintah	7,377	1,106	212	215	585	1,848	113	1,569	1,729
Southeastern	19,127	2,309	760	855	1,635	4,220	348	3,812	5,188
Carbon	7,991	1,021	228	366	514	1,904	185	1,635	2,138
Emery	3,524	900	211	57	747	396	37	292	884
Grand	3,490	124	150	51	107	1,312	90	984	672
San Juan	4,122	264	171	381	267	608	36	901	1,494

Source: Utah Department of Employment Security, Labor Market Information Services.

Table 10
Utah's Largest Nonagricultural Employers: December 1994

Rank by Size	Firm Name	Approximate Employment
1	University of Utah	15,000
2	Brigham Young University	15,000
3	Hill Air Force Base*	8,000
4	Granite School District	7,500
5	Jordan School District	7,000
6	Davis School District	6,000
7	Utah State University	6,000
8	Utah Social Services	5,500
9	Smith's Food & Drug Centers	5,500
10	U.S. Post Office	5,000
11	Morton International	5,000
12	Matrixx Marketing	4,500
13	U.S. Internal Revenue Service	4,500
14	Salt Lake County	4,500
15	Delta Airlines	4,500
16	Albertsons, Inc.	4,500
17	Thiokol Corporation	4,500
18	ZCMI	4,000
19	Alpine School District	4,000
20	Wal-Mart Stores	4,000
21	Salt Lake School District	3,500
22	K Mart	3,000
23	Pacific Corporation	3,000
24	WordPerfect	3,000
25	Weber School District	3,000
26	Proform Fitness	3,000
27	U.S. West Communications	3,000
28	LDS Hospital	3,000
29	Geneva Steel, Inc	2,500
30	Salt Lake City Corporation	2,500
31	Shopko Stores	2,500
32	Sears & Roebuck Company	2,500
33	FHP of Utah	2,500
34	JC Penney Company	2,500
35	First Security Bank of Utah	2,500
36	Hercules (Alliant Techsystems)	2,500
37	Kennecott Mining	2,000
38	Utah Valley Regional Medical Cntr	2,000
39	McKay-Dee Hospital	2,000
40	Unisys Defense Systems	2,000
41	Unibase Data Entry	2,000
42	Zions First National Bank	2,000
43	Provo School District	2,000
44	United Parcel Service	2,000
45	Utah State Corrections	2,000
46	Primary Children's Medical Center	2,000
47	Salt Lake Community College	2,000
48	Fred Meyer, Inc.	2,000
49	Nebo School District	2,000
50	American Express	2,000

*Includes only civilian employment (military excluded) and differs from HAFB employment presented in the defense chapter of this report.

Source: Utah Department of Employment Security.

Table 11
Utah's Largest Private Sector Nonagricultural Employers: December 1994

Rank by Size	Firm Name	Approximate Employment
1	Brigham Young University	15,000
2	Smith's Food & Drug Centers	5,500
3	Morton International	5,000
4	Matrixx Marketing	4,500
5	Delta Airlines	4,500
6	Albertsons, Inc.	4,500
7	Thiokol Corporation	4,500
8	ZCMI	4,000
9	Wal-Mart Stores	4,000
10	K Mart	3,000
11	Pacific Corporation	3,000
12	WordPerfect	3,000
13	Proform Fitness	3,000
14	U.S. West Communications	3,000
15	LDS Hospital	3,000
16	Geneva Steel, Inc.	2,500
17	Shopko Stores	2,500
18	Sears & Roebuck Company	2,500
19	FHP of Utah	2,500
20	JC Penney Company	2,500
21	First Security Bank of Utah	2,500
22	Hercules (Alliant Techsystems)	2,500
23	Kennecott Mining	2,000
24	Utah Valley Regional Medical Center	2,000
25	McKay-Dee Hospital	2,000
26	Unisys Defense Systems	2,000
27	Unibase Data Entry	2,000
28	Zions First National Bank	2,000
29	United Parcel Service	2,000
30	Primary Children's Medical Center	2,000
31	Fred Meyer, Inc.	2,000
32	American Express Service	2,000
33	Novell	1,500
34	Pizza Hut	1,500
35	O.C .Tanner Corporation	1,500
36	Frankly Quest Company	1,500
37	Union Pacific Railroad	1,500
38	Nordstrom, Inc.	1,500
39	C.R. England & Sons	1,500
40	Harmons	1,500
41	Deseret Industries	1,500
42	Manpower Temporary Agency	1,500
43	Snowbird Corporation	1,500
44	Mountain Fuel Supply	1,500
45	Mervyn's	1,500
46	Abbott Laboratories	1,500
47	RC Willey Home Furniture	1,500
48	Seven-Eleven Stores	1,500
49	Discover Card	1,500
50	Cottonwood Hospital	1,500

Source: Utah Department of Employment Security.

Table 12
Utah's Average Monthly Wage by Industry: 1986 to 1994

Industry	Average Monthly Wage									Percent Change							
	1986	1987	1988	1989	1990	1991	1992	1993	1994	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94
Total Nonagricultural Jobs	$1,463	$1,501	$1,549	$1,585	$1,644	$1,710	$1,801	$1,823	$1,867	2.6	3.2	2.3	3.7	4.0	5.3	1.2	2.4
Mining	2,758	2,708	2,820	2,905	2,976	3,002	3,217	3,283	3,318	-1.8	4.1	3.0	2.4	0.9	7.2	2.1	1.1
Construction	1,636	1,665	1,742	1,799	1,843	1,917	1,878	1,875	1,934	1.8	4.6	3.3	2.4	4.0	-2.0	-0.2	3.1
Manufacturing	1,864	1,896	1,968	2,009	2,066	2,125	2,246	2,250	2,302	1.7	3.8	2.1	2.8	2.9	5.7	0.2	2.3
Trans., Comm., & Util.	2,087	2,175	2,270	2,355	2,424	2,552	2,613	2,643	2,699	4.2	4.4	3.7	2.9	5.3	2.4	1.1	2.1
Trade	1,052	1,063	1,103	1,133	1,173	1,231	1,264	1,288	1,351	1.0	3.8	2.7	3.5	4.9	2.7	1.9	4.9
Finance, Ins., & Real Estate	1,568	1,641	1,702	1,760	1,818	1,907	2,092	2,177	2,169	4.7	3.7	3.4	3.3	4.9	9.7	4.1	-0.4
Services	1,226	1,315	1,350	1,385	1,458	1,534	1,682	1,690	1,717	7.3	2.7	2.6	5.3	5.2	9.6	0.5	1.6
Government	1,574	1,597	1,625	1,663	1,735	1,805	1,891	1,922	1,983	1.5	1.8	2.3	4.3	4.0	4.8	1.6	3.2

Source: Utah Department of Employment Security.

Table 13
Utah and U.S. Labor Force Participation Rates: Selected Years

Category	1950	1960	1970	1980	1990	1991	1992	1993	1994*
UTAH	52.2	57.4	58.4	64.2	70.5	70.8	70.4	72.2	74.3
Male	82.5	82.3	77.4	79.3	80.5	80.9	80.6	81.2	82.8
Female	25.3	33.5	41.5	49.8	60.6	61.2	61.0	63.5	65.7
U.S.	54.0	60.0	58.0	62.0	66.4	65.6	66.3	66.2	66.5
Male	80.0	83.3	79.7	75.1	76.1	74.7	75.6	75.2	74.9
Female	30.0	37.7	43.3	49.9	57.5	57.3	57.8	57.9	58.7

*Male/Female participation rates for Utah are estimated.

Source: Utah Department of Employment Security and U.S. Department of Labor, Bureau of Labor Statistics.

Table 14
Characteristics of Utah Unemployed Persons: 1994

Category	Number	Percent
Total Unemployed	35,000	100.0
Men	18,000	51.4
Women	17,000	48.6
Both Sexes, Ages 16-19	10,000	28.6
Unemployment Rate		
Total		3.9
Men		3.6
Women		4.2
Both Sexes, Ages 16-19		11.5
Marital Status of Unemployed		
Single (never married)	16,000	45.7
Married, Spouse Present	14,000	40.0
Other: Widowed, Divorced, and Separated	5,000	14.3
Length of Unemployment		
Total		
Less than 5 Weeks	18,800	53.6
5-14 Weeks	8,900	25.5
15-26 Weeks	4,000	11.4
27 Weeks and Over	3,300	9.5
Males		
Less than 5 Weeks	8,800	48.7
5-14 Weeks	4,000	22.1
15-26 Weeks	2,500	14.1
27 Weeks and Over	2,700	15.1
Females		
Less than 5 Weeks	10,000	58.8
5-14 Weeks	4,900	28.8
15-26 Weeks	1,500	8.8
27 Weeks and Over	600	3.5
Full and Part-Time Status		
Total		
Looking for Full-Time Work	22,000	62.9
Looking for Part-time Work	13,000	37.1
Reason for Unemployment		
Total		
Job Losers	16,800	48.0
Job Leavers	6,100	17.4
Re-entrants	7,600	21.6
New Entrants	4,600	13.0
Males		
Job Losers	10,400	57.6
Job Leavers	3,200	17.9
Re-entrants	2,200	12.4
New Entrants	2,200	12.1
Females		
Job Losers	6,400	37.6
Job Leavers	2,900	17.1
Re-entrants	5,400	31.8
New Entrants	2,400	14.1

Note: Numbers may not add due to rounding.

Source: U.S. Bureau of Labor Statistics.

Table 15
Duration of Unemployment in Utah as a Percent of Total Unemployed: 1981 to 1993

Year	Less than 5 Weeks	5-14 Weeks	15 Weeks +	27 Weeks +
1993	53.6	25.5	20.9	9.5
1992	45.8	29.0	25.3	11.5
1991	47.5	31.2	21.3	8.6
1990	50.0	29.4	20.6	8.8
1989	47.4	28.9	23.7	7.9
1988	47.3	34.3	37.6	7.5
1987	50.2	27.2	22.6	10.2
1986	45.9	32.2	21.9	10.7
1985	46.7	32.2	21.1	9.8
1984	47.3	29.9	22.7	11.1
1983	37.3	32.0	30.3	15.0
1982	38.2	36.6	25.3	10.1
1981	49.6	29.9	20.5	8.9

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

Table 16
Reasons for Unemployment in Utah as a Percent of Total Unemployed: 1981 to 1994

Year	Job Losers	Job Leavers	New and Re-entrants
1994	27.8	23.3	48.9
1993	48.0	17.4	34.6
1992	46.5	16.8	37.0
1991	45.2	17.1	37.7
1990	38.2	20.6	38.2
1989	42.1	23.7	34.2
1988	44.2	12.2	43.5
1987	45.7	12.8	41.5
1986	48.5	13.1	38.4
1985	45.0	14.5	40.5
1984	44.3	10.8	44.9
1983	52.9	8.4	38.7
1982	57.5	9.0	36.5
1981	45.0	16.1	38.8

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

Table 17
Utah Employment and Job Openings Summary by Major Occupational Category: 1996 to 2001

Occupational Category	Employment 1996	Employment 2001	Total	Annual Average Job Openings: Due to Growth	Annual Average Job Openings: Due to Replacement
Total - All Categories	1,017,710	1,207,770	60,980	38,010	22,970
Managerial & Administrative	72,310	85,970	3,780	2,730	1,050
Professional & Paraprofessional	166,090	201,950	9,580	7,170	2,410
Technical	49,440	60,520	3,060	2,220	840
Sales & Related	125,560	150,740	9,160	5,040	4,120
Clerical & Administrative Support	165,710	191,050	8,360	5,070	3,290
Service	149,810	183,150	11,410	6,670	4,740
Agriculture, Forestry, & Fishing	23,950	26,030	1,070	410	660
Production, Operating, & Maintenance	264,840	308,360	14,560	8,700	5,860

Source: Utah Department of Employment Security, Labor Market Information Services, November 1995.

☆ Personal Income

Total personal income is defined as all income received by all residents of an area. The statistical series comprising the components of total personal income, by area and by year, constitutes the most extensive body of consistent economic information available for the nation, states, counties, and metropolitan areas. This entire data series was developed and is maintained by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. The Utah Department of Employment Security assists BEA in this service by providing wage and employment data by industry for the state and its counties.

Utah's 1995 total personal income (TPI) is forecast to be $35.9 billion, up 9.5 percent from the 1994 total. This figure reflects a substantial increase from 1994's growth of 7.7 percent; moreover, Utah's 1995 TPI grew faster than the forecasted U.S. TPI growth of 5.3 percent. The relative strength of Utah's ongoing economic expansion is clearly reflected in these TPI growth comparisons.

Components of Personal Income

The largest single component of total personal income is "Earnings by Place of Work." As depicted in Table 18, this portion consists of the total earnings from farm and nonfarm industries, including contributions for social insurance. In 1994, earnings by place of work was $25.4 billion, representing 78 percent of TPI. Approximately 10 percent of this figure was proprietors' income, while 90 percent was wages, salaries, and other labor income. Nonfarm earnings ($25.1 billion) was 99 percent of total earnings; farm income comprised only 1 percent. Private sector nonfarm industries accounted for 81 percent of nonfarm earnings, while earnings from public (government) industries made up 18 percent. Although earnings from government employment have been declining as a share of Utah's economy, it is still relatively more important than the U.S. share (18 percent to 16 percent, respectively).

The other components of TPI are 1) dividends, interest, and rent (DIR), and 2) transfer payments. In 1994, DIR amounted to $4.1 billion, and transfer payments were $4.7 billion. Some of the major differences between the economic compositions of Utah and the United States can be observed in Table 18. Perhaps the most significant is that Utah DIR comprise a much smaller (12.4 vs. 15.7 percent) 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 percent (in 1994) of the U.S. average. Due to these two factors, Utah's TPI is relatively lower than the U.S. total personal income.

The industrial composition of Utah's TPI has changed in recent years. In 1980, prior to the last two recession periods, goods-producing industries (mining, construction, manufacturing) generated over 31 percent of Utah's total earnings. By 1993 that share had dropped to 22.9 percent, but increased to 23.5 percent in 1994. In comparison, 24.5 percent 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 percent of earnings; government (including military) pays 18 percent. Both manufacturing and trade (wholesale plus retail) account for roughly 16 percent of Utah's total earnings. Following these are transportation/communications/utilities at 8 percent, construction and finance/insurance/real estate at 7 percent and 6 percent respectively, and mining at 2 percent of earnings. Agriculture/agricultural services make up the remaining 1 percent.

Per Capita Personal Income

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 1995 per capita personal income (PCI) is estimated at approximately $18,400. From 1990 to 1995, Utah's real (inflation-adjusted) PCI has increased about $2,000, compared to an $800 increase in the United States' real PCI. Thus, Utah's percentage of the U.S. PCI has increased by nearly 6 percentage points (from 75.4 to 81.4 percent) since 1990.

Utah's 1994 per capita personal income of $17,172 ranked only 46th among the 50 states. Because Utah's population has a large number of children (the result of many years of high birth rates), these PCI comparisons portray Utah as a low-income state. However, 1990 adult per capita income improves the Utah's picture considerably: 88 percent of the national figure. Similarly, Utah also compares more favorably to the rest of the U.S. when using household income data. Total personal income per household in 1994 in Utah was $54,700, which is 93 percent of the nation's personal income per household figure of $58,900.

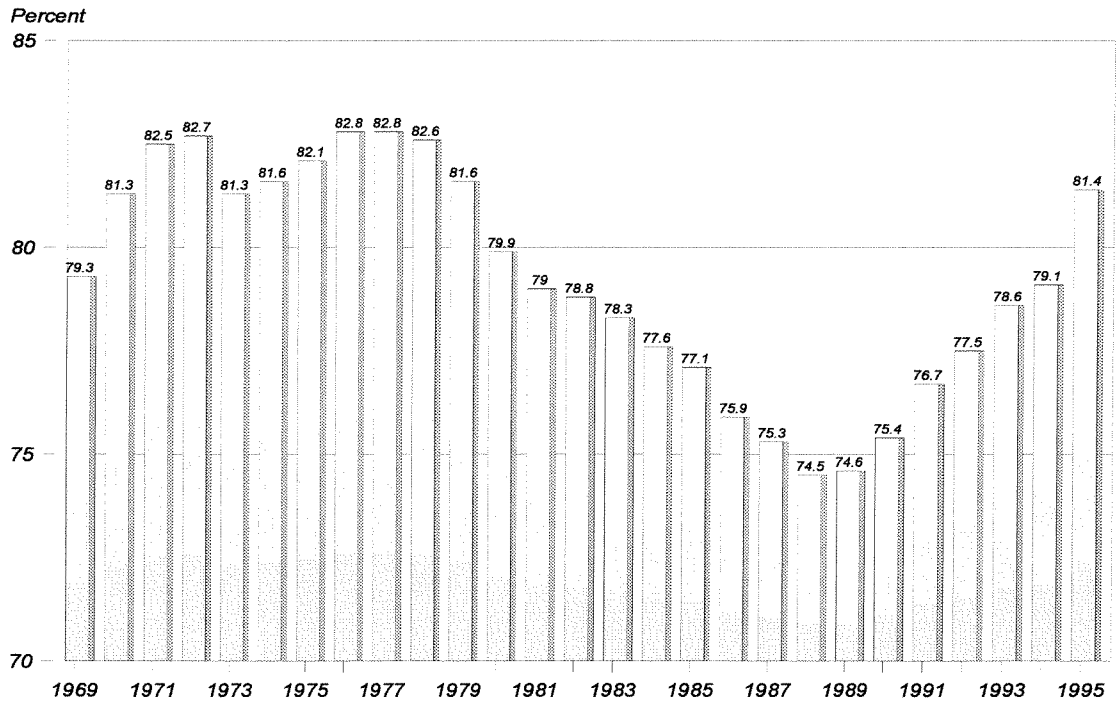
During the 1970s, Utah's PCI ranged between 81 percent and 83 percent of the United States' PCI (Table 19). However, as shown in Figure 13, from 1978 to 1988, this parameter dropped eight percentage points--from 83 to 75 percent. All the years--1990 through 1995--experienced improvements in this comparison--the 1995 ratio, at 81.4 percent, is the highest level since 1979. Utah's PCI for 1969-1995 is presented in Table 20.

County Personal Income

Seven of Utah's 29 counties (Table 21) posted double-digit 1993-1994 growth in total personal income, an improvement over 1993's five counties. Most of these counties had large nonfarm employment increases which led to large wage increases; their total personal income thus increased rapidly too. On the other end of the scale, only Tooele county suffered a year-over loss of TPI, the result of a decline of 4 percent of nonfarm jobs.

With few exceptions, the per capita income estimates in northern Utah's counties are considerably higher than those of the rest of the state. Summit County's $27,700 is the highest in Utah; San Juan County's $10,500 is lowest. Interestingly, only three counties, Summit, Salt Lake, and Weber, have PCI's that exceed the state figure. The 1994 per capita income of the United States, at $21,699, is higher than that of all of Utah's counties except Summit. Table 21 presents by county and planning district, the TPI and PCI estimates for 1992 through 1994. ☆

Figure 13
Utah Per Capita Personal Income as a Percent of U.S.: 1969 to 1995



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

Table 18
Components of Utah's Total Personal Income (Millions of Dollars): 1991 to 1994

Components	Dollar Amounts (millions) 1992	1993	1994	Percentage Change 1992-93	1993-94	1994 Percentage Distribution Utah	U.S.	Industry Distribution Utah	U.S.
Total Personal Income	$28,272	$30,415	$32,763	7.6	7.7	100.0	100.0		
Total Earnings - Place/Work	21,755	23,382	25,396	7.5	8.6	77.5	72.3		
Less:									
Pers. Contribution for Soc. Ins.	1,207	1,300	1,441	7.7	10.8	4.4	5.0		
Plus: Resid. Adjustment	6	6	6	4.5	8.7	0.0	-0.0		
Equals: Earnings by Residence	20,554	22,088	23,962	7.5	8.5	73.1	67.3		
Plus:									
Dividends, Interest, & Rent	3,493	3,771	4,059	8.0	7.6	12.4	15.7		
Plus:									
Transfer Payments	4,225	4,556	4,742	7.8	4.1	14.5	16.9		
Components of Earnings	21,755	23,383	25,396	7.5	8.6	77.5	72.3		
Wages & Salaries	17,679	18,844	20,501	6.6	8.8	62.6	57.2		
Other Labor Income	1,964	2,206	2,427	12.3	10.0	7.4	6.7		
Proprietors' Income	2,112	2,333	2,469	10.5	5.8	7.5	8.4		
Farm	224	248	177	10.8	-28.7	0.5	0.7		
Nonfarm	1,888	2,085	2,299	10.4	10.3	7.0	7.7		
Earnings by Industry	21,754	23,383	25,397	7.5	8.6	77.5	72.3	100.0	100.0
Farm	279	311	251	11.4	-19.1	0.8	0.9	1.0	1.3
Nonfarm	21,475	23,072	25,146	7.4	9.0	76.8	71.4	99.0	98.7
Private Sector	17,197	18,651	20,525	8.5	10.0	62.6	59.8	80.8	82.7
Ag. Services, Etc.	69	77	88	12.0	15.0	0.3	0.5	0.3	0.7
Mining	406	417	420	2.6	0.9	1.3	0.6	1.7	0.9
Construction	1,202	1,372	1,675	14.1	22.1	5.1	3.9	6.6	5.3
Manufacturing	3,387	3,556	3,867	5.0	8.7	11.8	13.2	15.2	18.3
Trans., Comm., Utilities	1,710	1,876	2,023	9.7	7.8	6.2	4.8	8.0	6.7
Wholesale Trade	1,273	1,342	1,472	5.4	9.7	4.5	4.5	5.8	6.2
Retail Trade	2,179	2,339	2,658	7.3	13.6	8.1	6.9	10.5	9.6
Fin., Ins., Real Estate	1,199	1,376	1,516	14.8	10.2	4.6	5.4	6.0	7.4
Services	5,774	6,297	6,806	9.1	8.1	20.8	20.0	26.8	27.6
Government (Incl. Military)	4,278	4,422	4,621	3.4	4.5	14.1	11.6	18.2	16.0
Federal, Civilian	1,341	1,330	1,314	-0.9	-1.2	4.0	2.3	5.2	3.2
Military	267	263	263	-1.5	-0.3	0.8	0.8	1.0	1.2
State and Local	2,670	2,829	3,045	6.0	7.6	9.3	8.4	12.0	11.6
Per Capita Personal Income*	$15.6	$16.4	$17.2	4.8	5.0				
Population*	1,811	1,860	1,908	2.7	2.6				

*Per capita personal income and population totals are in thousands.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, October 1995.

Table 19
Personal Income Trends--Utah and U.S.: 1985,1990, and 1995

Category	Absolute Amounts 1985	1990	1995	Average Annual Percent Change* 1985-90	1990-95	1985-95	Amount as a Percent of U.S. Total 1985	1990	1995
Population (thousands)									
U.S.	237,924	249,399	262,778	0.9	1.1	1.0	100.00	100.00	100.00
Utah **	1,643	1,730	1,953	1.0	2.4	1.7	0.69	0.69	0.74
Total Personal Income (billions)									
U.S.	$3,368.1	$4,655.4	$5,948.4	6.7	5.0	5.9	100.00	100.00	100.00
Utah	$17.9	$24.3	$35.9	6.3	8.1	7.2	0.53	0.52	0.60
Per Capita Personal Income									
U.S.	$14,155	$18,666	$22,600	5.7	3.9	4.8	100.00	100.00	100.00
Utah	$10,914	$14,060	$18,400	5.2	5.5	5.4	77.1	75.4	81.4

* Compounded annually.
**These estimates may not agree with Utah Population Estimates Committee data.

Sources: Population--U.S. Bureau of the Census, Governor's Office of Plannig and Budget.
Income--U.S. Bureau of Economic Analysis, and Utah Office of Planning and Budget.

Table 20
Personal Income and Growth Rates--Utah and U.S.: 1969 to 1995

Year	Total Personal Income (millions of dollars)		Growth Rates		Per Capita Personal Income		
	Utah	U.S.	Utah	U.S.	Utah	U.S.	Utah as a Percent of U.S.
1969	$3,167	$767,608	--	--	$3,024	$3,813	79.3
1970	3,507	824,823	10.7	7.5	3,291	4,047	81.3
1971	3,898	888,002	11.1	7.7	3,541	4,294	82.5
1972	4,369	974,938	12.1	9.8	3,851	4,659	82.7
1973	4,908	1,092,217	12.3	12.0	4,199	5,168	81.3
1974	5,509	1,200,575	12.2	9.9	4,595	5,628	81.6
1975	6,123	1,302,532	11.1	8.5	4,963	6,045	82.1
1976	6,982	1,442,221	14.0	10.7	5,488	6,629	82.8
1977	7,920	1,596,944	13.4	10.7	6,016	7,267	82.8
1978	9,142	1,802,663	15.4	12.9	6,702	8,117	82.6
1979	10,419	2,024,812	14.0	12.3	7,358	9,017	81.6
1980	11,695	2,259,006	12.2	11.6	7,942	9,940	79.9
1981	13,186	2,526,009	12.7	11.8	8,702	11,009	79.0
1982	14,225	2,683,456	7.9	6.2	9,128	11,583	78.8
1983	15,261	2,857,710	7.3	6.5	9,568	12,223	78.3
1984	16,776	3,144,363	9.9	10.0	10,343	13,332	77.6
1985	17,933	3,368,069	6.9	7.1	10,915	14,155	77.1
1986	18,821	3,579,783	5.0	6.3	11,318	14,906	75.9
1987	19,769	3,789,297	5.0	5.9	11,781	15,638	75.3
1988	20,915	4,061,806	5.8	7.2	12,376	16,610	74.5
1989	22,520	4,366,135	7.7	7.5	13,200	17,690	74.6
1990	24,320	4,655,420	8.0	6.6	14,066	18,667	75.4
1991	26,036	4,841,078	7.1	4.0	14,733	19,201	76.7
1992	28,272	5,137,875	8.6	6.1	15,608	20,146	77.5
1993	30,145	5,364,300	7.6	4.4	16,354	20,809	78.6
1994	32,763	5,649,010	7.7	5.3	17,172	21,699	79.1
1995	35,875	5,948,000	9.5	5.3	18,400	22,600	81.4

Note: These estimates may not agree with Utah Population Estimates Committee data.

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

Table 21
Total and Per Capita Income by District and County: 1992 to 1994

County/MCD	Total Personal Income (millions of dollars) 1992	1993	1994	Percentage Change 1992-93	1993-94	Per Capita Personal Income 1992	1993	1994	Percentage Change 1992-93	1993-94
State Total	$28,272.0	$30,415.0	$32,762.0	7.6	7.7	$15,608	$16,354	$17,172	4.8	5.0
Bear River	1,588.2	1,719.9	1,844.3	8.3	7.2	14,118	15,060	15,800	6.7	4.9
Box Elder	565.5	609.3	629.1	7.7	3.2	15,081	16,035	16,400	6.3	2.3
Cache	996.7	1,082.1	1,184.4	8.6	9.5	13,597	14,524	15,400	6.8	6.0
Rich	26.0	28.5	30.7	9.6	7.9	15,289	16,758	17,100	9.6	2.0
Wasatch Front	19,551.6	20,972.1	22,408.9	7.3	6.9	16,848	17,644	18,500	4.7	4.8
North	5,842.0	6,248.5	6,579.6	7.0	5.3	15,789	16,444	16,900	4.1	2.8
Davis	3,027.8	3,259.9	3,416.1	7.7	4.8	15,177	15,863	16,200	4.5	2.1
Morgan	83.0	90.3	97.2	8.7	7.7	14,319	14,796	15,400	3.3	4.1
Weber	2,731.2	2,898.3	3,066.3	6.1	5.8	16,583	17,211	17,900	3.8	4.0
South	13,709.6	14,723.6	15,829.3	7.4	7.5	17,343	18,209	19,200	5.0	5.4
Salt Lake	13,306.1	14,295.7	15,413.8	7.4	7.8	17,439	18,314	19,400	5.0	5.9
Tooele	403.5	427.9	415.5	6.1	-2.9	14,671	15,281	14,200	4.2	-7.1
Mountainland	4,176.1	4,506.9	4,948.0	7.9	9.8	13,715	14,339	15,200	4.6	6.0
Summit	440.8	498.7	596.5	13.1	19.6	24,220	25,059	27,700	3.5	10.5
Utah	3,587.0	3,848.5	4,181.3	7.3	8.6	13,015	13,580	14,300	4.3	5.3
Wasatch	148.2	159.7	170.2	7.7	6.6	13,855	14,521	14,700	4.8	1.2
Central	662.6	715.2	770.4	7.9	7.7	12,158	12,749	13,300	4.9	4.3
Juab	75.1	80.1	85.1	6.6	6.3	12,731	13,125	13,500	3.1	2.9
Millard	144.7	153.9	160.1	6.3	4.0	12,477	13,042	13,300	4.5	2.0
Piute	14.2	15.0	16.3	5.7	8.4	10,948	10,748	10,900	-1.8	1.4
Sanpete	197.7	217.1	235.3	9.8	8.4	11,168	11,864	12,400	6.2	4.5
Sevier	204.8	221.4	241.0	8.1	8.8	12,879	13,584	14,300	5.5	5.3
Wayne	26.1	27.7	32.6	6.1	17.5	12,427	12,589	14,200	1.3	12.8
Southwestern	1,175.1	1,314.5	1,558.7	11.9	18.6	12,787	13,468	14,900	5.3	10.6
Beaver	67.1	72.5	77.8	8.1	7.3	13,689	14,503	15,300	5.9	5.5
Garfield	50.2	53.4	59.0	6.5	10.4	12,233	13,353	14,400	9.2	7.8
Iron	266.9	296.4	333.1	11.0	12.4	12,134	12,721	13,500	4.8	6.1
Kane	72.7	78.1	90.2	7.5	15.5	13,976	13,700	15,000	-2.0	9.5
Washington	718.3	814.1	998.7	13.3	22.7	12,895	13,659	15,500	5.9	13.5
Uintah Basin	454.3	479.5	498.0	5.5	3.9	12,246	12,618	12,600	3.0	-0.1
Daggett	9.4	10.0	12.5	7.0	24.5	13,365	14,302	15,600	7.0	9.1
Duchesne	170.0	180.9	187.6	6.4	3.7	13,074	13,602	13,800	4.0	1.5
Uintah	275.0	288.6	298.0	4.9	3.3	11,753	12,023	11,900	2.3	-1.0
Southeastern	664.0	706.9	733.6	6.5	3.8	13,200	13,834	14,000	4.8	1.2
Carbon	308.7	320.5	331.0	3.8	3.3	15,209	15,866	16,100	4.3	1.5
Emery	136.0	143.2	150.5	5.3	5.1	13,329	13,771	14,200	3.3	3.1
Grand	95.7	106.0	111.6	10.8	5.4	13,474	14,320	14,300	6.3	-0.1
San Juan	123.6	137.3	140.5	11.0	2.4	9,733	10,478	10,500	7.7	0.2
Salt Lake/Odgen MSA	19,065.0	20,454.0	21,896.0	7.3	7.1	16,914	17,717	18,600	4.7	5.0

Sources: 1992-1993: U.S. Department of Commerce, BEA, May 1995 data adjusted to October 1995 state total BEA data. 1994: Utah Department of Employment Security, LMI, November 1995.

☆ Gross State Product

Gross State Product (GSP) is the broadest measure of the aggregate production that occurs within a state for a given year and is comparable to Gross Domestic Product (GDP) at the national level. More precisely, GSP is the total market value of final goods and services produced with labor, capital and other factor services located within the state in a year.

GSP by industry is the value added in production, or the value of the industry's output less the cost of the goods and services purchased from other industries. Although GSP by industry is estimated separately for each of the states, these estimates are adjusted so that the national total of GSP by industry is the same as the U.S. GDP by industry which is also known as Gross Product Originating (GPO) by industry.

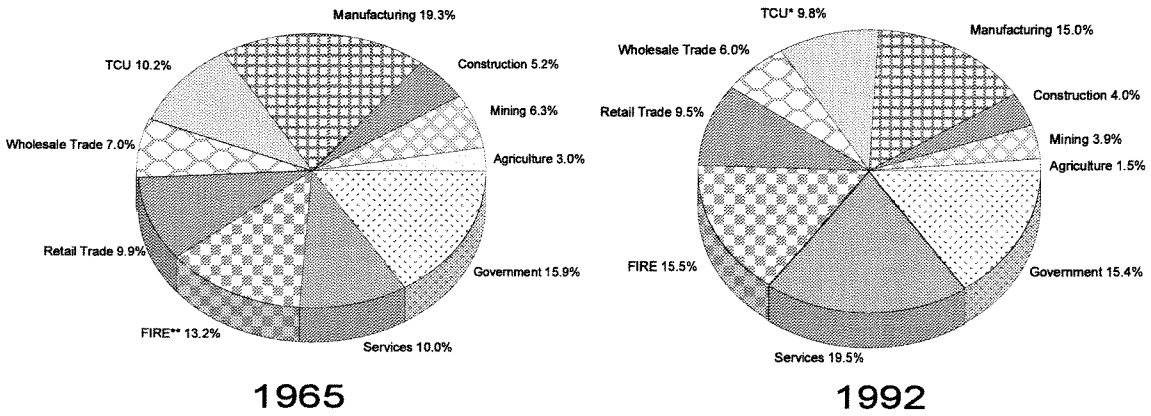
Figures 14 and 15 present the distribution of GSP by major industrial sector for Utah and the U.S., respectively, in 1965 and 1992. Tables 22 and 23 present Utah's GSP by industry for selected years between 1965 and 1992 in current and inflation-adjusted 1987 dollars, respectively. Table 24 presents Utah's GSP charged to compensation, proprietor's income, indirect business taxes and capital, by industry for 1992. Table 25 presents GSP for each state and region in the nation for selected years between 1965 and 1992 in current dollars. U.S. GDP by industry from 1965 to 1992 in current and inflation-adjusted 1987 dollars, respectively, appear in Tables 26 and 27.

The GSP series has been produced by the U.S. Bureau of Economic Analysis (BEA). Until recently, GSP estimates have been issued relatively infrequently, but BEA has implemented a process which should allow annual releases of the estimates. In attempting to produce annual estimates of GSP, BEA established a Gross State Product Branch within its Regional Economics Division during 1992. BEA's plan is to issue estimates every spring for the GSP produced three years previously. In the spring of 1995, for instance, BEA released new estimates of GSP during 1992 and revised estimates for earlier years. In the spring of 1996, new estimates for 1993 and revised estimates for earlier years should be available. Although BEA's GSP estimates are three years out of date when released, Regional Financial Associates (RFA), a private firm providing regional economic analysis, produces current GSP estimates. For 1993, 1994, and 1995, respectively, RFA has estimated Utah's GSP to be $39.5 billion, $43.6 billion, and $47.0 billion.

GSP estimates include the allocation of productive income between employee compensation, proprietors' income, indirect business taxes, and capital charges. Employee compensation includes wages and salaries, employer contributions for social insurance, such as employer-paid social security taxes, and other labor income, such as pension and health benefits. Proprietor's income includes the income of sole proprietorships, such as farms and restaurants; partnerships, such as law firms and accounting firms, and tax exempt cooperatives. Indirect business taxes are taxes or charges paid by firms on the goods and services they sell. Examples include the federal excise taxes on gasoline, alcohol and tobacco, federal customs duties, and state and local sales and business receipts taxes. Capital charges represent the cost of using fixed assets, such as plant and equipment, in production. Among other things, these charges include rental income, corporate profits and depreciation.

For the most part, inflation-adjusted GSP estimates are derived with the so-called "double deflation" method. Using double deflation, the price of an industry's output is deflated separately from the prices of the inputs purchased from other industries. The industry's inflation-adjusted GSP is then the difference between its deflated output and input. Although output and input prices will generally vary by state, BEA does not have the resources to estimate these prices state by state. Instead, inflation-adjusted estimates for each of the states are produced with the same national price indexes used to estimate GPO. A more thorough discussion of the sources and methods used to compute inflation-adjusted GPO estimates is contained in the *Survey of Current Business* issued in May 1993 in an article entitled "Gross Product by Industry, 1977-1990." The important point to note is that BEA does not use the implicit GDP price deflator. ☆

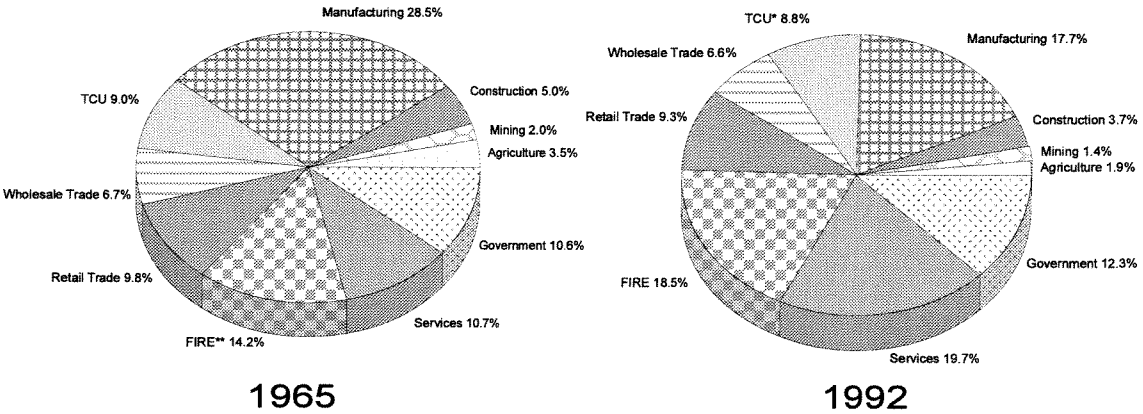
Figure 14
Utah Gross State Product--Percent Share by Industry: 1965 and 1992



*Transportation, Communication and Utilities
**Finance, Insurance, and Real Estate

Source: Bureau of Economic Analysis

Figure 15
U.S. Gross State Product--Percent Share by Industry: 1965 and 1992



*Transportation, Communication and Utilities
**Finance, Insurance, and Real Estate

Source: Bureau of Economic Analysis

Table 22
Utah Gross State Product by Industry (Millions of Current Dollars): Selected Years

Industry	1965	1970	1975	1980	1985	1990	1991	1992
Total	$3,203	$4,366	$7,798	$15,209	$24,009	$30,913	$33,078	$35,590
Private Industries	2,694	3,498	6,476	13,010	20,239	26,072	27,868	30,102
Agriculture, Forestry, and Fisheries	95	133	189	281	339	511	495	542
Farms	89	125	173	250	275	446	419	458
Agricultural Services, Forestry, and Fisheries	6	8	16	32	64	65	76	85
Mining	203	204	385	1,071	1,398	1,436	1,334	1,381
Metal Mining	112	125	111	276	138	376	315	367
Coal Mining	20	22	103	259	253	282	264	299
Oil and Gas Extraction	55	42	149	490	963	736	712	669
Nonmetallic Minerals, Except Fuels	16	14	23	46	44	43	44	47
Construction	166	216	498	915	1,252	1,182	1,322	1,412
Manufacturing	617	676	1,180	2,437	3,612	4,666	5,122	5,350
Durable Goods	449	468	825	1,693	2,616	3,186	3,360	3,504
Lumber and Wood Products	9	14	40	77	85	112	116	120
Furniture and Fixtures	3	6	11	29	69	84	94	106
Stone, Clay, and Glass Products	30	35	68	127	191	148	142	153
Primary Metal Industries	221	168	221	358	308	520	563	566
Fabricated Metal Products	29	45	104	161	206	288	305	357
Industrial Machinery and Equipment	29	72	177	436	650	335	329	426
Electronic and Other Electric Equipment	20	32	44	157	235	469	461	377
Motor Vehicles and Equipment	4	7	17	36	83	121	131	195
Other Transportation Equipment	97	73	106	197	574	732	780	713
Instruments and Related Products	2	8	21	73	87	238	290	322
Miscellaneous Manufacturing Industries	5	7	16	42	127	140	150	170
Nondurable Goods	169	209	354	744	997	1,479	1,762	1,846
Food and Kindred Products	72	90	134	169	262	397	481	498
Tobacco Manufactures	0	0	0	0	0	0	0	0
Textile Mill Products	0	1	1	1	2	7	7	9
Apparel and Other Textile Products	10	22	37	71	76	82	89	95
Paper and Allied Products	4	6	11	16	36	58	61	65
Printing and Publishing	27	31	58	126	228	333	349	376
Chemicals and Allied Products	10	16	43	130	136	208	287	272
Petroleum and Coal Products	40	36	51	190	214	313	402	442
Rubber and Miscellaneous Plastic Products	5	7	17	38	41	80	84	88
Leather and Leather Products	0	1	1	1	1	2	2	3
Transportation, Communication, and Utilities	326	446	801	1,706	2,786	3,219	3,298	3,469
Transportation	168	232	355	704	975	1,431	1,440	1,571
Railroad Transportation	82	95	102	207	292	248	240	264
Local and Interurban Passenger Transit	9	11	15	36	20	22	23	24
Trucking and Warehousing	59	96	182	325	381	611	629	691
Water Transportation	0	0	1	6	1	3	2	2
Transportation by Air	12	20	34	74	207	467	456	485
Pipelines, Except Natural Gas	4	6	10	36	30	13	15	16
Transportation Services	2	4	11	19	43	66	75	88
Communication	77	107	203	380	686	807	855	890
Electric, Gas, and Sanitary Services	81	106	242	622	1,125	982	1,003	1,008
Wholesale Trade	225	317	591	1,091	1,532	1,912	2,086	2,150
Retail Trade	318	456	838	1,379	2,244	2,868	3,058	3,373
Finance, Insurance, and Real Estate	423	582	1,100	2,249	3,616	4,669	5,019	5,502
Depository Institutions	47	84	110	256	473	786	865	1,034
Nondepository Institutions	8	8	12	47	124	114	137	184
Holding Cos. and Investment Services	7	9	14	39	139	133	138	134
Insurance Carriers	22	32	51	133	142	262	320	326
Insurance Agents, Brokers, and Services	16	21	34	67	92	182	204	214
Real Estate	322	430	879	1,707	2,647	3,193	3,354	3,609
Services	321	468	893	1,882	3,459	5,608	6,134	6,922
Hotels and Other Lodging Places	17	25	56	127	201	253	277	288
Personal Services	31	37	53	88	137	177	189	212
Business Services	27	49	109	281	614	1,084	1,272	1,563
Auto Repair, Services, and Garages	21	33	67	132	223	292	306	338
Miscellaneous Repair Services	9	15	31	70	88	124	114	116
Motion Pictures	6	9	15	40	48	75	67	90
Amusement and Recreation Services	15	20	36	70	127	182	214	259
Health Services	83	130	245	542	911	1,577	1,738	1,963
Legal Services	17	22	47	87	180	269	282	312
Educational Services	36	41	74	125	203	312	355	356
Social Services and Membership Organizations	28	44	75	137	435	621	637	673
Other Services	24	34	77	170	272	613	655	723
Private Households	8	8	9	12	19	28	27	31
Government	509	869	1,322	2,198	3,771	4,841	5,210	5,488
Federal Civilian Government	233	405	541	770	1,192	1,481	1,606	1,701
Federal Military Government	34	50	86	164	281	349	379	401
State and Local Government	242	414	695	1,264	2,298	3,011	3,225	3,386

Source: U.S. Bureau of Economic Analysis.

Table 23
Utah Gross State Product by Industry (Millions of Constant 1987 Dollars): Selected Years

Industry	1965	1970	1975	1980	1985	1990	1991	1992
Total	$10,983	$11,925	$14,870	$20,625	$25,111	$27,549	$28,599	$29,968
Private Industries	8,503	8,975	11,915	17,162	20,985	23,380	24,364	25,722
Agriculture, Forestry, and Fisheries	208	244	197	263	329	434	443	516
Farms	187	225	174	227	263	375	374	432
Agricultural Services, Forestry, and Fisheries	21	20	23	36	65	58	69	83
Mining	768	650	686	683	954	1,382	1,433	1,544
Metal Mining	382	359	268	98	139	398	400	464
Coal Mining	82	60	99	193	207	340	329	380
Oil and Gas Extraction	263	196	284	340	562	602	661	654
Nonmetallic Minerals, Except Fuels	41	34	36	53	47	42	43	46
Construction	1,085	825	1,140	1,319	1,459	1,035	1,151	1,280
Manufacturing	1,938	1,658	2,048	2,863	3,586	4,223	4,504	4,629
Durable Goods	1,474	1,188	1,439	2,024	2,551	3,004	3,160	3,240
Lumber and Wood Products	28	34	76	87	90	101	102	95
Furniture and Fixtures	9	13	20	40	72	76	82	94
Stone, Clay, and Glass Products	79	78	111	168	197	152	141	153
Primary Metal Industries	733	460	368	398	305	416	495	515
Fabricated Metal Products	88	116	167	193	207	259	266	304
Industrial Machinery and Equipment	61	126	235	461	583	314	324	446
Electronic and Other Electric Equipment	37	56	64	201	235	498	493	411
Motor Vehicles and Equipment	8	16	39	54	89	129	131	176
Other Transportation Equipment	414	256	292	287	557	720	725	627
Instruments and Related Products	3	16	37	90	87	212	267	273
Miscellaneous Manufacturing Industries	14	18	29	44	129	128	133	146
Nondurable Goods	465	471	610	839	1,035	1,219	1,344	1,389
Food and Kindred Products	168	177	197	210	272	343	395	397
Tobacco Manufactures	0	0	0	0	0	0	0	0
Textile Mill Products	1	1	1	1	2	6	7	8
Apparel and Other Textile Products	19	33	53	84	76	78	82	86
Paper and Allied Products	10	13	18	22	39	52	56	61
Printing and Publishing	111	99	143	203	256	286	279	282
Chemicals and Allied Products	21	34	66	158	136	176	234	215
Petroleum and Coal Products	124	100	106	117	212	201	214	257
Rubber and Miscellaneous Plastic Products	10	12	25	42	41	75	76	79
Leather and Leather Products	1	1	1	2	1	1	2	2
Transportation, Communication, and Utilities	905	1,125	1,564	2,399	2,786	3,130	3,165	3,306
Transportation	481	577	660	803	961	1,404	1,423	1,548
Railroad Transportation	217	218	172	186	257	270	271	298
Local and Interurban Passenger Transit	39	38	37	58	23	19	19	19
Trucking and Warehousing	162	226	323	410	414	576	612	675
Water Transportation	0	0	1	7	1	2	2	2
Transportation by Air	36	53	68	78	194	465	442	470
Pipelines, Except Natural Gas	19	29	38	37	27	14	17	17
Transportation Services	8	13	20	27	47	57	60	66
Communication	159	215	331	522	706	774	821	844
Electric, Gas, and Sanitary Services	265	333	573	1,075	1,118	952	920	913
Wholesale Trade	573	704	931	1,084	1,513	1,683	1,815	1,858
Retail Trade	1,039	1,147	1,556	1,804	2,419	2,659	2,725	2,945
Finance, Insurance, and Real Estate	1,671	1,903	2,804	3,712	4,104	4,117	4,212	4,390
Depository Institutions	255	329	374	489	547	669	652	668
Nondepository Institutions	86	61	61	151	192	98	118	139
Holding Cos. and Investment Services	31	39	44	69	136	140	158	149
Insurance Carriers	98	104	132	221	213	225	257	281
Insurance Agents, Brokers, and Services	84	87	104	102	112	155	164	166
Real Estate	1,118	1,283	2,089	2,680	2,904	2,830	2,863	2,987
Services	1,400	1,544	2,130	3,035	3,835	4,718	4,916	5,255
Hotels and Other Lodging Places	90	99	154	200	221	229	250	246
Personal Services	117	113	122	140	153	152	154	165
Business Services	109	162	253	422	648	943	1,058	1,230
Auto Repair, Services, and Garages	76	101	148	219	264	245	247	257
Miscellaneous Repair Services	36	42	65	106	90	116	103	95
Motion Pictures	22	32	41	60	54	62	53	68
Amusement and Recreation Services	53	53	73	96	140	157	176	207
Health Services	416	468	638	954	1,045	1,250	1,283	1,357
Legal Services	120	123	159	181	212	223	221	232
Educational Services	148	115	150	200	223	263	283	274
Social Services and Membership Organizations	101	121	149	197	474	564	559	572
Other Services	87	96	162	245	292	488	507	526
Private Households	24	18	14	15	19	26	25	26
Government	2,480	2,950	2,954	3,463	4,125	4,169	4,235	4,245
Federal Civilian Government	1,230	1,467	1,217	1,217	1,277	1,296	1,296	1,312
Federal Military Government	166	166	177	246	299	304	310	297
State and Local Government	1,084	1,317	1,560	2,000	2,549	2,569	2,629	2,637

Source: U.S. Bureau of Economic Analysis.

Table 24
Utah Gross State Product by Component and Industry (Millions of Current Dollars): 1992

Industry	Absolute Amounts: Compensation	Proprietor's Income	Capital Charges	Indirect Business Taxes	GSP	Percent of Total: Compensation	Proprietor's Income	Capital Charges	Indirect Business Taxes	GSP
Total	21,418	3,213	8,069	2,889	35,590	60.2%	9.0%	22.7%	8.1%	100.0%
Private Industries	16,363	3,213	7,636	2,889	30,102	54.4%	10.7%	25.4%	9.6%	100.0%
Agriculture, Forestry, and Fisheries	108	392	19	23	542	19.9%	72.3%	3.5%	4.2%	100.0%
Farms	52	378	9	18	458	11.4%	82.5%	2.0%	3.9%	100.0%
Agricultural Services, Forestry, and Fisheries	56	14	10	4	85	65.9%	16.5%	11.8%	4.7%	100.0%
Mining	406	131	710	134	1,381	29.4%	9.5%	51.4%	9.7%	100.0%
Metal Mining	147	29	157	34	367	40.1%	7.9%	42.8%	9.3%	100.0%
Coal Mining	139	19	93	49	299	46.5%	6.4%	31.1%	16.4%	100.0%
Oil and Gas Extraction	89	81	450	49	669	13.3%	12.1%	67.3%	7.3%	100.0%
Nonmetallic Minerals, Except Fuels	32	3	10	3	47	68.1%	6.4%	21.3%	6.4%	100.0%
Construction	969	295	113	35	1,412	68.6%	20.9%	8.0%	2.5%	100.0%
Manufacturing	3,524	80	1,275	471	5,350	65.9%	1.5%	23.8%	8.8%	100.0%
Durable Goods	2,579	54	663	208	3,504	73.6%	1.5%	18.9%	5.9%	100.0%
Lumber and Wood Products	77	10	21	11	120	64.2%	8.3%	17.5%	9.2%	100.0%
Furniture and Fixtures	80	8	16	2	106	75.5%	7.5%	15.1%	1.9%	100.0%
Stone, Clay, and Glass Products	110	1	16	25	153	71.9%	0.7%	10.5%	16.3%	100.0%
Primary Metal Industries	272	1	263	30	566	48.1%	0.2%	46.5%	5.3%	100.0%
Fabricated Metal Products	226	12	94	24	357	63.3%	3.4%	26.3%	6.7%	100.0%
Industrial Machinery and Equipment	358	7	47	14	426	84.0%	1.6%	11.0%	3.3%	100.0%
Electronic and Other Electric Equipment	315	10	34	18	377	83.6%	2.7%	9.0%	4.8%	100.0%
Motor Vehicles and Equipment	139	0	19	37	195	71.3%	0.0%	9.7%	19.0%	100.0%
Other Transportation Equipment	641	3	36	32	713	89.9%	0.4%	5.0%	4.5%	100.0%
Instruments and Related Products	214	2	104	3	322	66.5%	0.6%	32.3%	0.9%	100.0%
Miscellaneous Manufacturing Industries	147	1	12	10	170	86.5%	0.6%	7.1%	5.9%	100.0%
Nondurable Goods	945	26	612	264	1,846	51.2%	1.4%	33.2%	14.3%	100.0%
Food and Kindred Products	305	8	158	27	498	61.2%	1.6%	31.7%	5.4%	100.0%
Tobacco Manufactures	0	0	0	0	0					
Textile Mill Products	(D)	(D)	(D)	0	9	0.0%	0.0%	0.0%	0.0%	100.0%
Apparel and Other Textile Products	76	3	12	3	95	80.0%	3.2%	12.6%	3.2%	100.0%
Paper and Allied Products	59	0	1	4	65	90.8%	0.0%	1.5%	6.2%	100.0%
Printing and Publishing	232	14	119	11	376	61.7%	3.7%	31.6%	2.9%	100.0%
Chemicals and Allied Products	125	1	130	16	272	46.0%	0.4%	47.8%	5.9%	100.0%
Petroleum and Coal Products	64	0	177	201	442	14.5%	0.0%	40.0%	45.5%	100.0%
Rubber and Miscellaneous Plastic Products	74	0	11	2	88	84.1%	0.0%	12.5%	2.3%	100.0%
Leather and Leather Products	(D)	(D)	(D)	0	3	0.0%	0.0%	0.0%	0.0%	100.0%
Transportation, Communication, and Public Utilities	1,763	101	1,232	373	3,469	50.8%	2.9%	35.5%	10.8%	100.0%
Transportation	1,085	63	313	109	1,571	69.1%	4.0%	19.9%	6.9%	100.0%
Railroad Transportation	175	0	78	11	264	66.3%	0.0%	29.5%	4.2%	100.0%
Local and Interurban Passenger Transit	18	2	3	1	24	75.0%	8.3%	12.5%	4.2%	100.0%
Trucking and Warehousing	470	60	134	27	691	68.0%	8.7%	19.4%	3.9%	100.0%
Water Transportation	0	0	2	0	2	0.0%	0.0%	100.0%	0.0%	100.0%
Transportation by Air	362	(11)	68	66	485	74.6%	-2.3%	14.0%	13.6%	100.0%
Pipelines, Except Natural Gas	4	0	10	2	16	25.0%	0.0%	62.5%	12.5%	100.0%
Transportation Services	56	12	18	3	88	63.6%	13.6%	20.5%	3.4%	100.0%
Communication	286	21	498	86	890	32.1%	2.4%	56.0%	9.7%	100.0%
Electric, Gas, and Sanitary Services	392	17	420	179	1,008	38.9%	1.7%	41.7%	17.8%	100.0%
Wholesale Trade	1,269	96	317	469	2,150	59.0%	4.5%	14.7%	21.8%	100.0%
Retail Trade	2,082	237	473	581	3,373	61.7%	7.0%	14.0%	17.2%	100.0%
Finance, Insurance, and Real Estate	1,150	818	2,877	656	5,502	20.9%	14.9%	52.3%	11.9%	100.0%
Depository Institutions	367	2	613	52	1,034	35.5%	0.2%	59.3%	5.0%	100.0%
Nondepository Institutions	123	1	37	23	184	66.8%	0.5%	20.1%	12.5%	100.0%
Holding Cos. And Investment Services	151	4	(29)	8	134	112.7%	3.0%	-21.6%	6.0%	100.0%
Insurance Carriers	228	0	30	68	326	69.9%	0.0%	9.2%	20.9%	100.0%
Insurance Agents, Brokers, and Services	125	66	15	7	214	58.4%	30.8%	7.0%	3.3%	100.0%
Real Estate	156	745	2,210	497	3,609	4.3%	20.6%	61.2%	13.8%	100.0%
Services	5,092	1,063	621	146	6,922	73.6%	15.4%	9.0%	2.1%	100.0%
Hotels and Other Lodging Places	193	18	55	22	288	67.0%	6.3%	19.1%	7.6%	100.0%
Personal Services	117	63	23	9	212	55.2%	29.7%	10.8%	4.2%	100.0%
Business Services	1,047	261	222	31	1,563	67.0%	16.7%	14.2%	2.0%	100.0%
Auto Repair, Services, and Garages	149	68	87	34	338	44.1%	20.1%	25.7%	10.1%	100.0%
Miscellaneous Repair Services	72	18	14	12	116	62.1%	15.5%	12.1%	10.3%	100.0%
Motion Pictures	54	11	20	5	90	60.0%	12.2%	22.2%	5.6%	100.0%
Amusement and Recreation Services	140	66	44	9	259	54.1%	25.5%	17.0%	3.5%	100.0%
Health Services	1,530	310	109	14	1,963	77.9%	15.8%	5.6%	0.7%	100.0%
Legal Services	249	57	4	1	312	79.8%	18.3%	1.3%	0.3%	100.0%
Educational Services	319	25	8	4	356	89.6%	7.0%	2.2%	1.1%	100.0%
Social Services and Membership Organizations	656	4	11	2	673	97.5%	0.6%	1.6%	0.3%	100.0%
Other Services	536	161	22	4	723	74.1%	22.3%	3.0%	0.6%	100.0%
Private Households	31	0	0	0	31	100.0%	0.0%	0.0%	0.0%	100.0%
Government	5,056	0	432	0	5,488	92.1%	0.0%	7.9%	0.0%	100.0%
Federal Civilian Government	1,623	0	78	0	1,701	95.4%	0.0%	4.6%	0.0%	100.0%
Federal Military Government	401	0	0	0	401	100.0%	0.0%	0.0%	0.0%	100.0%
State and Local Government	3,031	0	355	0	3,386	89.5%	0.0%	10.5%	0.0%	100.0%

(D) Not shown to avoid disclosure of confidential information.

Source: U.S. Bureau of Economic Analysis.

Table 25
Gross State Product by Region and State (Millions of Current Dollars): Selected Years

Region/State	1965	1970	1975	1980	1985	1990	1991	1992
United States	$695,784	$1,001,793	$1,571,442	$2,684,793	$4,037,830	$5,518,482	$5,690,865	$5,994,063
New England	40,361	58,665	83,310	141,197	230,020	327,043	331,974	343,875
Connecticut	11,794	16,972	23,965	40,633	65,743	94,329	96,384	98,873
Maine	2,769	3,887	5,857	10,053	15,593	23,007	23,241	24,085
Massachusetts	19,609	28,520	40,234	67,049	109,880	154,208	156,090	161,966
New Hampshire	2,007	3,066	4,770	9,106	16,675	23,616	24,404	25,524
Rhode Island	2,941	4,302	5,728	9,547	14,675	20,664	20,657	21,582
Vermont	1,241	1,916	2,757	4,810	7,454	11,219	11,198	11,844
Mideast	159,989	231,220	328,345	511,026	775,366	1,084,371	1,114,620	1,167,946
Delaware	2,137	3,075	4,655	7,371	11,929	19,664	21,274	23,666
District of Columbia	5,230	8,115	12,437	17,867	25,771	36,646	38,160	40,441
Maryland	11,696	18,250	28,578	45,103	73,790	109,202	111,874	116,169
New Jersey	26,572	38,457	55,281	89,343	143,980	207,449	212,822	223,146
New York	74,097	106,902	145,134	221,815	341,015	466,827	475,961	497,555
Pennsylvania	40,257	56,421	82,260	129,527	178,881	244,584	254,528	266,969
Great Lakes	157,251	208,691	307,681	482,583	680,384	891,410	913,777	971,639
Illinois	45,806	63,495	95,385	144,657	202,306	270,503	279,283	294,449
Indiana	19,409	25,068	37,718	58,861	82,033	111,164	114,211	121,647
Michigan	37,930	46,677	65,781	103,083	152,334	187,155	189,445	204,421
Ohio	39,350	53,171	77,312	122,803	170,335	223,058	228,109	241,604
Wisconsin	14,756	20,280	31,484	53,178	73,376	99,530	102,729	109,517
Plains	53,299	75,032	121,041	195,083	278,893	367,980	379,866	402,903
Iowa	9,569	12,917	21,665	33,775	41,510	54,800	56,032	59,457
Kansas	7,237	10,018	16,958	27,817	40,240	51,691	53,281	56,164
Minnesota	12,293	18,252	28,599	49,049	72,248	99,751	103,301	110,276
Missouri	15,725	22,059	32,626	52,528	78,983	103,172	106,214	111,604
Nebraska	4,730	6,893	11,661	17,687	25,378	33,648	35,281	37,213
North Dakota	1,890	2,371	5,044	7,625	10,837	11,990	12,045	13,057
South Dakota	1,855	2,522	4,487	6,602	9,697	12,929	13,712	15,131
Southeast	118,886	179,833	303,157	538,158	829,972	1,156,954	1,208,921	1,283,225
Alabama	8,699	12,215	20,517	35,296	52,267	70,594	73,956	78,137
Arkansas	4,497	6,485	11,551	19,873	28,852	38,376	40,561	43,994
Florida	17,344	29,541	52,989	95,851	163,508	244,527	255,129	268,609
Georgia	12,603	19,173	31,373	55,608	96,154	137,064	143,643	153,534
Kentucky	9,811	13,883	22,744	36,553	50,110	67,028	69,839	75,561
Louisiana	11,440	16,794	29,543	64,652	84,864	91,784	95,377	96,245
Mississippi	4,836	6,956	11,870	22,062	30,655	39,471	41,481	44,298
North Carolina	14,464	22,138	34,939	59,067	95,305	140,630	147,520	159,637
South Carolina	6,198	9,566	15,514	27,315	42,492	63,706	66,408	69,810
Tennessee	10,562	15,541	25,990	45,077	67,892	95,234	100,804	108,894
Virginia	13,126	20,449	34,345	58,037	94,745	140,362	145,189	153,808
West Virginia	5,306	7,090	11,781	18,768	23,128	28,180	29,014	30,699
Southwest	49,902	77,482	141,661	293,713	438,607	533,961	553,604	582,977
Arizona	4,782	8,104	14,680	29,542	48,702	67,752	69,767	74,060
New Mexico	3,101	4,163	7,806	16,352	23,064	27,101	30,250	31,863
Oklahoma	7,217	10,857	18,704	38,143	51,176	56,942	57,914	60,188
Texas	34,802	54,357	100,471	209,677	315,665	382,167	395,673	416,867
Rocky Mountain	15,913	22,998	42,531	82,635	118,547	147,820	156,395	167,325
Colorado	6,802	10,504	19,628	37,387	57,103	72,669	76,921	82,463
Idaho	2,215	3,071	5,600	9,749	13,001	18,156	19,047	20,860
Montana	2,251	3,055	5,402	9,284	10,986	13,406	14,419	15,227
Utah	3,203	4,366	7,798	15,209	24,009	30,913	33,078	35,590
Wyoming	1,442	2,003	4,104	11,006	13,448	12,675	12,931	13,186
Far West	100,184	147,872	243,714	440,397	686,041	1,008,942	1,031,709	1,074,173
Alaska	1,224	2,189	6,387	15,619	25,753	27,303	26,212	25,957
California	75,887	111,631	179,858	319,804	511,087	752,665	763,577	787,896
Hawaii	2,564	4,566	7,743	12,351	17,985	29,087	30,802	33,203
Nevada	1,934	3,055	5,322	11,721	18,283	31,830	33,322	36,816
Oregon	6,985	9,726	16,610	30,022	39,582	56,217	58,799	62,724
Washington	11,590	16,705	27,794	50,879	73,352	111,839	118,997	127,578

Source: U.S. Bureau of Economic Analysis.

Table 26
U.S. Gross Domestic Product by Industry (Millions of Current Dollars): Selected Years

Industry	1965	1970	1975	1980	1985	1990	1991	1992
Total	$695,784	$1,001,793	$1,571,442	$2,684,793	$4,037,830	$5,518,482	$5,690,865	$5,994,063
Private Industries	622,266	875,361	1,368,264	2,370,240	3,570,831	4,862,148	4,992,795	5,255,834
Agriculture, Forestry, and Fisheries	24,209	29,854	56,329	66,711	84,343	112,018	108,630	115,510
Farms	21,892	26,297	50,261	56,106	67,100	85,096	78,846	85,569
Agricultural Services, Forestry, and Fisheries	2,317	3,557	6,068	10,605	17,243	26,922	29,784	29,941
Mining	13,976	18,661	41,255	112,635	130,592	103,059	91,841	85,198
Metal Mining	1,120	1,534	1,618	4,432	2,506	6,183	5,671	6,287
Coal Mining	1,757	3,004	9,052	13,604	13,763	12,738	12,248	13,130
Oil and Gas Extraction	9,534	12,243	27,411	89,085	108,425	76,940	66,745	58,516
Nonmetallic Minerals, Except Fuels	1,565	1,880	3,174	5,514	5,898	7,198	7,177	7,265
Construction	34,673	51,397	76,511	128,657	179,228	240,081	223,394	222,115
Manufacturing	198,396	252,275	357,312	588,286	798,489	1,024,697	1,026,182	1,062,981
Durable Goods	118,433	145,941	206,331	348,883	471,528	563,696	551,423	567,978
Lumber and Wood Products	5,449	7,052	10,422	19,179	23,593	30,778	29,837	31,254
Furniture and Fixtures	3,031	3,786	5,019	8,376	13,551	15,945	15,516	16,601
Stone, Clay, and Glass Products	6,573	8,002	11,532	18,007	23,735	24,937	23,481	24,838
Primary Metal Industries	16,559	18,393	28,522	44,170	35,658	43,972	42,450	39,953
Fabricated Metal Products	13,520	18,181	27,403	45,424	57,366	66,510	65,479	70,065
Industrial Machinery and Equipment	19,992	28,180	41,706	76,748	86,961	109,124	102,209	102,700
Electronic and Other Electric Equipment	16,127	21,536	28,279	54,548	83,502	85,687	88,087	85,527
Motor Vehicles and Equipment	18,516	16,186	19,887	26,791	58,317	46,313	41,076	56,695
Other Transportation Equipment	10,775	13,446	16,844	26,307	48,203	65,117	65,413	60,811
Instruments and Related Products	4,769	7,005	10,189	19,511	26,791	56,368	58,868	59,542
Miscellaneous Manufacturing Industries	3,122	4,174	6,528	9,822	13,851	18,945	19,007	19,992
Nondurable Goods	79,963	106,334	150,981	239,403	326,961	461,001	474,759	495,003
Food and Kindred Products	20,107	26,653	39,135	51,781	71,731	97,121	102,281	103,859
Tobacco Manufactures	3,308	4,112	5,103	7,091	11,196	15,954	17,190	19,316
Textile Mill Products	6,497	8,482	10,072	14,803	17,263	21,940	21,749	24,344
Apparel and Other Textile Products	6,729	9,027	11,499	17,333	20,992	25,330	26,013	27,112
Paper and Allied Products	7,220	9,678	13,875	22,762	32,863	46,222	45,442	46,199
Printing and Publishing	9,373	12,925	18,560	32,662	52,464	72,093	72,904	76,560
Chemicals and Allied Products	14,423	19,074	30,005	47,556	66,958	103,581	105,839	110,826
Petroleum and Coal Products	5,388	6,893	9,857	24,267	23,548	40,116	43,121	43,382
Rubber and Miscellaneous Plastic Products	4,994	7,217	10,406	17,012	26,364	34,618	36,053	38,894
Leather and Leather Products	1,924	2,273	2,469	4,136	3,582	4,026	4,167	4,511
Transportation, Communication, and Utilities	62,563	88,445	141,708	242,236	378,022	481,178	506,017	529,299
Transportation	29,965	40,431	59,207	102,928	136,009	176,777	180,788	193,812
Railroad Transportation	9,014	10,294	12,427	20,630	22,229	22,177	21,724	22,974
Local and Interurban Passenger Transit	2,585	3,031	3,600	5,264	7,357	9,951	10,931	11,403
Trucking and Warehousing	10,997	15,303	24,572	40,323	53,632	73,282	72,788	78,388
Water Transportation	2,237	2,861	3,969	7,179	8,329	10,029	10,735	10,324
Transportation by Air	3,426	6,313	10,045	18,082	27,237	39,833	41,592	45,983
Pipelines, Except Natural Gas	668	1,046	1,528	5,195	6,072	4,205	4,613	4,676
Transportation Services	1,038	1,583	3,066	6,255	11,153	17,300	18,405	20,064
Communication	15,310	24,122	40,017	68,883	112,582	146,720	154,944	162,088
Electric, Gas, and Sanitary Services	17,288	23,892	42,484	70,425	129,431	157,681	170,285	173,399
Wholesale Trade	46,844	68,240	117,484	191,596	276,556	363,042	375,133	394,431
Retail Trade	68,132	100,488	156,235	244,673	390,936	515,712	532,075	557,462
Finance, Insurance, and Real Estate	98,912	145,801	221,676	418,438	681,762	982,370	1,039,707	1,106,114
Depository Institutions	9,887	18,379	25,812	55,952	100,500	158,667	171,814	193,932
Nondepository Institutions	1,216	1,688	3,274	6,659	18,516	20,716	21,207	25,918
Holding Cos. and Investment Services	2,574	3,839	5,722	15,625	41,784	53,674	57,235	62,383
Insurance Carriers	7,248	11,625	17,236	36,924	39,056	69,931	90,059	84,828
Insurance Agents, Brokers, and Services	3,446	4,844	7,793	14,639	22,245	37,697	37,936	40,356
Real Estate	74,541	105,426	161,839	288,639	459,661	641,685	661,456	698,697
Services	74,561	120,200	199,754	377,008	650,903	1,039,991	1,089,816	1,182,724
Hotels and Other Lodging Places	3,939	6,323	10,097	19,631	35,703	49,864	52,040	53,948
Personal Services	7,083	9,274	11,414	17,481	27,884	36,273	36,462	39,042
Business Services	10,558	18,032	30,609	69,279	143,260	198,235	201,762	220,529
Auto Repair, Services, and Garages	4,002	6,256	11,174	19,138	33,304	46,240	47,859	48,775
Miscellaneous Repair Services	1,807	2,688	4,641	8,901	12,234	17,066	16,072	16,903
Motion Pictures	1,595	2,272	3,094	5,989	9,937	18,612	18,419	19,305
Amusement and Recreation Services	3,624	4,753	7,672	14,222	22,624	40,187	44,026	51,070
Health Services	16,961	31,363	57,807	111,460	186,201	304,403	332,963	364,445
Legal Services	4,605	7,260	12,496	24,912	47,968	79,626	81,929	88,697
Educational Services	3,839	7,144	11,424	16,428	25,901	38,123	42,490	45,594
Social Services and Membership Organizations	6,454	10,047	15,907	26,143	38,086	60,636	64,805	70,165
Other Services	6,126	10,287	18,785	37,321	60,460	141,283	141,815	154,104
Private Households	3,968	4,501	4,634	6,103	7,341	9,443	9,174	10,147
Government	73,518	126,432	203,178	314,553	466,999	656,334	698,070	738,229
Federal Civilian Government	17,941	29,658	45,257	70,263	100,950	134,233	146,037	153,425
Federal Military Government	10,755	18,037	25,366	35,496	55,183	67,172	71,057	77,035
State and Local Government	44,822	78,737	132,555	208,794	310,866	454,929	480,976	507,769

Source: U.S. Bureau of Economic Analysis.

Table 27
U.S. Gross Domestic Product by Industry (Millions of Constant 1987 Dollars): Selected Years

Industry	1965	1970	1975	1980	1985	1990	1991	1992
Total	$2,214,606	$2,627,051	$3,006,556	$3,697,140	$4,270,981	$4,888,324	$4,883,224	$5,001,445
Private Industries	1,866,676	2,208,733	2,554,540	3,202,709	3,759,219	4,324,161	4,315,114	4,430,686
Agriculture, Forestry, and Fisheries	54,115	55,958	59,321	63,199	81,885	95,759	97,377	110,307
Farms	46,136	47,469	50,713	50,973	64,181	71,604	70,387	80,799
Agricultural Services, Forestry, and Fisheries	7,978	8,489	8,607	12,226	17,704	24,155	26,990	29,508
Mining	60,754	74,183	69,790	79,917	83,347	91,836	91,525	88,950
Metal Mining	3,817	4,402	3,912	1,567	2,513	6,553	7,192	7,955
Coal Mining	7,138	8,206	8,729	10,122	11,292	15,348	15,286	16,691
Oil and Gas Extraction	45,766	57,004	52,313	61,805	63,204	62,929	61,992	57,250
Nonmetallic Minerals, Except Fuels	4,033	4,571	4,836	6,423	6,338	7,006	7,055	7,054
Construction	226,648	196,531	174,851	185,393	208,972	210,154	194,522	201,373
Manufacturing	523,384	570,629	617,337	725,428	810,486	928,483	908,011	924,617
Durable Goods	317,478	334,093	356,725	424,333	468,115	536,998	525,513	533,611
Lumber and Wood Products	16,958	17,731	19,798	21,572	24,928	27,745	26,219	24,940
Furniture and Fixtures	8,134	8,072	8,944	11,601	14,254	14,314	13,538	14,683
Stone, Clay, and Glass Products	17,265	17,763	18,723	23,801	24,548	25,612	23,447	24,895
Primary Metal Industries	54,856	50,389	47,388	49,181	35,323	35,162	37,353	36,390
Fabricated Metal Products	40,598	46,777	44,280	54,573	57,578	59,673	57,191	59,667
Industrial Machinery and Equipment	42,311	49,499	55,591	81,237	77,948	102,406	100,766	107,588
Electronic and Other Electric Equipment	30,035	37,227	40,692	69,820	83,359	90,937	94,214	93,114
Motor Vehicles and Equipment	41,879	35,529	45,133	39,767	62,753	49,444	41,022	51,273
Other Transportation Equipment	45,872	47,021	46,274	38,261	46,708	64,107	60,803	53,486
Instruments and Related Products	10,781	13,700	18,003	24,151	26,651	50,314	54,107	50,382
Miscellaneous Manufacturing Industries	8,788	10,386	11,900	10,369	14,065	17,284	16,853	17,193
Nondurable Goods	205,907	236,536	260,612	301,095	342,371	391,485	382,498	391,006
Food and Kindred Products	46,687	52,318	57,520	64,270	74,655	83,863	83,923	82,910
Tobacco Manufactures	14,619	16,830	19,337	19,657	14,362	9,362	8,334	7,768
Textile Mill Products	10,678	12,777	11,712	17,314	17,993	21,038	20,549	22,498
Apparel and Other Textile Products	13,299	13,774	16,474	20,412	20,853	24,077	24,094	24,567
Paper and Allied Products	19,252	22,406	24,127	30,937	35,684	41,942	41,963	43,657
Printing and Publishing	38,292	41,828	45,468	52,686	58,861	61,870	58,256	57,472
Chemicals and Allied Products	30,187	39,706	45,374	57,540	66,963	87,627	86,382	87,834
Petroleum and Coal Products	16,660	19,235	20,275	14,981	23,289	25,827	22,954	25,245
Rubber and Miscellaneous Plastic Products	10,614	12,822	15,349	18,528	26,122	32,271	32,386	35,127
Leather and Leather Products	5,618	4,840	4,975	4,770	3,589	3,608	3,657	3,928
Transportation, Communication, and Utilities	177,871	227,728	278,947	336,306	381,793	462,640	478,087	494,510
Transportation	89,910	104,391	113,247	120,211	137,362	168,929	173,010	183,672
Railroad Transportation	23,761	23,563	20,895	18,473	19,562	24,141	24,563	25,991
Local and Interurban Passenger Transit	11,048	9,875	8,752	8,465	8,267	8,706	9,135	8,978
Trucking and Warehousing	30,044	36,208	43,630	50,821	58,236	68,999	70,755	76,610
Water Transportation	6,938	7,947	8,207	9,319	8,405	7,963	8,238	7,597
Transportation by Air	10,259	16,863	19,830	19,223	25,511	39,686	40,351	44,540
Pipelines, Except Natural Gas	3,648	5,129	6,037	5,254	5,382	4,476	5,182	4,827
Transportation Services	4,212	4,808	5,895	8,656	11,999	14,958	14,786	15,129
Communication	31,641	48,247	65,113	94,447	115,812	140,827	148,782	153,763
Electric, Gas, and Sanitary Services	56,320	75,090	100,586	121,648	128,619	152,884	156,295	157,075
Wholesale Trade	119,389	151,453	184,952	190,512	273,021	319,543	326,372	340,880
Retail Trade	222,596	252,568	289,947	320,134	421,372	478,080	474,137	486,689
Finance, Insurance, and Real Estate	386,107	476,886	576,041	692,808	776,367	868,306	878,390	893,446
Depository Institutions	53,679	72,214	87,582	107,074	116,157	135,076	129,450	125,325
Nondepository Institutions	12,587	13,735	16,701	21,412	28,824	17,853	18,283	19,528
Holding Cos. and Investment Services	11,301	17,291	18,047	27,616	40,920	56,507	65,327	69,277
Insurance Carriers	32,016	38,154	45,251	61,122	58,657	60,083	72,241	73,038
Insurance Agents, Brokers, and Services	17,965	20,549	24,055	22,537	27,083	32,057	30,600	31,270
Real Estate	258,559	314,944	384,404	453,047	504,726	566,730	562,489	575,008
Services	322,461	399,329	478,206	609,012	721,976	869,360	866,693	889,914
Hotels and Other Lodging Places	20,835	24,843	27,969	31,008	39,211	45,047	46,881	46,007
Personal Services	26,830	28,537	26,244	27,620	31,117	30,991	29,544	30,381
Business Services	42,343	59,325	71,214	103,885	151,186	172,573	167,901	173,653
Auto Repair, Services, and Garages	14,913	19,205	24,712	31,736	39,339	38,860	38,669	37,058
Miscellaneous Repair Services	7,124	7,634	9,636	13,530	12,551	15,942	14,412	13,923
Motion Pictures	6,270	7,714	8,284	8,951	11,139	15,535	14,646	14,563
Amusement and Recreation Services	12,581	12,902	15,933	19,545	24,903	34,598	36,203	40,752
Health Services	85,461	113,123	150,486	196,095	213,557	241,357	245,784	252,004
Legal Services	32,905	39,705	42,321	51,530	56,516	66,120	64,094	65,974
Educational Services	15,903	20,049	23,041	26,255	28,442	32,098	33,859	35,065
Social Services and Membership Organizations	23,233	27,503	32,008	37,767	41,435	54,990	56,831	59,614
Other Services	22,023	29,006	39,283	53,902	65,074	112,341	109,641	112,150
Private Households	12,039	9,783	7,075	7,188	7,506	8,908	8,228	8,770
Government	347,930	418,318	452,016	494,431	511,762	564,163	568,110	570,759
Federal Civilian Government	94,621	107,474	101,834	111,058	108,207	117,417	117,853	118,341
Federal Military Government	52,206	60,157	52,532	53,102	58,685	58,536	58,174	56,979
State and Local Government	201,103	250,687	297,650	330,271	344,870	388,210	392,083	395,439

Source: U.S. Bureau of Economic Analysis.

☆ Demographics

Demographic characteristics play an important role in the analysis of a state's economy. Population growth, resulting from natural increase and migration, is a factor which provides insight into the economic health of Utah. Utah is demographically unique among states for a variety of reasons. The state's population is younger and lives longer, has a higher fertility rate and more persons per household than the nation as a whole. These characteristics tend to reinforce what is perhaps the hallmark of Utah's demographic profile--its rapid rate of population increase.

Population estimates for Utah by county are prepared annually by both the U.S. Bureau of the Census and the Utah Population Estimates Committee. Because the Estimates Committee utilizes more recent data and has the input of local population analysts, the Committee's estimates are generally preferable to Census estimates for planning and analysis. However, Bureau of the Census population estimates are frequently used for allocating revenues, including transportation funds and local option sales taxes. This section focuses on the estimates generated by the Utah Population Estimates Committee, but concludes with Census Bureau age estimates, race/ethnicity information, and household characteristics.

State Population Change

Between July 1, 1994 and July 1, 1995, Utah's population grew by approximately 43,000 people--from 1,916,000 to 1,959,000. This preliminary estimate was produced by the Utah Population Estimates Committee and implies a net in-migration of 15,139 persons. As shown in Figure 16, the level of change indicates an annual growth rate of 2.2 percent between 1994 and 1995, lower than the 2.7 percent growth rate for the previous year. Table 28 presents population estimates, along with the components of population change--migration and natural increase--for the past 43 years.

Migration

Utah has experienced net in-migration for the fifth year in a row. Net migration is derived by calculating the difference between the population change and the natural increase for a given year. Net in-migration occurs when the population increase exceeds the natural increase, while net out-migration occurs when the natural increase exceeds the population increase. During 1995, Utah experienced a net in-migration of 15,139 (Figure 16). The last five years account for the only years of net in-migration since 1983. Utah in 1995, as in the previous four years, experienced robust employment growth. However, over the last 40 years, the highest annual migration rates (net in-migration as a percent of total population) were during the 1970s.

While very little is known about the characteristics of migrants, data from the Internal Revenue Service and the 1990 Census illuminate several interesting points:

- ☆ California dominates the flow of interstate migration to and from Utah.
- ☆ The extended Salt Lake area has strong migration ties with the major metropolitan areas south and or west of Utah, such as Los Angeles, Phoenix, Portland, Seattle and Las Vegas.
- ☆ Employment-related migration accounts for the vast majority of population movement to and from Utah.

These characteristics and other findings are described in more detail in reports published by the Governor's Office of Planning and Budget.

County Shift in Net Migration

Roughly 77 percent of Utah's population is concentrated along the metropolitan area comprised of Salt Lake, Davis, Weber, and Utah Counties. Over the last four years, net migration in non-metropolitan counties has steadily increased. In 1992, counties outside the metropolitan area accounted for roughly

one-third (32.4 percent) of Utah's total net in-migration. In 1995, more than half (53.2 percent) of the net in-migration is attributed to non-metropolitan counties.

Natural Increase

Natural increase is the number of births minus the number of deaths. The number of deaths in Utah has climbed proportionally with the total population. The number of births peaked in 1982 and has declined almost every year, until 1991 and 1992 when the number of births increased slightly. Births fell once again in 1993 and then increased in both 1994 and 1995. Utah births and deaths are provided in Table 28.

The total fertility rate is the number of births that a woman would have during her lifetime if, at each year of age, she experienced the birth rate occurring for that specific year. Fertility rates declined in Utah from 3.28 births per woman in 1979 to a low of 2.48 in 1987. Since 1987, Utah's total fertility rate has climbed as high as 2.77 and now remained at 2.68 for two years. Utah's total fertility rate is the highest in the nation. The national rate averaged approximately 1.81 births per woman from 1977 through 1986 and has since climbed as high as 2.08, but is 2.05 currently. Historical fertility rates for Utah and the nation are illustrated in Figure 18 and listed in Table 29.

County Population

Almost every county in Utah experienced population increases between 1994 and 1995. Washington County experienced the largest net in-migration with approximately 4,366 persons. Four other counties -- Salt Lake, Utah, Iron, and Summit--also experienced net in-migration of at least 1,000 persons. Nineteen of Utah's 29 counties experienced net in-migration in 1995, compared to 27 in 1994.

In terms of growth rates, Washington County led the state with an 8.1 percent growth. Iron County had the second fastest growth with 6.7 percent, followed by Summit County (6.2 percent), Juab County (5.1 percent), and Grand County (5.0 percent). In 1995, only five of Utah's counties experienced growth of 4 percent or more, compared to 12 in 1994. Table 30 presents the preliminary 1995 county population estimates, along with the intercensal county estimates for Utah during the 1980s.

Age Composition

The U.S. Bureau of the Census produces annual state population estimates by age group. The most recent data available are for 1994 and are shown in Table 31. These data demonstrate that Utah continues to have a very young population relative to the nation. Utah ranks first in the percent of the population under five years of age--9.5 percent--and first in the percent of the population aged 5 to 17, 25.7 percent. Utah has the youngest median age in the country--26.7 years old--compared to a national median age of 34 years old. Median age divides the age distribution into two equal parts: one-half of the cases falling below the median value and one-half above the value. In contrast, Utah ranks 50th in the percent of the population over age 64.

Utah's age characteristics can be summarized in terms of a demographic construct called a dependency ratio. The dependency ratio measures the number of dependents (defined as persons younger than age 18 and older than age 64) per 100 persons of working age (defined as persons in the age group 18 to 64). Utah's dependency ratio is 79 compared to the national average of 64. This means that for every 100 persons of working age in Utah, 15 more dependents than the national average must be supported. Utah's dependency ratio is the highest in the country and even significantly higher than the next closest state. Table 32 provides dependency ratios for every state and the District of Columbia.

Racial Composition

The 1990 Census provides two types of minority data. First, data is presented by Racial Group classification: Black; White; American Indian, Eskimo and Aleut; Asian and Pacific Islander; and Other Races. According to Census officials, the vast majority of people classifying themselves in the 'Other Race' category were people of Hispanic origin who felt they did not fit into one of the other four racial categories on the Census form. The second group of data presents population of Hispanic origin. Persons of

Hispanic origin can be of any race. In other words, the Hispanic origin classification is an ethnicity category only, and is not intended by the Census Bureau to be a racial category. If Hispanic origin population figures are added to the Racial Groups, the total population would be more than 100 percent.

The 1990 Census reported that the total Non-White population of Utah was 6.2 percent of the state's total population. Persons of Hispanic origin totaled 4.9 percent of the state's 1990 population. As expected given total population distribution, the minority populations of Utah--both Racial and Hispanic origin--live for the most part in the Wasatch Front Counties of Weber, Davis, Salt Lake and Utah Counties. Almost 77 percent of the non-white population resides in these four counties, and over 83 percent of persons of Hispanic origin reside in the area.

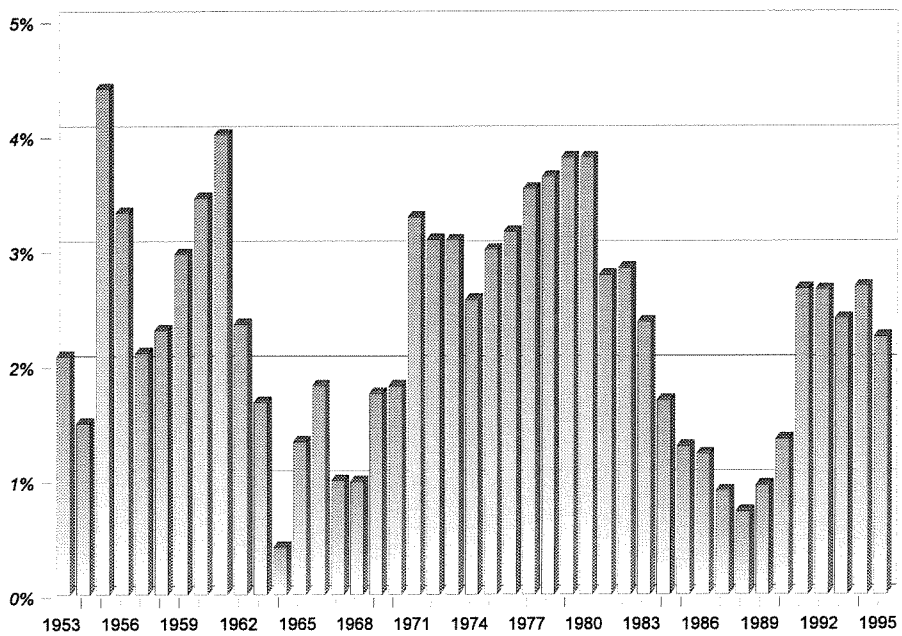
Racial and Hispanic origin populations for the United States and Utah show some important differences. Comparing Utah with the U.S., Utah has a lower percent distribution for all minority races and persons of Hispanic origin, except American Indians. When looking at growth rates, Utah and the U.S. differ by group (Table 33). For example, Utah's growth rates between 1980 and 1990 for Black and Asian and Pacific Islander exceeded those for the U.S. But for American Indian, Other Race and Hispanic origin, the growth rates for the U.S. were greater than those for Utah.

Household Characteristics

Table 34 provides household characteristics and rankings from the 1990 Census for the United States, the District of Columbia, and states. Utah ranks first in the percentage of persons living in family households--88.5 percent. A family household is defined by the Census Bureau as a householder and one or more other persons living in the same household who are related to the householder by birth, marriage, or adoption. Utah ranks last in the percentage of persons living in group quarters--1.7 percent. Group quarters include both institutionalized quarters--prisons or nursing homes--and noninstitutionalized quarters--college dormitories or shelters.

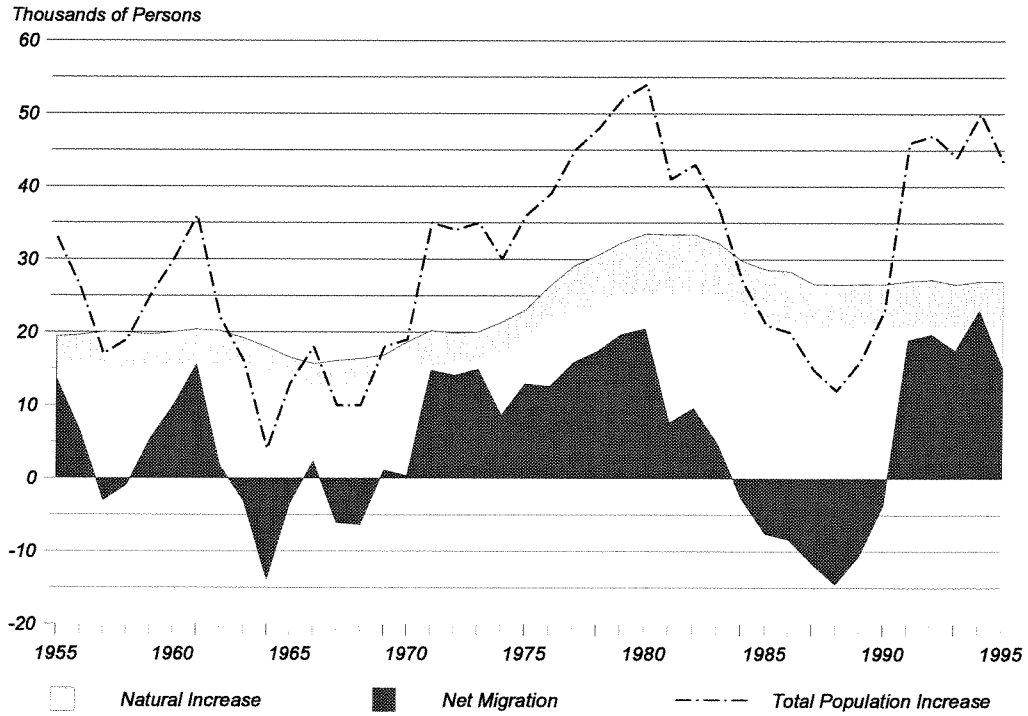
Of Utah's total households, 64.8 percent are comprised of married-couple families, which ranks Utah first. Utah has a lower-than-average ranking of single-headed households--11.7 percent of households are comprised of single parents, ranking Utah 41st in the nation. Utah also has the most persons per household nationally, 3.15, and most persons per family, 3.67. ☆

Figure 16
Utah Population--Annual Percent Change: 1953 to 1995



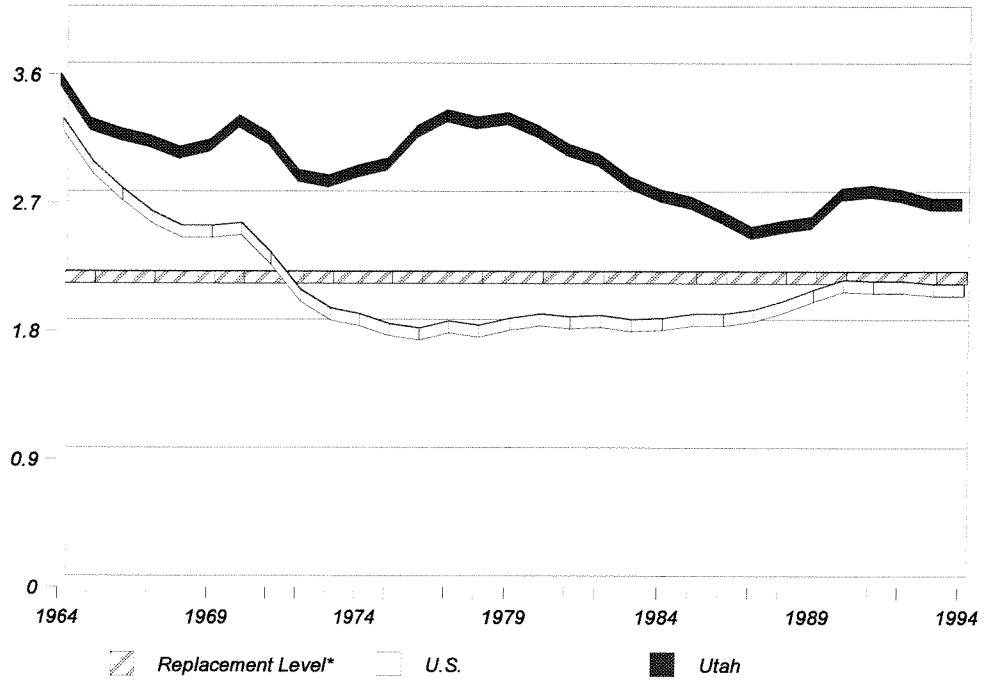
Source: Utah Population Estimates Committee

Figure 17
Components of Utah Population Change--Net Migration and Natural Increase: 1954 to 1995



Source: Utah Population Estimates Committee and Utah Bureau of Health Statistics

Figure 18
Total Fertility for U.S. and Utah: 1962 to 1994



*Fertility level at which current population is replaced

Source: National Center for Health Statistics and Governor's Office of Planning and Budget

Table 28
Utah Population Estimates, Net Migration, Births and Deaths: 1952 to 1995

Year	July 1st Population	Percent Change	Increase	Net *Migration	Net Migration as a Percent of Previous Year's Population	Natural Increase	Fiscal Year **Births	Fiscal Year **Deaths
1952	724,000	2.55	18,000	(209)	NA	18,209	23,251	5,042
1953	739,000	2.07	15,000	(3,522)	-0.49%	18,522	23,658	5,136
1954	750,000	1.49	11,000	(7,906)	-1.07%	18,906	23,944	5,038
1955	783,000	4.40	33,000	13,589	1.81%	19,412	24,454	5,042
1956	809,000	3.32	26,000	6,372	0.81%	19,629	24,787	5,158
1957	826,000	2.10	17,000	(3,058)	-0.38%	20,058	25,518	5,460
1958	845,000	2.30	19,000	(972)	-0.12%	19,972	25,724	5,753
1959	870,000	2.96	25,000	5,330	0.63%	19,671	25,515	5,844
1960	900,000	3.45	30,000	9,980	1.15%	20,021	25,959	5,938
1961	936,000	4.00	36,000	15,608	1.73%	20,392	26,431	6,039
1962	958,000	2.35	22,000	1,802	0.19%	20,199	26,402	6,203
1963	974,000	1.67	16,000	(3,148)	-0.33%	19,148	25,583	6,435
1964	978,000	0.41	4,000	(13,924)	-1.43%	17,924	24,398	6,474
1965	991,000	1.33	13,000	(3,515)	-0.36%	16,515	23,053	6,538
1966	1,009,000	1.82	18,000	2,330	0.24%	15,670	22,431	6,761
1967	1,019,000	0.99	10,000	(6,092)	-0.60%	16,092	22,775	6,683
1968	1,029,000	0.98	10,000	(6,372)	-0.63%	16,372	23,071	6,699
1969	1,047,000	1.75	18,000	1,124	0.11%	16,876	23,713	6,837
1970	1,066,000	1.81	19,000	327	0.03%	18,674	25,601	6,927
1971	1,101,000	3.28	35,000	14,800	1.39%	20,200	27,407	7,207
1972	1,135,000	3.09	34,000	14,090	1.28%	19,910	27,146	7,236
1973	1,170,000	3.08	35,000	14,955	1.32%	20,045	27,562	7,517
1974	1,200,000	2.56	30,000	8,620	0.74%	21,380	28,876	7,496
1975	1,236,000	3.00	36,000	12,949	1.08%	23,051	30,566	7,515
1976	1,275,000	3.16	39,000	12,605	1.02%	26,395	33,773	7,378
1977	1,320,000	3.53	45,000	15,886	1.25%	29,114	36,709	7,595
1978	1,368,000	3.64	48,000	17,422	1.32%	30,578	38,265	7,687
1979	1,420,000	3.80	52,000	19,712	1.44%	32,288	40,134	7,846
1980	1,474,000	3.80	54,000	20,517	1.44%	33,483	41,591	8,108
1981	1,515,000	2.78	41,000	7,601	0.52%	33,399	41,511	8,112
1982	1,558,000	2.84	43,000	9,630	0.64%	33,370	41,774	8,404
1983	1,595,000	2.37	37,000	4,789	0.31%	32,211	40,557	8,346
1984	1,622,000	1.69	27,000	(2,757)	-0.17%	29,757	38,643	8,886
1985	1,643,000	1.29	21,000	(7,585)	-0.47%	28,585	37,508	8,923
1986	1,663,000	1.22	20,000	(8,355)	-0.51%	28,355	37,145	8,790
1987	1,678,000	0.90	15,000	(11,656)	-0.70%	26,656	35,469	8,813
1988	1,690,000	0.72	12,000	(14,526)	-0.87%	26,526	35,648	9,122
1989	1,706,000	0.95	16,000	(10,633)	-0.63%	26,633	35,549	8,916
1990	1,729,000	1.35	23,000	(3,619)	-0.21%	26,619	35,569	8,950
1991	1,775,000	2.66	46,000	18,961	1.10%	27,039	36,312	9,273
1992	1,822,000	2.65	47,000	19,746	1.11%	27,254	36,813	9,559
1993	1,866,000	2.41	44,000	17,427	0.96%	26,573	36,573	10,000
1994	1,916,000	2.68	50,000	22,831	1.22%	27,169	37,480	10,311
1995 (p)	1,959,000	2.24	43,000	15,139	0.79%	27,861	38,271	10,410

(p) = preliminary

*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.

**From 1952 to 1970 fiscal year births and deaths are estimated by averaging calendar year births and deaths in the two years that are partially covered by each fiscal year. From 1971 to 1994, actual fiscal year births and deaths are shown. Births and deaths in 1995 are calendar year.

Source: Utah Bureau of Health Statistics and Utah Population Estimates Committee.

Table 29
Total Fertility Rates--Utah and U.S.: 1960 to 1994

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	3.26	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	3.19	1.84
1981	3.06	1.82
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	2.75	2.08
1991	2.77	2.07
1992	2.74	2.07
1993	2.68	2.05
1994	2.68	2.05

Sources: Eileen Brown, "Fertility in Utah: 1960-1985";
Governor's Office of Planning & Budget, UPED/CASA: 1986-1994
U.S. Department of Health & Human Services,
National Center for Health Statistics, Advanced Report of
Final Natality Statistics.

Table 30
Utah Population Estimates by County: 1980 to 1995

Multi-County/County	July 1, 1980	July 1, 1981	July 1, 1982	July 1, 1983	July 1, 1984	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(a)	July 1, 1995(b)	Avg. Ann. Percent Change 1980-95	Percent Change 1994-95	1995 Percent of Total Population
Bear River	93,350	95,450	97,750	100,450	101,300	102,750	104,300	105,650	106,550	107,450	108,750	110,700	113,250	116,000	118,650	120,900	1.7	1.9	6.2
Box Elder	33,500	33,800	34,200	34,700	34,900	35,500	36,000	36,300	36,300	36,500	36,500	37,100	37,500	38,100	38,500	38,900	1.0	1.0	2.0
Cache	57,700	59,400	61,200	63,500	64,300	65,200	66,300	67,500	68,500	69,200	70,500	71,900	74,000	76,100	78,300	80,200	2.2	2.4	4.1
Rich	2,150	2,250	2,350	2,250	2,100	2,050	2,000	1,850	1,750	1,750	1,750	1,700	1,750	1,800	1,850	1,800	-1.2	-2.7	0.1
Wasatch Front	949,150	973,500	999,800	1,019,900	1,038,250	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	1,233,100	1.8	1.8	62.9
Davis	148,000	153,000	158,000	162,000	166,000	170,000	175,000	179,000	184,000	186,000	188,000	195,000	201,000	206,000	212,000	216,000	2.6	1.9	11.0
Morgan	4,950	5,000	5,100	5,100	5,150	5,250	5,250	5,350	5,350	5,450	5,550	5,650	5,850	6,150	6,350	6,500	1.8	2.4	0.3
Weber	145,000	148,000	151,000	153,000	154,000	154,000	156,000	156,000	157,000	158,000	159,000	162,000	166,000	169,000	172,000	175,000	1.3	1.7	8.9
Salt Lake	625,000	641,000	659,000	673,000	686,000	697,000	706,000	710,000	713,000	720,000	728,000	747,000	765,000	777,000	792,000	806,000	1.7	1.8	41.1
Tooele	26,200	26,500	26,700	26,800	27,100	27,300	27,000	27,100	26,500	26,500	26,700	27,200	27,800	28,100	29,300	29,600	0.8	1.0	1.5
Mountainland	239,050	246,950	252,300	259,300	265,000	267,200	269,850	275,900	279,050	283,100	291,800	299,700	308,200	321,900	331,900	342,600	2.4	3.2	17.5
Summit	10,400	11,100	11,600	12,200	12,800	13,000	13,400	14,200	14,300	15,100	15,700	17,000	18,400	19,700	21,100	22,400	5.2	6.2	1.1
Utah	220,000	227,000	232,000	238,000	243,000	245,000	247,000	252,000	255,000	258,000	266,000	272,000	279,000	291,000	299,000	308,000	2.3	3.0	15.7
Wasatch	8,650	8,850	8,700	9,100	9,200	9,200	9,450	9,700	9,750	10,000	10,100	10,700	10,800	11,200	11,800	12,200	2.3	3.4	0.6
Central	47,600	48,700	50,150	52,250	54,300	54,900	52,700	51,950	52,000	52,100	52,200	53,750	54,850	55,950	58,150	59,250	1.5	1.9	3.0
Juab	5,550	5,600	5,700	5,950	6,200	6,300	5,900	5,800	5,800	5,900	5,800	6,000	6,150	6,200	6,800	7,150	1.7	5.1	0.4
Millard	9,050	9,450	10,100	10,800	12,400	12,900	12,200	11,400	11,300	11,300	11,300	11,600	11,700	11,700	11,900	11,900	1.8	0.0	0.6
Piute	1,350	1,350	1,250	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,250	1,350	1,350	1,350	1,450	1,400	0.2	-3.4	0.1
Sanpete	14,800	15,200	15,800	16,400	16,400	16,300	15,800	15,900	16,000	16,000	16,300	16,900	17,500	18,100	18,800	19,200	1.8	2.1	1.0
Sevier	14,900	15,100	15,300	15,600	15,800	15,900	15,300	15,400	15,400	15,400	15,400	15,700	16,000	16,400	16,900	17,300	1.0	2.4	0.9
Wayne	1,950	2,000	2,000	2,200	2,200	2,200	2,200	2,150	2,200	2,200	2,150	2,200	2,150	2,200	2,300	2,300	1.1	0.0	0.1
Southwestern	56,050	58,350	61,000	64,200	67,050	70,900	75,050	77,550	79,100	81,650	83,900	87,600	91,750	97,150	103,650	110,950	4.7	7.0	5.7
Beaver	4,400	4,600	4,650	5,000	5,150	5,050	4,950	4,900	4,800	4,800	4,800	4,850	4,900	5,000	5,150	5,350	1.3	3.9	0.3
Garfield	3,700	3,700	3,750	3,900	3,900	4,000	4,000	4,000	3,950	4,000	3,950	4,100	4,100	4,200	4,200	4,300	1.0	2.4	0.2
Iron	17,500	18,100	18,600	19,500	20,000	20,100	20,300	20,300	20,100	20,400	20,900	21,500	22,400	23,800	25,200	26,900	2.9	6.7	1.4
Kane	4,050	4,050	4,200	4,500	4,700	4,950	5,100	5,150	5,250	5,250	5,150	5,250	5,350	5,450	5,700	5,900	2.5	3.5	0.3
Washington	26,400	27,900	29,800	31,300	33,300	36,800	40,700	43,200	45,000	47,200	49,100	51,900	55,000	58,700	63,400	68,500	6.6	8.0	3.5
Uintah Basin	34,150	36,050	39,350	41,150	40,750	40,300	39,000	37,400	36,500	35,650	35,500	36,600	37,200	37,500	38,950	38,550	0.8	-1.0	2.0
Daggett	750	850	850	750	750	700	700	700	700	650	700	700	700	700	750	750	0.0	0.0	0.0
Duchesne	12,700	13,100	13,700	14,400	14,800	14,700	14,300	13,700	13,100	12,800	12,600	12,800	12,900	13,200	13,500	13,500	0.4	0.0	0.7
Uintah	20,700	22,100	24,800	26,000	25,200	24,900	24,000	23,000	22,700	22,200	22,200	23,100	23,600	23,600	24,700	24,300	1.1	-1.6	1.2
Southeastern	54,650	56,000	57,650	57,750	55,350	53,400	52,850	52,100	50,950	50,100	49,700	50,300	51,050	51,700	53,050	53,650	-0.1	1.1	2.7
Carbon	22,400	23,000	24,300	24,100	23,100	22,800	22,300	21,700	21,100	20,400	20,200	20,600	20,600	20,700	21,100	21,100	-0.4	0.0	1.1
Emery	11,600	12,000	12,700	12,700	11,900	11,100	11,100	10,900	10,500	10,400	10,300	10,200	10,200	10,400	10,600	10,700	-0.5	0.9	0.5
Grand	8,250	8,400	8,150	8,050	7,750	7,200	7,050	6,900	6,750	6,700	6,600	6,800	7,150	7,500	7,950	8,350	0.1	5.0	0.4
San Juan	12,400	12,600	12,500	12,900	12,600	12,300	12,400	12,600	12,600	12,600	12,600	12,700	13,100	13,100	13,400	13,500	0.6	0.7	0.7
State	1,474,000	1,115,750	1,558,000	1,595,000	1,622,000	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	1,959,000	1.9	2.2	100.0

(a) Revised
(b) Preliminary

Note: Totals may not add due to rounding. State total is not the sum of the rounded county estimates, it is the rounded sum of the unrounded county estimates.

Source: Utah Population Estimates Committee.

Table 31
Rankings of States by Selected Age Groups: July 1, 1994

Rank	Under Age 5 State	Population (thousands)	Percent of Total	Ages 5-17 State	Population (thousands)	Percent of Total	Ages 18-64 State	Population (thousands)	Percent of Total	Ages 65+ State	Population (thousands)	Percent of Total	All Ages State	Population (thousands)	Percent of Total	State	Median Age
	United States	19,727	7.6%	United States	48,291	18.5%	United States	159,164	61.1%	United States	33,158	12.7%	United States	260,341	100.0%	United States	34.0
1	Utah	181	9.5%	Utah	491	25.7%	District of Columbia	375	65.8%	Florida	2,571	18.4%	California	31,431	100.0%	Utah	26.7
2	Alaska	56	9.2%	Alaska	136	22.4%	Virginia	4,223	64.5%	Pennsylvania	1,919	15.9%	Texas	18,378	100.0%	Alaska	30.9
3	California	2,833	9.0%	Idaho	252	22.2%	Alaska	386	63.7%	Rhode Island	155	15.5%	New York	18,169	100.0%	Texas	31.9
4	Texas	1,559	8.5%	Wyoming	104	21.8%	Maryland	3,183	63.6%	Iowa	437	15.4%	Florida	13,953	100.0%	California	32.2
5	New Mexico	140	8.5%	New Mexico	358	21.6%	Colorado	2,318	63.4%	West Virginia	280	15.4%	Pennsylvania	12,052	100.0%	Mississippi	32.4
6	Arizona	344	8.4%	South Dakota	154	21.4%	Georgia	4,454	63.1%	Arkansas	362	14.8%	Illinois	11,752	100.0%	New Mexico	32.4
7	Hawaii	95	8.1%	Montana	179	20.9%	Nevada	917	62.9%	North Dakota	94	14.7%	Ohio	11,102	100.0%	Louisiana	32.4
8	Nevada	115	7.9%	Louisiana	898	20.8%	Vermont	364	62.8%	South Dakota	106	14.7%	Michigan	9,496	100.0%	Idaho	32.6
9	Louisiana	337	7.8%	Mississippi	549	20.6%	North Carolina	4,430	62.7%	Connecticut	465	14.2%	New Jersey	7,904	100.0%	Georgia	32.7
10	Illinois	915	7.8%	Texas	3,742	20.4%	Delaware	441	62.5%	Nebraska	230	14.2%	North Carolina	7,070	100.0%	Arizona	33.1
11	Georgia	549	7.8%	North Dakota	129	20.2%	New Hampshire	710	62.4%	Missouri	745	14.1%	Georgia	7,055	100.0%	South Carolina	33.5
12	Mississippi	207	7.8%	Nebraska	326	20.1%	Massachusetts	3,768	62.4%	Massachusetts	849	14.1%	Virginia	6,552	100.0%	South Dakota	33.6
13	Idaho	87	7.7%	Minnesota	914	20.0%	Tennessee	3,220	62.2%	Maine	173	14.0%	Massachusetts	6,041	100.0%	Wyoming	33.9
14	New York	1,382	7.6%	Kansas	506	19.8%	South Carolina	2,277	62.1%	Kansas	354	13.9%	Indiana	5,752	100.0%	Virginia	33.9
15	Maryland	379	7.6%	Oklahoma	643	19.7%	Hawaii	732	62.1%	Oregon	422	13.7%	Washington	5,343	100.0%	Minnesota	33.9
16	District of Columbia	43	7.5%	Wisconsin	997	19.6%	Washington	3,317	62.1%	New Jersey	1,078	13.6%	Missouri	5,278	100.0%	Michigan	34.0
17	South Dakota	54	7.5%	Arizona	795	19.5%	New York	11,265	62.0%	Oklahoma	443	13.6%	Tennessee	5,175	100.0%	Illinois	34.0
18	South Carolina	274	7.5%	Michigan	1,824	19.2%	New Jersey	4,896	61.9%	District of Columbia	77	13.5%	Wisconsin	5,082	100.0%	Colorado	34.1
19	Colorado	270	7.4%	Colorado	700	19.1%	Kentucky	2,368	61.9%	Wisconsin	683	13.4%	Maryland	5,006	100.0%	Kansas	34.1
20	Michigan	701	7.4%	Iowa	541	19.1%	California	19,407	61.7%	Ohio	1,491	13.4%	Minnesota	4,567	100.0%	North Carolina	34.2
21	Washington	394	7.4%	Arkansas	468	19.1%	Connecticut	2,022	61.7%	Arizona	546	13.4%	Louisiana	4,315	100.0%	North Dakota	34.2
22	New Jersey	579	7.3%	Georgia	1,344	19.1%	Indiana	3,545	61.6%	Montana	114	13.3%	Alabama	4,219	100.0%	Deleware	34.2
23	Oklahoma	237	7.3%	Missouri	1,003	19.0%	Maine	761	61.4%	New York	2,393	13.2%	Arizona	4,075	100.0%	Nevada	34.2
24	Delaware	51	7.2%	Washington	1,014	19.0%	Alabama	2,586	61.3%	Alabama	552	13.1%	Kentucky	3,827	100.0%	Maryland	34.2
25	North Carolina	510	7.2%	New Hampshire	212	18.6%	Illinois	7,187	61.2%	Indiana	735	12.8%	South Carolina	3,664	100.0%	Hawaii	34.2
26	Kansas	184	7.2%	Ohio	2,070	18.6%	West Virginia	1,113	61.1%	Kentucky	489	12.8%	Colorado	3,656	100.0%	Washington	34.3
27	Minnesota	327	7.2%	Vermont	108	18.6%	Texas	11,209	61.0%	Tennessee	658	12.7%	Connecticut	3,275	100.0%	Nebraska	34.3
28	Virginia	469	7.2%	Oregon	574	18.6%	Michigan	5,791	61.0%	Delaware	89	12.6%	Oklahoma	3,258	100.0%	Oklahoma	34.3
29	Alabama	302	7.2%	California	5,844	18.6%	Oregon	1,881	61.0%	Illinois	1,481	12.6%	Oregon	3,086	100.0%	Alabama	34.3
30	Nebraska	116	7.1%	Indiana	1,066	18.5%	Ohio	6,757	60.9%	Minnesota	572	12.5%	Iowa	2,829	100.0%	Wisconsin	34.3
31	Missouri	376	7.1%	Kentucky	709	18.5%	Rhode Island	602	60.4%	North Carolina	885	12.5%	Mississippi	2,669	100.0%	Indiana	34.3
32	Rhode Island	71	7.1%	South Carolina	678	18.5%	Minnesota	2,755	60.3%	Mississippi	332	12.4%	Kansas	2,554	100.0%	New Hampshire	34.4
33	Indiana	407	7.1%	Illinois	2,168	18.4%	Wyoming	286	60.1%	Michigan	1,180	12.4%	Arkansas	2,453	100.0%	District of Columbia	34.5
34	Tennessee	366	7.1%	Alabama	778	18.4%	Wisconsin	3,052	60.1%	Vermont	70	12.1%	Utah	1,908	100.0%	Kentucky	34.5
35	Ohio	784	7.1%	Maine	228	18.4%	Pennsylvania	7,236	60.0%	Hawaii	142	12.0%	West Virginia	1,822	100.0%	New York	34.6
36	Connecticut	231	7.1%	Tennessee	931	18.0%	Louisiana	2,586	59.9%	New Hampshire	136	12.0%	New Mexico	1,654	100.0%	Ohio	34.7
37	New Hampshire	80	7.0%	Nevada	261	17.9%	Missouri	3,154	59.8%	South Carolina	435	11.9%	Nebraska	1,623	100.0%	Tennessee	34.7
38	Arkansas	172	7.0%	Hawaii	209	17.7%	Oklahoma	1,935	59.4%	Idaho	132	11.7%	Nevada	1,457	100.0%	Missouri	34.7
39	Massachusetts	423	7.0%	Maryland	884	17.7%	Mississippi	1,582	59.3%	Washington	618	11.6%	Maine	1,240	100.0%	Massachusetts	34.8
40	Wyoming	33	6.9%	North Carolina	1,246	17.6%	Arkansas	1,450	59.1%	Louisiana	494	11.4%	Hawaii	1,179	100.0%	Arkansas	34.9
41	Florida	962	6.9%	West Virginia	321	17.6%	Kansas	1,509	59.1%	Nevada	165	11.3%	New Hampshire	1,137	100.0%	Vermont	35.0
42	Montana	59	6.9%	Delaware	124	17.6%	Montana	505	59.0%	Maryland	559	11.2%	Idaho	1,133	100.0%	Rhode Island	35.0
43	Wisconsin	350	6.9%	Pennsylvania	2,099	17.4%	New Mexico	975	58.9%	Wyoming	53	11.1%	Rhode Island	997	100.0%	Montana	35.4
44	Kentucky	261	6.8%	Virginia	1,134	17.3%	Iowa	1,664	58.8%	Virginia	725	11.1%	Montana	856	100.0%	Iowa	35.4
45	Oregon	209	6.8%	New York	3,129	17.2%	Nebraska	952	58.7%	New Mexico	181	10.9%	South Dakota	721	100.0%	New Jersey	35.5
46	North Dakota	43	6.7%	New Jersey	1,352	17.1%	Arizona	2,390	58.7%	California	3,346	10.6%	Deleware	706	100.0%	Connecticut	35.6
47	Iowa	188	6.6%	Connecticut	557	17.0%	North Dakota	373	58.5%	Texas	1,868	10.2%	North Dakota	638	100.0%	Maine	35.7
48	Pennsylvania	799	6.6%	Rhode Island	169	17.0%	Idaho	662	58.4%	Georgia	710	10.1%	Alaska	606	100.0%	Oregon	35.8
49	Vermont	38	6.6%	Massachusetts	1,001	16.6%	Florida	8,119	58.2%	Colorado	367	10.0%	Vermont	580	100.0%	Pennsylvania	36.3
50	Maine	78	6.3%	Florida	2,300	16.5%	South Dakota	406	56.3%	Utah	166	8.6%	District of Columbia	570	100.0%	West Virginia	37.0
51	West Virginia	108	5.9%	District of Columbia	76	13.3%	Utah	1,067	55.9%	Alaska	28	4.6%	Wyoming	476	100.0%	Florida	37.1

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

Table 32
Dependency Ratios for States: July 1, 1994

Rank	State	Pre-School per 100 of Working Age	State	School Age per 100 of Working Age	State	Retirement Age per 100 of Working Age	State	Total Dependents per 100 of Working Age
	United States	12	United States	30	United States	21	United States	64
1	Utah	17	Utah	46	Florida	32	Utah	79
2	California	15	Idaho	38	Pennsylvania	27	South Dakota	77
3	Alaska	15	South Dakota	38	Iowa	26	Florida	72
4	Arizona	14	New Mexico	37	South Dakota	26	North Dakota	71
5	New Mexico	14	Wyoming	36	Rhode Island	26	Idaho	71
6	Texas	14	Montana	35	North Dakota	25	Nebraska	71
7	South Dakota	13	Alaska	35	West Virginia	25	Arizona	71
8	Idaho	13	Louisiana	35	Arkansas	25	Iowa	70
9	Mississippi	13	Mississippi	35	Nebraska	24	Montana	70
10	Louisiana	13	North Dakota	35	Missouri	24	New Mexico	70
11	Hawaii	13	Nebraska	34	Kansas	23	Kansas	69
12	Illinois	13	Kansas	34	Connecticut	23	Arkansas	69
13	Nevada	13	Texas	33	Oklahoma	23	Mississippi	69
14	Georgia	12	Arizona	33	Arizona	23	Oklahoma	68
15	New York	12	Oklahoma	33	Maine	23	Missouri	67
16	Oklahoma	12	Minnesota	33	Montana	23	Louisiana	67
17	Kansas	12	Wisconsin	33	Massachusetts	23	Pennsylvania	67
18	Nebraska	12	Iowa	33	Oregon	22	Wisconsin	67
19	Michigan	12	Arkansas	32	Wisconsin	22	Wyoming	66
20	South Carolina	12	Missouri	32	Ohio	22	Minnesota	66
21	Missouri	12	Michigan	31	New Jersey	22	Rhode Island	66
22	Maryland	12	Ohio	31	Alabama	21	Ohio	64
23	Washington	12	Washington	31	New York	21	Oregon	64
24	Minnesota	12	Oregon	31	Mississippi	21	Michigan	64
25	Arkansas	12	Colorado	30	Minnesota	21	Texas	64
26	Florida	12	Georgia	30	Indiana	21	West Virginia	64
27	New Jersey	12	Illinois	30	Kentucky	21	Illinois	64
28	Rhode Island	12	California	30	Illinois	21	Alabama	63
29	Montana	12	Alabama	30	District of Columbia	21	Maine	63
30	Alabama	12	Indiana	30	Tennessee	20	Indiana	62
31	Colorado	12	Maine	30	Michigan	20	Connecticut	62
32	Ohio	12	Kentucky	30	Delaware	20	California	62
33	Delaware	12	New Hampshire	30	North Carolina	20	Kentucky	62
34	Wyoming	12	South Carolina	30	Idaho	20	New Jersey	61
35	North Dakota	12	Vermont	30	Hawaii	19	New York	61
36	North Carolina	12	Pennsylvania	29	Vermont	19	Washington	61
37	Indiana	11	Tennessee	29	New Hampshire	19	Hawaii	61
38	Wisconsin	11	West Virginia	29	South Carolina	19	South Carolina	61
39	District of Columbia	11	Hawaii	29	Louisiana	19	Tennessee	61
40	Connecticut	11	Nevada	28	Washington	19	Massachusetts	60
41	Tennessee	11	Florida	28	New Mexico	19	New Hampshire	60
42	Iowa	11	North Carolina	28	Wyoming	19	Delaware	60
43	New Hampshire	11	Delaware	28	Nevada	18	North Carolina	60
44	Massachusetts	11	Rhode Island	28	Maryland	18	Vermont	59
45	Oregon	11	New York	28	California	17	Nevada	59
46	Virginia	11	Maryland	28	Virginia	17	Georgia	58
47	Pennsylvania	11	New Jersey	28	Texas	17	Colorado	58
48	Kentucky	11	Connecticut	28	Georgia	16	Maryland	57
49	Vermont	10	Virginia	27	Colorado	16	Alaska	57
50	Maine	10	Massachusetts	27	Utah	16	Virginia	55
51	West Virginia	10	District of Columbia	20	Alaska	7	District of Columbia	52

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

Table 33

19990 Census of Population and Housing: Race and Hispanic Origin Population Distribution for U.S. and Utah

United States	1990 Number	Percent	1980 Number	Percent	Number Change	Percent Change
Total Population	248,709,873	100.0%	226,545,805	100.0%	22,164,068	9.8%
White	199,686,070	80.3%	188,371,622	83.1%	11,314,448	6.0%
Black	29,986,060	12.1%	26,495,025	11.7%	3,491,035	13.2%
American Indian, Eskimo, or Aleut	1,959,234	0.8%	1,420,400	0.6%	538,834	37.9%
Asian or Pacific Islander	7,273,662	2.9%	3,500,439 *	1.5%	3,773,223	107.8%
Other Race	9,804,847	3.9%	6,758,319	3.0%	3,046,528	45.1%
Hispanic Origin**	22,354,059	9.0%	14,608,673	6.4%	7,745,386	53.0%

Utah	1990 Number	Percent	1980 Number	Percent	Number Change	Percent Change
Total Population	1,722,850	100.0%	1,461,037	100.0%	261,813	17.9%
White	1,615,845	93.8%	1,382,550	94.6%	233,295	16.9%
Black	11,576	0.7%	9,225	0.6%	2,351	25.5%
American Indian, Eskimo, or Aleut	24,283	1.4%	19,256	1.3%	5,027	26.1%
Asian or Pacific Islander	33,371	1.9%	15,076 *	1.0%	18,295	121.4%
Other Race	37,775	2.2%	34,930	2.4%	2,845	8.1%
Hispanic Origin**	84,597	4.9%	60,302	4.1%	24,295	40.3%

* This 1980 number, based on 100-percent tabulations, includes all groups listed separately in the race question. Write-in responses for groups such as Cambodian, Thai, Laotian, and Fiji Islander were not included in 100-percent totals for the Asian or Pacific Islander population but were included in the Asian or Pacific Islander total in all tabulations.

** Persons of Hispanic origin may be of any race.

Source: U.S. Bureau of the Census.

Table 34
1990 Census of Population and Housing--Household Characteristics for U.S. and States

State	All Persons: Total	Percent in Family Households	Rank	Percent in Group Quarters	Rank	Persons 15 Years and Over: Percent Now Married	Rank	Percent Never Married	Rank	Households: Total	Percent Married-Couple Family	Rank	Percent Single Head-of-Household	Rank	Persons per Household	Rank	Persons per Family	Rank
United States	248,709,873	83.7%	---	2.7%	---	54.8%	---	26.9%	---	91,947,410	55.1%	---	15.0%	---	2.63	---	3.16	---
Alabama	4,040,587	86.3%	3	2.3%	42	56.6%	24	23.9%	38	1,506,790	57.0%	21	16.3%	8	2.62	18	3.13	25
Alaska	550,043	82.7%	38	3.8%	5	56.6%	22	27.2%	17	188,915	56.2%	29	14.2%	27	2.80	3	3.33	3
Arizona	3,665,228	82.9%	34	2.2%	46	55.7%	31	25.5%	26	1,368,843	54.6%	40	14.0%	28	2.62	20	3.16	13
Arkansas	2,350,725	85.9%	6	2.5%	34	59.7%	7	20.7%	51	891,179	59.2%	7	13.9%	30	2.57	31	3.06	41
California	29,760,021	82.8%	37	2.5%	32	51.9%	48	30.1%	4	10,381,206	52.7%	47	16.1%	11	2.79	4	3.32	4
Colorado	3,294,394	81.1%	47	2.4%	36	56.0%	28	25.8%	24	1,282,489	53.8%	44	12.8%	35	2.51	49	3.07	39
Connecticut	3,287,116	83.1%	29	3.1%	14	54.1%	39	29.0%	9	1,230,479	55.6%	34	14.6%	22	2.59	27	3.10	30
Delaware	666,168	83.3%	26	3.0%	17	54.6%	37	27.6%	12	247,497	55.8%	32	15.3%	17	2.61	22	3.09	32
District of Columbia	606,900	66.3%	51	6.9%	1	28.8%	51	47.6%	1	249,634	25.3%	51	23.6%	1	2.26	51	3.15	20
Florida	12,937,926	82.0%	43	2.4%	39	56.3%	27	22.6%	44	5,134,869	54.4%	41	14.0%	29	2.46	50	2.95	51
Georgia	6,478,216	84.9%	15	2.7%	29	54.7%	36	26.2%	22	2,366,615	55.2%	36	17.2%	6	2.66	13	3.16	17
Hawaii	1,108,229	85.2%	14	3.4%	9	55.1%	34	29.8%	5	356,267	59.1%	9	14.9%	20	3.01	2	3.48	2
Idaho	1,006,749	85.8%	9	2.1%	47	62.2%	1	21.2%	49	360,723	62.2%	2	10.8%	47	2.73	9	3.23	10
Illinois	11,430,602	84.0%	21	2.5%	33	53.3%	44	28.8%	10	4,202,240	54.1%	43	15.5%	14	2.65	15	3.23	9
Indiana	5,544,159	84.4%	19	2.9%	22	57.4%	16	24.3%	35	2,065,355	58.2%	13	13.5%	32	2.61	24	3.11	27
Iowa	2,776,755	82.4%	40	3.6%	7	59.5%	8	23.7%	40	1,064,325	59.2%	6	10.4%	50	2.52	48	3.05	47
Kansas	2,477,574	82.9%	32	3.3%	13	59.8%	5	22.7%	43	944,726	58.5%	12	11.2%	46	2.53	42	3.08	37
Kentucky	3,685,296	85.9%	8	2.7%	25	58.7%	13	22.6%	45	1,379,782	59.2%	5	14.4%	25	2.60	25	3.08	38
Louisiana	4,219,973	86.0%	5	2.7%	30	53.0%	45	27.4%	14	1,499,269	53.6%	45	19.1%	3	2.74	6	3.28	5
Maine	1,227,928	82.9%	35	3.0%	16	58.0%	15	24.0%	36	465,312	58.1%	15	12.5%	37	2.56	35	3.03	49
Maryland	4,781,468	84.0%	22	2.4%	38	52.8%	46	29.1%	8	1,748,991	54.2%	42	17.0%	7	2.67	12	3.14	21
Massachusetts	6,016,425	80.8%	48	3.6%	8	50.5%	49	32.8%	2	2,247,110	52.1%	48	15.3%	16	2.58	30	3.15	19
Michigan	9,295,297	84.7%	17	2.3%	43	54.0%	40	27.8%	11	3,419,331	55.1%	37	16.3%	9	2.66	14	3.16	15
Minnesota	4,375,099	82.2%	42	2.7%	28	57.2%	18	27.4%	15	1,647,853	57.2%	19	11.4%	44	2.58	29	3.13	24
Mississippi	2,573,216	86.9%	2	2.7%	27	53.4%	43	26.7%	20	911,374	54.7%	39	19.3%	2	2.75	5	3.27	7
Missouri	5,117,073	83.5%	25	2.8%	24	57.0%	20	23.9%	37	1,961,206	56.3%	28	13.4%	33	2.54	41	3.08	35
Montana	799,065	82.9%	31	3.0%	20	59.8%	4	22.3%	46	306,163	57.7%	17	11.5%	43	2.53	44	3.08	36
Nebraska	1,578,385	82.9%	33	3.0%	18	59.2%	11	24.4%	34	602,363	58.2%	14	10.8%	48	2.54	40	3.11	28
Nevada	1,201,833	80.6%	50	2.0%	49	53.8%	41	23.7%	39	466,297	51.4%	49	14.5%	23	2.53	46	3.06	44
New Hampshire	1,109,252	83.1%	28	2.9%	23	58.2%	14	25.5%	29	411,186	59.7%	4	11.5%	42	2.62	19	3.09	34
New Jersey	7,730,188	85.6%	10	2.2%	45	53.8%	42	29.1%	7	2,794,711	56.5%	25	15.8%	12	2.70	10	3.21	12
New Mexico	1,515,069	85.9%	7	1.9%	50	56.0%	29	25.8%	25	542,709	56.0%	31	16.2%	10	2.74	7	3.26	8
New York	17,990,455	82.5%	39	3.0%	15	49.9%	50	32.1%	3	6,639,322	49.9%	50	17.7%	4	2.63	16	3.22	11
North Carolina	6,628,637	83.9%	23	3.4%	10	56.3%	26	25.1%	31	2,517,026	56.6%	24	15.4%	15	2.54	39	3.03	48
North Dakota	638,800	82.3%	41	3.8%	4	59.7%	6	25.9%	23	240,878	59.1%	8	9.9%	51	2.55	37	3.13	23
Ohio	10,847,115	84.5%	18	2.4%	37	55.9%	30	25.5%	27	4,087,546	56.1%	30	14.7%	21	2.59	26	3.12	26
Oklahoma	3,145,585	84.2%	20	3.0%	19	59.3%	10	20.9%	50	1,206,135	57.7%	16	13.2%	34	2.53	45	3.06	43
Oregon	2,842,321	81.8%	44	2.3%	40	57.3%	17	23.1%	42	1,103,313	55.6%	35	12.5%	39	2.52	47	3.02	50
Pennsylvania	11,881,643	83.6%	24	2.9%	21	54.5%	38	27.3%	16	4,495,966	55.7%	33	14.5%	24	2.57	33	3.10	31
Rhode Island	1,003,464	81.6%	45	3.8%	2	52.4%	47	29.6%	6	377,977	53.5%	46	15.0%	18	2.55	36	3.11	29
South Carolina	3,486,703	85.4%	12	3.3%	12	55.0%	35	26.4%	21	1,258,044	56.4%	27	17.3%	5	2.68	11	3.16	16
South Dakota	696,004	83.0%	30	3.7%	6	59.5%	9	24.4%	33	259,034	58.9%	11	10.7%	49	2.59	28	3.16	14
Tennessee	4,877,185	85.3%	13	2.6%	31	57.1%	19	23.2%	41	1,853,725	57.2%	20	15.6%	13	2.56	34	3.05	46
Texas	16,986,510	85.4%	11	2.3%	41	56.6%	25	25.1%	30	6,070,937	56.6%	23	15.0%	19	2.73	8	3.28	6
Utah	1,722,850	88.5%	1	1.7%	51	60.6%	3	25.5%	28	537,273	64.8%	1	11.7%	41	3.15	1	3.67	1
Vermont	562,758	80.6%	49	3.8%	3	55.5%	33	27.6%	13	210,650	56.4%	26	12.3%	40	2.57	32	3.06	42
Virginia	6,187,358	82.8%	36	3.4%	11	55.7%	32	27.1%	19	2,291,830	56.8%	22	14.3%	26	2.61	23	3.09	33
Washington	4,866,692	81.5%	46	2.5%	35	56.6%	23	24.8%	32	1,872,431	55.0%	38	12.6%	36	2.53	43	3.06	40
West Virginia	1,793,477	86.0%	4	2.1%	48	58.8%	12	22.2%	47	688,557	59.0%	10	13.7%	31	2.55	38	3.05	45
Wisconsin	4,891,769	83.2%	27	2.7%	26	56.7%	21	27.1%	18	1,822,118	57.5%	18	12.5%	38	2.61	21	3.14	22
Wyoming	453,588	84.7%	16	2.3%	44	61.3%	2	21.7%	48	168,839	59.7%	3	11.3%	45	2.63	17	3.16	18

Source: U.S. Bureau of the Census, Summary Tape File 1C.

☆ Social Indicators

Utah is 100 years old in 1996 and many people are reflecting on the legacy of quality that has made Utah a unique and wonderful place to call home. In a sense this entire publication reports on the social well-being of citizens of the state of Utah. The fact that quality of life and economic performance are intertwined cannot be denied, but the exact relationships are difficult to ascertain. Quality of life and social well-being are subjective notions. Determining the quality of life might entail examining ownership of material things, measuring the physical health of the population, assessing the availability of affordable housing, or evaluating the safety of neighborhoods. Determining quality of life can be as simple as measuring income, or as complex as measuring how well society cares for children.

The State of Utah has received recognition recently for being well-managed by government leaders (*Financial World*, 1995) and has received 'A' ratings for economic performance and capacity for development (Corporation for Enterprise Development, 1995). Utah has been praised as being among the "healthiest states" (Reliastar State Health Ranking study, 1995), and among the "most livable states" (Morgan Quitno Press, 1995). The state has also been named as being one of the best states to raise children (Casie Foundation, 1995). These studies are among many that seem to indicate Utahns are enjoying a high quality of life.

The studies cited above base ratings on socioeconomic indicators varying from data on the labor force (unemployment, earnings, educational attainment) and environmental conditions (water and air quality, commuting time, crime), to data about the physical health of the population (heart disease, cancer, infant mortality, deaths from infectious diseases). Obviously the state does not perform the best in every area, and these measurements can be analyzed in conflicting ways: for example, low wages may be attractive from a business perspective but not from the perspective of a worker.

This chapter first describes some Utah resources for quality-of-life data that complement and expand on many of the data and issues presented in the *Economic Report to the Governor.* Data on the social indicators of crime, education, health, housing, and poverty/public assistance are then presented. These data have not been interpreted or analyzed. Rather the data are provided as a starting point for further dialogue about social issues in the context of Utah's economic performance.

Utah Quality of Life Reports

Quality of Life Survey

In Utah, the most comprehensive measure of quality of life is the Utah Quality of Life Survey. This survey was conducted in 1994 by the University of Utah's Survey Research Center (no longer in existence) under the sponsorship of the Center for Public Policy and Affairs, the Department of Health, and the Commission on Criminal and Juvenile Justice. In this survey, quality of life is conceptualized using 14 life domains about which respondents were questioned, including:

- ☆ mental health
- ☆ family and personal relationships
- ☆ community and neighborhood
- ☆ financial security
- ☆ housing
- ☆ leisure time
- ☆ public education
- ☆ job security
- ☆ human rights
- ☆ transportation
- ☆ environment and natural resources
- ☆ cultural and arts activities
- ☆ physical health
- ☆ crime

The results illuminate Utahns' individual perception of their own quality of life. The 1994 Survey measured an overall quality of life in Utah that was higher in 1994 than 1993.[22]

Growth Summit Survey

Governor Michael Leavitt and leaders of the Utah State Legislature held a 'Growth Summit' to address critical infrastructure challenges created by large population growth in the state. The Growth Summit was held in December for the purpose of creating an environment leading to legislative solutions for: transportation funding, development of a water policy, and tools for preservation of open space and wildlife habitat protection. A survey was conducted for the Summit in November 1995 in which a sample of Utahns were asked what are the most important issues facing the State of Utah. Respondents stated that growth...overpopulation was the most important issue. Crime, education, and youth/gang violence also ranked among the most important. Eighty-one percent of respondents indicated that the amount of growth currently occurring with the state of Utah is at least somewhat positive.[23]

Kids Count Project

A collection of indicators of child well-being was assembled for the Utah Kids Count Project. Information about child well-being is a critical part of understanding Utah's standard of living. Maintaining Utah's quality of life for the next 100 years will depend heavily on the ability to build human capital; this process starts with preserving the welfare of Utah children. The indicators examined in this project fall into the domains of health, education, safety and economic security, including:

- ☆ Prenatal Care
- ☆ Low Birth Weight Babies
- ☆ Infant Mortality
- ☆ Births to Teens
- ☆ Immunization Rates
- ☆ Free and Reduced Meals at School
- ☆ Average Class Size
- ☆ Per Pupil Expenditures
- ☆ Dropout Rates
- ☆ Idle Teens
- ☆ Child Abuse
- ☆ Child Deaths
- ☆ Teen Violent Deaths
- ☆ Juvenile Violent Crime Arrest Rate
- ☆ Family Composition
- ☆ Divorce Rates
- ☆ Children in Poverty
- ☆ Child Care Availability
- ☆ AFDC Cases and Recipients

By many of these measures Utah children are well taken care of compared to other states and the nation as a whole.[24]

Social Indicators

As mentioned previously, this chapter presents only a few social indicators related to the domains of crime, education, health, housing, and poverty/public assistance. The data are presented for the purpose of initiating dialogue about the relationships between social issues and economic performance.

Crime

The Provo-Orem Metropolitan Statistical Area ranked among the safe havens in 1994, because of its low rate of violent crimes. The Federal Bureau of Investigation's reports the violent crime rate per 100,000

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[22] *Quality of Life in Utah: 1994 Report.* 1995: University of Utah, Survey Research Center; University of Utah Center for Public Policy and Administration; Utah Department of Health; Governor's Commission on Criminal and Juvenile Justice.

[23] Growth Summit Survey Results, 1995. Conducted by Dan Jones & Associates Inc. And Insight Research, Inc.

[24] *Measures of Child Well-Being in Utah, 1996.* 1996: Utah Children

people in the publication, *Crime in the United States, 1994.* This data show the Provo-Orem Metropolitan Statistical Area to be among the ten lowest of metropolitan statistical areas, with a rate of 141.9. The Salt Lake-Ogden Metropolitan Statistical Area's rate was much higher at 375.5 violent crimes per 100,000 people in 1994. Violent crime rates of over 1,000 are common among the nation's largest metros, the highest rate (1,914.2) was in the Miami, Florida Metropolitan Statistical Area. The rate for the non-metro population of the state is 215.7. Overall in Utah the rate of violent crime per 100,000 was 304.5 in 1994, which places Utah 40th in a ranking of states from highest rate to lowest (Table 35). Utah also has a low rate for the number of federal and state prisoners per 1,000 people. Utah has the 47th lowest number, with 1.5 prisoners per 1,000 people in 1992. Utah does not rank quite as well for the number of cases of child abuse reported in 1992, with approximately 16,000 child abuse cases reported in 1992. Utah ranks 34th from the highest (the rankings for this indicator have not been adjusted for population, Table 35).

Education

Utah consistently ranks low relative to other states in measures of resources devoted to education (teacher salaries, per pupil expenditures, pupil-teacher ratios), but does well in many of the measures of performance (graduation rate, educational attainment, college entrance exam scores). Data from the 1990 Census of Population and Housing indicated that 85.1 percent of the population ages 25 and over had obtained a high school degree, with that Utah had the second highest percentage among the states. Utah ranks 15th highest for percent of the population over age 24 with at least a Bachelor's degree (Table 35). More recent data shows that Utah continues to rank high in educational attainment. A report on 1993 numbers from the Current Population Survey conducted by the U.S. Bureau of the Census shows approximately 90 percent of the population over age 25 with at least a high school degree, and about 23 percent with at least a Bachelor's degree.

Health

Once again in 1994 Utah had the highest birth rate of all states--20.3 births per 1,000 people. The infant mortality rate was among the best, only 2 states had lower rates. There were 6 infant deaths per 1,000 live births in 1994 (Table 36). The 1994 death rate is the lowest in the nation and is a factor of the age composition of Utah's population. Utah has the youngest median age in the country (26.7 years old, national median age is 34 years old). Also Utah has the lowest percent of the population over age 64. Most Utah residents are not yet old enough to get cancer or heart diseases so the death rates per 100,000 from these causes are among the lowest.

Availability of health care is suggested by the low infant mortality rate stated above, and by statistics on health insurance coverage. Only 11.5 percent of persons lacked health insurance during 1990-1992. Community hospitals in the state average 55.2 percent occupancy rate which is among the lowest occupancy rates of all states. Low occupancy rate of community hospitals can indicate underutilization of health care facilities that negatively impacts the costs to paying customers.

Housing

Information about the median sales price of single-family homes is available from the National Board of Realtors®. Table 37 shows how the median sales price of single-family homes in the Salt Lake City metro area compares to other areas. Data collected for metropolitan areas reveal that the median price of an existing house in Salt Lake City is appreciating at a rate that is among the highest in the U.S. The issue of diminishing housing affordability is discussed in the "Construction and Housing" chapter of this report.

Poverty/Public Assistance

Data from the 1990 Census of Population and Housing conducted by the U.S. Bureau of the Census indicates a poverty rate of 11.4 percent for Utah, ranking the state 34th from the highest rate (25.2 percent in Mississippi). Additional measures of poverty and participation in public assistance programs are given in Table 38. ☆

Table 35
Social Indicators in Domains of Crime and Education

	CRIME						EDUCATION			
	Violent Crime Rate per 100,000 People, 1994 (1)		Federal & State Prisoners per 1,000 People, 1992 (2)		Child Abuse Cases Reported (1,000) 1992 (2)		Educational Attainment, Persons 25 years old and Over, 1990: High School or Higher (3)		Bachelor's Degree or Higher (3)	
	Rate	Rank	Rate	Rank	(1,000)	Rank	Percent	Rank	Percent	Rank
U.S.	716	--	3.5	--	1,899	--	75.2	--	20.3	--
Alabama	684	18	4.2	9	28	22	66.9	47	15.7	45
Alaska	766	12	4.9	4	10	39	86.6	1	23.0	12
Arizona	703	17	4.3	8	29	21	78.7	20	20.3	23
Arkansas	595	24	3.5	14	17	33	66.3	48	13.3	50
California	1,013	4	3.5	14	326	1	76.2	28	23.4	10
Colorado	510	29	2.6	28	34	17	84.4	3	27.0	4
Connecticut	456	33	3.5	14	14	35	79.2	17	27.2	2
Delaware	561	25	5.9	2	5	46	77.5	23	21.4	17
District of Colombia	2,663	1	18.6	1	6	45	73.1	39	33.3	1
Florida	1,147	2	3.6	13	116	3	74.4	37	18.3	30
Georgia	668	19	3.7	12	51	9	70.9	42	19.3	26
Hawaii	262	44	2.5	29	5	46	80.1	14	22.9	13
Idaho	286	41	2.1	36	12	38	79.7	16	17.7	35
Illinois	961	8	2.7	27	74	6	76.2	28	21.0	20
Indiana	525	26	2.5	29	39	14	75.6	31	15.6	46
Iowa	315	39	1.6	44	19	30	80.1	14	16.9	41
Kansas	479	32	2.4	31	22	28	81.3	10	21.1	19
Kentucky	605	23	2.8	25	36	15	64.6	50	13.6	49
Louisiana	982	6	4.9	4	26	24	68.3	44	16.1	43
Maine	130	48	1.2	48	5	46	78.8	18	18.8	28
Maryland	948	9	4.1	10	30	20	78.4	22	26.5	5
Massachusetts	708	15	1.7	43	32	18	80.0	15	27.2	2
Michigan	766	11	4.1	10	52	8	76.8	25	17.4	37
Minnesota	359	37	0.9	49	18	31	82.4	6	21.8	16
Mississippi	494	30	3.4	19	18	31	64.3	51	14.7	48
Missouri	744	14	3.1	22	49	11	73.9	38	17.8	33
Montana	177	47	1.8	41	10	39	81.0	11	19.8	25
Nebraska	390	35	1.6	44	8	42	81.8	8	18.9	27
Nevada	1,002	5	4.5	7	14	35	78.8	18	15.3	47
New Hampshire	117	49	1.6	44	7	44	82.2	7	24.4	8
New Jersey	614	22	2.9	24	50	10	76.7	26	24.9	6
New Mexico	889	10	2.1	36	27	23	75.1	33	20.4	22
New York	966	7	3.4	19	138	2	74.8	34	23.1	11
North Carolina	655	20	3.0	23	55	7	70.0	43	17.4	37
North Dakota	82	51	0.8	51	5	46	76.7	26	18.1	31
Ohio	486	31	3.5	14	95	5	75.7	30	17.0	40
Oklahoma	652	21	4.6	6	24	27	74.6	36	17.8	33
Oregon	521	27	2.2	34	26	24	81.5	9	20.6	21
Pennsylvania	427	34	2.1	36	26	24	74.7	35	17.9	32
Rhode Island	376	36	2.8	25	8	42	72.0	41	21.3	18
South Carolina	1,031	3	5.2	3	20	29	68.3	44	16.6	42
South Dakota	228	45	2.1	36	10	39	77.1	24	17.2	39
Tennessee	748	13	2.4	31	31	19	67.1	46	16.0	44
Texas	707	16	3.5	14	111	4	72.1	40	20.3	23
Utah	305	40	1.5	47	16	34	85.1	2	22.3	15
Vermont	97	50	2.2	34	3	50	80.8	12	24.3	9
Virginia	358	38	3.3	21	36	15	75.2	32	24.5	7
Washington	511	28	1.9	40	40	13	83.8	4	22.9	13
West Virginia	216	46	0.9	49	13	37	66.0	49	12.3	51
Wisconsin	271	43	1.8	41	48	12	78.6	21	17.7	35
Wyoming	273	42	2.3	33	3	50	83.0	5	18.8	28

Rank is highest value to lowest. When states share the same rank, the next lower rank is omitted.

Sources:
(1) Federal Bureau of Investigations, "Crime in the United States, 1994"
(2) Bureau of the Census, Statistical Abstract of the United States, 1994
(3) U.S. Bureau of the Census, 1990 Census of Population and Housing

Table 36
Social Indicators in the Health Domain

VITAL STATISTICS AND HEALTH

	Birth Rate per 1,000 People, 1994 (1)		Infant Deaths per 1,000 Live Births, 1994 (1)		Death Rate per 1,000 People, 1994 (1)		Death rate per 100,000 people, 1991: Heart Disease (2)		Death rate per 100,000 people, 1991: Cancer (2)		Persons Without Health Insurance, 1990-92 (2)		Community Hospitals Occupancy Rate* 1992 (2)	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Percent	Rank	Rate	Rank
U.S.	15.3	—	7.9	—	8.8	—	286	—	204	—	14.2	—	65.6	—
Alabama	14.4	26	9.9	4	10.0	8	322	12	216	15	17.3	11	62.1	27
Alaska	19.9	2	5.9	50	4.0	51	9	51	88	51	14.9	18	53.7	50
Arizona	16.2	9	8.6	19	8.5	34	234	41	191	36	15.8	14	60.2	36
Arkansas	14.1	32	8.0	25	10.9	3	346	6	236	6	17.6	10	59.1	40
California	18.5	3	6.7	39	7.1	47	222	45	165	44	19.0	8	62.5	26
Colorado	14.8	15	6.6	42	6.7	48	182	48	154	46	12.4	26	61.6	31
Connecticut	12.9	45	6.5	44	8.7	31	291	25	214	19	7.5	49	75.6	5
Delaware	14.7	19	7.0	36	8.8	27	283	29	224	13	12.7	24	70.2	11
District of Colombia	17.0	5	20.1	1	12.1	1	312	17	259	2	22.0	1	74.4	7
Florida	13.7	36	8.1	23	10.6	4	348	5	260	1	18.7	9	61.2	32
Georgia	15.4	12	9.7	5	8.0	38	249	35	175	42	16.1	13	65.3	18
Hawaii	16.3	7	6.5	44	6.1	49	180	49	146	49	6.8	51	81.7	2
Idaho	15.3	14	7.3	34	7.5	42	225	43	165	44	16.4	12	57.3	42
Illinois	16.1	10	9.1	10	9.2	19	309	18	212	25	11.8	31	64.9	20
Indiana	14.5	25	9.5	6	9.3	17	299	22	214	19	11.5	32	59.4	39
Iowa	12.7	48	7.0	36	9.3	17	346	6	228	12	9.0	44	59.6	37
Kansas	13.0	43	8.8	17	9.2	19	301	19	206	28	11.0	36	54.2	48
Kentucky	13.6	38	7.7	32	9.8	10	322	12	230	9	13.6	20	62.8	25
Louisiana	15.9	11	9.5	6	9.4	16	293	24	209	26	20.8	4	58.2	41
Maine	11.5	51	6.3	46	9.2	19	300	21	238	5	11.1	35	68.2	12
Maryland	14.3	28	8.9	13	8.1	36	242	38	201	32	12.3	27	75.5	6
Massachusetts	13.8	35	5.7	51	9.0	26	285	28	230	9	10.1	42	72.3	9
Michigan	14.7	19	8.6	19	8.8	27	295	23	206	28	9.4	43	64.8	21
Minnesota	14.2	30	6.7	39	8.0	38	241	39	189	39	8.8	45	66.6	14
Mississippi	16.3	7	10.1	3	10.1	7	372	2	213	21	19.3	6	59.6	37
Missouri	14.3	28	8.1	23	10.6	4	345	8	229	11	13.1	23	60.4	34
Montana	12.9	45	8.2	22	8.6	32	241	39	203	30	12.0	29	63.7	24
Nebraska	14.2	30	7.9	30	9.1	24	322	12	200	33	8.7	47	56.3	43
Nevada	14.8	15	6.2	47	8.1	36	250	33	186	40	19.3	6	60.4	34
New Hampshire	12.8	47	6.6	42	7.8	41	246	26	203	30	10.9	37	66.1	15
New Jersey	14.8	15	7.9	30	9.2	19	301	19	234	8	11.3	34	79.5	3
New Mexico	16.9	6	8.9	13	7.4	44	200	46	152	48	21.0	3	55.1	47
New York	15.4	12	8.5	21	9.2	19	353	4	213	21	12.6	25	84.2	1
North Carolina	14.4	26	9.0	11	9.1	24	281	30	198	34	14.2	19	71.2	10
North Dakota	13.5	39	9.3	9	9.6	11	286	27	216	15	7.4	50	65.4	17
Ohio	14.6	22	8.9	13	9.5	13	320	15	222	14	10.5	40	61.0	33
Oklahoma	14.0	33	9.4	8	10.0	8	340	9	215	17	19.5	5	56.2	45
Oregon	13.7	36	9.0	11	8.8	27	246	36	213	21	13.3	22	54.1	49
Pennsylvania	13.0	43	7.6	33	10.6	4	363	3	251	4	8.8	45	72.6	8
Rhode Island	13.5	39	6.0	48	9.4	16	323	11	236	6	10.2	41	76.9	4
South Carolina	13.9	34	8.9	13	8.6	32	268	31	190	38	15.4	16	67.9	13
South Dakota	14.7	19	11.8	2	9.5	13	331	10	215	17	12.2	28	62.1	28
Tennessee	14.6	22	8.8	17	9.6	11	313	16	213	21	13.6	20	61.9	29
Texas	17.5	4	7.2	35	7.5	42	227	42	168	43	21.9	2	56.3	43
Utah	20.3	1	6.0	48	5.5	50	157	50	112	50	11.5	32	55.2	46
Vermont	12.3	49	6.7	39	7.9	40	259	32	197	35	10.6	39	65.0	19
Virginia	14.6	22	8.0	25	8.2	35	250	33	191	36	15.5	15	65.8	16
Washington	14.8	15	8.0	25	7.4	44	223	44	183	41	10.7	38	61.9	29
West Virginia	11.8	50	6.8	38	11.1	2	393	1	257	3	15.0	17	64.4	22
Wisconsin	13.5	39	8.0	25	8.8	27	290	26	209	26	7.9	48	63.9	23
Wyoming	13.4	42	8.0	25	7.4	44	198	47	154	46	11.9	30	49.9	51

Note: Rank is highest value to lowest. When states share the same rank, the next lower rank is omitted.

* Ratio of average daily census to every 100 beds.

Sources:
(1) National Center for Health Statistics, "Monthly Vital Statistics Report. Vol. 43, No.13"
(2) Bureau of the Census, Statistical Abstract of the United States, 1994

Table 37
National Board of Realtors® Median Sales Price of Single-Family Home: 1992 - Second Quarter 1995
(thousands of dollars)

Metropolitan Area	1992	1993	1994	1994 Quarter II	1994 Quarter III	1994 Quarter IV	1995 Quarter I	1995 Quarter II
UTAH AREAS								
Salt Lake City	76.5	84.9	98.0	95.6	103.2	102.2	103.0	111.5
WESTERN AREAS								
Pheonix AZ	86.8	89.1	91.4	91.1	93.2	92	91.6	94.8
Los Angeles Area CA	210.8	195.4	189.1	190.9	191.1	182.7	177.1	176.3
San Diego CA	183.1	176.9	176.0	178.6	175.9	170.7	172.1	170.0
Denver CO	96.2	104.7	116.8	114.8	121.6	119.0	120.8	125.5
Boise ID	83.1	91.4	99.0	97.0	102.0	101.0	98.0	96.8
Las Vegas NV	104.3	108.2	110.5	109.9	110.8	111.0	111.6	110.5
Portland OR	97.7	106.0	116.9	117.6	118.7	120.0	120.6	127.2
OTHER AREAS								
Orlando FL	87.6	90.1	90.7	91.8	91.9	89.2	89.1	89.2
Boston MA	171.1	173.2	179.3	181.3	187.3	176.6	175.1	179.0
Kansas City MO-KS	79.5	83.6	87.1	86.8	88.6	87.7	88.5	90.3
Philadelphia PA-NJ	117.0	118.0	119.5	119.5	124.7	115.4	113.4	117.1
Houston TX	80.3	80.9	80.5	82.6	81.2	78.1	77.2	78.0

Source: National Board of Realtors

Table 38
Indicators of Public Assistance/Poverty

	Poverty Percent of Persons in Poverty, 1990 (1)		AFDC and/or SSI Percent of Population Receiving, 1992: (2)		Food Stamp Program Households Participating 1993 (2)			National School Lunch Program 1993 (2)	
	Percent	Rank	Percent	Rank	Number (1,000)	Percent of all Households	Rank	Persons (1,000)	Rank
U.S.	13.1	--	7.6	--	10,782	11.3	--	24,770	--
Alabama	18.3	7	7.1	19	216	13.8	10	565	15
Alaska	9.0	44	6.7	26	14	6.8	49	45	51
Arizona	15.7	13	6.4	28	178	12.1	14	365	27
Arkansas	19.1	5	6.8	23	106	11.6	18	310	30
California	12.5	24	10.7	3	1,075	10.0	27	2,292	1
Colorado	11.7	29	5.0	41	108	7.8	38	295	31
Connecticut	6.8	50	6.0	32	93	7.6	42	226	34
Delaware	8.7	46	5.2	38	21	8.0	36	61	46
District of Colombia	16.9	9	13.3	1	41	17.1	4	47	50
Florida	12.7	23	6.8	23	606	11.3	23	1,174	4
Georgia	14.7	16	8.5	11	315	12.4	13	948	7
Hawaii	8.3	47	5.9	34	44	11.6	18	150	38
Idaho	13.3	18	3.2	51	29	7.4	46	140	39
Illinois	11.9	27	7.9	14	493	11.5	20	959	6
Indiana	10.7	37	5.0	41	184	8.6	32	602	12
Iowa	11.5	30	5.0	40	78	7.3	48	383	25
Kansas	11.5	30	4.6	44	73	7.6	42	316	29
Kentucky	19.0	6	9.8	5	200	14.1	8	521	17
Louisiana	23.6	2	10.2	4	282	18.4	2	691	11
Maine	10.8	36	7.6	15	61	12.9	11	106	41
Maryland	8.3	47	6.0	32	159	8.7	31	352	28
Massachusetts	8.9	45	7.5	16	189	8.4	33	441	22
Michigan	13.1	20	9.0	7	419	12.0	15	747	10
Minnesota	10.2	39	5.7	35	131	7.7	40	510	18
Mississippi	25.2	1	11.8	2	200	21.4	1	423	23
Missouri	13.3	18	6.8	23	236	11.8	17	562	16
Montana	16.1	11	5.4	36	27	8.4	33	87	45
Nebraska	11.1	33	4.2	47	45	7.4	46	203	35
Nevada	10.2	39	3.6	49	42	7.8	38	89	43
New Hampshire	6.4	51	3.4	50	26	6.2	51	87	44
New Jersey	7.6	49	6.1	31	218	7.7	40	505	19
New Mexico	20.6	3	8.0	12	85	14.7	7	183	37
New York	13.0	21	9.0	7	943	14.1	8	1,617	3
North Carolina	13.0	21	7.2	17	253	9.6	28	751	9
North Dakota	14.4	17	4.3	46	19	7.9	37	92	42
Ohio	12.5	24	8.7	9	535	12.8	12	943	8
Oklahoma	16.7	10	6.4	28	146	11.9	16	370	26
Oregon	12.4	26	5.2	37	123	10.5	26	250	32
Pennsylvania	11.1	33	6.9	20	518	11.4	22	985	5
Rhode Island	9.6	43	8.0	12	40	10.6	25	56	48
South Carolina	15.4	15	6.7	26	146	11.1	24	459	21
South Dakota	15.9	12	4.6	44	20	7.6	42	108	40
Tennessee	15.7	13	8.6	10	317	16.4	5	601	13
Texas	18.1	8	6.3	30	975	15.2	6	2,119	2
Utah	11.4	32	3.8	48	47	8.1	35	249	33
Vermont	9.9	42	7.2	17	25	11.5	20	49	49
Virginia	10.2	39	4.8	43	225	9.3	30	586	14
Washington	10.9	35	6.9	20	191	9.5	29	406	24
West Virginia	19.7	4	9.7	6	124	17.7	3	199	36
Wisconsin	10.7	37	6.9	20	125	6.7	50	487	20
Wyoming	11.9	27	5.2	38	13	7.5	45	58	47

Sources:
(1) U.S. Bureau of the Census, 1990 Census of Population and Housing
(2) Bureau of the Census, Statistical Abstract of the United States, 1994

☆ Prices, Inflation, Cost of Living

The pace of inflation, as measured by the U.S. Consumer Price Index (CPI) for all urban consumers, remained highly favorable in 1995. Throughout 1995, the year-to-year Consumer Price Index increase varied between 2.5 to 3.2 percent (Figure 19). The 1995 annual average increase is estimated at 2.8 percent (Table 39).

The outlook for inflation in 1996 is for price increases near 2.5 percent. Capacity utilization rates have slipped from 85 percent to 83 percent; while the national unemployment rate in October was 5.5 percent. Productivity is high, unit-labor costs remain low, and wage pressure in the labor market is minimal. Growth in the nation's money supply, while admittedly hard to interpret, continues generally below target ranges.

Gross Domestic Product Deflators

In 1995, the Gross Domestic Product (GDP) implicit price deflator is estimated to increase 1.7 percent compared with 2.1 percent in 1994. The GDP personal consumption deflator in 1995 rose approximately 2.1 percent compared to 2.2 percent in 1994. Beginning in 1996, the Real Gross Domestic Product will be reported using a chain-weighted inflation index. Under this method, the composition of economic output (the weights) will be updated each year (Table 40).

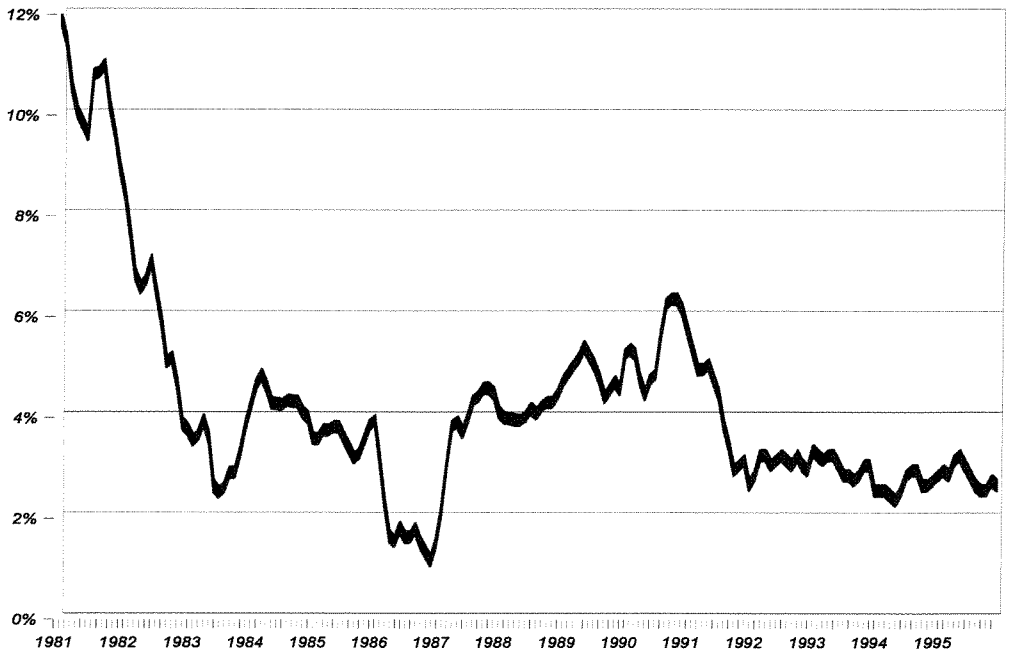
Utah Cost of Living

The American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index is prepared quarterly and includes comparative data for approximately 270 urban areas (Figure 20). The index consists of price comparisons for a single point in time, but it does not measure inflation or price changes over time. The differences between areas in the cost of consumer goods and services are 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. Additional Utah-specific price information can be obtained through First Security Bank or Weber State University.

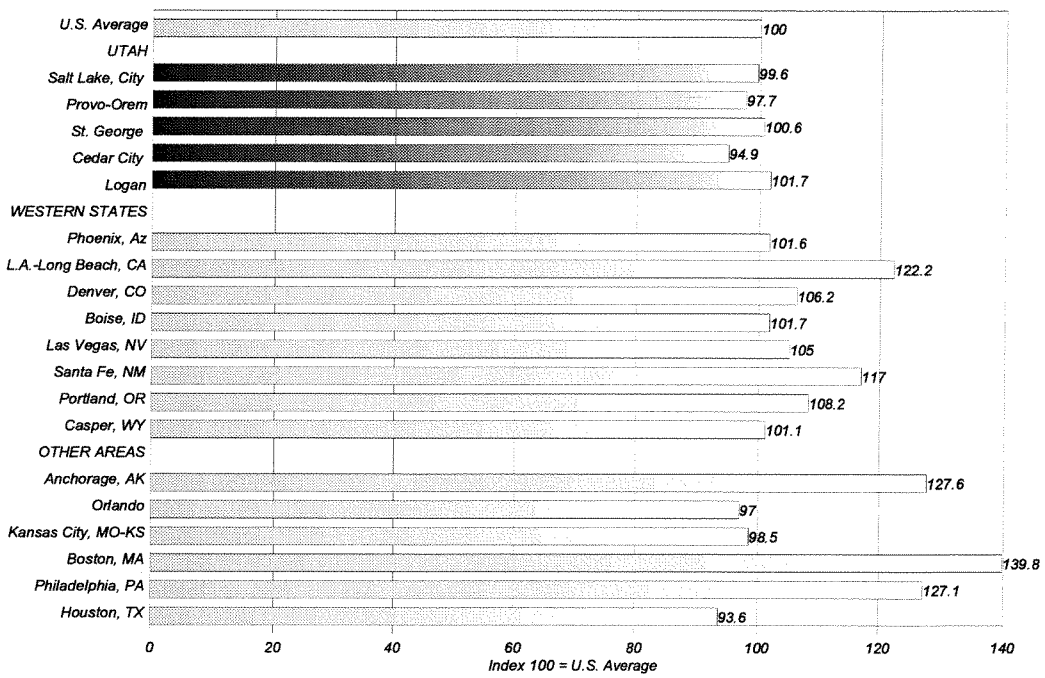
The second-quarter 1995 composite index for Salt Lake City was 99.6, virtually the same as the national average for the quarter. Other Utah cities included in the second-quarter survey were Cedar City (94.9), Logan (101.7), Provo-Orem (97.7), and St. George (100.6), as found in Table 41. Historical figures by component for the Salt Lake City area may be found in Table 42. ☆

Figure 19
Increase in Prices Measured by CPI: Monthly from 1981 to 1995



Source: U.S. Department of Labor

Figure 20
Cost of Living Comparisons for Selected Metropolitan Areas: Second Quarter 1995



Source: American Chamber of Commerce Researchers Association (ACCRA)

Table 39
U.S. Consumer Price Index for All Urban Consumers (1982-1984=100): 1954 to 1995

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual Avg.	Percent Change Dec.-Dec.	Percent Change Annual Avg.
1954	26.9	26.9	26.9	26.8	26.9	26.9	26.9	26.9	26.8	26.8	26.8	26.7	26.9	-0.7	0.7
1955	26.7	26.7	26.7	26.7	26.7	26.7	26.8	26.8	26.9	26.9	26.9	26.8	26.8	0.4	-0.4
1956	26.8	26.8	26.8	26.9	27.0	27.2	27.4	27.3	27.4	27.5	27.5	27.6	27.2	3.0	1.5
1957	27.6	27.7	27.8	27.9	28.0	28.1	28.3	28.3	28.3	28.3	28.4	28.4	28.1	2.9	3.3
1958	28.6	28.6	28.8	28.9	28.9	28.9	29.0	28.9	28.9	28.9	29.0	28.9	28.9	1.8	2.8
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	360.4	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	120.7	118.3	4.6	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	136.3	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	140.4	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	144.6	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	148.3	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	153.8(e)	152.4(e)	2.7(e)	2.8(e)

(e) = estimate

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

Table 40
Gross Domestic Product Implicit Price Deflators (1987=100): 1974 to 1995

Year	Gross Domestic Product Deflator	Change from Previous Year	Personal Consumption Expenditures Deflator	Change from Previous Year	Chain-Weighted Index, Annual % Change
1974	44.9	8.7%	45.2	10.2%	
1975	49.2	9.6%	48.9	8.2%	
1976	52.3	6.3%	51.8	5.9%	
1977	55.9	6.9%	55.4	6.9%	
1978	60.3	7.9%	59.4	7.2%	
1979	65.5	8.6%	64.7	8.9%	
1980	71.7	9.5%	71.4	10.4%	
1981	78.9	10.0%	77.8	9.0%	2.5%
1982	83.8	6.2%	82.2	5.7%	2.2%
1983	87.2	4.1%	86.2	4.9%	3.8%
1984	91.0	4.4%	89.6	3.9%	7.0%
1985	94.4	3.7%	93.1	3.9%	3.2%
1986	96.9	2.6%	96.0	3.1%	2.9%
1987	100.0	3.2%	100.0	4.2%	3.1%
1988	103.9	3.9%	104.2	4.2%	3.9%
1989	108.5	4.4%	109.3	4.9%	2.6%
1990	113.2	4.3%	114.9	5.1%	1.2%
1991	117.6	3.8%	119.7	4.2%	0.7%
1992	120.9	2.8%	123.5	3.1%	2.1%
1993	123.5	2.2%	126.6	2.5%	2.5%
1994	126.1	2.1%	129.3	2.1%	3.6%
1995 (e)	128.2	1.7%	132.1	2.2%	2.0%

(e) = estimate

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

Table 41
American Chamber of Commerce Researcher's Association Cost of Living Comparisons for Selected Metropolitan Areas: Second Quarter 1995

COMPONENT INDEX WEIGHT:	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	99.6	96.5	99.3	93.1	98.6	109.0	101.4
Cedar City (Nonmetro)	94.9	104.4	82.6	85.5	104.0	99.4	99.7
Logan (nonmetro)	101.7	104.9	107.8	85.2	99.6	99.6	99.8
Provo-Orem	97.7	96.9	101.2	81.9	102.8	99.2	97.3
St George (Nonmetro)	100.6	102.8	109.2	80.7	100.8	98.2	97.5
WESTERN AREAS							
Phoenix AZ	101.6	106.6	97.2	104.5	108.8	112.7	98.3
Los Angeles-Long Beach CA	122.2	123.7	136.8	94.2	121.6	136.6	113.5
San Diego CA	122.8	113.0	164.2	77.8	132.9	115.1	101.9
Denver CO	106.2	101.9	117.2	95.6	110.7	125.0	96.9
Boise ID	101.7	98.1	110.1	78.4	95.4	112.2	101.8
Las Vegas NV	105.0	104.0	105.8	101.6	114.2	120.0	100.3
Santa Fe NM	117.0	104.8	148.3	107.8	109.9	112.9	101.4
Portland OR	108.2	100.2	127.1	69.9	106.1	128.1	102.3
Casper WY	101.1	102.7	105.8	78.0	94.1	104.8	103.2
OTHER AREAS							
Anchorage AK	127.6	124.6	136.9	102.6	112.6	174.1	122.8
Orlando FL	97.0	98.7	87.9	116.3	97.7	101.8	98.3
Boston MA	139.8	117.1	194.5	130.1	121.6	139.6	111.7
Kansas City MO-KS	98.5	97.1	94.3	106.4	97.6	102.8	100.3
Philadelphia PA	127.1	116.1	142.9	184.7	119.4	105.1	111.3
Houston TX	96.3	95.5	89.2	94.8	111.2	104.5	97.3

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

Table 42
American Chamber of Commerce Researchers Association Cost of Living Index for Salt Lake Metropolitan Area: Second Quarter 1981-1995

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
1981	100.1	96.1	107.3	80.7	107.8	100.9	101.8
1982	100.9	101.2	107.5	89.4	103.5	100.6	99.0
1983	96.0	96.2	104.9	88.0	95.2	98.6	92.2
1984	98.0	100.3	97.4	88.2	97.5	106.8	98.9
1985	101.7	100.6	97.9	95.3	102.2	103.2	107.1
1986	101.4	102.9	94.4	97.2	98.6	105.3	107.5
1987	99.3	95.4	94.0	96.2	105.5	101.6	103.4
1988	98.3	94.6	88.4	94.0	105.4	106.1	104.4
1989	95.6	94.8	86.9	89.8	101.1	100.9	100.9
1990	92.0	88.8	81.5	84.4	97.0	93.7	101.9
1991	93.8	95.4	81.5	93.4	100.4	93.3	99.2
1992	96.9	105.3	84.8	92.8	104.8	101.1	101.6
1993*	96.8	99.7	86.0	89.4	104.0	99.6	103.7
1994	97.5	101.8	96.6	93.7	95.0	108.6	95.8
1995	99.6	96.5	99.3	93.1	98.6	109	101.4

* First Quarter 1993:Salt Lake City not included in Second Quarter 1993 ACCRA Report.

**Second Quarter 1995: Weight percentages may differ from year to year

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

☆ International Merchandise Exports

The value of Utah's 1994 international merchandise exports decreased by 1.2 percent from 1993 levels to $2.51 billion. The value of merchandise exports for 1993 had fallen by 12.3 percent from the record 1992 level. The fluctuations in the value of Utah's international merchandise exports are primarily attributable to price fluctuations in the primary metal market, which continues to be Utah's largest merchandise export industry in value terms.

The Value of Utah's Exports

The State of Utah has become more integrated into the world economy as the value of merchandise exports has grown from $943 million in 1988 to $2.51 billion in 1994, an increase of $1.57 billion or 166 percent. Over this same period, Gross State Product (GSP), the broadest measure of the productive activity in the state, increased from $27.0 billion to an estimated $43.6 billion. Thus merchandise exports have gained in share of GSP from 3.5 percent in 1988 to 5.8 percent in 1994. The value of Utah's merchandise exports reached a record level of $2.90 billion in 1992, increasing by 40.6 percent from 1991 (Figure 21). The state's merchandise exports decreased in value terms by 12.3 percent in 1993 to $2.54 billion, and decreased by 1.2 percent in 1994 to $2.51 billion.

The fluctuations that have occurred in the value of the state's merchandise exports over the past four years are almost wholly explained by primary metal export fluctuations as measured in value terms. For 1991 through 1994, primary metal products have represented between 30 percent and 45 percent of the total value of Utah's merchandise exports. Over this time period, the value of primary metal exports ranged from $0.6 billion to $1.3 billion. Much of this fluctuation has resulted from changes in world commodity prices, specifically the price of copper, as the volume of these exports has remained relatively constant. Exports of all other merchandise except primary metal products has been relatively more constant varying between $1.4 billion and $1.6 billion during the same time.

Industry Composition of Utah's Merchandise Exports

In 1994, primary metal products were 36.5 percent of the value of Utah's international merchandise exports. Other major export industries in 1994 were metallic ores (11.3 percent), electrical and electronic equipment (9.1 percent), transportation equipment (8.6 percent), and industrial machinery (8.2 percent). This composition is shown in Table 43 and Figure 22.

Destination of Utah's Merchandise Exports

Utah's largest markets for merchandise exports are in eastern Asia, Canada, and Europe. In 1994 the top five destination countries for Utah's merchandise exports accounted for $1.58 billion of the $2.51 billion total, or 62.9 percent. Further, these top five destination markets purchased 76.1 percent of primary metal exports, 97.4 percent of coal exports, 48.5 percent of metallic ore exports, 30.7 percent of electrical and electronic machinery exports, 29.6 percent of instruments and related product exports, 75.9 percent of chemicals and allied products, and 61.1 percent of transportation equipment exports from Utah in 1994 (Table 44, Table 45, and Figure 23).

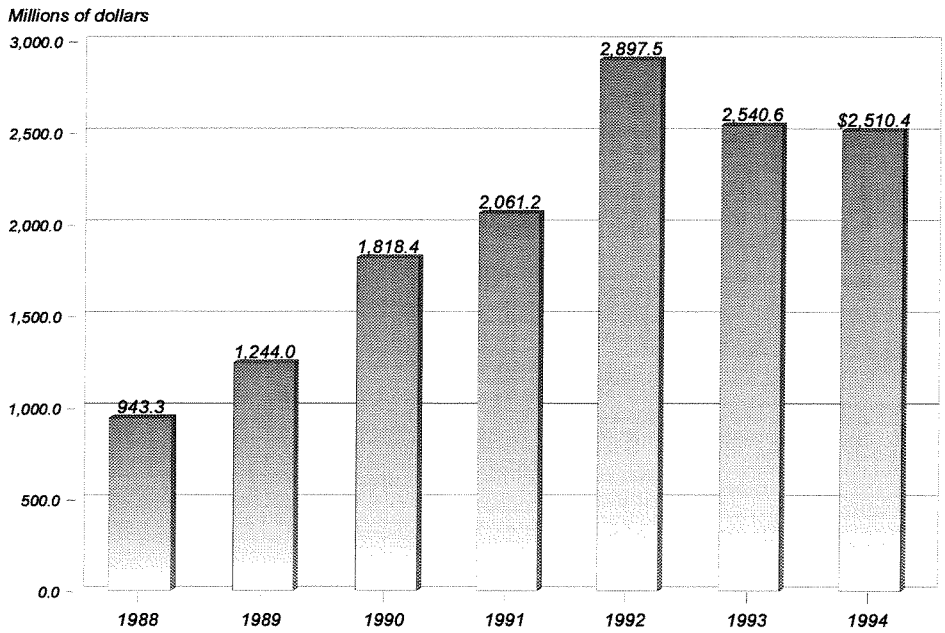
Hong Kong, Utah's fifth largest export market in 1993, was the state's largest export market in 1994. The great bulk of the $463.7 million in purchases (95.7 percent or $444.0 million) were concentrated in primary metal products. Canada was the second largest market for Utah exports in 1994, purchasing a total of $360.7 million of merchandise. Canada's purchases were much more disbursed across industries with significant purchases of transportation equipment (21.8 percent or $78.8 million), electronic and electrical equipment (15.8 percent or $56.9 million), industrial machinery and computer equipment (11.6 percent or $42.0 million), chemicals and allied products (8.7 percent or $31.4 million), and metallic ores (8.6 percent or $31.2 million). Japan was Utah's third largest merchandise export destination in 1994 and also had purchases distributed across a range of industries. Of total Utah merchandise exports to Japan in 1994, $106.4 million (30.1 percent) was metallic ores, $63.3 million (17.9 percent) was bituminous coal, and

$53.5 million (15.1 percent), chemicals and allied products. Taiwan, Utah's largest export market for 1993, was the fourth largest export market in 1994. About 61 percent ($124.3 million) of this was primary metal products, $31.4 million (15.4 percent) was chemicals and allied products, and $16.4 million (8.1 percent), coal purchases. Nearly two-thirds (64.7 percent) of Utah's exports to its fifth largest trading partner, Germany, was $128.0 million of primary metal products.

Limitations of These Export Data

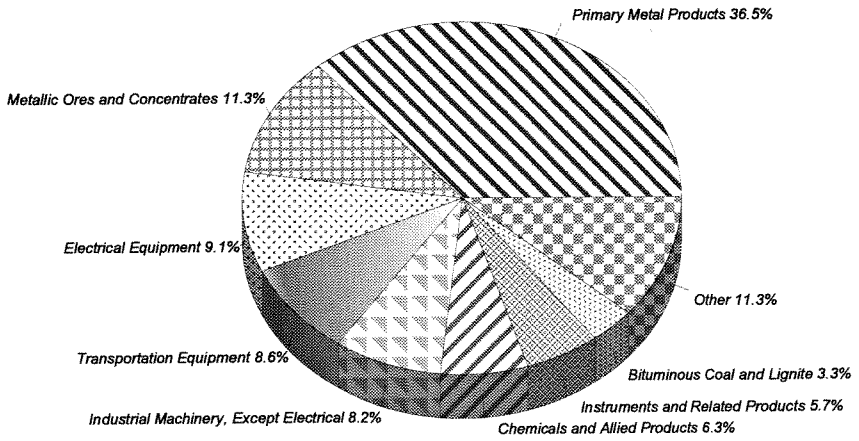
The export data presented here have been generated by the U.S. Census Bureau, Foreign Trade Division and has been adjusted by the Massachusetts Institute for Social and Economic Research (MISER). The series, called "Origin of Movement," is designed to measure the transportation origin of exports, and 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. Further, data on international imports by state are not compiled, making it impossible to determine a balance of trade for Utah. ☆

Figure 21
Utah Merchandise Exports: 1988 to 1994



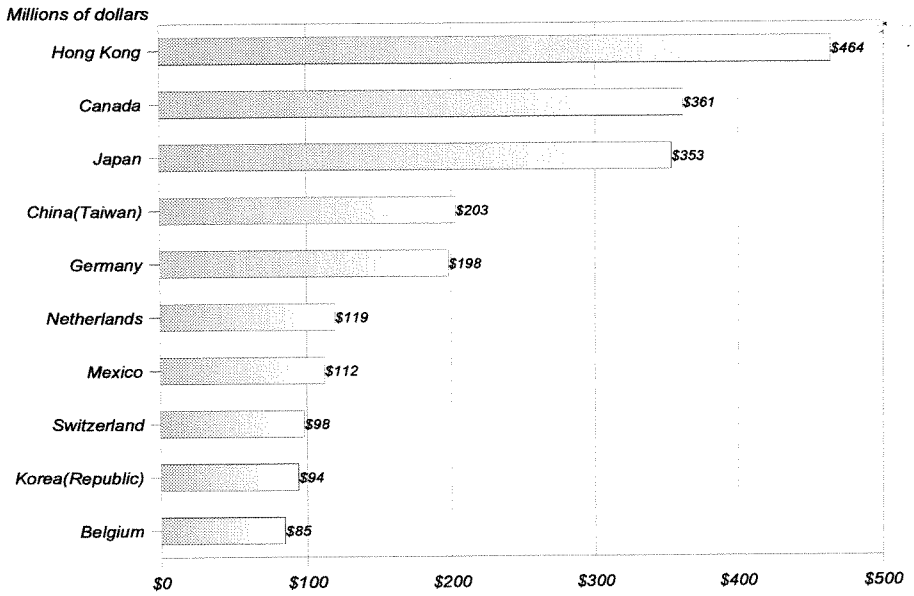
Source: U.S. Bureau of the Census Foreign Trade Division;
and Massachusetts Institute for Social and Economic Research (MISER)

Figure 22
Utah Merchandise Exports by Industry: 1994



Source: U.S. Bureau of the Census Foreign Trade Division;
and Massachusetts Institute for Social and Economic Research (MISER)

Figure 23
Utah Merchandise Exports to Selected Countries: 1994



Source: U.S. Bureau of the Census Foreign Trade Division; and Massachusetts Institute for Social and Economic Research (MISER)

Table 43
Utah Merchandise Exports by Industry (Thousands of Dollars): 1988 to 1994

SIC Code	Industry Description	1988	1989	1990	1991	1992	1993	1994	Industry as a Percent of 1994 Total	Percent Change 1991-92	1992-93	1993-94
1	Agricultural Products	$278.6	$1,687.1	$1,864.1	$1,477.2	$1,057.6	$2,900.1	$4,229.1	0.2	-28.4	174.2	45.8
2	Livestock and Livestock Products	501.8	562.0	153.6	98.4	173.8	486.4	87.4	0.0	76.6	179.9	-82.0
8	Forestry Products	189.0	32.2	52.5	5.0	74.2	23.3	43.3	0.0	1394.4	-68.7	86.4
9	Fishing, Hunting, and Trapping	3,521.2	213.2	572.0	732.4	334.7	1,279.3	1,097.7	0.0	-54.3	282.3	-14.2
10	Metallic Ores and Concentrates	15,668.7	213,167.4	209,220.6	196,613.3	282,205.1	224,861.2	283,769.2	11.3	43.5	-20.3	26.2
12	Bituminous Coal and Lignite	32,775.4	80,003.3	64,021.2	84,073.2	78,485.8	81,193.1	81,921.4	3.3	-6.6	3.4	0.9
13	Crude Petroleum and Natural Gas	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Nonmetallic Minerals, Except Fuels	1,842.7	10,265.9	5,166.0	7,833.0	11,766.7	8,153.6	8,962.7	0.4	50.2	-30.7	9.9
20	Food and Kindred Products	33,230.1	53,931.7	57,903.5	54,963.2	60,006.5	74,419.4	72,801.8	2.9	9.2	24.0	-2.2
21	Tobacco Manufacturers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	Textile Mill Products	1,577.8	2,240.1	2,162.2	1,644.9	1,590.6	2,107.2	2,836.0	0.1	-3.3	32.5	34.6
23	Apparel and Related Products	10,967.0	3,077.6	3,368.5	4,969.3	7,538.9	6,276.2	8,154.2	0.3	51.7	-16.8	29.9
24	Lumber and Wood Products, Except Furniture	572.9	594.7	1,687.3	947.0	3,098.8	917.0	894.3	0.0	227.2	-70.4	-2.5
25	Furniture and Fixtures	1,364.5	2,093.4	1,806.4	2,964.6	6,742.7	3,766.4	2,845.8	0.1	127.4	-44.1	-24.4
26	Paper and Allied Products	10,495.0	10,691.9	12,563.5	6,650.0	3,175.0	9,241.3	3,184.0	0.1	-52.3	191.1	-65.5
27	Printing, Publishing, and Allied Products	9,053.1	24,885.4	34,539.9	19,731.5	22,619.8	26,359.0	26,808.8	1.1	14.6	16.5	1.7
28	Chemicals and Allied Products	22,224.5	40,406.4	66,567.4	60,072.8	94,803.4	98,883.0	157,377.4	6.3	57.8	4.3	59.2
29	Petroleum Refining and Related Products	2,124.7	530.6	3,925.5	758.8	289.5	454.7	108.4	0.0	-61.8	57.1	-76.2
30	Rubber and Misc. Plastic Products	27,050.7	11,242.0	9,675.8	23,318.5	8,724.5	11,544.2	14,732.0	0.6	-62.6	32.3	27.6
31	Leather and Leather Products	584.2	395.2	1,404.0	2,413.5	3,902.0	2,709.8	3,965.3	0.2	61.7	-30.6	46.3
32	Stone, Clay, Glass, and Concrete Products	7,366.1	3,366.5	3,676.3	3,552.2	5,477.2	8,610.1	4,702.8	0.2	54.2	57.2	-45.4
33	Primary Metal Products	200,209.8	95,443.0	322,645.9	616,094.1	1,313,756.9	931,868.6	915,393.7	36.5	113.2	-29.1	-1.8
34	Fabricated Metal Products, Except Mach./Tran.	21,653.2	33,571.1	36,721.2	65,105.2	62,682.0	51,831.0	38,392.7	1.5	-3.7	-17.3	-25.9
35	Industrial Machinery, Except Electrical	117,563.4	146,628.1	202,848.0	195,040.1	153,313.0	214,509.6	204,532.0	8.1	-21.4	39.9	-4.7
36	Electrical/Electronic Machinery, Equip., and Supplies	281,318.0	287,844.1	446,497.0	402,726.3	325,596.4	329,298.6	228,041.7	9.1	-19.2	1.1	-30.7
37	Transportation Equipment	25,825.0	68,319.4	144,321.3	140,653.5	277,191.4	253,965.1	214,563.0	8.5	97.1	-8.4	-15.5
38	Instruments and Related Products	85,323.9	116,766.7	128,715.6	109,561.9	111,647.5	124,175.8	141,979.5	5.7	1.9	11.2	14.3
39	Misc. Manufactured Commodities	18,348.1	19,649.8	22,642.4	31,033.1	39,975.9	47,299.8	67,586.0	2.7	28.8	18.3	42.9
91	Scrap and Waste	8,633.2	7,482.0	20,099.5	14,665.8	8,700.7	12,598.5	10,622.1	0.4	-40.7	44.8	-15.7
92	Used or Second-Hand Merchandise	451.1	66.1	4,653.4	2,871.5	1,001.9	1,871.5	1,608.1	0.1	-65.1	86.8	-14.1
98	Special Classification Provisions	2,606.4	8,843.5	5,299.5	5,234.5	7,715.0	6,084.8	4,836.1	0.2	47.4	-21.1	-20.5
99	GDS Imported From Canada and Returned UN	0.0	0.0	3,101.8	5,433.7	3,811.6	2,848.8	4,389.3	0.2	-29.9	-25.3	54.1
	Statistical Adjustment	0.0	0.0	569.5	0.0	0.0	4.2	0.0				
	TOTAL	$943,320.1	$1,244,000.4	$1,818,445.4	$2,061,241.3	$2,897,458.8	$2,540,541.4	$2,510,465.8	100.0	40.6	-12.3	-1.2

Notes: In 1988 and 1989, Special Classification Provisions' SIC Code was 99; After which it became 98 and GDS Imported From Canada and Returned UN assumed SIC Code 99.

Sources: U.S. Bureau of the Census, Foreign Trade Division; and Massachusetts Institute for Social and Economic Research.

Table 44
Utah Merchandise Exports to Selected Countries (Thousands of Dollars): 1988 to 1994

Rank	Country	1988	1989	1990	1991	1992	1993	1994	Country as a Percent of 1994 Total	Percent Change 1991-92	1992-93	1993-94
1	Hong Kong	$10,778.8	$15,645.5	$55,429.4	$131,887.4	$417,473.7	$223,950.8	$463,716.0	18.5	216.5	-46.4	107.1
2	Canada	209,526.1	183,645.5	430,093.0	303,256.0	361,432.4	362,147.6	360,681.3	14.4	19.2	0.2	-0.4
3	Japan	77,782.7	257,319.9	210,624.8	211,503.0	315,343.6	313,588.3	353,372.2	14.1	49.1	-0.6	12.7
4	China (Taiwan)	41,495.1	46,815.4	45,885.8	68,049.2	421,116.6	380,309.4	203,319.8	8.1	518.8	-9.7	-46.5
5	Germany	59,402.5	59,061.3	115,135.6	119,862.5	103,195.9	166,260.9	197,784.3	7.9	-13.9	61.1	19.0
6	Netherlands	23,571.4	26,029.3	28,070.4	27,577.9	69,175.7	145,810.0	119,164.6	4.7	150.8	110.8	-18.3
7	Mexico	50,985.2	31,758.3	40,081.8	39,340.2	26,609.7	51,301.4	112,413.5	4.5	-32.4	92.8	119.1
8	Switzerland	25,235.1	15,598.6	20,377.4	101,678.9	28,871.3	244,614.2	98,340.8	3.9	-71.6	747.3	-59.8
9	Korea (Republic)	65,823.1	86,556.0	121,126.2	89,940.4	114,535.9	63,535.2	94,484.5	3.8	27.3	-44.5	48.7
10	Belgium	13,862.2	51,909.8	38,469.5	23,238.8	25,478.0	34,228.4	85,052.2	3.4	9.6	34.3	148.5
11	U.K.	61,267.9	70,707.0	130,598.1	366,163.4	450,659.2	79,709.7	63,369.9	2.5	23.1	-82.3	-20.5
12	Thailand	100,516.3	92,671.0	163,010.4	162,290.2	104,182.8	71,509.5	51,686.6	2.1	-35.8	-31.4	-27.7
13	Philippines	1,949.7	10,095.6	12,532.3	32,604.1	27,458.1	28,025.9	32,761.8	1.3	-15.8	2.1	16.9
14	Australia	15,186.8	24,604.7	30,566.0	28,420.1	42,526.2	31,615.0	29,646.0	1.2	49.6	-25.7	-6.2
15	Singapore	17,750.3	39,690.4	33,487.1	42,522.0	68,324.8	50,894.3	27,524.4	1.1	60.7	-25.5	-45.9
16	Ireland	4,187.8	3,659.6	5,532.7	6,559.0	7,541.6	16,510.0	22,294.3	0.9	15.0	118.9	35.0
17	France	24,320.3	30,668.4	33,710.1	30,109.9	23,334.4	19,516.0	21,926.0	0.9	-22.5	-16.4	12.3
18	Chile	1,767.0	5,110.9	8,003.4	11,300.5	12,177.9	17,797.0	17,987.0	0.7	7.8	46.1	1.1
19	China (mainland)	11,554.8	10,557.5	47,251.6	44,359.7	49,673.7	20,219.4	17,181.0	0.7	12.0	-59.3	-15.0
20	Malaysia	30,221.1	41,250.1	33,545.3	38,066.2	37,586.7	66,874.7	14,802.1	0.6	-1.3	77.9	-77.9
21	Italy	9,659.9	14,562.5	34,905.4	16,722.1	20,324.3	12,584.3	13,015.8	0.5	21.5	-38.1	3.4
22	Brazil	3,139.5	47,612.5	22,473.7	34,426.8	2,107.2	7,730.7	8,293.2	0.3	-93.9	266.9	7.3
23	New Zealand	2,139.1	3,523.4	3,733.9	6,524.9	7,866.1	6,468.8	7,804.6	0.3	20.6	-17.8	20.7
24	Sweden	2,955.1	9,105.1	13,927.7	5,235.6	5,978.0	5,014.6	6,797.9	0.3	14.2	-16.1	35.6
25	Indonesia	1,450.2	2,912.2	2,270.9	2,999.7	4,593.2	5,478.7	6,359.5	0.3	53.1	19.3	16.1
26	Spain	13,982.4	7,966.9	11,144.3	23,656.0	27,290.3	8,587.8	6,284.2	0.3	15.4	-68.5	-26.8
27	Colombia	823.1	1,251.7	846.9	1,106.6	1,312.8	2,837.6	5,526.0	0.2	18.6	116.1	94.7
28	Austria	1,682.6	1,979.5	3,573.2	5,068.1	4,212.1	4,978.9	4,971.2	0.2	-16.9	18.2	-0.2
29	Peru	218.7	2,938.5	519.3	1,005.1	347.5	3,620.9	4,467.8	0.2	-65.4	942.1	23.4
30	Denmark	1,950.8	2,846.9	2,983.5	2,736.9	2,521.5	3,136.7	3,795.1	0.2	-7.9	24.4	21.0
31	Norway	4,300.1	2,037.4	56.1	3,634.6	4,738.6	4,326.9	3,659.5	0.1	30.4	-8.7	-15.4
32	Israel	0.0	5,291.1	31,983.1	10,509.7	5,001.2	6,617.7	3,432.2	0.1	-52.4	32.3	-48.1
33	Saudi Arabia	2,486.0	1,902.4	2,146.5	1,824.3	7,461.1	4,740.2	2,961.9	0.1	309.0	-36.5	-37.5
34	Republic of S. Africa	3,167.7	3,178.9	4,922.0	5,220.2	3,883.4	3,603.6	2,877.4	0.1	-25.6	-7.2	-20.2
35	Russia	0.0	0.0	0.0	0.0	6,645.3	4,392.5	2,603.1	0.1	0.0	-33.9	-40.7
36	Dominican Republic	65.1	171.1	93.0	32.6	168.0	1,232.1	2,545.9	0.1	414.8	633.5	106.6
37	Turkey	4,680.6	694.3	1,146.6	13,512.8	39,798.6	22,398.8	2,534.6	0.1	194.5	-43.7	-88.7
38	Venezuela	2,655.6	1,355.6	2,101.6	2,433.8	3,683.0	2,511.5	2,507.8	0.1	51.3	-31.8	-0.1
39	India	1,465.8	3,134.9	5,540.9	1,356.1	1,373.2	4,064.7	2,156.6	0.1	1.3	196.0	-46.9
40	United Arab Emirates	936.5	1,153.5	1,156.8	1,390.3	2,062.4	2,604.7	2,130.7	0.1	48.3	26.3	-18.2
	Total (All Countries)	$943,319.6	$1,244,000.2	$1,818,446.0	$2,061,241.3	$2,897,458.8	$2,540,541.4	$2,510,465.8	100.0	40.6	-12.3	-1.2

Sources: U.S. Bureau of the Census, Foreign Trade Division; and Massachusetts Institute for Social and Economic Research (MISER).

Table 45
Utah Top Five Export Markets by Top Five Industries (Thousands of Dollars): 1994

Country	Industry Group	Dollar Value	Percent of Total
Hong Kong	Primary Metal Industries	$443,977.6	95.7
	Misc. Manufacturing Industries	4,451.6	1.0
	Food & Kindred Products	4,429.7	1.0
	Chemicals & Allied Products	3,118.0	0.7
	Industrial Machinery & Computer Equipment	2,633.9	0.6
	All Others	5,105.3	1.1
	Total	463,716.0	100.0
Canada	Transportation Equipment	$78,789.4	21.8
	Electronic & Electric Equipment (exc. Computers)	56,912.6	15.8
	Industrial Machinery & Computer Equipment	42,017.4	11.6
	Chemicals & Allied Products	31,439.8	8.7
	Metallic Ores	31,163.2	8.6
	All Others	120,359.0	33.4
	Total	360,681.3	100.0
Japan	Metallic Ores	$106,446.3	30.1
	Bituminous Coal & Lignite Mining	63,306.1	17.9
	Chemicals & Allied Products	53,473.2	15.1
	Instruments & Related Products	35,280.5	10.0
	Transportation Equipment	32,948.3	9.3
	All Others	61,917.7	17.5
	Total	353,372.2	100.0
China (Taiwan)	Primary Metal Industries	$124,301.9	61.1
	Chemicals & Allied Products	31,354.5	15.4
	Bituminous Coal & Lignite Mining	16,446.8	8.1
	Food & Kindred Products	9,778.6	4.8
	Electronic & Electric Equipment (exc. Computers)	4,474.2	2.2
	All Others	16,963.8	8.3
	Total	203,319.8	100.0
Germany	Primary Metal Industries	$127,989.6	64.7
	Industrial Machinery & Computer Equipment	25,115.6	12.7
	Transportation Equipment	19,380.2	9.8
	Electronic & Electric Equipment (exc. Computers)	8,525.6	4.3
	Instruments & Related Products	6,746.6	3.4
	All Others	10,026.7	5.1
	Total	197,784.3	100.0

Source: U.S. Bureau of the Census, Foreign Trade Division.

☆ Gross Taxable Sales

After two years of more than 11 percent growth, taxable sales in Utah will make a 9 percent gain in 1995. This gain is one percent more than the forecast in 1994 at this time. On a quarterly basis, the first quarter grew 9.3 percent; the second quarter grew 9.8 percent; and the third quarter sales appear headed for a near 9 percent growth rate. Christmas quarter sales should remain at the 9 percent level due to strong employment, low inflation and falling interest rates.

Taxable sales have been in a real growth mode for more than seven years now (Table 46). The second quarter 1995 growth of 9.8 percent continues a string of 18 consecutive quarters of real-dollar gains for taxable sales (the last real-dollar decline occurred just prior to the Persian Gulf War in the fourth quarter of 1990). In fact, real-dollar taxable sales have shown increases in 28 of the last 29 quarters.

Retail Trade

Taxable retail trade sales rose more than 10 percent for the past three years:

- ☆ 10.6 percent in 1992.
- ☆ 11.4 percent in 1993.
- ☆ 10 percent in 1994.

In 1995, due to lackluster food store and automobile dealer sales, retail trade will rise at an 8 percent rate. This rate may pick up slightly in 1996 to between 8 percent and 9 percent. During the first half of 1995, retail sales rose 8.3 percent as nondurable goods growth outpaced durable goods growth by 9.1 percent to 6.8 percent, respectively.

The double-digit durable retail sales gains are readily apparent (Figure 27). Quarterly data from 1982 was seasonally adjusted for both retail durable goods sales (those items lasting three years or more) and retail nondurable goods sales (less than three years). As expected, nondurable retail sales is a much smoother, upward-trending series. One reason for this is that food and clothing spending is not as sensitive to swings in the business cycle, since they are necessities. Much more cyclical and sensitive to interest rates, consumer confidence and steady employment growth, is the upward path of retail durable goods. Clearly, sales of automobiles and housing materials are sensitive not only to demographic trends and wage and salary growth, but also to these business cycle variables.

Nondurable Retail Sales

Nondurable retail sales, including sales in the food, general merchandise, apparel, food, eating and drinking, and retail shopping goods store sectors, comprise almost 35 percent of gross taxable sales and almost two-thirds of retail trade sales. Nondurable sales increased about 7 percent in both 1993 and 1994 but are expected to make a stronger 8.8 percent gain in 1995 (Table 47). During the first half of 1995 nondurable sales rose a robust 9.1 percent, and year-end sales growth is expected to approach 9 percent, given the strong Christmas quarter outlook. For 1996, nondurable sales are expected to pickup to an 9.5 percent clip due to continued strength in department store, restaurants and miscellaneous shopping goods store sales. In 1995, general merchandise store sales are expected to rebound from 6 percent growth in 1993 and 1994 to a 10 percent gain in 1995.

Eating and drinking places sales should grow 10 percent, slightly better than its strong, average annual growth between 1990 and 1994 of 9.4 percent. Overall, restaurant sales have been running one to two percent faster than wages in this period. First half 1995 growth of 8.3 percent was especially strong despite alleged softness from hepatitis outbreaks and the Utah Clean Air Act's no smoking policy, which became effective on January 1, 1995. Double-digit gains were evident in third-quarter monthly reports.

Sales at miscellaneous shopping goods stores, which include but are not limited to drug, liquor, sporting goods, book, stationary, jewelry, hobby, toy, camera, gift, luggage, florist, sewing, and tobacco stores, have

been brisk all year long and are headed for a 14 percent gain in 1995. Sales have been especially strong at bookstores, toy stores and optical goods stores. Nationally, sales of computer, children's books and self-help books have been very popular in 1995. Sales by direct retailers, such as Avon, Amway, and NuSkin were up more than 50 percent in the first half of 1995, and sales from these stores are expected to show a 12 percent gain in 1996.

Apparel store sales, which have been soft in 1995, are expected to rebound to an 8 percent growth rate in 1996. Food store sales are expected to have grown only about 6 percent in 1995 and to reach 7.5 percent in 1996 due to food store purchases at Utah's thriving discount department stores.

Durable Goods Retail Sales

Durable goods retail sales consist of sales by Utah's motor vehicle dealers and sales related to housing, home improvements, and electronics (building, garden and furniture store sales). Following three years of double-digit gains (up 15.5 percent in 1992, up 20.4 percent in 1993 and up 15.2 percent in 1994), these sales will grow only about 6.4 percent in 1995. Rising interest rates in 1994 combined with a slowdown in migration from California should level off single-family housing starts in 1995. In addition, it appears that pent-up demands were fulfilled in 1993 and 1994 for motor vehicle dealer sales.

Notwithstanding the "high mesa" leveling of Utah construction values in 1995, the ride has been exciting. The boom in residential and nonresidential construction over the past three years has affected a doubling of taxable sales in the retail "building and garden" and "furniture and home furnishings" sectors. Sales in the building and garden sector have risen from $575 million in 1990 to an estimated $1.25 billion in 1995 (Table 47). Once the homes are built, new furnishings are usually necessary. Furniture and home furnishings stores sales have risen from $498 million in 1990 to an estimated $1.06 billion in 1995. Evidence of the housing boom is reflected in the rise of new single family permits, which have risen from 6,099 in 1990 to more than 13,000 from 1993 through 1995. Its no wonder then that sales in these two subsectors have almost doubled since 1990.

Retail sales in building and garden stores were up 6.1 percent in the first half of 1995 and appeared to gain strength in the third quarter. In contrast, furniture stores sales jumped 13 percent in the first half of 1995 and continued on that growth path into the third quarter. Sales of electronics, sparked by competitive pricing and "no interest" loans (for six to nine months), are booming and expected to continue to grow in double digits. Building and garden store sales should show an 8 percent growth in 1995. Following three years of 20 percent plus growth, furniture store sales will show about 12 percent growth in 1995 and in 1996.

The continued string of interest rate hikes by the Federal Reserve Bank in 1994 took a toll not only on the housing market in early 1995, but also on the sales of motor vehicles. Unit sales of new cars and trucks in Utah at 59,951, during the first three quarters of 1995, were up slightly less than 5 percent compared to 1994. This figure is a marked slowdown from the almost 9 percent gain in 1993 and the 10.2 percent gain in 1994. Motor vehicle dollar sales rose only 5 percent in the first half of 1995.

While new car dealer sales and services were very soft, used cars dealer sales rose in double-digits. In addition, motorcycle dealers, who also market all-terrain vehicles, snowmobiles and jet skis, had very strong sales. The outlook for 1995 and 1996 is that motor vehicle sales will increase 2.5 to 3.5 percent (Table 47). Nationally, new car and truck sales are expected to rise between 0 percent and 4 percent, in Utah a 3.5 percent unit sales growth is expected in 1996. This forecast may be on the low side given the fact that Utah's construction industry may be ready to climb to a new level, and that motorcycle, gasoline service station and auto parts store sales should grow in line with 9 percent wage gains.

Business Equipment Investment and Utility Purchases

A forecast of 9 percent forecast for 1995 appears to be on the mark for taxable business equipment investment and utility sales and purchases. The big growth sector here since 1990 has been the wholesale trade sector. Final sales of wholesalers have risen from $1.27 billion in 1990 to an estimated $2.51 billion in 1995. Following a double-digit gain in the first quarter, these sales slid to an only 2.2 percent gain in the

second quarter, but then appeared to have rebounded to a 10 percent gain in the third quarter. Much of this runup since 1990 has been due to the boom in residential and nonresidential construction over the past three years, but Utah's expanding economy is also a factor.

Utah's vibrant manufacturing sector also reinvested in plant and equipment expansion during 1995. Taxable purchases of replacement equipment (new and expanding equipment is exempt) and supplies were up almost 13 percent in the first half, and purchases appear to have gained momentum in the third quarter of 1995. According to the Bureau of Labor Statistics, Utah's 7 percent gain in manufacturing employment for September 1995 was the best gain in the nation. Several factors have led Utah manufacturers to heavily invest in plant and equipment every year for the past five years:

- ☆ It has been boom times for manufacturers selling to Utah's residential sector.
- ☆ The cost of capital relative to labor has been relatively low.
- ☆ The flood of capital from the stock market growth has been staggering.
- ☆ The ability of manufacturers to finance projects through commercial paper has increased.
- ☆ The upgrading of communications equipment, from coaxial cables to mobile phones has expanded purchases and sales for telephone companies.
- ☆ Continued globalization has increased competitive pressures, forcing manufacturers to upgrade equipment.
- ☆ Utah's relatively low wages have probably influenced investment in the state rather than in the East or on the West Coast.

Another strong sector has been taxable communication sales. These sales have risen 58 percent in five years, from $444 million in 1990 to an estimated $700 million in 1995. Driving these sales have been noteworthy disposable income gains in addition to consumer attachment to new technologies, such as fax machines, pagers, mobile telephones and satellite TV dishes. Since the saturation points for these technologies are well below 100 percent, communications spending is expected to continue in double-digits in 1996.

The forecast for a 10.2 percent gain in taxable business investment during 1996 is based on continued double-digit purchasing gains in the wholesale trade, manufacturing, construction and communications sectors. Nationally, nonresidential investment in plant and equipment is estimated to slow down from its rapid, double-digit growth rates to between 6 percent and 8 percent. Utah is on the high end of that growth band, however, with the $2.5 billion Micron investment, not to mention Utah's vibrant metal mining and manufacturing sectors. In addition, it is important to note that Utah's extremely low vacancy rates for retail, commercial and industrial space will enhance nonresidential construction in 1996, boosting taxable sales in both the construction and wholesale trade sectors.

Taxable Services

Only about 40 percent of the service sector is charged a sales tax. Even though this sector constitutes only 13 percent of taxable sales, services and purchases, it has been a fast-growing sector in the past few years. Taxable services have increased 74 percent in the past five years from $1.83 billion in 1990 to an estimated $3.18 billion in 1995 (Table 47).

Last year, with some trepidation, the estimate was made that taxable services would grow almost 16 percent in 1995. During the first half of 1995 they rose almost 15 percent. Double-digit gains were evident in many subsectors during preliminary third-quarter reports. Taxable services are expected to grow at least 13 percent in 1995 and then rise another 11 percent in 1996.

Several factors mentioned above lead to this conclusion. First, permanent nonfarm wages and salaries are growing at a relatively strong 9 percent to 10 percent rate over the forecast period. Second, strong tourist growth is forecasted, evidenced by double-digit growth for visitations to national parks and monuments. More of the same is expected for 1996. In addition, taxable leases by Utah's consumer installment credit businesses are increasing at double-digit rates. These taxable credit sales include, but are not limited to the leasing of automobiles and condominiums, and selling other consumer durable goods in installments.

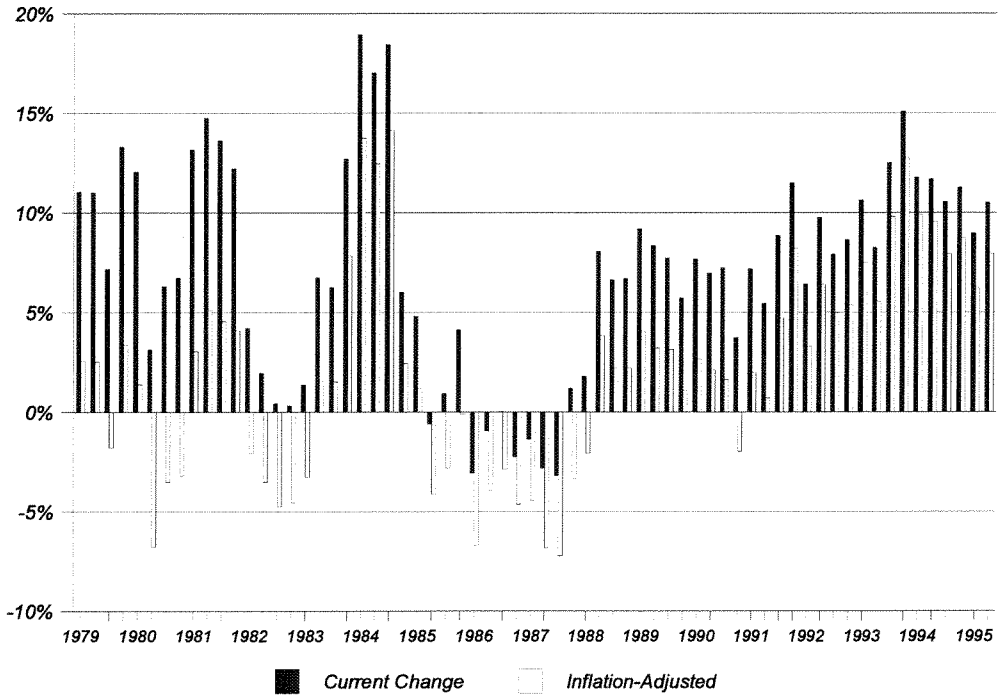
Double-digit gains are also evident in personal services, amusement and recreation, and educational services during the first half of 1995.

The largest subsector, auto rentals and repair, reported sales of $420 million in the first half of 1995, up almost 17 percent. This unanticipated strength was probably due to two factors:

- ☆ Utah's strong tourist sector pushed up auto rentals.
- ☆ Slower growth in new car and truck sales probably forced more repair work.

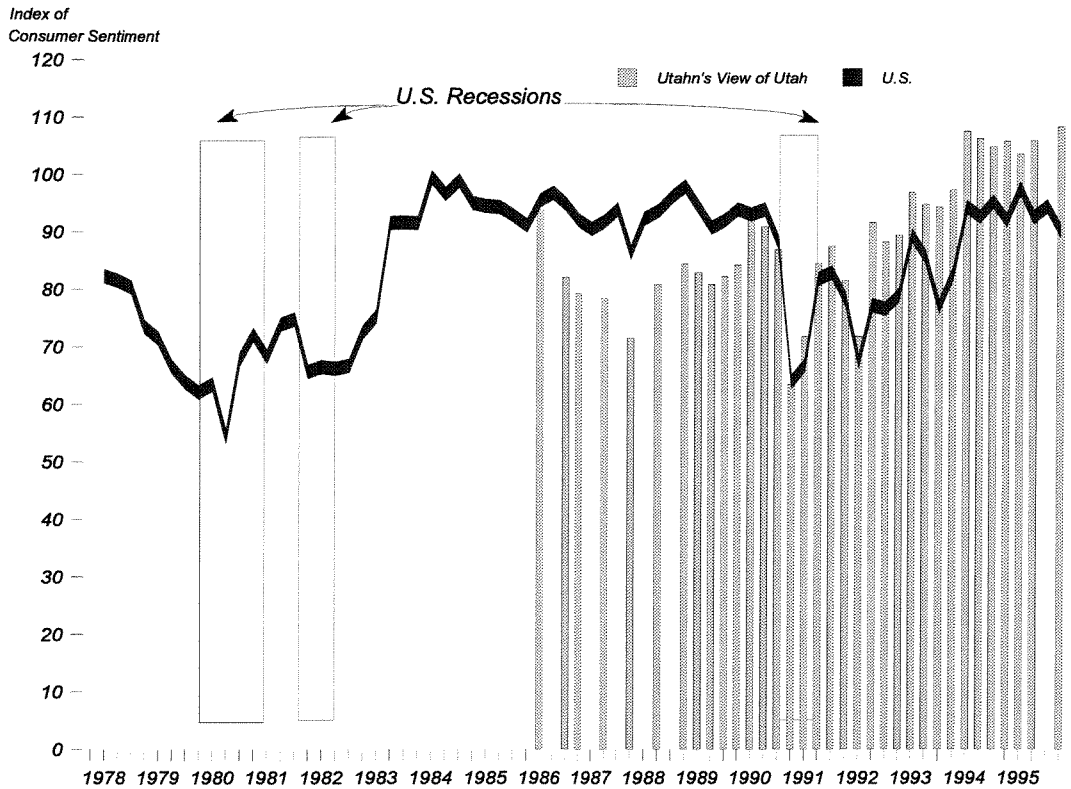
Taxable amusement and recreation sales were up 24 percent in the first half of 1995. A substantial portion of this gain was due to the increase in the tax base due to the 1994 Legislature's redefining "admissions", which included activities such as golf, tennis, bowling, river running and a broad range of recreational and cultural activities. This sector is expected to continue to see strong growth due to increasing compliance with the expanded "admissions" definition and due to expected strong income gains and tourist activity during 1996. ☆

Figure 24
Percent Change in Gross Taxable Sales: 1979 to 1995



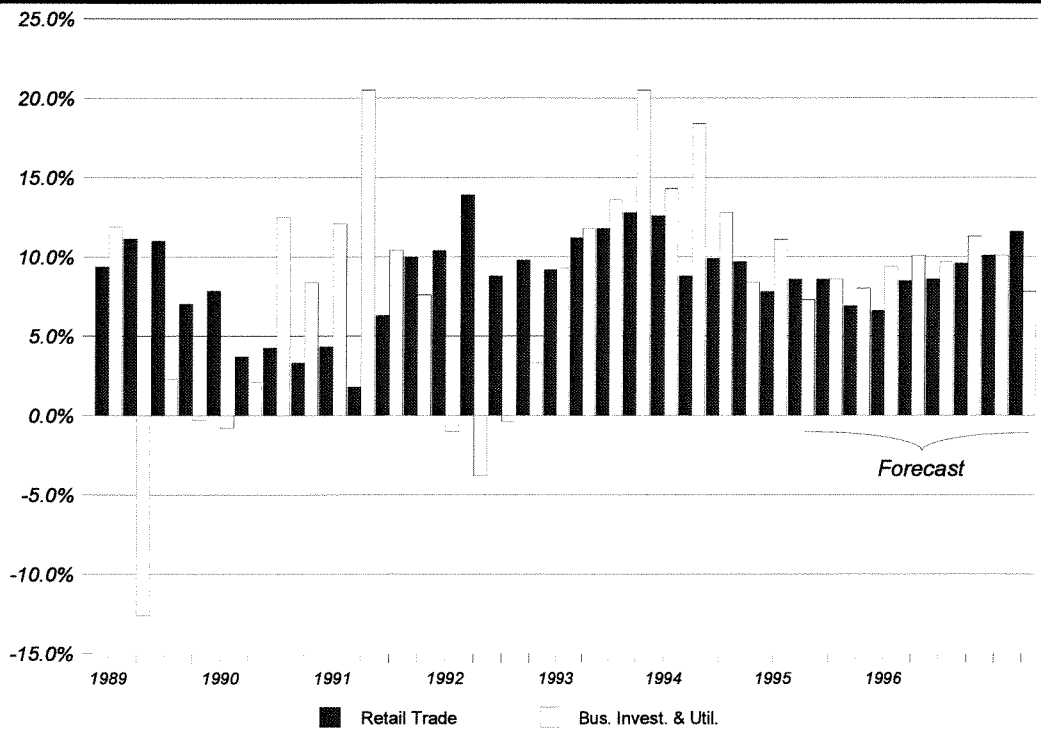
Note: All data includes prior-period adjusted
Source: Utah State Tax Commission

Figure 25
Consumer Sentiment Indices--Utah and U.S.: 1978 to 1995



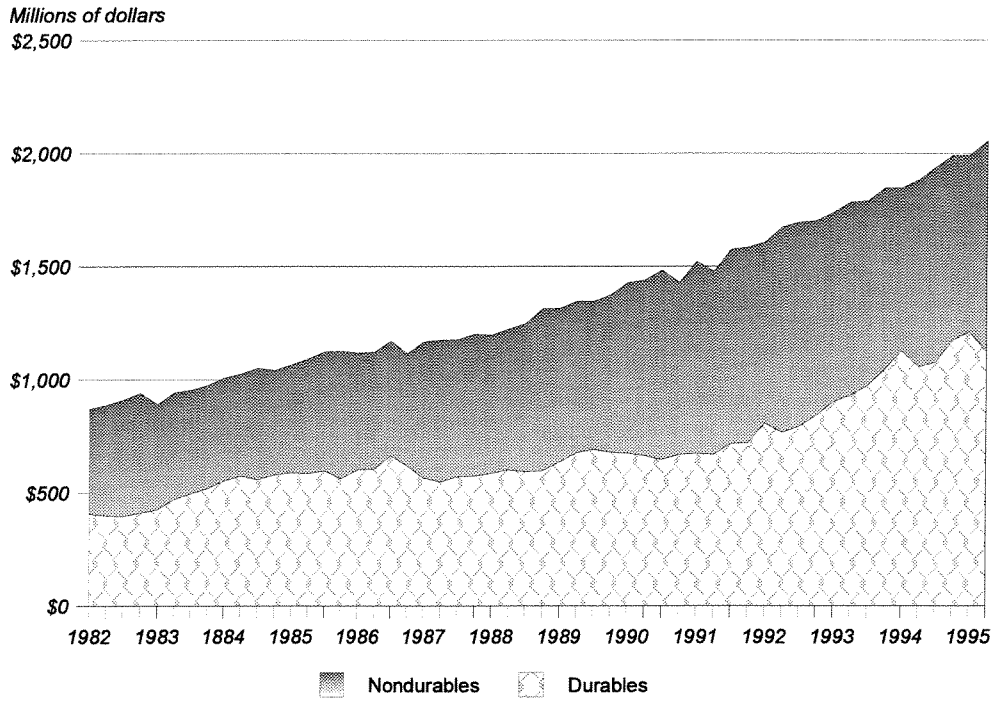
Sources: U.S.--University of Michigan, Utah--University of Utah Survey Research Center

Figure 26
Growth in Retail Sales vs. Business Investment & Utilities: 1989 to 2nd Quarter 1995 & Forecast



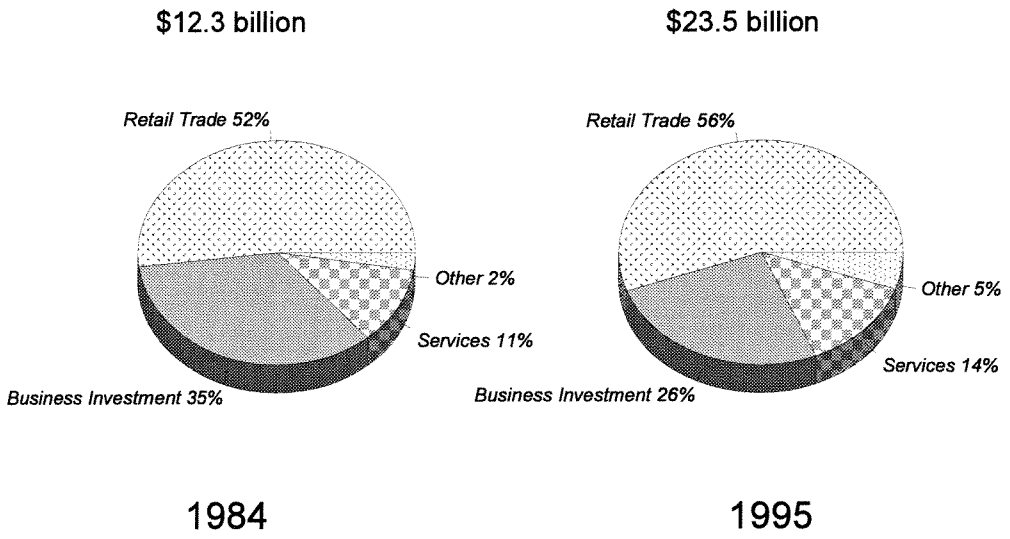
Source: Utah State Tax Commission

Figure 27
Utah Retail Sales--Durables and Nondurables (Seasonally Adjusted): 1982 to 1995



Source: Utah State Tax Commission

Figure 28
Shares of Utah's Sales Tax Base--Four Major Sectors: 1984 and 1995



Source: Utah State Tax Commission

Table 46
Utah Gross Taxable Sale by Component: 1982 to 1996

Dollar Amounts (millions)

Calendar Year	Retail Sales	Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1982	$5,225	$3,271	$1,059	$464	$10,019
1983	5,655	3,423	1,135	472	10,685
1984	6,399	4,254	1,385	256	12,294
1985	6,749	4,122	1,440	263	12,574
1986	7,022	3,689	1,414	253	12,378
1987	6,982	3,398	1,587	222	12,189
1988	7,376	3,684	1,718	240	13,018
1989	8,080	3,676	1,849	288	13,893
1990	8,424	3,864	1,828	658	14,774
1991	8,939	4,345	1,946	769	15,998
1992	9,889	4,328	2,117	978	17,312
1993	10,994	4,933	2,469	945	19,341
1994	12,097	5,589	2,802	1,039	21,527
1995 (e)	13,060	6,074	3,177	1,182	23,493
1996 (f)	14,162	6,691	3,532	1,289	25,673

Percent Change

Calendar Year	Retail Sales	Business Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1982	6.4	-7.7	15.4	-3.9	1.6
1983	8.2	4.6	7.2	1.7	6.6
1984	13.2	24.3	22.0	-45.8	15.1
1985	5.5	-3.1	4.0	2.7	2.3
1986	4.0	-10.5	-1.8	-3.8	-1.6
1987	-0.6	-7.9	12.2	-12.3	-1.5
1988	5.6	8.4	8.3	8.1	6.8
1989	9.5	-0.2	7.6	20.0	6.7
1990	4.3	5.1	-1.1	128.5	6.3
1991	6.1	12.4	6.4	16.9	8.3
1992	10.6	-0.4	8.8	27.2	8.2
1993	11.2	14.0	16.6	-3.4	11.7
1994	10.0	13.3	13.5	9.9	11.3
1995 (e)	8.0	8.7	13.4	13.8	9.1
1996 (f)	8.4	10.2	11.2	9.0	9.3

(e) = estimate
(f) = forecast

Source: Utah State Tax Commission.

Table 47
Gross Taxable Retail Sales by Sector: 1990 to 1996

Category	Dollar Amounts (millions)							Percent Change					
	1990	1991	1992	1993	1994	(e) 1995	(f) 1996	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Retail Nondurables	$5,775	$6,164	$6,685	$7,164	$7,656	$8,333	$9,122	6.7	8.5	7.2	6.9	8.8	9.5
General Merchandise	1,362	1,484	1,619	1,716	1,816	1,998	2,177	9.0	9.1	6.0	5.8	10.0	9.0
Apparel	415	452	506	581	591	615	665	8.9	11.9	14.8	1.7	4.0	8.2
Food Stores	2,161	2,226	2,374	2,496	2,677	2,838	3,050	3.0	6.6	5.1	7.3	6.0	7.5
Eating and Drinking	861	935	1,025	1,140	1,234	1,357	1,520	8.6	9.6	11.2	8.2	10.0	12.0
Miscellaneous Shopping Goods	976	1,067	1,161	1,231	1,338	1,525	1,708	9.3	8.8	6.0	8.7	14.0	12.0
Retail Durables	2,650	2,773	3,203	3,854	4,441	4,727	5,040	4.6	15.5	20.3	15.2	6.4	6.6
Motor Vehicles	1,577	1,590	1,783	2,140	2,331	2,410	2,478	0.8	12.1	20.0	8.9	3.4	2.8
Building & Garden	575	630	764	941	1,160	1,253	1,366	9.6	21.3	23.2	23.3	8.0	9.0
Furniture & Home Furnishings	498	553	656	773	950	1,064	1,197	11.0	18.6	17.8	22.9	12.0	12.5
Business Investment	3,864	4,345	4,329	4,932	5,590	6,074	6,691	12.4	-0.4	13.9	13.3	8.7	10.2
Mining	150	186	153	142	149	187	210	24.0	-17.7	-7.2	4.9	25.8	12.0
Construction	203	207	228	246	290	325	361	2.0	10.1	7.9	17.9	12.0	11.0
Manufacturing	889	936	1,000	1,083	1,155	1,317	1,448	5.3	6.8	8.3	6.6	14.0	10.0
Transportation, Comm. & Utilities	1,351	1,644	1,407	1,552	1,657	1,740	1,867	21.7	-14.4	10.3	6.8	5.0	7.3
Wholesale Trade	1,271	1,372	1,541	1,909	2,339	2,505	2,806	7.9	12.3	23.9	22.5	7.1	12.0
Services	1,829	2,039	2,223	2,501	2,802	3,177	3,531	11.5	9.0	12.5	12.0	13.4	11.2
Hotels & Lodging	307	351	373	400	423	465	507	14.3	6.3	7.2	5.8	10.0	9.0
Amusement & Recreation	194	228	256	304	378	473	543	17.5	12.3	18.8	24.3	25.0	15.0
Personal	91	99	110	130	146	166	182	8.8	11.1	18.2	12.3	13.5	10.0
Health	76	68	77	85	84	95	103	-10.5	13.2	10.4	-1.2	13.0	8.0
Education, Legal & Social	111	126	137	144	160	178	194	13.5	8.7	5.1	11.1	11.0	9.0
Auto Rental & Repairs	525	571	601	677	763	877	963	8.8	5.3	12.6	12.7	15.0	9.8
Business	446	502	564	626	645	690	759	12.6	12.4	11.0	3.0	7.0	10.0
Finance Insurance & Real Estate	79	94	105	135	203	233	280	19.0	11.7	28.6	50.4	15.0	20.0
All Other	658	675	872	890	1,038	1,182	1,289	2.6	29.2	2.1	16.6	13.9	9.1
Grand Total Taxable Sales	14,776	15,996	17,312	19,341	21,527	23,493	25,673	8.3	8.2	11.7	11.3	9.1	9.3

(e) = estimate
(f) = forecast

Source: Economic and Statistical Unit, Utah State Tax Commission.

☆ Tax Collections

Overview of Recent Events

Sizable tax reductions enacted during the 1995 legislative session included a $31 million sales tax manufacturing exemption (to be phased in from FY1997 to FY1999) and a $141.4 million property tax cut. The property tax cut reflects raising the residential exemption from 32 to 45 percent, lowering the minimum school program rate from .00422 to .00264, and lowering the assessing and collection rate from .0003 to .000281. Income taxes will increase about $4.5 million in FY1996 due to lower property tax deductions claimed on income tax forms.

Gross receipts taxes were raised $9.4 million in FY1996 to offset the property tax decrease accruing to electric utilities. Other public utilities are required to pass property tax reductions forward to customers through lower utility rate charges. The 1995 legislative session also established "certified revenue levy" targets for state mandated property tax collections. The certified levy sets a tax rate that allows for the collection of the previous year's revenues plus any additional revenues that may accrue from new growth.

The 1995 legislative session reinstated the $4 million sales tax exemption for construction materials used in public education building projects that was eliminated in the 1994 session. A $1.4 million sales tax exemption for mobile homes in FY1996 also occurred. Finally, the 1995 session revisited the earmarking of sales taxes for water and transportation projects. Beginning in FY1998 1/8th of a cent of sales taxes ($30 million) will be earmarked for water and road projects; i.e, each will receive $15 million or 1/16th percent.

Tax Collection Tables

Historic tax collections are presented in this chapter in current (not adjusted for inflation) dollars and in constant (inflation-adjusted) dollars. Collections are also 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.

Tables in this chapter also show the distribution of unrestricted revenue funds as a percent of total revenues and total personal income. Table 48 shows that unrestricted general fund, transportation fund, and mineral lease monies have generally declined as a percent of total revenues and of personal income, while the uniform school fund percentages have increased. This change is largely due to stronger historic growth in sales tax-exempt services industries than in taxable goods industries; tax credits and exemptions, income tax bracket creep; increased fuel efficiency of vehicles; and, unrestricted general fund monies transferred to restricted accounts.

Previous 10-Year Tax Collection Highlights

Ten years ago Utah was experiencing an increase in net out-migration and declining employment growth. Net out-migration increased from 7,500 persons in 1985 to 8,400 in 1986, and 11,700 in 1987. Employment growth declined from 23,300 jobs in 1985, to 9,800 in 1986 and 6,200 in 1987.

The closures of Geneva Steel (August 1986) and Kennecott Copper (September 1985), the completion of the Intermountain Power Project (May 1987), and depressed oil prices contributed to this downturn. Oil and gas severance tax collections declined from $46.1 million in FY1985 to $20.8 million in FY1987; while, gross taxable sales declined in both 1986 and 1987 (from $12.6 billion in 1985 to $12.4 billion in 1986, and $12.2 billion in 1987).

Table 54 shows that real revenue growth (adjusted for inflation) turned negative at -0.5 percent for both FY1986 and FY1987. Without accelerated corporate payments, a state income tax surcharge, and income tax windfalls resulting from the federal Tax Reform Act of 1986, nominal revenue collections (not adjusted for inflation) would also have fallen during FY1987.

Major Tax Increases ($150 million)

Because of this economic downturn, tax increases totaling approximately $150 million became effective in the winter and spring of 1987. The tax increases included repealing the deductibility of federal income taxes paid against state income taxes owed ($50 million); a ½ cent increase in sales taxes ($50 million); an 11 cents per pack increase in cigarette taxes ($10 million); and, a 5 cents per gallon increase in motor and special fuels taxes ($40 million). These tax increases, increased oil prices, and the reopening of Geneva (September 1987) and Kennecott (June 1987) contributed to FY1988 revenue growth of 11.2 percent (7.6 percent in constant dollars).

Growth in revenue receipts continued to improve throughout FY1989. Receipts increased 9.4 percent, with inflation-adjusted growth of 4.7 percent. Large income tax receipts prompted a special session of the Legislature in July 1988 to reduce income tax rates by 5 percent, and to allow one-third of federal income taxes paid to be deducted against state income taxes owed. A second special session of the Legislature in September 1989 reduced income tax rates another 2 percent and increased the deductibility of federal taxes allowed against state taxes from 33.3 percent to 50 percent.

Revenue receipts increased 4 percent in FY1990. But, when adjusted for inflation these receipts declined 0.3 percent due to income tax reductions, new severance tax workover credits, a large mineral lease payment windfall in the previous year, and a 1/8th percent decrease in the sales tax rate.

Constant dollar receipts only increased 0.4 percent in FY1991. Receipts would have increased more in FY1991 were it not for large corporate income tax refunds, the national recession, and higher gasoline prices due to the war in the Middle East.

Current and constant dollar receipts in FY1992 registered moderate gains of 5.6 and 2.3 percent respectively. Cigarette taxes were raised 3.5 cents per pack. The transfer of Department of Commerce unrestricted revenues into a restricted fund, and the decline in severance taxes due to workover tax credits and new sliding scale tax rates, lessened revenue growth that year.

Employment, income and revenue growth picked up significantly in both FY1993 and FY1994. Current dollar growth in revenue collections in FY1994 was 11.4 percent, largely due to strong sales tax collections. The phenomenal sales tax increase of 10.8 percent resulted from strength in net in-migration, housing sales, construction and overall employment.

This strength in tax collections prompted the Legislature in its 1994 session to enact tax decreases of around $19 million. The sales tax rate was reduced by 1/8th cent, while several sales tax exemptions were eliminated (which partially offset the tax rate reduction). The property tax residential exemption was raised (from 29.5 percent to 32 percent), and the minimum school program property tax rate was lowered (from .004275 to .00422), in order to prevent an $8.5 million increase in property taxes that would have resulted from the elimination of the 5 percent intangibles exemption under the AMAX agreement.

These tax decreases did not prevent another strong year of tax collections in FY1995. Current dollar receipts increased 10.1 percent while inflation-adjusted growth was 7.9 percent. Individual and corporate income tax growth was especially healthy due to strong corporate profits, net in-migration, and the continuation of Utah's construction boom.

Major Tax Decreases ($181 million)

A second round of cuts reduced taxes about $162 million in the 1995 legislative session. These reductions, in addition to the $19 million already enacted in the 1994 session, resulted in total tax cuts of about $181 million (on an annualized basis). The details of these tax cuts are illustrated on Table 55.

Major tax reductions enacted during the 1995 session included a $31 million sales tax manufacturing exemption (to be phased in from FY1997 to FY1999) and a $141.4 million property tax cut. The legislation affecting manufacturing extended the current sales tax exemption used in new and expanding operations to include replacement equipment.

Property taxes decreased even though total assessed valuations increased. This decrease was due to raising the residential exemption from 32 percent to 45 percent, lowering the minimum school program rate from .00422 to .00264, and lowering the assessing and collection rate from .0003 to .000281.

Total assessed valuations, against which tax rates are applied, increased around $8.1 billion in FY1996 due to State Tax Commission factoring orders, ongoing reappraisals, and new growth. New growth was about $2.3 billion of this amount. Assessed valuations would have increased another $7.3 billion if the residential exemption had not been increased.

Income taxes will increase about $4.5 million in FY1996 due to lower property tax deductions claimed on income tax forms as a result of the property tax cut. Gross receipts taxes will increase $9.4 million to offset the property tax decrease accruing to electric utilities. Other public utilities are required to pass property tax reductions forward to customers through lower utility rate charges.

The 1995 legislative session established "certified revenue levy" targets for state-mandated property tax collections. The certified levy sets a tax rate that allows for the collection of the previous year's revenues plus any additional revenues that may accrue from new growth.

New growth is the change in valuation for centrally assessed property (up or down) plus the change in locally assessed valuation over and above that which results from factoring, reappraisals, changes in exemptions, or other adjustments. A newspaper notice must be published if a levy that exceeds the certified rate is imposed. These requirements are similar to those under which cities, counties, and districts operate.

The $4 million sales tax exemption for construction materials used in public education building projects eliminated in the 1994 session was also reinstated. And, a $1.4 million sales tax exemption for mobile homes in FY1996 exempts 45 percent of the sales price of any new mobile or manufactured home, and 100 percent of the resale price.

Finally, the 1995 session revisited the earmarking of sales taxes for water and transportation projects. Beginning in FY1998 1/8th of a cent of sales taxes ($30 million) will be earmarked for water and road projects; i.e, each will receive $15 million or 1/16th percent.

Revenues Outlook

Employment growth, net in-migration, and overall economic activity should remain above average in fiscal year 1996. The outlook for FY1996 is for solid growth in inflation-adjusted receipts of around 7.1 percent. This rate exceeds the average annual constant dollar rate of 4.2 percent for fiscal years 1980 through 1996.

Budget Reserve Account and Appropriations Limitation

The State maintains a Budget Reserve Account (the "Rainy Day Fund") which can only be used to cover operating deficits or retroactive tax refunds. In the 1994 General Session, the Legislature raised the ceiling of the Rainy Day Fund from 6 percent to 8 percent of the particular year's general fund appropriation total. The "Rainy Day" balance at the end of FY1995 was $65.7 million.

Appropriations from tax collections are limited by the "State Appropriations and Tax Limitation Act". This law limits State appropriations from the general fund, uniform school fund and transportation fund based upon a formula that reflects the average of changes in personal income and the combined changes in population and inflation. Debt service payments, mineral lease revenues, and all restricted revenues such as dedicated credits and federal funds are exempt from this limitation.

This law also restricts the amount of outstanding general obligation debt to 20 percent of the maximum allowable appropriations limit. The appropriations limit in effect for FY1995 was $2.54 billion. The Governor's budget recommendations, and the final appropriations enacted by the Legislature have been in strict compliance with this law since its inception in FY1989. ☆

Table 48
Distribution of Unrestricted Revenue Funds as a Percent of Total Revenues and Personal Income: FY1980 to FY1996

Fiscal Year	Total Unrestricted Revenues (thousands)	Fiscal Year Personal Income (millions)	Percent of Personal Income	General Fund (thousands)	Percent of Total Revenues	Percent of Personal Income	Uniform School Fund (thousands)	Percent of Total Revenues	Percent of Personal Income	Transpor-tation Fund (thousands)	Percent of Total Revenues	Percent of Personal Income	Mineral Lease Payments (thousands)	Percent of Total Revenues	Percent of Personal Income
1980	$841,315	$11,090	7.6%	$403,410	48%	3.6%	$333,179	40%	3.0%	$89,794	11%	0.8%	$14,933	2%	0.1%
1981	901,574	12,404.5	7.3%	437,153	48%	3.5%	359,518	40%	2.9%	86,750	10%	0.7%	18,153	2%	0.1%
1982	1,020,704	13,772.8	7.4%	499,345	49%	3.6%	392,978	39%	2.9%	101,490	10%	0.7%	26,891	3%	0.1%
1983	1,045,236	14,659.8	7.1%	486,988	47%	3.3%	409,909	39%	2.8%	112,177	11%	0.8%	36,162	3%	0.1%
1984	1,280,109	16,061.3	8.0%	657,399	51%	4.1%	468,734	37%	2.9%	116,508	9%	0.7%	37,468	3%	0.2%
1985	1,409,793	17,409.0	8.1%	705,088	50%	4.1%	529,594	38%	3.0%	140,921	10%	0.8%	34,190	2%	0.2%
1986	1,445,594	18,454.5	7.8%	706,012	49%	3.8%	560,809	39%	3.0%	146,195	10%	0.8%	32,578	2%	0.2%
1987	1,479,883	19,221.5	7.7%	679,076	46%	3.5%	622,973	42%	3.2%	155,449	11%	0.8%	22,385	2%	0.2%
1988	1,645,921	20,263.8	8.1%	759,554	46%	3.7%	665,082	40%	3.3%	192,449	12%	0.9%	28,836	2%	0.2%
1989	1,800,179	21,715.3	8.3%	823,704	46%	3.8%	728,259	40%	3.4%	197,416	11%	0.9%	50,800	3%	0.1%
1990	1,871,433	23,367.0	8.0%	869,059	46%	3.7%	767,181	41%	3.3%	200,252	11%	0.9%	34,941	2%	0.1%
1991	1,960,264	25,238.0	7.8%	893,950	46%	3.5%	826,524	42%	3.3%	207,412	11%	0.8%	32,378	2%	0.2%
1992	2,069,194	26,992.8	7.7%	932,284	45%	3.5%	890,048	43%	3.3%	214,336	10%	0.8%	32,526	2%	0.1%
1993	2,209,196	29,420.5	7.5%	1,016,714	46%	3.5%	938,023	42%	3.2%	224,172	10%	0.8%	30,287	1%	0.1%
1994	2,461,400	31,521.8	7.8%	1,128,386	46%	3.6%	1,061,525	43%	3.4%	238,153	10%	0.8%	33,336	1%	0.1%
1995	2,710,871	34,218.3	7.9%	1,234,816	46%	3.6%	1,197,951	44%	3.5%	249,050	9%	0.7%	29,054	1%	0.1%
1996*	2,950,300	37,195.2	7.9%	1,337,600	45%	3.6%	1,317,300	45%	3.5%	260,900	9%	0.7%	34,500	1%	0.1%
Average	--	--	7.8%	--	47%	3.7%	--	41%	3.1%	--	10%	0.8%	--	2%	0.2%

*FY96 values are estimates.

Note: These revenues were not adjusted for tax rate or base changes. As such they include historical changes to the tax structure, including all tax rate increases. These monies are cash collections as reported by the Tax Commission. They are not the modified accrual collections used for budgeting.

Sources: Utah Department of Finance, Utah State Tax Commission, and Governor's Office of Planning and Budget.

Table 49
Cash Collection Unrestricted Revenues (Thousands of Current Dollars): FY1980 to FY1996

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995*	1996**
General Fund:																	
Sales & Use Tax	$320,454	$347,366	$385,378	$389,480	$526,158	$555,415	$558,581	$558,998	$617,624	$667,403	$707,443	$740,307	$802,391	$881,917	$976,991	$1,055,061	$1,150,000
Liquor Profits	15,054	17,604	19,163	19,005	19,475	18,867	19,008	17,177	15,918	15,984	16,602	17,571	16,596	18,132	17,893	20,080	21,500
Insurance Premiums	14,718	15,778	21,494	18,012	19,990	22,262	26,077	27,762	28,223	26,406	30,020	27,845	30,175	33,998	38,735	40,942	45,800
Beer Cig. & Tobacco	12,445	13,520	14,107	16,241	19,998	21,314	21,052	24,000	29,190	30,733	30,182	31,008	34,581	34,282	36,582	37,658	38,000
Severance Taxes	10,568	15,344	23,307	19,433	36,235	46,880	43,797	21,548	29,156	28,135	30,096	31,016	18,160	19,267	18,873	21,403	24,000
Inheritance Tax	1,695	2,046	4,514	1,977	3,121	4,786	4,725	2,318	3,443	9,766	7,593	4,811	3,975	7,606	8,189	24,956	12,500
Investment Income	22,370	14,743	21,485	11,253	11,204	14,368	12,020	3,836	10,688	19,236	17,893	10,959	7,002	4,358	6,370	12,321	12,500
Other Fines and Fees	8,990	13,125	12,403	13,924	23,042	23,409	22,237	24,679	26,464	27,437	32,593	33,946	23,473	21,339	29,231	27,125	38,300
Circuit Breaker	(2,884)	(2,373)	(2,506)	(2,337)	(1,824)	(2,213)	(1,485)	(1,242)	(1,152)	(1,396)	(3,363)	(3,513)	(4,069)	(4,185)	(4,477)	(4,730)	(5,000)
GF Subtotal	403,410	437,153	499,345	486,988	657,399	705,088	706,012	679,076	759,554	823,704	869,059	893,950	932,284	1,016,714	1,128,386	1,234,816	1,337,600
Uniform School Fund:																	
Individual Income	265,328	294,947	331,139	347,977	390,913	435,510	454,290	533,288	569,853	615,604	647,593	717,600	784,430	842,089	925,000	1,026,803	1,132,000
Corporate Franchise	40,377	40,667	40,894	33,763	53,226	65,918	84,048	68,898	78,806	92,982	99,693	87,766	80,945	79,441	121,062	153,512	163,000
School Land Income	10,728	14,443	18,857	30,428	18,985	18,409	11,227	7,940	0	0	0	0	0	0	0	0	0
Perm. Fund Interest	0	0	0	0	0	0	0	0	2,075	3,110	4,533	4,593	4,721	6,491	4,417	4,897	4,500
Gross Receipts Tax	0	0	0	0	0	0	0	510	4,498	2,814	4,172	3,685	3,577	4,505	4,128	4,389	13,800
Federal Rev. Sharing	14,045	6,999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USF Other	2,701	2,462	2,088	(2,259)	5,610	9,757	11,244	12,337	9,850	13,749	11,189	12,880	16,375	5,496	6,918	8,350	4,000
USF Subtotal	333,179	359,518	392,978	409,909	468,734	529,594	560,809	622,973	665,082	728,259	767,181	826,524	890,048	938,023	1,061,525	1,197,951	1,317,300
Transportation Fund:																	
Motor Fuel Tax	60,451	56,508	67,734	68,697	68,979	89,337	92,164	99,985	129,370	131,220	132,475	131,056	136,352	141,306	150,896	155,662	162,000
Special Fuel Tax	10,470	10,107	12,672	12,637	14,449	17,791	19,369	20,626	27,555	29,305	29,092	36,786	33,405	35,568	37,676	40,760	44,000
TF Other	18,873	20,135	21,084	30,843	33,080	33,793	34,662	34,838	35,524	36,891	38,685	39,570	44,579	47,298	49,581	52,628	54,900
TF Subtotal	89,794	86,750	101,490	112,177	116,508	140,921	146,195	155,449	192,449	197,416	200,252	207,412	214,336	224,172	238,153	249,050	260,900
Mineral Lease Payment	14,933	18,153	26,891	36,162	37,468	34,190	32,578	22,385	28,836	50,800	34,941	32,378	32,526	30,287	33,336	29,054	34,500
Total	841,315	901,574	1,020,704	1,045,236	1,280,109	1,409,793	1,445,594	1,479,883	1,645,921	1,800,179	1,871,433	1,960,264	2,069,194	2,209,196	2,461,400	2,710,871	2,950,300

*FY95 revenues are preliminary collections.
**FY96 values are estimates.

Note: These revenues were not adjusted for tax rate or base changes. As such they include historical changes to the tax structure, including all tax rate increases. These monies are cash collections as reported by the Tax Commission. They are not the modified accrual collections used for budgeting.

Sources: Utah Department of Finance, Utah State Tax Commission, and Governor's Office of Planning and Budget.

Table 50
Cash Collection Unrestricted Revenues (Current Dollar Percent Changes): FY1980 to FY1996

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996*
General Fund:																	
Sales & Use Tax	na	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	10.8	8.0	9.0
Liquor Profits	na	16.9	8.9	-0.8	2.5	-3.1	0.7	-9.6	-7.3	0.4	3.9	5.8	-5.5	9.3	-1.3	12.2	7.1
Insurance Premiums	na	7.2	36.2	-16.2	11.0	11.4	17.1	6.5	1.7	-6.4	13.7	-7.2	8.4	12.7	13.9	5.7	11.9
Beer, Cig. & Tobacco	na	8.6	4.3	15.1	23.1	6.6	-1.2	14.0	21.6	5.3	-1.8	2.7	11.5	-0.9	6.7	2.9	0.9
Severance Taxes	na	45.2	51.9	-16.6	86.5	29.4	-6.6	-50.8	35.3	-3.5	7.0	3.1	-41.5	6.1	-2.0	13.4	12.1
Inheritance Tax	na	20.7	120.6	-56.2	57.9	53.3	-1.3	-50.9	48.5	183.6	-22.3	-36.6	-17.4	91.3	7.7	204.8	-49.9
Investment Income	na	-34.1	45.7	-47.6	-0.4	28.2	-16.3	-68.1	178.6	80.0	-7.0	-38.8	-36.1	-37.8	46.2	93.4	1.5
Other Fines and Fees	na	46.0	-5.5	12.3	65.5	1.6	-5.0	11.0	7.2	3.7	18.8	4.2	-30.9	-9.1	37.0	-7.2	41.2
Circuit Breaker	na	-17.7	5.6	-6.7	-22.0	21.3	-32.9	-16.4	-7.2	21.2	140.9	4.5	15.8	2.9	7.0	5.7	5.7
GF Subtotal	na	8.4	14.2	-2.5	35.0	7.3	0.1	-3.8	11.9	8.4	5.5	2.9	4.3	9.1	11.0	9.4	8.3
Uniform School Fund:																	
Individual Income	na	11.2	12.3	5.1	12.3	11.4	4.3	17.4	6.9	8.0	5.2	10.8	9.3	7.4	9.6	11.0	10.2
Corporate Franchise	na	0.7	0.6	-17.4	57.6	23.8	27.5	-18.0	14.4	18.0	7.2	-12.0	-7.8	-1.9	55.6	26.8	6.2
School Land Income	na	34.6	30.6	61.4	-37.6	-3.0	-39.0	-29.3	na	na	na	na	na	na	na	na	na
Perm. Fund Interest	na	na	na	na	na	na	na	na	na	49.9	45.8	1.3	2.8	37.5	-32.0	10.9	-8.1
Gross Receipts Tax	na	na	na	na	na	na	na	na	782.0	-37.4	48.3	-11.7	-2.9	25.9	-8.4	6.3	214.4
Federal Rev. Sharing	na	-50.2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
USF Other	na	-8.8	-15.2	-208.2	-348.3	73.9	15.2	9.7	-20.2	39.6	-18.6	15.1	27.1	-66.4	25.9	20.7	-52.1
USF Subtotal	na	7.9	9.3	4.3	14.4	13.0	5.9	11.1	6.8	9.5	5.3	7.7	7.7	5.4	13.2	12.9	10.0
Transportation Fund:																	
Motor Fuel Tax	na	-6.5	19.9	1.4	0.4	29.5	3.2	8.5	29.4	1.4	1.0	-1.1	4.0	3.6	6.8	3.2	4.1
Special Fuel Tax	na	-3.5	25.4	-0.3	14.3	23.1	8.9	6.5	33.6	6.4	-0.7	26.4	-9.2	6.5	5.9	8.2	7.9
TF Other	na	6.7	4.7	46.3	7.3	2.2	2.6	0.5	2.0	3.8	4.9	2.3	12.7	6.1	4.8	6.1	4.3
TF Subtotal	na	-3.4	17.0	10.5	3.9	21.0	3.7	6.3	23.8	2.6	1.4	3.6	3.3	4.6	6.2	4.6	4.8
Mineral Lease Payment	na	21.6	48.1	34.5	3.6	-8.7	-4.7	-31.3	28.8	76.2	-31.2	-7.3	0.5	-6.9	10.1	-12.8	18.7
Total Ann. Pct. Change	na	7.2	13.2	2.4	22.5	10.1	2.5	2.4	11.2	9.4	4.0	4.7	5.6	6.8	11.4	10.1	8.8
Avg. Ann. Grth. Rates	na	7.2	10.1	7.5	11.1	10.9	9.4	8.4	8.8	8.8	8.3	8.0	7.8	7.7	8.8	8.1	8.2

*FY 96 values are estimates.

Note: These percentages reflect tax rate and base changes, and represent Tax Commission cash collection annual reports rather than the Department of Finance's accrual reports which are used for budgeting.

Sources: Utah Department of Finance, Utah State Tax Commission, and Governor's Office of Planning and Budget.

Table 51
Cash Collection Unrestricted Revenues (Thousands of Constant 1987 Dollars): FY1980 to FY1996

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995*	1996**
General Fund:																	
Sales & Use Tax	467,953	461,126	471,699	455,639	590,857	598,508	583,984	568,203	607,300	628,144	638,602	640,238	672,301	720,933	783,599	828,929	888,889
Liquor Profits	21,983	23,369	23,455	22,233	21,870	20,331	19,872	17,460	15,652	15,044	14,986	15,196	13,905	14,822	14,351	15,776	16,618
Insurance Premiums	21,492	20,945	26,308	21,072	22,448	23,989	27,263	28,219	27,751	24,853	27,099	24,081	25,283	27,792	31,067	32,167	35,401
Beer, Cig. & Tobacco	18,173	17,948	17,267	19,000	22,457	22,968	22,009	24,395	28,702	28,925	27,245	26,817	28,974	28,024	29,341	29,586	29,372
Severance Taxes	15,432	20,369	28,528	22,734	40,690	50,517	45,789	21,903	28,669	26,480	27,167	26,824	15,216	15,750	15,137	16,816	18,551
Inheritance Tax	2,475	2,716	5,525	2,313	3,505	5,157	4,940	2,356	3,385	9,192	6,854	4,161	3,331	6,218	6,568	19,607	9,662
Investment Income	32,666	19,571	26,297	13,164	12,582	15,483	12,567	3,899	10,509	18,104	16,152	9,478	5,867	3,562	5,109	9,680	9,662
Other Fines and Fees	13,128	17,423	15,181	16,289	25,875	25,225	23,248	25,085	26,022	25,823	29,421	29,357	19,667	17,444	23,445	21,311	29,604
Circuit Breaker	(4,211)	(3,150)	(3,067)	(2,734)	(2,048)	(2,385)	(1,553)	(1,262)	(1,133)	(1,314)	(3,036)	(3,038)	(3,409)	(3,421)	(3,591)	(3,716)	(3,865)
GF Subtotal	589,091	580,317	611,194	569,710	738,235	759,793	738,120	690,258	746,857	775,251	784,491	773,113	781,135	831,124	905,026	970,157	1,033,894
Uniform School Fund:																	
Individual Income	387,453	391,540	405,311	407,086	438,981	469,300	474,950	542,069	560,328	579,392	584,576	620,600	657,252	688,375	741,899	806,728	874,976
Corporate Franchise	58,962	53,985	50,054	39,498	59,771	71,033	87,870	70,033	77,489	87,513	89,992	75,903	67,821	64,940	97,098	120,610	125,990
School Land Income	15,666	19,173	23,081	35,597	21,319	19,837	11,738	8,071	0	0	0	0	0	0	0	0	0
Perm. Fund Interest	0	0	0	0	0	0	0	0	2,040	2,927	4,092	3,972	3,956	5,306	3,543	3,847	3,478
Gross Receipts Tax	0	0	0	0	0	0	0	518	4,423	2,648	3,766	3,187	2,997	3,683	3,311	3,448	10,667
Federal Rev. Sharing	20,510	9,291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USF Other	3,944	3,268	2,556	(2,643)	6,300	10,514	11,755	12,540	9,685	12,940	10,100	11,139	13,720	4,493	5,549	6,560	3,092
USF Subtotal	486,535	477,257	481,001	479,538	526,372	570,684	586,313	633,231	653,965	685,420	692,526	714,800	745,746	766,797	851,400	941,193	1,018,203
Transportation Fund:																	
Motor Fuel Tax	88,275	75,014	82,906	80,366	77,461	96,268	96,355	101,632	127,207	123,501	119,584	113,341	114,245	115,512	121,026	122,299	125,217
Special Fuel Tax	15,289	13,417	15,510	14,784	16,226	19,171	20,250	20,966	27,094	27,581	26,261	31,814	27,989	29,075	30,218	32,024	34,010
TF Other	27,560	26,729	25,807	36,082	37,148	36,415	36,238	35,412	34,930	34,721	34,921	34,221	37,351	38,664	39,767	41,348	42,435
TF Subtotal	131,124	115,160	124,223	131,232	130,834	151,855	152,844	158,009	189,232	185,803	180,766	179,375	179,586	183,252	191,011	195,671	201,662
Mineral Lease Payment	21,806	24,098	32,914	42,304	42,075	36,843	34,060	22,754	28,354	47,812	31,541	28,001	27,253	24,758	26,737	22,827	26,667
Total	1,228,556	1,196,833	1,249,331	1,222,784	1,437,517	1,519,174	1,511,337	1,504,252	1,618,408	1,694,286	1,689,324	1,695,290	1,733,719	1,805,931	1,974,174	2,129,848	2,280,425

*FY95 revenues are preliminary collections.
**FY96 values are estimates.

Note: These revenues were not adjusted for tax rate or base changes. As such they include historical changes to the tax structure, including all tax rate increases. These monies are cash collections as reported by the Tax Commission. They are not the modified accrual collections used for budgeting.

Sources: Utah Department of Finance, Utah State Tax Commission, and Governor's Office of Planning and Budget.

Table 52
Cash Collection Unrestricted Revenues (Constant 1987 Dollar Percent Changes): FY1980 to FY1996

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996*
General Fund:																	
Sales & Use Tax	na	-1.5	2.3	-3.4	29.7	1.3	-2.4	-2.7	6.9	3.4	1.7	0.3	5.0	7.2	8.7	5.8	7.2
Liquor Profits	na	6.3	0.4	-5.2	-1.6	-7.0	-2.3	-12.1	-10.4	-3.9	-0.4	1.4	-8.5	6.6	-3.2	9.9	5.3
Insurance Premiums	na	-2.5	25.6	-19.9	6.5	6.9	13.6	3.5	-1.7	-10.4	9.0	-11.1	5.0	9.9	11.8	3.5	10.1
Beer, Cig. & Tobacco	na	-1.2	-3.8	10.0	18.2	2.3	-4.2	10.8	17.7	0.8	-5.8	-1.6	8.0	-3.3	4.7	0.8	-0.7
Severance Taxes	na	32.0	40.1	-20.3	79.0	24.2	-9.4	-52.2	30.9	-7.6	2.6	-1.3	-43.3	3.5	-3.9	11.1	10.3
Inheritance Tax	na	9.7	103.4	-58.1	51.5	47.2	-4.2	-52.3	43.7	171.5	-25.4	-39.3	-20.0	86.7	5.6	198.5	-50.7
Investment Income	na	-40.1	34.4	-49.9	-4.4	23.1	-18.8	-69.0	169.5	72.3	-10.8	-41.3	-38.1	-39.3	43.4	89.5	-0.2
Other Fines and Fees	na	32.7	-12.9	7.3	58.8	-2.5	-7.8	7.9	3.7	-0.8	13.9	-0.2	-33.0	-11.3	34.4	-9.1	38.9
Circuit Breaker	na	-25.2	-2.6	-10.9	-25.1	16.4	-34.9	-18.7	-10.3	16.0	131.1	0.1	12.2	0.3	5.0	3.5	4.0
GF Subtotal	na	-1.5	5.3	-6.8	29.6	2.9	-2.9	-6.5	8.2	3.8	1.2	-1.5	1.0	6.4	8.9	7.2	6.6
Uniform School Fund:																	
Individual Income	na	1.1	3.5	0.4	7.8	6.9	1.2	14.1	3.4	3.4	0.9	6.2	5.9	4.7	7.8	8.7	8.5
Corporate Franchise	na	-8.4	-7.3	-21.1	51.3	18.8	23.7	-20.3	10.6	12.9	2.8	-15.7	-10.6	-4.2	49.5	24.2	4.5
School Land Income	na	22.4	20.4	54.2	-40.1	-7.0	-40.8	-31.2	na	na	na	na	na	na	na	na	na
Perm. Fund Interest	na	na	na	na	na	na	na	na	na	43.5	39.8	-2.9	-0.4	34.1	-33.2	8.6	-9.6
Gross Receipts Tax	na	na	na	na	na	na	na	na	753.2	-40.1	42.2	-15.4	-6.0	22.9	-10.1	4.1	209.3
Federal Rev. Sharing	na	-54.7	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
USF Other	na	-17.1	-21.8	-203.4	-338.4	66.9	11.8	6.7	-22.8	33.6	-21.9	10.3	23.2	-67.3	23.5	18.2	-52.9
USF Subtotal	na	-1.9	0.8	-0.3	9.8	8.4	2.7	8.0	3.3	4.8	1.0	3.2	4.3	2.8	11.0	10.5	8.2
Transportation Fund:																	
Motor Fuel Tax	na	-15.0	10.5	-3.1	-3.6	24.3	0.1	5.5	25.2	-2.9	-3.2	-5.2	0.8	1.1	4.8	1.1	2.4
Special Fuel Tax	na	-12.2	15.6	-4.7	9.8	18.2	5.6	3.5	29.2	1.8	-4.8	21.1	-12.0	3.9	3.9	6.0	6.2
TF Other	na	-3.0	-3.5	39.8	3.0	-2.0	-0.5	-2.3	-1.4	-0.6	0.6	-2.0	9.1	3.5	2.9	4.0	2.6
TF Subtotal	na	-12.2	7.9	5.6	-0.3	16.1	0.7	3.4	19.8	-1.8	-2.7	-0.8	0.1	2.0	4.2	2.4	3.1
Mineral Lease Payment	na	10.5	36.6	28.5	-0.5	-12.4	-7.6	-33.2	24.6	68.6	-34.0	-11.2	-2.7	-9.2	8.0	-14.6	16.8
Total Ann. Pct. Chg.	na	-2.6	4.4	-2.1	17.6	5.7	-0.5	-0.5	7.6	4.7	-0.3	0.4	2.3	4.2	9.3	7.9	7.1
Avg. Ann. Grth. Rates	na	-2.6	0.8	-0.2	4.0	4.3	3.5	2.9	3.5	3.6	3.2	3.0	2.9	3.0	3.4	3.7	4.2

*FY96 values are estimates.

Note: These percentages reflect tax rate and base changes, and represent Tax Commission cash collection annual reports rather than the Department of Finance's accrual reports which are used for budgeting.

Sources: Utah Department of Finance, Utah State Tax Commission, and Governor's Office of Planning and Budget.

Table 53
Rate and Base Adjusted Cash Collection Unrestricted Revenues (Thousands of Constant 1987 Dollars): FY1980 to FY1995

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995*
General Fund:																
Sales & Use Tax	$571,372	$563,037	$575,474	$554,023	$587,576	$620,753	$610,179	$580,730	$581,343	$601,347	$616,129	$627,347	$650,554	$698,407	$756,033	$828,929
Liquor Profits	21,983	23,369	23,455	22,233	21,870	20,331	19,872	17,460	15,652	15,044	14,986	15,196	13,905	14,822	14,351	15,776
Insurance Premiums	21,233	20,692	19,824	20,817	22,177	23,700	26,934	27,879	27,416	24,553	25,434	25,072	24,978	27,457	30,891	32,167
Beer, Cig. & Tobacco	51,011	50,217	45,829	43,550	39,912	40,134	38,601	37,709	31,939	32,232	30,302	29,878	28,974	28,024	29,341	29,586
Severance Taxes	23,440	30,674	42,538	33,674	40,089	37,646	34,419	16,693	24,154	23,505	23,443	21,291	17,787	19,696	15,604	16,816
Inheritance Tax	2,475	2,716	5,525	2,313	3,505	5,157	4,940	2,356	3,385	9,192	6,854	4,161	3,331	6,218	6,568	19,607
Investment Income	32,666	19,571	26,297	13,164	12,582	15,483	12,567	3,899	10,509	18,104	16,152	9,478	5,867	3,562	5,109	9,680
Other Fines and Fees	9,351	12,411	10,814	11,603	18,431	17,968	16,560	17,868	18,535	18,394	20,957	20,911	21,768	19,307	23,060	21,311
Circuit Breaker	(4,211)	(3,150)	(3,067)	(2,734)	(2,048)	(2,385)	(1,553)	(1,262)	(1,133)	(1,314)	(3,036)	(3,038)	(3,409)	(3,421)	(3,591)	(3,716)
GF Subtotal	729,321	719,538	746,689	698,644	744,093	778,787	762,520	703,331	711,802	741,058	751,222	750,296	763,755	814,072	877,366	970,157
Uniform School Fund:																
Individual Income	382,944	386,984	400,594	402,378	433,907	463,893	469,488	485,045	519,617	554,496	586,389	622,525	659,292	690,512	726,966	806,728
Corporate Franchise	81,692	74,797	69,350	53,746	69,473	73,433	91,809	73,410	82,816	97,488	92,224	86,998	78,674	81,477	96,327	120,610
School Land Income	15,666	19,173	23,081	35,597	21,319	19,837	11,738	8,071	0	0	0	0	0	0	0	0
Perm. Fund Interest	0	0	0	0	0	0	0	0	2,040	2,927	4,092	3,972	3,956	5,306	3,543	3,847
Gross Receipts Tax	0	0	0	0	0	0	0	518	4,423	2,648	3,766	3,187	2,997	3,683	3,311	3,448
Federal Rev. Sharing	20,510	9,291	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USF Other	3,944	3,268	2,556	(2,643)	6,300	10,514	11,755	12,540	9,685	12,940	10,100	11,139	13,720	4,493	5,549	6,560
USF Subtotal	504,756	493,513	495,581	489,078	530,999	567,678	584,790	579,584	618,581	670,499	696,571	727,820	758,639	785,471	835,696	941,193
Transportation Fund:																
Motor Fuel Tax	186,359	158,363	143,201	138,814	133,796	130,650	130,768	131,721	127,207	123,501	119,584	113,341	114,245	115,512	121,026	122,299
Special Fuel Tax	36,420	31,960	30,229	28,813	31,624	29,358	31,009	29,771	30,572	31,121	29,632	29,359	27,989	29,075	30,218	32,024
TF Other	28,519	27,660	26,705	37,338	38,441	37,683	37,500	36,645	36,146	35,930	36,136	35,413	37,351	38,664	39,767	41,348
TF Subtotal	251,299	217,983	200,135	204,966	203,861	197,691	199,278	198,136	193,926	190,552	185,352	178,112	179,586	183,252	191,011	195,671
Mineral Lease Payment	20,142	22,260	30,402	39,076	38,865	34,032	31,461	21,017	26,191	26,776	29,134	25,865	25,173	22,869	24,697	22,827
Total	1,505,518	1,453,293	1,472,808	1,431,764	1,517,818	1,578,187	1,578,049	1,502,070	1,550,499	1,628,886	1,662,279	1,682,094	1,727,154	1,805,665	1,928,769	2,129,848

*FY95 Revenues are preliminary collections.

Note: These revenues were adjusted for tax rate and base changes. As such they do not include historical changes to the tax structure. These monies are cash collections as reported by the Tax Commission. They are not the modified accrual collections used for budgeting.

Source: Governor's Office of Planning and Budget.

Table 54
Rate and Base Adjusted Cash Collection Unrestricted Revenues (Constant 1987 Dollar Percent Changes): FY1980 to FY1995

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
General Fund:																
Sales & Use Tax	na	-1.5	2.2	-3.7	6.1	5.6	-1.7	-4.8	0.1	3.4	2.5	1.8	3.7	7.4	8.3	9.6
Liquor Profits	na	6.3	0.4	-5.2	-1.6	-7.0	-2.3	-12.1	-10.4	-3.9	-0.4	1.4	-8.5	6.6	-3.2	9.9
Insurance Premiums	na	-2.5	-4.2	5.0	6.5	6.9	13.6	3.5	-1.7	-10.4	3.6	-1.4	-0.4	9.9	12.5	4.1
Beer, Cig. & Tobacco	na	-1.6	-8.7	-5.0	-8.4	0.6	-3.8	-2.3	-15.3	0.9	-6.0	-1.4	-3.0	-3.3	4.7	0.8
Severance Taxes	na	30.9	38.7	-20.8	19.0	-6.1	-8.6	-51.5	44.7	-2.7	-0.3	-9.2	-16.5	10.7	-20.8	7.8
Inheritance Tax	na	9.7	103.4	-58.1	51.5	47.2	-4.2	-52.3	43.7	171.5	-25.4	-39.3	-20.0	86.7	5.6	198.5
Investment Income	na	-40.1	34.4	-49.9	-4.4	23.1	-18.8	-69.0	169.5	72.3	-10.8	-41.3	-38.1	-39.3	43.4	89.5
Other Fines and Fees	na	32.7	-12.9	7.3	58.8	-2.5	-7.8	7.9	3.7	-0.8	13.9	-0.2	4.1	-11.3	19.4	-7.6
Circuit Breaker	na	-25.2	-2.6	-10.9	-25.1	16.4	-34.9	-18.7	-10.3	16.0	131.1	0.1	12.2	0.3	5.0	3.5
GF Subtotal	na	-1.3	3.8	-6.4	6.5	4.7	-2.1	-7.8	1.2	4.1	1.4	-0.1	1.8	6.6	7.8	10.6
Uniform School Fund:																
Individual Income	na	1.1	3.5	0.4	7.8	6.9	1.2	3.3	7.1	6.7	5.8	6.2	5.9	4.7	5.3	11.0
Corporate Franchise	na	-8.4	-7.3	-22.5	29.3	5.7	25.0	-20.0	12.8	17.7	-5.4	-5.7	-9.6	3.6	18.2	25.2
School Land Income	na	22.4	20.4	54.2	-40.1	-7.0	-40.8	-31.2	na	na	na	na	na	na	na	na
Perm. Fund Interest	na	na	na	na	na	na	na	na	na	43.5	39.8	-2.9	-0.4	34.1	-33.2	8.6
Gross Receipts Tax	na	na	na	na	na	na	na	na	753.2	-40.1	42.2	-15.4	-6.0	22.9	-10.1	4.1
Federal Rev. Sharing	na	-54.7	na	na	na	na	na	na	na	na	na	na	na	na	na	na
USF Other	na	-17.1	-21.8	-203.4	-338.4	66.9	11.8	6.7	-22.8	33.6	-21.9	10.3	23.2	-67.3	23.5	18.2
USF Subtotal	na	-2.2	0.4	-1.3	8.6	6.9	3.0	-0.9	6.7	8.4	3.9	4.5	4.2	3.5	6.4	12.6
Transportation Fund:																
Motor Fuel Tax	na	-15.0	-9.6	-3.1	-3.6	-2.4	0.1	0.7	-3.4	-2.9	-3.2	-5.2	0.8	1.1	4.8	1.1
Special Fuel Tax	na	-12.2	-5.4	-4.7	9.8	-7.2	5.6	-4.0	2.7	1.8	-4.8	-0.9	-4.7	3.9	3.9	6.0
TF Other	na	-3.0	-3.5	39.8	3.0	-2.0	-0.5	-2.3	-1.4	-0.6	0.6	-2.0	5.5	3.5	2.9	4.0
TF Subtotal	na	-13.3	-8.2	2.4	-0.5	-3.0	0.8	-0.6	-2.1	-1.7	-2.7	-3.9	0.8	2.0	4.2	2.4
Mineral Lease Payment	na	10.5	36.6	28.5	-0.5	-12.4	-7.6	-33.2	24.6	2.2	8.8	-11.2	-2.7	-9.2	8.0	-7.6
Total Ann. Pct. Chg.	na	-3.5	1.3	-2.8	6.0	4.0	-0.0	-4.8	3.2	5.1	2.1	1.2	2.7	4.5	6.8	10.4
Avg. Ann. Grth. Rates	na	-3.5	-1.1	-1.7	0.2	0.9	0.8	-0.0	0.4	0.9	1.0	1.0	1.2	1.4	1.8	2.3

Note: These percentages do not reflect tax rate and base changes. As such they do not include historical changes to the tax structure nor tax rate increases.

Source: Governor's Office of Planning and Budget.

Table 55
Total Budget Tax Increases and Decreases from 1994 and 1995 Legislative Sessions

Bill	Subject	Tax Change
FY 1995:		
H.B. 145	Sales Tax Exemption - Replacement Parts for Steel Mills	($516,700)
H.B. 162	Sales Tax - Repeal of Flood Tax Authorization	(23,600,000)
H.B. 205	Tax Credit for Low-Income Housing	(226,600)
H.B. 279	Sales Tax - Container Exemption	380,000
H.B. 302	Sales Tax - Vending Machines	310,400
H.B. 346	Sales Tax Exemption - Pollution Control Facilities	1,400,000
S.B. 090	Property Tax Rate & Residence Exemption Changes	(8,500,000)
S.B. 093	Corporate Tax Revisions	50,000
S.B. 191	Treatment of Admission and User Fees	3,290,000
S.B. 205	Sales Tax Exemptions - Transportation Services	600,000
S.B. 211	Sales Tax Exemptions - Coin Operated Devices	1,103,100
S.B. 238	Sales Tax Exemptions - Building Materials	6,920,000
	SUBTOTAL FY 1995	**($18,789,800)**
FY 1996:		
H.B. 020	Tax Incentives to Employ Persons with Disabilities	($64,400)
H.B. 056	Sales Tax - Home Medical Equipment	(288,000)
H.B. 120	Sales Tax - Authorized Carrier Exemption	(150,000)
H.B. 274	Sales Tax on Construction Projects (a)	(2,000,000)
S.B. 043	Agricultural Sales Tax Exemptions	275,000
S.B. 254	Gross Receipts Taxes	9,400,000
S.B. 56 & 254	Property Taxes (b)	(141,440,833)
S.B. 56 & 254	Income Taxes (b)	4,500,000
S.B. 273	Sales Tax Exemption on School Fund Raisers	(50,000)
S.B. 289	Sales Tax - Mobile Homes	(1,400,000)
	SUBTOTAL FY 1996	**($131,218,233)**
FY 1997:		
S.B. 105	Sales Tax - Manufacturing Exemption (c)	($7,489,700)
H.B. 145	Sales Tax Exemption Expiration- Replacement Parts for Steel Mills (1994 Session)	$2,092,000
H.B. 274	Additional Sales Tax on Construction Projects (a)	(2,000,000)
	SUBTOTAL FY 1997	**($7,397,700)**
FY 1998:		
S.B. 105	Additional Sales Tax - Manufacturing Exemption (c)	**($9,943,700)**
FY 1999:		
S.B. 105	Additional Sales Tax - Manufacturing Exemption (c)	**($13,258,300)**
	GRAND TOTAL FY 1995-99 (d)	**($180,607,733)**

(a) 50% impact (full -$4.0 million impact will occur in FY1997 and thereafter).
(b) Tax Commission calculation based on increasing the residential exemption from 32% to 45%, decreasing the basic school rate from .00422 to .00264, and reducing the state assessing and collecting rate from .0003 to .000281. A $4.5 million increase in income tax collections will occur due to lower property tax deductions on income tax forms.
(c) Exemption to be phased-in through FY1999. Beginning July 1996 30% exemption allowed, as of July 1997 60% allowed, and as of July 1998 100% allowed.
(d) Total impacts do NOT include transfers within the total budget due to tax changes. S.B. 162 reduced general fund severance tax revenues $0.3 million beginning in FY1997 by setting up a restricted Uintah Basin Revitalization Fund; but total severance taxes were not reduced. Similarly, S.B. 117 reduced general fund insurance premium tax revenues by $1.0 million in FY1997 in order to set up a restricted Workers' Compensation Safety Fund. And, S.B. 49 will reduce general fund sales tax revenues by $30 million beginning in FY1998 in order to earmark sales taxes to water and transportation projects; but, total budget sales taxes were not reduced.

Sources: Governor's Office of Planning and Budget, Utah State Tax Commision, Legislative Research Office, and Legislative Fiscal Analyst Office.

☆ Regional / National Comparisons

The 1990s have been a period of sustained economic growth for the Mountain Division[25]. The mountain region is in the midst of a four year economic boom and leads the nation in economic vitality and growth. An examination of basic demographic and economic statistics demonstrates the relatively favorable economic conditions among most mountain states compared to the national economy.

Population Growth

The rate of population growth in the mountain states has increased since 1988. In 1994, the population growth rate was 3.0 percent. The favorable economic conditions in the mountain west will support continued above-average population growth. In-migrants (from California in particular) have been moving into the intermountain area. From 1993 to 1994, the population in Mountain Division states increased by 437,000, to a total of 15,214,000 inhabitants, for a growth of 3.0 percent compared to a 1.0 percent increase nationally (Figure 29 and Table 56). In 1995, the mountain states continued to attract in-migrants to the area. The California economy is now improving, which will likely reduce the number of migrants moving into this region during 1996.

Personal Income Growth

Total personal income for the region grew at an average annual rate of 7.3 percent from 1989 to 1994, as compared to the national rate of 5.3 percent. Utah's average annual growth of personal income was 7.8 percent during this period. All eight states in the mountain region have had personal income growth rates above the national average since 1988 (Table 57).

From 1993 to 1994, income grew by 7.4 percent in the mountain states compared to 5.3 percent in the U.S. The most recent data show that income growth is quite strong in this region relative to the nation. Personal income grew by 7.8 percent and 5.8 percent in the mountain states and the U.S., respectively. from the second quarter of 1994 to the second quarter of 1995. During this same time, personal income grew 9.5 percent in Nevada, 9.2 percent in Arizona, and 9.0 percent in Utah; the first, second and third largest percent increases of all 50 states.

Seven of eight mountain states experienced an increase in per capita personal income relative to the U.S. average from 1989 to 1994. Per capita personal income for a region can change relative to the U.S. average because the region's total personal income, its population, or both, grow at a faster or slower rate than the U.S. average. From 1989 to 1994, income in the mountain region grew 38 percent faster than the national rate, while population grew more than twice the U.S. rate. The result is that per capita income for the mountain states has increased relative to national per capita income (Table 58). In 1989, per capita income in the mountain region was $15,713 or 88.8 percent of the national figure of $17,690. By 1994, per capita income for the mountain states was 91.2 percent of the national figure--$19,789 compared to $21,699.

Per capita total personal income is one statistic that is used to measure relative economic prosperity between states. In Utah, on average, the birth rate is higher and household size is larger than found in other states. With 35.2 percent of Utah's population under the age of 18 compared to 26.1 percent nationally, Utah's per capita income is just 79.1 percent of the national figure of $21,699 for 1994. This rate of 79.1 percent is the second lowest of any state in the region (Figure 30).

Another measure of relative economic prosperity, total personal income per household, recognizes that most people live in households and not as individuals. In 1994, Utah's per household income ($54,700) was third out of the eight mountain states, and was 92.9 percent of the national figure of $58,900 (Figure 31

[25]As defined by the Bureau of the Census, the Mountain Division includes: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming.

and Table 59). Total personal income per household in the mountain region at $54,000 was 91.7 percent of the U.S. average.

Wages

The most complete measure of relative wages paid between states is average annual pay for all workers covered either by state or federal unemployment insurance programs. Wage growth for the intermountain region averaged 3.4 percent per year from 1989 to 1994, compared to the national growth rate of 3.6 percent (Table 60). With a slower growth rate in wages for the mountain states, wages dropped from 90.2 percent of the U.S. average in 1989 to 89.5 percent by 1994. As a percent of the national average, wages dropped in five of the eight mountain states over this five-year period. In 1994, average pay in Utah was 84.7 percent of the U.S. average, ranking fourth among the eight mountain states, and 37th nationally (Figure 32). The most recent data available show wages increasing among mountain states relative to wages nationally--from 89.3 percent of the U.S. average in 1993 to 89.5 percent in 1994. This is the first measurement to show that the strong regional economy is putting upward pressure on wages. Relative wage increases certainly occurred in 1995 and will continue in 1996.

Labor Market Activity

From 1989 to 1994, the mountain region's employment growth rate was more than 3.6 times that of the nation. Nonagricultural job growth in the region averaged 3.6 percent per year, while the national rate was 1.0 percent. Among the eight states of the region job growth per year was the highest in Nevada (4.9 percent), Idaho (4.8 percent), and Utah (4.5 percent). These rates were the fastest job growth rates for all 50 states over this five-year period. During this period, every mountain state increased in employment at a faster rate than the national growth rate (Table 61).

The most recent complete year for which data is available is 1994. From 1993 to 1994, nonagricultural employment growth in the mountain region was 5.9 percent, compared to the national rate of 2.6 percent. Of the 50 states, Nevada, Utah, Arizona, and Idaho led the way with job increases ranging from 9.7 percent to 6.1 percent.

Latest available information for all states, October 1994 to October 1995, indicates that the job picture in the mountain region, while slowing from last year's torrid pace, is by far the strongest of any region of the country. Three states, Nevada, Utah, and New Mexico, are out pacing all other states with net new job creation of between 4.8 to 5.8 percent (Figure 33). Nonagricultural job growth averaged 3.7 percent for mountain states, and for the nation, 1.8 percent.

The latest data indicate that unemployment in this region is about the same as the national rate of 5.2 percent (Table 62). This relatively favorable unemployment situation for the mountain states is indicative of the economic strength this region has maintained during the 1990s.

Broad-Based Strength

Economic conditions in the mountain region are stronger than that of any other region in the United States. The states of the intermountain west have been recognized nationally as having a favorable business climate: including moderate business taxes, less government regulation, a relatively youthful and educated populace, lower wages, and affordable housing. In addition, the quality of life in the mountain states with lower crime, functioning schools, and abundant recreational opportunities has been praised. For the past few years there has been a noticeable migration of jobs and people into this region. The largest number of these jobs and people have been relocating from California.

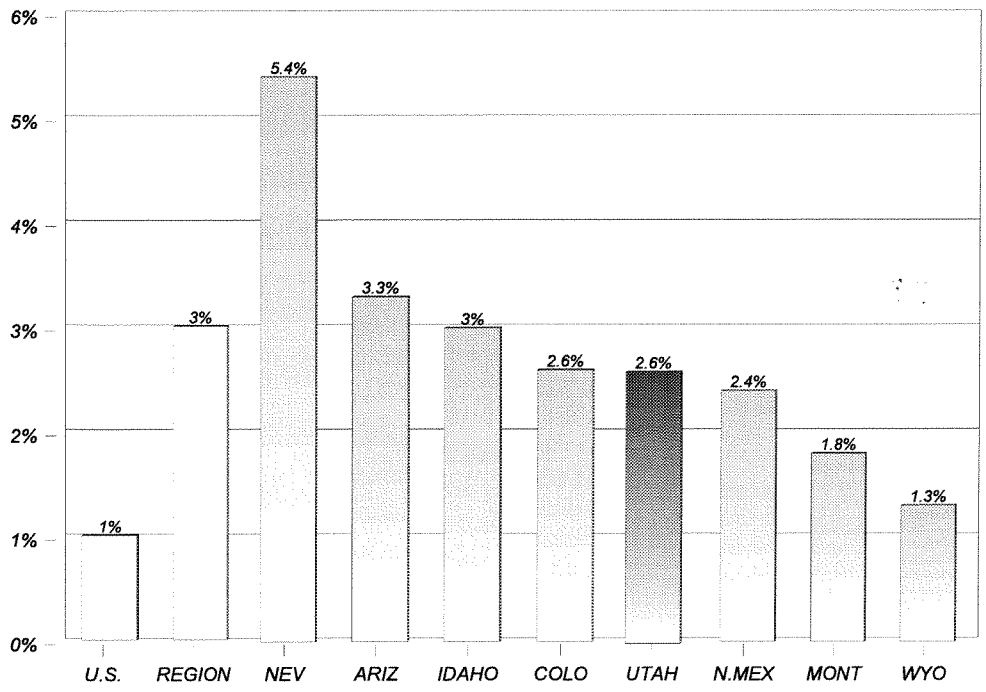
This influx has helped to fuel increased economic activity in manufacturing, residential and nonresidential construction, wholesale and retail trade, service industries, and government throughout the mountain west. Regional employment growth is broad-based across most of the mountain states and most of the major industries. Wyoming is the only mountain state in which job growth is below the rate of growth in employment nationally.

The effects of the strong regional economy and net in-migration have had a particularly noticeable effect in the construction industries. From October 1993 to October 1994, construction jobs were increasing at double digit rates in four mountain states--Utah (14.6 percent), Nevada (13.6 percent), New Mexico (12.1 percent) and Montana (11.2 percent).

Nationally, manufacturing jobs have been adversely affected because of cuts in defense, productivity gains, and foreign competition. Manufacturing employment has shown no growth in the United States from October 1994 to October 1995. Four mountain states lead with manufacturing employment growth, Utah (6.8 percent), New Mexico (4.5 percent), Nevada (4.3 percent), and Arizona (2.7 percent). Montana is the sixth fastest in manufacturing job growth at 2.5 percent. Wyoming is the only mountain state with job loses in manufacturing from October 1994 to October 1995.

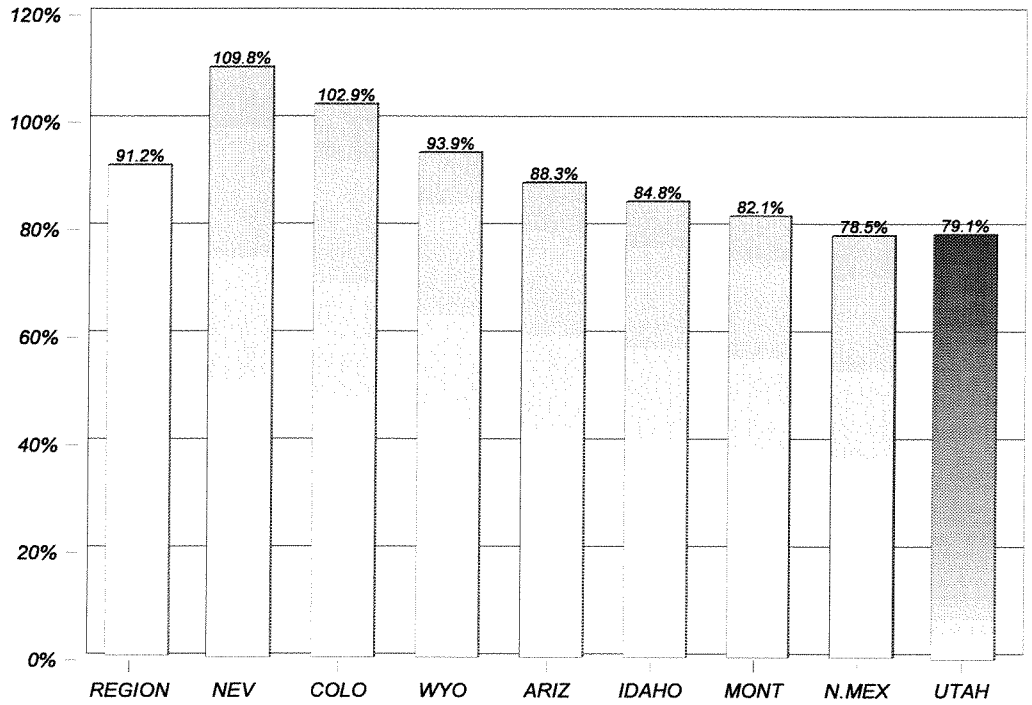
The national economy is expanding at a moderate pace as 1996 begins. Mountain Division state economies are experiencing the fourth straight year of an unprecedented, broad-based expansion. While the mountain states have been able, to this point, to expand economically without developing serious labor shortages or other bottlenecks, there are signs that rapid growth has begun to put inevitable strains on infrastructures and resources. These signs include increasing housing prices, low rates of unemployment, labor shortages (particularly among skilled construction workers) and upward pressure on wages. Regardless, the states in the Mountain Division will continue to outperform the nation as a whole during 1996. ☆

Figure 29
Population Growth Rates--U.S. and Mountain Division States: 1993-1994



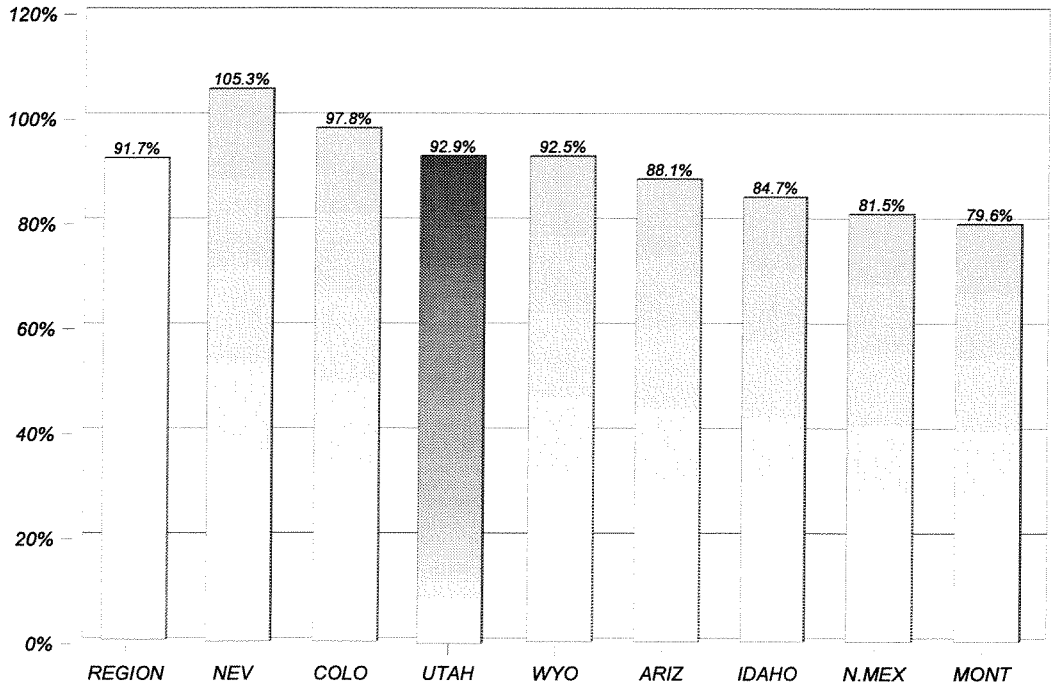
Source: U.S. Census Bureau

Figure 30
Per Capita Income as a Percent of U.S.--Mountain Division States: 1994



Source: Bureau of Economic Analysis

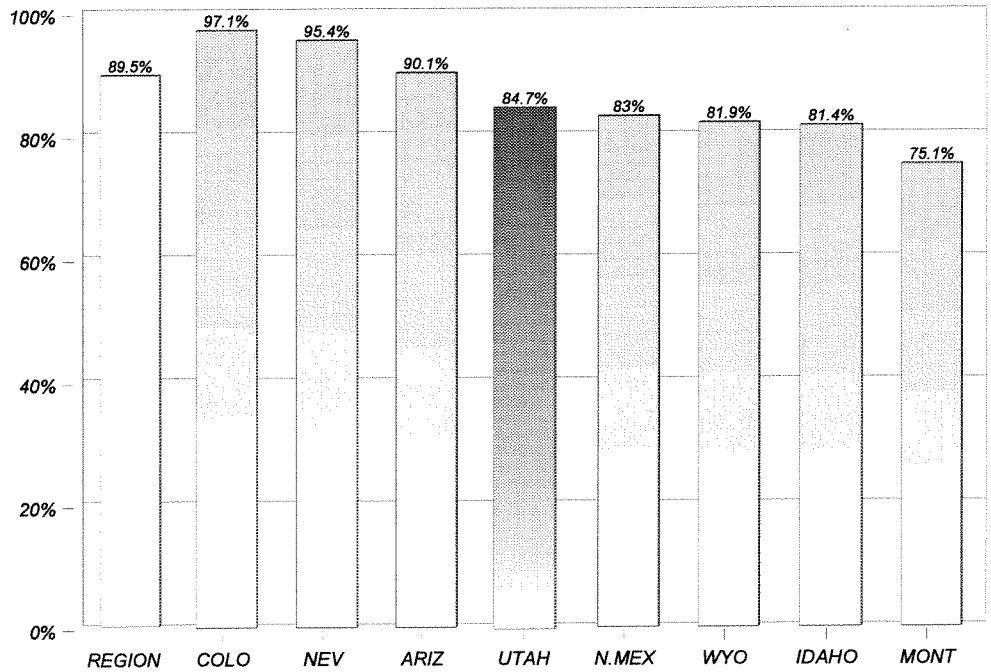
Figure 31
Personal Income per Household as a Percent of U.S.--Mountain Division States: 1994



*Personal income per household estimate calculated by Utah Foundation

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

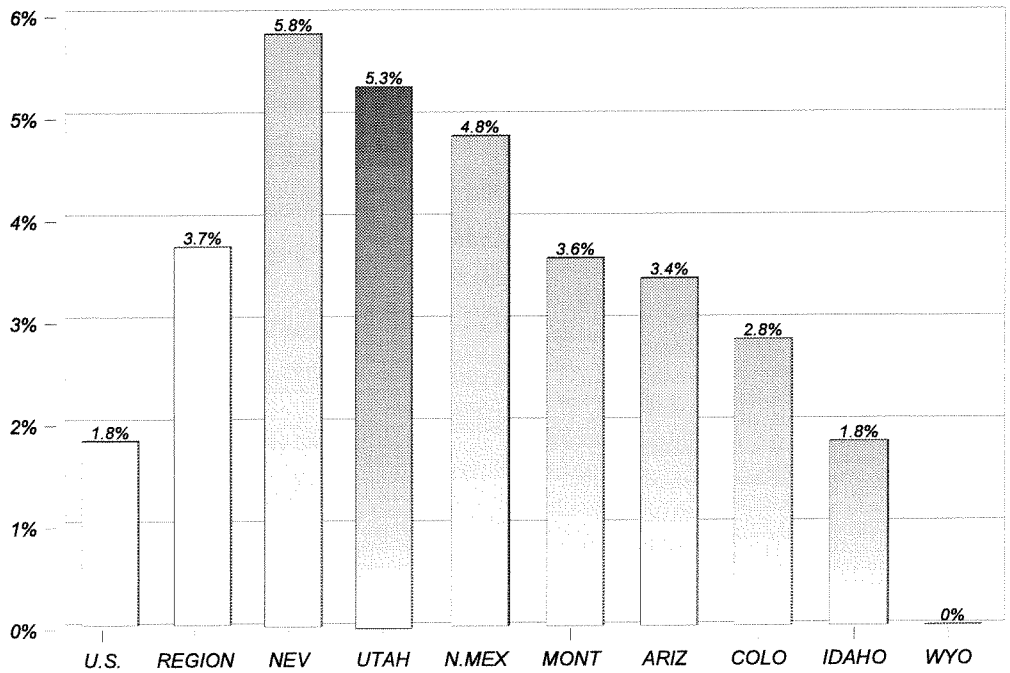
Figure 32
Average Annual Pay as a Percent of U.S.--Mountain Division States: 1994



*For workers covered by unemployment insurance

Source: U.S. Bureau of Labor Statistics

Figure 33
Nonagricultural Employment Growth--U.S. and Mountain Division States: Oct. 1994 to Oct. 1995



Source: U.S. Bureau of Labor Statisitcs

Table 56
Population and Households--U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Population (July 1 estimates) 1989 (thousands)	1993 (thousands)	1994 (thousands)	Rates of Population Change: Avg. Ann. Growth Rate 1989-94	Percent Change 1993-94	Households (July 1 estimates) 1994 (thousands)	Persons per Household	Rankings: Rank by Population 1994	Rank by Avg. Ann. Growth Rate 1989-94	Rank by Percent Change 1993-94	Rank by Persons per Household 1994
United States	246,820	257,783	260,341	1.1%	1.0%	95,946	2.64				
Mountain States	13,498	14,777	15,214	2.4%	3.0%	5,574	2.68				
Arizona	3,622	3,945	4,075	2.4%	3.3%	1,503	2.66	23	4	2	13
Colorado	3,276	3,564	3,656	2.2%	2.6%	1,417	2.52	26	6	4	48
Idaho	994	1,100	1,133	2.7%	3.0%	405	2.75	42	2	3	6
Montana	800	841	856	1.4%	1.8%	325	2.56	44	18	9	35
Nevada	1,137	1,382	1,457	5.1%	5.4%	560	2.56	38	1	1	36
New Mexico	1,504	1,616	1,654	1.9%	2.4%	587	2.77	36	11	6	5
Utah	1,706	1,860	1,908*	2.3%	2.6%	599	3.13	34	5	5	1
Wyoming	458	470	476	0.8%	1.3%	178	2.62	51	29	16	20
Other States											
Alabama	4,030	4,181	4,219	0.9%	0.9%	1,583	2.61	22	23	26	21
Alaska	547	598	606	2.1%	1.3%	208	2.81	48	7	15	4
Arkansas	2,346	2,426	2,453	0.9%	1.1%	927	2.58	33	25	21	30
California	29,218	31,217	31,431	1.5%	0.7%	10,850	2.83	1	15	35	3
Connecticut	3,283	3,278	3,275	-0.0%	-0.1%	1,222	2.60	27	48	49	25
Delaware	658	698	706	1.4%	1.1%	264	2.59	46	16	19	28
D.C.	624	579	570	-1.8%	-1.6%	237	2.24	50	51	51	51
Florida	12,638	13,726	13,953	2.0%	1.7%	5,456	2.50	4	9	12	50
Georgia	6,411	6,902	7,055	1.9%	2.2%	2,581	2.67	11	10	7	12
Hawaii	1,095	1,166	1,179	1.5%	1.1%	381	2.99	40	14	20	2
Illinois	11,410	11,686	11,752	0.6%	0.6%	4,308	2.66	6	36	39	14
Indiana	5,524	5,706	5,752	0.8%	0.8%	2,161	2.59	14	26	29	26
Iowa	2,771	2,821	2,829	0.4%	0.3%	1,082	2.52	30	41	43	49
Kansas	2,473	2,535	2,554	0.6%	0.7%	966	2.56	32	34	32	39
Kentucky	3,677	3,794	3,827	0.8%	0.9%	1,440	2.59	24	27	27	29
Louisiana	4,253	4,290	4,315	0.3%	0.6%	1,543	2.72	21	44	37	9
Maine	1,220	1,240	1,240	0.3%	0.0%	474	2.54	39	42	48	44
Maryland	4,727	4,958	5,006	1.2%	1.0%	1,831	2.67	19	21	23	11
Massachusetts	6,016	6,018	6,041	0.1%	0.4%	2,265	2.57	13	47	40	32
Michigan	9,253	9,460	9,496	0.5%	0.4%	3,502	2.65	8	38	41	16
Minnesota	4,338	4,524	4,567	1.0%	1.0%	1,711	2.60	20	22	24	24
Mississippi	2,574	2,640	2,669	0.7%	1.1%	949	2.74	31	30	22	8
Missouri	5,096	5,235	5,278	0.7%	0.8%	2,008	2.56	16	31	28	40
Nebraska	1,575	1,613	1,623	0.6%	0.6%	614	2.56	37	35	36	41
New Hampshire	1,105	1,124	1,137	0.6%	1.2%	424	2.61	41	37	18	22
New Jersey	7,726	7,859	7,904	0.5%	0.6%	2,845	2.72	9	40	38	10
New York	17,983	18,153	18,169	0.2%	0.1%	6,669	2.64	3	45	47	17
North Carolina	6,565	6,952	7,070	1.5%	1.7%	2,679	2.55	10	13	10	42
North Dakota	646	637	638	-0.2%	0.2%	241	2.54	47	50	46	43
Ohio	10,829	11,061	11,102	0.5%	0.4%	4,190	2.59	7	39	42	27
Oklahoma	3,150	3,233	3,258	0.7%	0.8%	1,236	2.56	28	33	30	37
Oregon	2,791	3,035	3,086	2.0%	1.7%	1,195	2.53	29	8	11	46
Pennsylvania	11,866	12,030	12,052	0.3%	0.2%	4,551	2.57	5	43	45	31
Rhode Island	1,001	1,000	997	-0.1%	-0.3%	374	2.57	43	49	50	33
South Carolina	3,457	3,630	3,664	1.2%	0.9%	1,337	2.66	25	20	25	15
South Dakota	697	716	721	0.7%	0.7%	265	2.63	45	32	33	18
Tennessee	4,854	5,094	5,175	1.3%	1.6%	1,966	2.57	17	19	14	34
Texas	16,807	18,022	18,378	1.8%	2.0%	6,539	2.75	2	12	8	7
Vermont	558	576	580	0.8%	0.7%	220	2.54	49	28	34	45
Virginia	6,120	6,473	6,552	1.4%	1.2%	2,439	2.60	12	17	17	23
Washington	4,746	5,259	5,343	2.4%	1.6%	2,042	2.56	15	3	13	38
West Virginia	1,807	1,818	1,822	0.2%	0.2%	705	2.53	35	46	44	47
Wisconsin	4,857	5,044	5,082	0.9%	0.8%	1,890	2.62	18	24	31	19

* The Bureau of the Census revised Utah's population to 1,910,000 in December 1995.

Source: U.S. Bureau of the Census.

Table 57
Total Personal Income--U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Total Personal Income 1989 (millions)	Total Personal Income 1993 (millions)	Total Personal Income 1994 (millions)	Rates of Total Personal Income Change: Avg. Ann. Growth Rate 1989-94	Rates of Total Personal Income Change: Percent Change 1993-94	Total Personal Income (saar): 2nd Quarter 1994 (millions)	Total Personal Income (saar): 2nd Quarter 1995 (millions)	Total Personal Income (saar): Percent Change 1994-95	Rankings: Rank by Total Personal Income 1994	Rankings: Rank by Avg. Ann. Growth Rate 1989-94	Rankings: Rank by Percent Change 1993-94	Rankings: Rank by Percent Change (saar)* 1994-95
United States	4,366,135	5,364,300	5,649,010	5.3%	5.3%	5,612,253	5,938,199	5.8%				
Mountain States	212,091	280,395	301,073	7.3%	7.4%	297,888	321,234	7.8%				
Arizona	56,646	71,774	78,050	6.6%	8.7%	76,996	84,102	9.2%	23	11	4	2
Colorado	58,202	76,831	81,595	7.0%	6.2%	80,773	86,118	6.6%	22	6	23	13
Idaho	14,241	19,495	20,855	7.9%	7.0%	20,692	21,999	6.3%	43	2	14	21
Montana	11,317	14,821	15,258	6.2%	3.0%	15,096	15,859	5.1%	46	19	49	35
Nevada	22,031	31,409	34,702	9.5%	10.5%	34,457	37,724	9.5%	34	1	1	1
New Mexico	20,134	26,326	28,152	6.9%	6.9%	27,821	30,028	7.9%	39	7	15	5
Utah	22,520	30,415	32,763	7.8%	7.7%	32,406	35,311	9.0%	36	3	8	3
Wyoming	6,999	9,324	9,699	6.7%	4.0%	9,648	10,093	4.6%	51	9	42	42
Other States												
Alabama	56,291	71,506	75,621	6.1%	5.8%	74,943	79,242	5.7%	25	21	28	27
Alaska	10,741	13,683	14,184	5.7%	3.7%	14,142	14,642	3.5%	47	29	44	51
Arkansas	30,702	38,766	41,248	6.1%	6.4%	40,969	43,341	5.8%	33	20	17	26
California	573,255	683,449	702,568	4.2%	2.8%	704,026	737,422	4.7%	1	45	50	39
Connecticut	80,601	92,072	95,127	3.4%	3.3%	94,257	98,694	4.7%	21	51	46	40
Delaware	12,420	15,400	16,256	5.5%	5.6%	16,094	16,967	5.4%	45	32	30	31
D.C.	14,227	16,962	17,421	4.1%	2.7%	17,392	18,053	3.8%	44	46	51	48
Florida	228,024	285,395	302,093	5.8%	5.9%	299,865	322,546	7.6%	4	27	27	8
Georgia	104,184	132,830	142,501	6.5%	7.3%	141,266	151,254	7.1%	12	15	11	9
Hawaii	20,957	27,466	28,335	6.2%	3.2%	28,125	29,244	4.0%	38	17	47	47
Illinois	217,594	263,318	277,424	5.0%	5.4%	275,628	293,064	6.3%	5	39	32	20
Indiana	88,227	109,657	116,547	5.7%	6.3%	115,195	122,855	6.6%	16	28	21	12
Iowa	43,352	51,947	57,083	5.7%	9.9%	56,530	59,375	5.0%	30	30	2	36
Kansas	40,553	50,397	53,028	5.5%	5.2%	52,642	55,843	6.1%	31	33	34	23
Kentucky	50,586	64,070	67,936	6.1%	6.0%	67,567	71,418	5.7%	26	22	25	28
Louisiana	56,369	71,026	76,009	6.2%	7.0%	74,929	80,612	7.6%	24	18	13	7
Maine	20,089	23,168	24,162	3.8%	4.3%	24,067	25,300	5.1%	41	48	40	34
Maryland	99,769	118,581	124,391	4.5%	4.9%	123,627	129,826	5.0%	14	41	36	37
Massachusetts	130,466	146,898	154,705	3.5%	5.3%	153,792	161,434	5.0%	10	49	33	38
Michigan	162,359	194,873	210,559	5.3%	8.0%	208,527	225,586	8.2%	9	34	7	4
Minnesota	77,405	94,612	101,654	5.6%	7.4%	100,326	106,900	6.6%	19	31	9	15
Mississippi	30,672	38,844	42,152	6.6%	8.5%	41,732	44,165	5.8%	32	13	5	25
Missouri	84,348	102,090	108,519	5.2%	6.3%	107,527	114,439	6.4%	17	35	20	18
Nebraska	25,276	31,780	33,795	6.0%	6.3%	33,707	35,477	5.3%	35	24	19	32
New Hampshire	22,065	25,084	26,920	4.1%	7.3%	26,699	28,358	6.2%	40	47	10	22
New Jersey	178,582	210,886	219,268	4.2%	4.0%	218,525	228,770	4.7%	8	44	43	41
New York	377,342	451,036	467,511	4.4%	3.7%	466,867	483,768	3.6%	2	42	45	50
North Carolina	100,010	130,128	138,401	6.7%	6.4%	136,931	146,545	7.0%	13	10	18	10
North Dakota	8,877	10,962	11,880	6.0%	8.4%	11,781	12,218	3.7%	49	23	6	49
Ohio	180,248	218,238	231,843	5.2%	6.2%	229,477	243,373	6.1%	7	36	22	24
Oklahoma	44,694	55,092	57,349	5.1%	4.1%	56,989	59,324	4.1%	29	38	41	45
Oregon	45,452	59,281	63,167	6.8%	6.6%	62,506	67,434	7.9%	28	8	16	6
Pennsylvania	211,739	256,408	267,501	4.8%	4.3%	265,525	277,718	4.6%	6	40	39	43
Rhode Island	18,454	21,222	21,877	3.5%	3.1%	21,815	22,735	4.2%	42	50	48	44
South Carolina	47,995	61,266	64,898	6.2%	5.9%	64,297	68,456	6.5%	27	16	26	16
South Dakota	9,851	12,992	14,156	7.5%	9.0%	13,970	14,537	4.1%	48	4	3	46
Tennessee	73,177	94,033	100,637	6.6%	7.0%	99,516	105,917	6.4%	20	12	12	17
Texas	263,785	342,826	362,398	6.6%	5.7%	358,618	382,284	6.6%	3	14	29	14
Vermont	9,421	11,165	11,663	4.4%	4.5%	11,583	12,382	6.9%	50	43	38	11
Virginia	114,864	140,140	147,415	5.1%	5.2%	146,580	154,776	5.6%	11	37	35	29
Washington	85,838	114,842	120,444	7.0%	4.9%	119,931	126,490	5.5%	15	5	37	30
West Virginia	23,352	29,515	31,146	5.9%	5.5%	30,964	32,574	5.2%	37	25	31	33
Wisconsin	79,831	99,996	106,142	5.9%	6.1%	104,918	111,606	6.4%	18	26	24	19

*saar = seasonally adjusted annual rate.

Source: U.S. Bureau of Economic Analysis.

Table 58
Per Capita Personal Income-U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Per Capita Personal Income 1989	1993	1994	Rates of Per Capita Personal Income Change: Avg. Ann. Growth Rate 1989-94	Percent Change 1993-94	Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1989	1993	1994	Rankings: Rank by Per Capita Personal Income 1994	Rank by Average Annual Growth Rate 1989-94	Rank by Percent Change 1993-94
United States	17,690	20,809	21,699	4.2%	4.3%	100.0%	100.0%	100.0%			
Mountain States	15,713	18,975	19,789	4.7%	4.3%	88.8%	91.2%	91.2%			
Arizona	15,639	18,194	19,153	4.1%	5.3%	88.4%	87.4%	88.3%	38	38	16
Colorado	17,767	21,560	22,320	4.7%	3.5%	100.4%	103.6%	102.9%	16	26	41
Idaho	14,321	17,717	18,406	5.1%	3.9%	81.0%	85.1%	84.8%	40	13	36
Montana	14,152	17,624	17,824	4.7%	1.1%	80.0%	84.7%	82.1%	42	23	51
Nevada	19,370	22,727	23,817	4.2%	4.8%	109.5%	109.2%	109.8%	8	36	24
New Mexico	13,388	16,295	17,025	4.9%	4.5%	75.7%	78.3%	78.5%	49	18	28
Utah	13,201	16,354	17,172	5.4%	5.0%	74.6%	78.6%	79.1%	47	8	19
Wyoming	15,270	19,851	20,378	5.9%	2.7%	86.3%	95.4%	93.9%	28	4	47
Other States											
Alabama	13,967	17,104	17,925	5.1%	4.8%	79.0%	82.2%	82.6%	41	16	23
Alaska	19,631	22,887	23,395	3.6%	2.2%	111.0%	110.0%	107.8%	11	43	48
Arkansas	13,085	15,980	16,817	5.1%	5.2%	74.0%	76.8%	77.5%	50	14	17
California	19,620	21,894	22,353	2.6%	2.1%	110.9%	105.2%	103.0%	15	51	49
Connecticut	24,548	28,088	29,044	3.4%	3.4%	138.8%	135.0%	133.8%	2	47	42
Delaware	18,867	22,048	23,015	4.1%	4.4%	106.7%	106.0%	106.1%	12	39	30
D.C.	22,794	29,292	30,555	6.0%	4.3%	128.9%	140.8%	140.8%	1	3	31
Florida	18,043	20,793	21,651	3.7%	4.1%	102.0%	99.9%	99.8%	21	41	34
Georgia	16,250	19,244	20,198	4.4%	5.0%	91.9%	92.5%	93.1%	30	32	20
Hawaii	19,146	23,566	24,042	4.7%	2.0%	108.2%	113.2%	110.8%	7	27	50
Illinois	19,071	22,533	23,607	4.4%	4.8%	107.8%	108.3%	108.8%	10	35	26
Indiana	15,972	19,219	20,262	4.9%	5.4%	90.3%	92.4%	93.4%	29	20	12
Iowa	15,647	18,412	20,176	5.2%	9.6%	88.5%	88.5%	93.0%	31	12	1
Kansas	16,399	19,880	20,762	4.8%	4.4%	92.7%	95.5%	95.7%	25	21	29
Kentucky	13,756	16,887	17,753	5.2%	5.1%	77.8%	81.2%	81.8%	43	10	18
Louisiana	13,254	16,555	17,615	5.9%	6.4%	74.9%	79.6%	81.2%	45	5	7
Maine	16,467	18,687	19,482	3.4%	4.3%	93.1%	89.8%	89.8%	36	48	32
Maryland	21,105	23,917	24,847	3.3%	3.9%	119.3%	114.9%	114.5%	6	50	37
Massachusetts	21,688	24,411	25,609	3.4%	4.9%	122.6%	117.3%	118.0%	5	49	22
Michigan	17,546	20,600	22,173	4.8%	7.6%	99.2%	99.0%	102.2%	19	22	4
Minnesota	17,843	20,911	22,257	4.5%	6.4%	100.9%	100.5%	102.6%	17	29	6
Mississippi	11,915	14,715	15,793	5.8%	7.3%	67.4%	70.7%	72.8%	51	6	5
Missouri	16,552	19,501	20,562	4.4%	5.4%	93.6%	93.7%	94.8%	26	33	11
Nebraska	16,050	19,698	20,824	5.3%	5.7%	90.7%	94.7%	96.0%	24	9	10
New Hampshire	19,977	22,312	23,680	3.5%	6.1%	112.9%	107.2%	109.1%	9	46	8
New Jersey	23,114	26,834	27,742	3.7%	3.4%	130.7%	129.0%	127.8%	3	40	43
New York	20,983	24,846	25,731	4.2%	3.6%	118.6%	119.4%	118.6%	4	37	40
North Carolina	15,233	18,717	19,576	5.1%	4.6%	86.1%	89.9%	90.2%	35	15	27
North Dakota	13,735	17,216	18,621	6.3%	8.2%	77.6%	82.7%	85.8%	39	2	3
Ohio	16,644	19,730	20,883	4.6%	5.8%	94.1%	94.8%	96.2%	23	28	9
Oklahoma	14,187	17,041	17,602	4.4%	3.3%	80.2%	81.9%	81.1%	46	34	45
Oregon	16,287	19,534	20,468	4.7%	4.8%	92.1%	93.9%	94.3%	27	24	25
Pennsylvania	17,844	21,314	22,195	4.5%	4.1%	100.9%	102.4%	102.3%	18	31	33
Rhode Island	18,441	21,232	21,948	3.5%	3.4%	104.2%	102.0%	101.1%	20	44	44
South Carolina	13,884	16,878	17,712	5.0%	4.9%	78.5%	81.1%	81.6%	44	17	21
South Dakota	14,139	18,143	19,630	6.8%	8.2%	79.9%	87.2%	90.5%	34	1	2
Tennessee	15,074	18,459	19,446	5.2%	5.3%	85.2%	88.7%	89.6%	37	11	14
Texas	15,695	19,023	19,719	4.7%	3.7%	88.7%	91.4%	90.9%	33	25	38
Vermont	16,891	19,394	20,101	3.5%	3.6%	95.5%	93.2%	92.6%	32	45	39
Virginia	18,768	21,650	22,501	3.7%	3.9%	106.1%	104.0%	103.7%	14	42	35
Washington	18,085	21,839	22,542	4.5%	3.2%	102.2%	104.9%	103.9%	13	30	46
West Virginia	12,926	16,232	17,094	5.7%	5.3%	73.1%	78.0%	78.8%	48	7	15
Wisconsin	16,438	19,824	20,887	4.9%	5.4%	92.9%	95.3%	96.3%	22	19	13

Source: U.S. Bureau of Economic Analysis.

Table 59
Total Personal Income per Household--U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Total Personal Income per Household 1989	1993	1994	Rates of Change for Total Personal Income per Household: Avg. Ann. Growth Rate 1989-94	Percent Change 1993-94	Total Personal Income per Household as a Percent of U.S. Personal Income per Household 1989	1993	1994	Rankings: Rank by Total Personal Income per Household 1994	Rank by Average Annual Growth Rate 1989-94	Rank by Percent Change 1993-94
United States	47,900	56,300	58,900	4.2%	4.6%	100.0%	100.0%	100.0%			
Mountain States	42,800	51,600	54,000	4.8%	4.7%	89.4%	91.7%	91.7%			
Arizona	42,200	49,100	51,900	4.2%	5.7%	88.1%	87.2%	88.1%	36	38	14
Colorado	45,800	55,400	57,600	4.7%	4.0%	95.6%	98.4%	97.8%	20	26	39
Idaho	40,000	49,400	51,500	5.2%	4.3%	83.5%	87.7%	87.4%	38	15	35
Montana	37,000	46,200	46,900	4.9%	1.5%	77.2%	82.1%	79.6%	47	21	51
Nevada	50,200	59,000	62,000	4.3%	5.1%	104.8%	104.8%	105.3%	12	36	25
New Mexico	37,500	45,600	48,000	5.1%	5.3%	78.3%	81.0%	81.5%	44	17	19
Utah	42,200	52,000	54,700	5.3%	5.2%	88.1%	92.4%	92.9%	28	9	22
Wyoming	41,200	53,000	54,500	5.8%	2.8%	86.0%	94.1%	92.5%	29	7	47
Other States											
Alabama	37,200	45,500	47,800	5.1%	5.1%	77.7%	80.8%	81.2%	45	16	26
Alaska	57,600	66,400	68,200	3.4%	2.7%	120.3%	117.9%	115.8%	7	46	48
Arkansas	34,500	42,200	44,500	5.2%	5.5%	72.0%	75.0%	75.6%	49	12	17
California	56,600	63,200	64,800	2.7%	2.5%	118.2%	112.3%	110.0%	9	51	49
Connecticut	65,500	75,000	77,800	3.5%	3.7%	136.7%	133.2%	132.1%	1	44	45
Delaware	50,700	58,800	61,600	4.0%	4.8%	105.8%	104.4%	104.6%	13	39	31
D.c.	54,800	70,100	73,500	6.0%	4.9%	114.4%	124.5%	124.8%	4	3	30
Florida	45,800	52,900	55,400	3.9%	4.7%	95.6%	94.0%	94.1%	22	40	32
Georgia	44,400	52,500	55,200	4.5%	5.1%	92.7%	93.3%	93.7%	25	34	24
Hawaii	59,100	72,700	74,400	4.7%	2.3%	123.4%	129.1%	126.3%	3	25	50
Illinois	51,800	61,200	64,400	4.5%	5.2%	108.1%	108.7%	109.3%	10	35	21
Indiana	42,600	51,000	53,900	4.8%	5.7%	88.9%	90.6%	91.5%	31	22	15
Iowa	40,900	47,900	52,800	5.2%	10.2%	85.4%	85.1%	89.6%	35	11	1
Kansas	43,100	52,300	54,900	5.0%	5.0%	90.0%	92.9%	93.2%	27	18	28
Kentucky	36,600	44,800	47,200	5.2%	5.4%	76.4%	79.6%	80.1%	46	13	18
Louisiana	37,100	46,200	49,300	5.9%	6.7%	77.5%	82.1%	83.7%	42	5	7
Maine	43,200	48,800	51,000	3.4%	4.5%	90.2%	86.7%	86.6%	40	48	34
Maryland	57,700	65,200	67,900	3.3%	4.1%	120.5%	115.8%	115.3%	8	50	36
Massachusetts	57,900	64,900	68,300	3.4%	5.2%	120.9%	115.3%	116.0%	6	49	20
Michigan	47,600	55,700	60,100	4.8%	7.9%	99.4%	98.9%	102.0%	15	23	4
Minnesota	47,400	55,600	59,400	4.6%	6.8%	99.0%	98.8%	100.8%	16	29	6
Mississippi	33,400	41,300	44,400	5.9%	7.5%	69.7%	73.4%	75.4%	50	4	5
Missouri	43,200	51,000	54,000	4.6%	5.9%	90.2%	90.6%	91.7%	30	32	11
Nebraska	42,200	51,800	55,000	5.4%	6.2%	88.1%	92.0%	93.4%	26	8	8
New Hampshire	53,600	59,900	63,500	3.4%	6.0%	111.9%	106.4%	107.8%	11	45	10
New Jersey	63,800	74,300	77,100	3.9%	3.8%	133.2%	132.0%	130.9%	2	41	44
New York	56,800	67,400	70,100	4.3%	4.0%	118.6%	119.7%	119.0%	5	37	38
North Carolina	40,100	49,300	51,700	5.2%	4.9%	83.7%	87.6%	87.8%	37	14	29
North Dakota	36,300	45,300	49,300	6.3%	8.8%	75.8%	80.5%	83.7%	41	2	2
Ohio	44,000	52,100	55,300	4.7%	6.1%	91.9%	92.5%	93.9%	24	27	9
Oklahoma	37,100	44,600	46,400	4.6%	4.0%	77.5%	79.2%	78.8%	48	30	37
Oregon	42,100	50,300	52,900	4.7%	5.2%	87.9%	89.3%	89.8%	34	28	23
Pennsylvania	47,100	56,200	58,800	4.5%	4.6%	98.3%	99.8%	99.8%	18	33	33
Rhode Island	48,800	56,300	58,500	3.7%	3.9%	101.9%	100.0%	99.3%	19	42	43
South Carolina	38,200	46,200	48,500	4.9%	5.0%	79.7%	82.1%	82.3%	43	20	27
South Dakota	38,200	49,200	53,400	6.9%	8.5%	79.7%	87.4%	90.7%	32	1	3
Tennessee	39,500	48,400	51,200	5.3%	5.8%	82.5%	86.0%	86.9%	39	10	13
Texas	44,000	53,300	55,400	4.7%	3.9%	91.9%	94.7%	94.1%	23	24	41
Vermont	44,800	51,000	53,000	3.4%	3.9%	93.5%	90.6%	90.0%	33	47	42
Virginia	50,600	58,100	60,400	3.6%	4.0%	105.6%	103.2%	102.5%	14	43	40
Washington	47,200	56,900	59,000	4.6%	3.7%	98.5%	101.1%	100.2%	17	31	46
West Virginia	33,400	41,900	44,200	5.8%	5.5%	69.7%	74.4%	75.0%	51	6	16
Wisconsin	44,200	53,100	56,200	4.9%	5.8%	92.3%	94.3%	95.4%	21	19	12

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.

Table 60
Average Annual Pay For All Workers Covered by Unemployment Insurance--U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Average Annual Pay 1989	Average Annual Pay 1993	Average Annual Pay 1994	Rates of Change for Average Annual Pay: Avg. Ann. Growth Rate 1989-94	Rates of Change for Average Annual Pay: Percent Change 1993-94	Average Annual Pay as a Percent of U.S. Average Annual Pay 1989	Average Annual Pay as a Percent of U.S. Average Annual Pay 1993	Average Annual Pay as a Percent of U.S. Average Annual Pay 1994	Rankings: Rank by Average Annual Pay 1994	Rankings: Rank by Avg. Ann. Growth Rate 1989-94	Rankings: Rank by Percent Change 1993-94
United States	22,563	26,361	26,939	3.6%	2.2%	100.0%	100.0%	100.0%			
Mountain States	20,356	23,548	24,109	3.4%	2.4%	90.2%	89.3%	89.5%			
Arizona	20,809	23,501	24,276	3.1%	3.3%	92.2%	89.2%	90.1%	28	46	9
Colorado	21,940	25,682	26,164	3.6%	1.9%	97.2%	97.4%	97.1%	16	33	38
Idaho	18,146	21,188	21,938	3.9%	3.5%	80.4%	80.4%	81.4%	45	14	4
Montana	17,224	19,932	20,219	3.3%	1.4%	76.3%	75.6%	75.1%	49	44	45
Nevada	21,333	25,461	25,700	3.8%	0.9%	94.5%	96.6%	95.4%	20	18	51
New Mexico	18,667	21,731	22,351	3.7%	2.9%	82.7%	82.4%	83.0%	41	26	17
Utah	19,362	22,250	22,811	3.3%	2.5%	85.8%	84.4%	84.7%	37	40	27
Wyoming	19,230	21,745	22,054	2.8%	1.4%	85.2%	82.5%	81.9%	44	49	46
Other States											
Alabama	19,593	22,786	23,616	3.8%	3.6%	86.8%	86.4%	87.7%	31	16	3
Alaska	29,704	32,336	32,657	1.9%	1.0%	131.6%	122.7%	121.2%	5	51	50
Arkansas	17,418	20,337	20,898	3.7%	2.8%	77.2%	77.1%	77.6%	47	24	20
California	24,917	29,470	29,878	3.7%	1.4%	110.4%	111.8%	110.9%	7	25	47
Connecticut	27,500	33,169	33,811	4.2%	1.9%	121.9%	125.8%	125.5%	2	5	37
Delaware	23,268	27,144	27,950	3.7%	3.0%	103.1%	103.0%	103.8%	11	22	15
D.C.	32,106	39,199	40,919	5.0%	4.4%	142.3%	148.7%	151.9%	1	1	2
Florida	20,072	23,571	23,925	3.6%	1.5%	89.0%	89.4%	88.8%	30	34	44
Georgia	21,072	24,865	25,306	3.7%	1.8%	93.4%	94.3%	93.9%	23	23	39
Hawaii	21,624	26,325	26,746	4.3%	1.6%	95.8%	99.9%	99.3%	13	3	42
Illinois	24,212	28,425	29,105	3.7%	2.4%	107.3%	107.8%	108.0%	9	21	30
Indiana	20,931	24,109	24,908	3.5%	3.3%	92.8%	91.5%	92.5%	24	35	8
Iowa	18,420	21,441	22,187	3.8%	3.5%	81.6%	81.3%	82.4%	43	19	6
Kansas	19,475	22,430	22,900	3.3%	2.1%	86.3%	85.1%	85.0%	36	42	35
Kentucky	19,001	22,170	22,747	3.7%	2.6%	84.2%	84.1%	84.4%	38	27	25
Louisiana	19,750	22,633	23,176	3.3%	2.4%	87.5%	85.9%	86.0%	33	45	29
Maine	19,202	22,026	22,389	3.1%	1.6%	85.1%	83.6%	83.1%	40	47	41
Maryland	23,469	27,686	28,421	3.9%	2.7%	104.0%	105.0%	105.5%	10	13	21
Massachusetts	25,233	30,229	31,024	4.2%	2.6%	111.8%	114.7%	115.2%	6	4	23
Michigan	24,767	28,260	29,541	3.6%	4.5%	109.8%	107.2%	109.7%	8	31	1
Minnesota	22,155	25,710	26,425	3.6%	2.8%	98.2%	97.5%	98.1%	14	32	19
Mississippi	17,047	19,693	20,382	3.6%	3.5%	75.6%	74.7%	75.7%	48	29	5
Missouri	20,900	23,898	24,625	3.3%	3.0%	92.6%	90.7%	91.4%	26	39	13
Nebraska	17,690	20,815	21,500	4.0%	3.3%	78.4%	79.0%	79.8%	46	11	10
New Hampshire	21,553	24,962	25,555	3.5%	2.4%	95.5%	94.7%	94.9%	21	38	31
New Jersey	26,780	32,722	33,439	4.5%	2.2%	118.7%	124.1%	124.1%	3	2	34
New York	27,303	32,919	33,438	4.1%	1.6%	121.0%	124.9%	124.1%	4	6	43
North Carolina	19,321	22,773	23,449	3.9%	3.0%	85.6%	86.4%	87.0%	32	12	16
North Dakota	16,932	19,382	19,893	3.3%	2.6%	75.0%	73.5%	73.8%	50	43	22
Ohio	21,986	25,338	26,133	3.5%	3.1%	97.4%	96.1%	97.0%	17	37	12
Oklahoma	19,533	22,001	22,292	2.7%	1.3%	86.6%	83.5%	82.7%	42	50	48
Oregon	20,303	24,093	24,780	4.1%	2.9%	90.0%	91.4%	92.0%	25	8	18
Pennsylvania	22,313	26,274	26,950	3.8%	2.6%	98.9%	99.7%	100.0%	12	15	26
Rhode Island	21,128	24,889	25,454	3.8%	2.3%	93.6%	94.4%	94.5%	22	17	33
South Carolina	18,797	21,933	22,477	3.6%	2.5%	83.3%	83.2%	83.4%	39	28	28
South Dakota	15,810	18,613	19,255	4.0%	3.4%	70.1%	70.6%	71.5%	51	10	7
Tennessee	19,712	23,368	24,106	4.1%	3.2%	87.4%	88.6%	89.5%	29	7	11
Texas	21,740	25,523	25,959	3.6%	1.7%	96.4%	96.8%	96.4%	19	30	40
Vermont	19,497	22,704	22,964	3.3%	1.1%	86.4%	86.1%	85.2%	34	41	49
Virginia	21,882	25,504	26,031	3.5%	2.1%	97.0%	96.7%	96.6%	18	36	36
Washington	21,617	25,760	26,362	4.0%	2.3%	95.8%	97.7%	97.9%	15	9	32
West Virginia	19,788	22,373	22,959	3.0%	2.6%	87.7%	84.9%	85.2%	35	48	24
Wisconsin	20,204	23,610	24,324	3.8%	3.0%	89.5%	89.6%	90.3%	27	20	14

Source: U.S. Bureau of Labor Statistics.

Table 61
Employees on Nonagricultural Payrolls--U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Employees on Nonagricultural Payrolls 1989 (thousands)	1993 (thousands)	1994 (thousands)	Rates of Change for Employees on Nonagricultural Payrolls: Avg. Ann. Growth Rate 1989-94	Percent Change 1993-94	Employees on Nonagricultural Payrolls (not seasonally adjusted): October 1994 (thousands)	October 1995(p) (thousands)	Percent Change 1993-94	Rankings: Rank by Employees on Nonagricultural Payrolls 1994	Rank by Average Annual Growth Rate 1989-94	Rank by Percent Change 1993-94	Rank by Percent Change (unadjusted) 1994-95
United States	107,895.0	110,525.0	113,429.0	1.0%	2.6%	115,829.0	117,961.0	1.8%				
Mountain States	5,620.9	6,336.7	6,711.1	3.6%	5.9%	6,874.4	7,127.7	3.7%				
Arizona	1,454.5	1,586.2	1,685.2	3.0%	6.2%	1,730.9	1,790.5	3.4%	24	9	3	8
Colorado	1,482.3	1670.7	1,749.7	3.4%	4.7%	1,773.4	1,822.5	2.8%	22	5	8	11
Idaho	365.8	436.5	463.0	4.8%	6.1%	479.1	487.5	1.8%	43	2	4	26
Montana	291.0	325.6	340.5	3.2%	4.6%	351.5	364.1	3.6%	46	7	9	7
Nevada	581.2	671.4	736.7	4.9%	9.7%	758.0	802.0	5.8%	36	1	1	1
New Mexico	562.2	626.2	658.1	3.2%	5.1%	675.6	708.3	4.8%	38	6	6	3
Utah	691.1	809.8	861.0	4.5%	6.3%	884.0	930.8	5.3%	34	3	2	2
Wyoming	192.8	210.3	216.9	2.4%	3.1%	221.9	222.0	0.0%	51	16	28	45
Other States												
Alabama	1,601.2	1,716.8	1,752.5	1.8%	2.1%	1,770.7	1,780.2	0.5%	21	29	41	42
Alaska	227.0	252.9	260.1	2.8%	2.8%	263.5	264.4	0.3%	50	11	33	43
Arkansas	893.4	994.0	1,035.4	3.0%	4.2%	1,063.1	1,088.7	2.4%	33	8	12	16
California	12,569.9	12,045.3	12,136.1	-0.7%	0.8%	12,228.9	12,359.1	1.1%	1	46	47	36
Connecticut	1,674.1	1,531.1	1,542.4	-1.6%	0.7%	1,564.8	1,563.5	-0.1%	27	51	48	46
Delaware	344.5	348.6	355.0	0.6%	1.8%	359.2	367.6	2.3%	45	39	43	17
D.C.	680.6	670.3	657.3	-0.7%	-1.9%	656.9	639.4	-2.7%	39	45	51	51
Florida	5,260.9	5,571.4	5,796.6	2.0%	4.0%	5,853.2	6,044.8	3.3%	4	24	14	9
Georgia	2,941.1	3,109.2	3,263.8	2.1%	5.0%	3,325.5	3,448.7	3.7%	11	22	7	5
Hawaii	505.5	538.8	536.1	1.2%	-0.5%	534.9	527.0	-1.5%	40	34	50	50
Illinois	5,213.9	5,330.5	5,463.1	0.9%	2.5%	5,556.8	5,604.2	0.9%	5	38	36	37
Indiana	2,479.3	2,626.9	2,712.0	1.8%	3.2%	2,757.4	2,809.6	1.9%	14	30	25	23
Iowa	1,200.1	1,278.6	1,319.2	1.9%	3.2%	1,344.6	1,372.9	2.1%	29	25	27	21
Kansas	1,064.2	1,133.3	1,166.3	1.8%	2.9%	1,188.4	1,218.7	2.5%	31	28	31	14
Kentucky	1,433.0	1,547.9	1,598.7	2.2%	3.3%	1,631.9	1,664.4	2.0%	26	20	23	22
Louisiana	1,538.5	1,658.6	1,727.1	2.3%	4.1%	1,769.5	1,817.6	2.7%	23	18	13	12
Maine	541.8	519.4	531.2	-0.4%	2.3%	547.6	557.5	1.8%	41	44	39	25
Maryland	2,155.2	2,102.4	2,144.5	-0.1%	2.0%	2,174.9	2,179.4	0.2%	20	42	42	44
Massachusetts	3,103.4	2,841.2	2,905.0	-1.3%	2.2%	2,965.0	2,999.9	1.2%	13	50	40	33
Michigan	3,922.3	4,005.8	4,141.6	1.1%	3.4%	4,232.2	4,324.7	2.2%	8	35	22	19
Minnesota	2,086.8	2,242.7	2,311.4	2.1%	3.1%	2,361.3	2,413.2	2.2%	18	23	29	18
Mississippi	919.3	1,002.3	1,053.4	2.8%	5.1%	1,066.7	1,061.2	-0.5%	32	10	5	49
Missouri	2,315.0	2,394.5	2,472.9	1.3%	3.3%	2,531.6	2,578.7	1.9%	16	33	24	24
Nebraska	708.0	767.2	795.5	2.4%	3.7%	810.2	817.1	0.9%	35	17	17	38
New Hampshire	529.1	502.4	522.3	-0.3%	4.0%	535.4	539.4	0.7%	42	43	16	40
New Jersey	3,689.8	3,490.7	3,550.3	-0.8%	1.7%	3,598.7	3,643.2	1.2%	9	47	44	32
New York	8,246.8	7,752.0	7,800.3	-1.1%	0.6%	7,879.7	7,939.8	0.8%	2	48	49	39
North Carolina	3,073.9	3,244.7	3361.1	1.8%	3.6%	3,433.6	3,472.0	1.1%	10	31	18	35
North Dakota	260.4	284.8	294.7	2.5%	3.5%	302.8	309.4	2.2%	48	12	19	20
Ohio	4,817.4	4,918.3	5,076.2	1.1%	3.2%	5,161.8	5,228.2	1.3%	7	36	26	31
Oklahoma	1,163.8	1,247.0	1,278.6	1.9%	2.5%	1,296.5	1,327.9	2.4%	30	26	35	15
Oregon	1,209.4	1,308.4	1,364.0	2.4%	4.2%	1,402.9	1,459.1	4.0%	28	14	11	4
Pennsylvania	5,138.5	5,122.8	5,187.8	0.2%	1.3%	5,271.0	5,263.4	-0.1%	6	40	45	47
Rhode Island	461.9	430.0	434.0	-1.2%	0.9%	440.5	439.7	-0.2%	44	49	46	48
South Carolina	1,499.7	1,570.1	1,607.3	1.4%	2.4%	1,623.3	1,641.8	1.1%	25	32	38	34
South Dakota	276.0	318.7	332.9	3.8%	4.5%	339.6	349.8	3.0%	47	4	10	10
Tennessee	2,167.2	2,328.5	2,420.8	2.2%	4.0%	2,463.9	2,528.8	2.6%	17	19	15	13
Texas	6,840.0	7,481.5	7,740.1	2.5%	3.5%	7,860.0	8,143.5	3.6%	3	13	20	6
Vermont	261.8	257.2	263.8	0.2%	2.6%	270.5	274.1	1.3%	49	41	34	30
Virginia	2,861.9	2,918.9	3,006.1	1.0%	3.0%	3,063.8	3,112.6	1.6%	12	37	30	29
Washington	2,052.4	2,253.0	2,309.0	2.4%	2.5%	2,360.6	2,377.5	0.7%	19	15	37	41
West Virginia	614.7	652.6	674.8	1.9%	3.4%	688.6	699.9	1.6%	37	27	21	28
Wisconsin	2,236.4	2,412.7	2,482.5	2.1%	2.9%	2,532.4	2,575.1	1.7%	15	21	32	27

(p)=preliminary

Note: These data vary slightly from data reported by the State of Utah Department of Employment Security.

Source: U.S. Bureau of Labor Statistics.

Table 62
Unemployment Rates--U.S., Mountain Division, and States: 1989, 1993, and 1994

Division/State	Unemployment Rate 1989	Unemployment Rate 1993	Unemployment Rate 1994	Unemployment Rate Percent Change 1989-94	Unemployment Rate Percent Change 1993-94	Unemployment Rate (not seasonally adjusted) October 1994	Unemployment Rate (not seasonally adjusted) October 1995(p)	Rankings: Rank by Unemployment Rate 1989	Rankings: Rank by Unemployment Rate 1993	Rankings: Rank by Unemployment Rate 1994	Rankings: Rank by Unemployment Rate (unadjusted) 1994	Rankings: Rank by Unemployment Rate (unadjusted) 1995
United States	5.3	6.8	6.1	0.8	-0.7	5.4	5.2					
Mountain States	5.5	5.8	5.3	-0.2	-0.5	5.8	5.3					
Arizona	5.2	6.2	6.4	1.2	0.2	6.9	5.1	22	30	12	7	18
Colorado	5.8	5.2	4.2	-1.6	-1.0	3.4	3.6	15	40	45	47	41
Idaho	5.1	6.1	5.6	0.5	-0.5	4.9	4.2	24	31	25	27	33
Montana	5.9	6.0	5.1	-0.8	-0.9	4.4	5.4	14	32	35	37	14
Nevada	5.0	7.2	6.2	1.2	-1.0	5.8	4.5	28	15	18	15	29
New Mexico	6.7	7.5	6.3	-0.4	-1.2	5.5	5.8	7	11	16	23	11
Utah	4.6	3.9	3.7	-0.9	-0.2	3.5	3.1	31	49	48	45	46
Wyoming	6.3	5.4	5.3	-1.0	-0.1	4.2	3.9	10	36	31	40	36
Other States												
Alabama	7.0	7.5	6.0	-1.0	-1.5	5.7	5.7	6	9	21	19	12
Alaska	6.7	7.6	7.8	1.1	0.2	7.2	6.8	8	7	5	5	5
Arkansas	7.2	6.2	5.3	-1.9	-0.9	4.4	4.2	4	27	32	36	32
California	5.1	9.2	8.6	3.5	-0.6	7.4	7.4	26	2	2	4	2
Connecticut	3.7	6.2	5.6	1.9	-0.6	5.1	4.6	45	28	26	26	28
Delaware	3.5	5.3	4.9	1.4	-0.4	4.3	4.1	48	39	36	38	35
D.C.	5.0	8.5	8.2	3.2	-0.3	7.5	8.3	27	3	3	2	1
Florida	5.6	7.0	6.6	1.0	-0.4	6.1	6.4	18	19	11	13	6
Georgia	5.5	5.8	5.2	-0.3	-0.6	5.4	5.2	21	34	33	24	17
Hawaii	2.6	4.2	6.1	3.5	1.9	6.3	5.7	51	47	19	9	13
Illinois	6.0	7.4	5.7	-0.3	-1.7	5.7	4.7	13	13	24	18	27
Indiana	4.7	5.3	4.9	0.2	-0.4	4.5	3.9	29	38	39	34	39
Iowa	4.3	4.0	3.7	-0.6	-0.3	3.0	2.7	36	48	49	48	48
Kansas	4.0	5.0	5.3	1.3	0.3	5.1	3.9	42	43	30	25	37
Kentucky	6.2	6.2	5.4	-0.8	-0.8	4.9	5.0	12	29	28	29	22
Louisiana	7.9	7.4	8.0	0.1	0.6	7.7	6.4	2	12	4	1	7
Maine	4.1	7.9	7.4	3.3	-0.5	6.2	5.0	38	4	6	10	19
Maryland	3.7	6.2	5.1	1.4	-1.1	4.9	4.9	44	26	34	28	23
Massachusetts	4.0	6.9	6.0	2.0	-0.9	5.9	4.8	41	21	20	14	25
Michigan	7.1	7.0	5.9	-1.2	-1.1	4.7	3.9	5	17	22	30	38
Minnesota	4.3	5.1	4.0	-0.3	-1.1	3.4	2.9	35	41	46	46	47
Mississippi	7.8	6.3	6.6	-1.2	0.3	6.1	5.4	3	25	10	12	15
Missouri	5.5	6.4	4.9	-0.6	-1.5	3.9	3.4	20	24	38	43	44
Nebraska	3.1	2.6	2.9	-0.2	0.3	2.6	2.2	50	51	51	50	50
New Hampshire	3.5	6.6	4.6	1.1	-2.0	3.6	3.4	49	22	43	44	43
New Jersey	4.1	7.4	6.8	2.7	-0.6	6.3	5.4	40	14	9	8	16
New York	5.1	7.7	6.9	1.8	-0.8	6.2	6.0	23	6	8	11	8
North Carolina	3.5	4.9	4.4	0.9	-0.5	4.6	3.8	47	44	44	33	40
North Dakota	4.3	4.3	3.9	-0.4	-0.4	2.8	2.2	34	46	47	49	51
Ohio	5.5	6.5	5.5	0.0	-1.0	4.5	4.2	19	23	27	35	31
Oklahoma	5.6	6.0	5.8	0.2	-0.2	5.6	4.7	17	33	23	20	26
Oregon	5.7	7.2	5.4	-0.3	-1.8	4.7	4.2	16	16	29	31	34
Pennsylvania	4.5	7.0	6.2	1.7	-0.8	5.7	4.8	32	20	17	17	24
Rhode Island	4.1	7.7	7.1	3.0	-0.6	7.1	7.0	39	5	7	6	4
South Carolina	4.7	7.5	6.3	1.6	-1.2	5.8	5.0	30	10	15	16	21
South Dakota	4.2	3.5	3.3	-0.9	-0.2	2.5	2.3	37	50	50	51	49
Tennessee	5.1	5.7	4.8	-0.3	-0.9	4.2	5.0	25	35	40	39	20
Texas	6.7	7.0	6.4	-0.3	-0.6	5.6	5.9	9	18	14	21	9
Vermont	3.7	5.4	4.7	1.0	-0.7	4.0	3.5	46	37	42	41	42
Virginia	3.9	5.0	4.9	1.0	-0.1	4.6	4.4	43	42	37	32	30
Washington	6.2	7.5	6.4	0.2	-1.1	5.6	5.9	11	8	13	22	10
West Virginia	8.6	10.8	8.9	0.3	-1.9	7.4	7.2	1	1	1	3	3
Wisconsin	4.4	4.7	4.7	0.3	0.0	4.0	3.2	33	45	41	42	45

(p)=preliminary

Source: U.S. Bureau of Labor Statistics.

Industry Focus

☆ Agriculture

The influence of weather on agriculture in Utah is seldommore evident than it was during 1995. The winter of 1994-1995 resulted in above-average snowpack for most areas of the state. This followed several years when the amount of snow received was below average. As a result, most farmers and ranchers were optimistic with respect to the 1995 crop year. The above-average snowfall was followed with a very wet spring in Utah as well as the central part of the nation. This wet spring made some types of farmers and ranchers very happy while it was detrimental to others. For example, the wet spring resulted in a very favorable growing season for Utah's rangeland---forage production was generally significantly above average in most areas of the state. The late and wet spring however, was detrimental to the production of crops such as corn that needs a long and warm growing season. The cool spring weather was also accompanied by frosts that eliminated the production of some fruits in portions of the state. But, there was probably no sector of Utah agriculture that benefited more from the cool wet spring than those who produced dryland grain. For example, the average level of production for dryland wheat was often double the level that is produced in most years (21.3 bushels per acre in 1994).

While the weather had a major influence on the amount of crops grown in the state, the impact of weather was even more pronounced on the prices received. The cool wet spring did not allow many corn producers in the central part of the United States to plant until late June, which was too late to allow a corn crop to mature. Consequently, many farmers in the "corn belt" did not plant any corn on lands that are commonly used to raise this crop. As a result, total corn production in 1995 is expected to be at its lowest level in more than a decade. This resulted in an increase in the price of all grains. For example, the price of corn and wheat was commonly a dollar a bushel greater than the prices that were received in 1994 in most areas including Utah. These relatively large increases in price coupled with above average levels of production resulted in large increases in revenue for producers of grain. This increase in prices received by grain farmers however, was detrimental to livestock operators---especially dairymen and feedlot operators, who faced significant increases in costs of concentrates (primarily grain). In addition, the large increase in the size of the nation's beef herd that has been occurring for several years resulted in a significant decline in cattle prices between 1993 and 1995. For example, feeder cattle prices declined more than 40 cents a pound from the highs that existed in the fall of 1993, to the 60 cents per pound received by many producers in 1995. It is anticipated that the price for beef animals will be somewhat less in 1996 than the prices received in 1995 which is less than the cost of production for most livestock operations.

The reduced price received for beef and dairy animals will result in a shift in the value of sales of the sectors of agriculture shown in Figure 34. The data for 1994 indicate livestock and livestock products declined from nearly 78 percent of total sales in 1993 to 74.3 percent in 1994. This percentage will probably fall to less than 70 percent in 1995 and 1996. If this percentage drops to less than 70 percent, it will be the first time this has occurred since since 1974. These changes will have a detrimental impact on net farm income in the state (Figure 35 and Table 63) because livestock production is the dominant portion of Utah agriculture. However, some changes will occur in 1996 that will enhance agricultural production.

New Developments

Considerable interest has been manifest in the hog operation being developed in Beaver County. At the present time there are approximately 20,000 sows (of a planned 120,000 head) at the Circle Four operation, and the first fat hogs produced from this operation should reach the market early in 1996. The growth of this complex has been slower than originally planned but the current number of sows makes Utah the largest hog producing state in the west (11 western states). If this complex is developed to the full extent planned, Utah would rank about 8th nationally in the production of hogs--Utah currently ranks 18th in the number of sows. Analysis of the economic impact of this operation conducted by the Office of Planning and Budget suggest that employment associated with this complex could result in an increase of nearly 4000 jobs if the complex is fully developed. If this occurs, Circle Four would be one of the largest employers in southwestern Utah. At this point in time neither the feed mill nor processing plant have been constructed. As a result, the impact of this operation is significantly less than the estimates noted above, but the potential impact of this complex is certainly being viewed carefully.

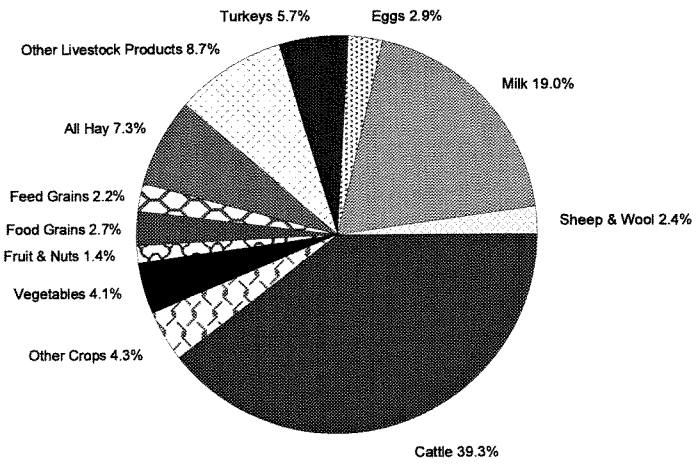
A second development has occurred that also has the potential of a positive influence on the dairy industry of Utah in 1996 and beyond. Dannon announced the construction of a new yogurt plant in Salt Lake County. According to Randy Parker (Utah Department of Agriculture), this plant will have the capacity to handle about 10 percent of the milk that is currently being produced in Utah. The first product from this plant is scheduled to be shipped in late summer 1996. This new plant and the continued strong demand for cheese has resulted in the movement of dairies from other states to Utah and the expansion of existing dairies. For example, Utah's first 2,000 head dairy, located near Delta, is scheduled to be in production by mid-February 1996. In addition, several existing dairies have increased production---there were about a dozen dairies that milked more than 300 cows in 1990, but there are now over 30. A number of smaller dairies have gone out of business during this period of time (number is unknown). However, the dairy industry in the state will likely see some expansion during 1996 as a result of a demand for milk by the Dannon plant and other processing facilities in the state.

The third sector in agriculture that has quietly been increasing in importance is the greenhouse and nursery business. For example, gross sales in this industry increased from $16 million in 1987 to over $47 million in 1992. In 1993 the value of greenhouse and nursery production ($26 million) was greater than the value of all sheep and lambs ($17 million), food grains---primarily wheat ($22 million), as well as fruits and nuts ($11 million) produced in the state in 1993 (Utah Agricultural Statistics).

County Perspective

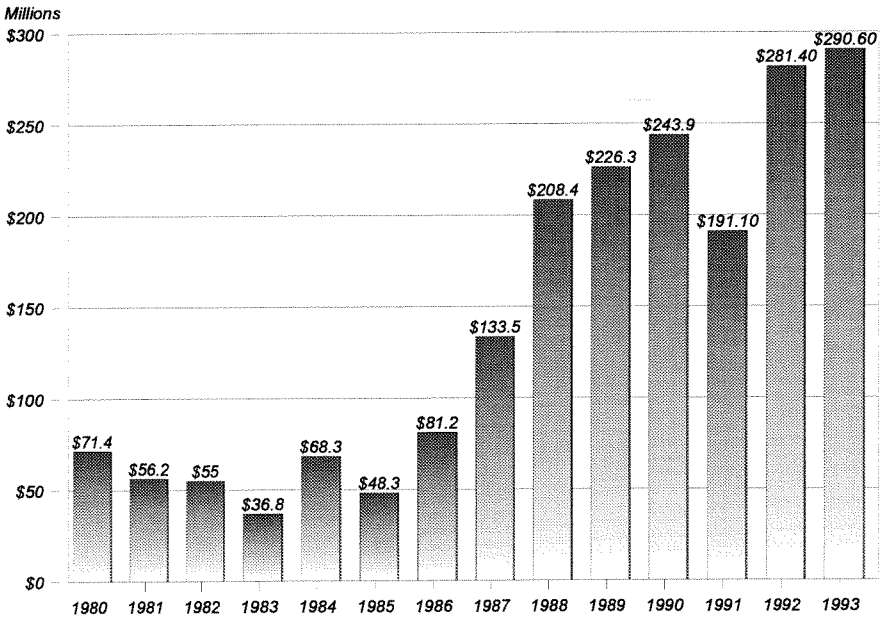
The changes outlined above will impact some counties more than others. For example, the Circle Four hog operation will have the largest impact on Beaver, Iron and Millard Counties while the Dannon plant will primarily affect those counties where dairying is important (e.g., Cache County). The low beef prices and associated reduction in income will be most heavily felt in those counties (e.g., Rich, Wayne, Piute) where beef production is the most important agricultural sector (Figure 36 and Table 64) and personal income from farming has increased over time (Figure 37 and Table 65) . This would suggest that the net worth of farms in these counties could decline if additional debt is incurred in an effort to "ride out" reductions in income. Those counties where grain production is relatively important (e.g., San Juan, Box Elder) will likely have an increase in net worth as a result of the high net returns these farmers obtained during 1995. However, it is unlikely there will be a major reduction in either the value of assets or the equity of farmers in Utah (Figure 40 and Table 66) in 1996. But, reductions in equity could occur if losses associated with beef production exist for several years. The number of farmers who raise beef animals or milk cows could decline in 1996 if those who incur losses are forced to seriously consider other alternatives. ☆

Figure 34
Utah Cash Receipts by Commodities: 1992



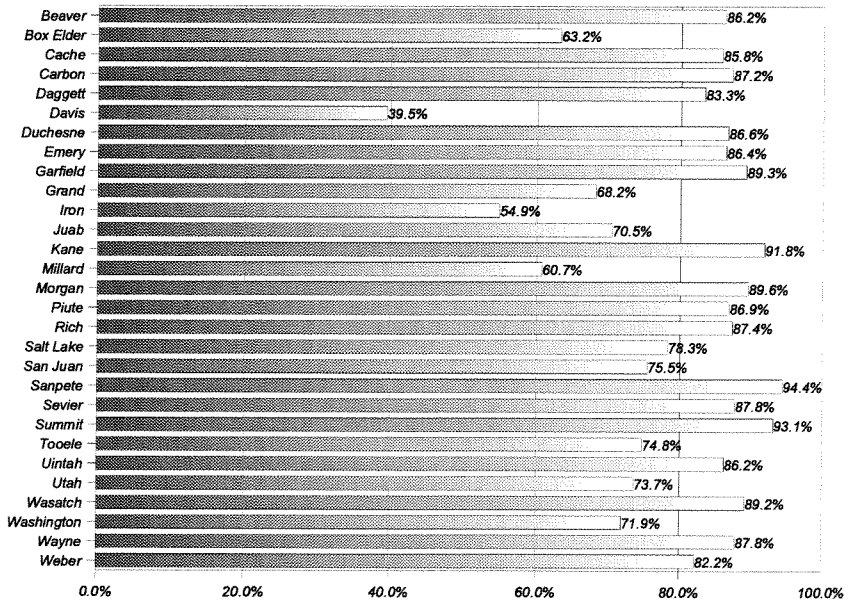
Source: Utah Agricultural Statistics

Figure 35
Net Farm Income in Utah: 1980 to 1993



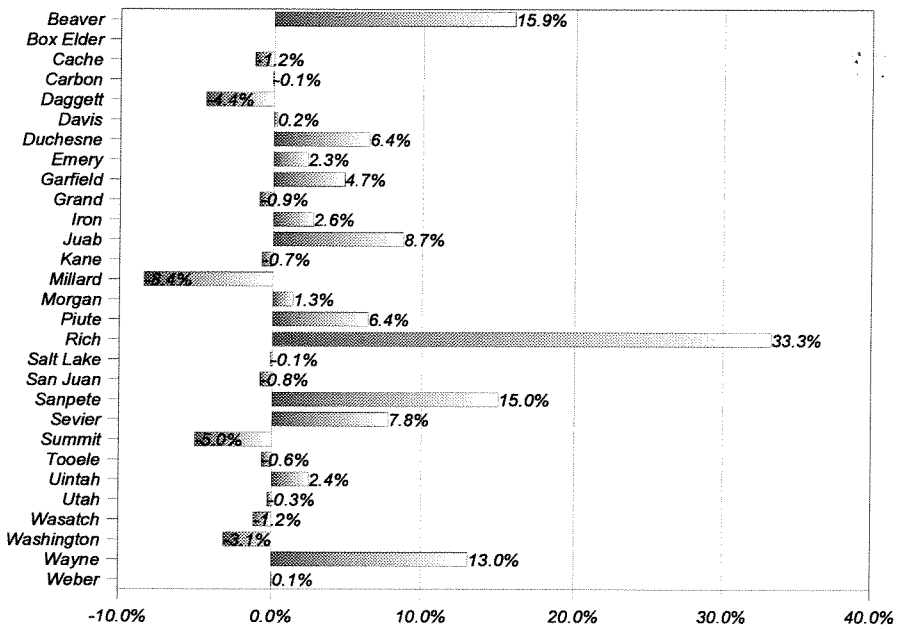
Source: USDA

Figure 36
Livestock and Products as a Percentage of Total Farm Receipts by County: 1993



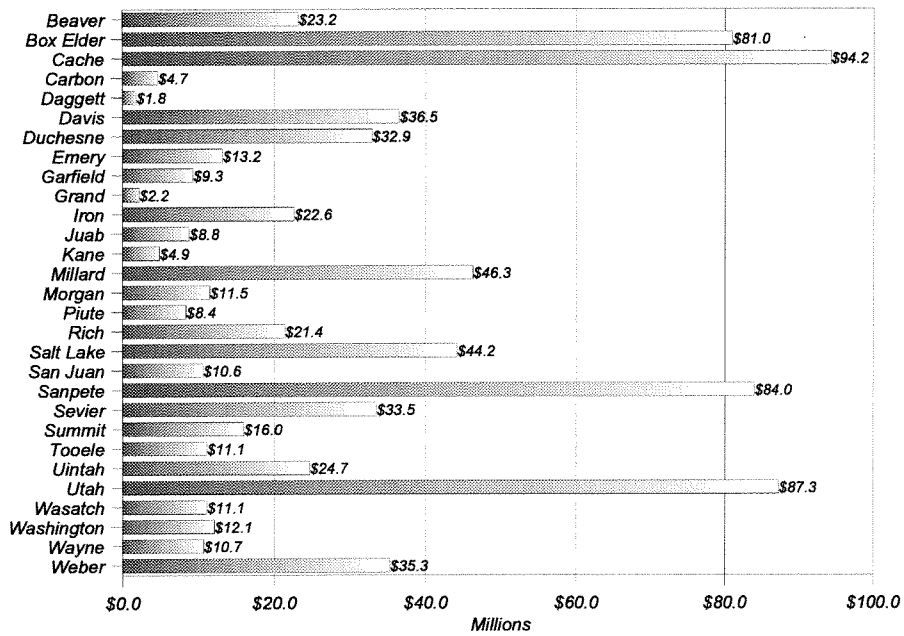
Source: Utah Agricultural Statistics

Figure 37
Change in Percent of Personal Income from Farming: 1980 to 1993



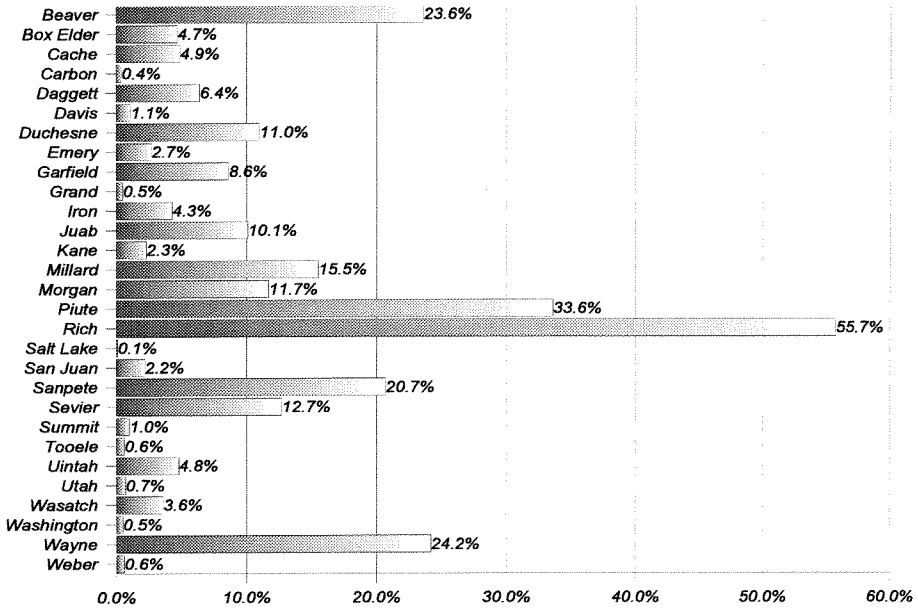
Source: Bureau of Economic Analysis

Figure 38
Farm Cash Receipts by County in Utah: 1993



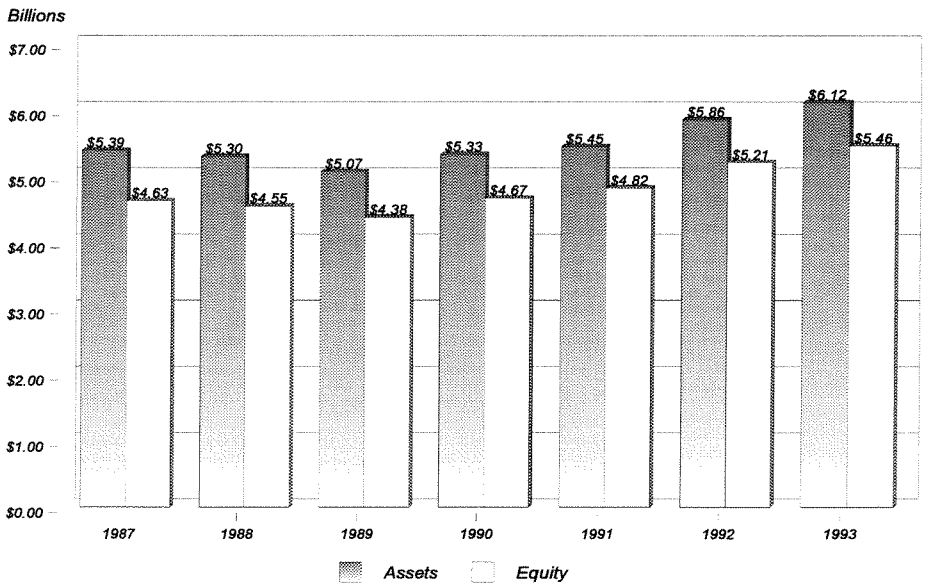
Source: Utah Agricultural Statistics

Figure 39
Farm Earnings as a Percent of Total Earnings by County: 1993



Source: Bureau of Economic Analysis

Figure 40
Farm Assets and Net Worth in Utah: 1987 to 1993



Source: Utah Agricultural Statistics

Table 63
Farm and Nonfarm Earnings (Thousands of Dollars)--Counties: 1980, 1990, and 1993

County	1980 Farm	1980 Nonfarm	1980 Total	1990 Farm	1990 Nonfarm	1990 Total	1993 Farm	1993 Nonfarm	1993 Total
Beaver	$1,365	$16,541	$17,906	$11,295	$26,266	$37,561	$11,981	$38,862	$50,843
Box Elder	12,101	205,175	217,276	30,739	499,961	530,700	28,248	569,147	597,395
Cache	15,569	239,901	255,470	29,493	564,103	593,596	37,000	721,239	758,239
Carbon	771	154,072	154,843	2,670	202,042	204,712	910	217,320	218,230
Daggett	636	5,264	5,900	684	6,675	7,359	590	8,690	9,280
Davis	7,499	815,373	822,872	16,060	1,674,144	1,690,204	22,382	1,972,679	1,995,061
Duchesne	3,340	69,866	73,206	14,445	93,135	107,580	13,138	106,750	119,888
Emery	432	101,858	102,290	6,840	120,971	127,811	3,644	132,557	136,201
Garfield	949	23,843	24,792	5,231	28,767	33,998	3,184	34,016	37,200
Grand	744	53,282	54,026	782	49,390	50,172	386	75,052	75,438
Iron	1,283	73,880	75,163	12,864	154,329	167,193	9,076	199,901	208,977
Juab	328	23,070	23,398	4,587	32,137	36,724	4,463	39,693	44,156
Kane	382	12,213	12,595	1,913	27,976	29,889	907	38,221	39,128
Millard	8,153	25,914	34,067	16,592	94,176	110,768	18,634	101,354	119,988
Morgan	2,053	17,330	19,383	4,741	25,080	29,821	4,422	32,718	37,140
Piute	1,239	3,308	4,547	3,050	3,416	6,466	2,303	4,547	6,850
Rich	1,217	4,207	5,424	6,886	5,694	12,580	9,782	7,781	17,563
Salt Lake	11,474	4,712,579	4,724,053	12,477	9,526,423	9,538,900	13,553	12,312,814	12,326,367
San Juan	2,048	55,548	57,596	5,902	68,955	74,857	2,736	95,158	97,894
Sanpete	2,139	34,911	37,050	19,998	75,703	95,701	25,776	98,565	124,341
Sevier	3,829	73,229	77,058	10,583	114,577	125,160	19,506	133,673	153,179
Summit	3,498	54,395	57,893	9,074	165,540	174,614	2,727	263,658	266,385
Tooele	2,152	171,706	173,858	6,262	304,141	310,403	2,114	352,981	355,095
Uintah	3,190	130,614	133,804	12,900	175,574	188,474	10,054	198,942	208,996
Utah	8,620	911,262	919,882	23,743	2,120,998	2,144,741	18,576	2,766,002	2,784,578
Wasatch	1,486	29,939	31,425	4,226	52,283	56,509	2,327	62,793	65,120
Washington	3,031	80,418	83,449	4,819	314,586	319,405	2,625	503,969	506,594
Wayne	917	7,328	8,245	3,241	10,084	13,325	4,315	13,547	17,862
Weber	4,261	717,303	721,564	10,762	1,519,717	1,530,479	12,018	1,863,034	1,875,052
State	$104,706	$8,824,329	$8,929,035	$292,859	$18,056,843	$18,349,702	$287,377	$22,965,663	$23,253,040

Source: Utah Agricultural Statistics.

Table 64
Cash Receipts by Source--Counties (Millions of Dollars): 1990 to 1993

County	1990 Crops	1990 Livestock	1990 Total	1991 Crops	1991 Livestock	1991 Total	1992 Crops	1992 Livestock	1992 Total	1993 Crops	1993 Livestock	1993 Total
Beaver	$3.9	$17.1	$21.0	3.2	16.9	20.1	$3.2	$17.8	$21.0	$20.0	$3.2	$23.2
Box Elder	26.4	47.3	73.7	26.2	44.5	70.7	28.8	45.9	74.7	51.2	29.8	81.0
Cache	13.4	78.6	92.0	12.6	74.9	87.5	12.9	79.9	92.8	80.8	13.4	94.2
Carbon	0.6	4.3	4.9	0.6	3.6	4.2	0.4	3.5	3.9	4.1	0.6	4.7
Daggett	0.2	1.7	1.9	0.2	1.4	1.6	0.3	1.0	1.3	1.5	0.3	1.8
Davis	22.4	12.4	34.8	11.6	23.7	35.3	28.7	11.5	40.2	14.4	22.1	36.5
Duchesne	4.4	26.0	30.4	3.8	25.2	29.0	3.5	25.3	28.8	28.5	4.4	32.9
Emery	2.0	10.6	12.6	1.7	10.6	12.3	1.5	10.8	12.3	11.4	1.8	13.2
Garfield	1.2	7.7	8.9	1.0	7.4	8.4	1.0	7.0	8.0	8.3	1.0	9.3
Grand	0.6	2.1	2.7	0.6	1.5	2.1	0.7	1.4	2.1	1.5	0.7	2.2
Iron	9.7	12.1	21.8	8.6	11.8	20.4	8.1	10.4	18.5	12.4	10.2	22.6
Juab	2.9	5.3	8.2	2.4	5.2	7.6	2.3	5.1	7.4	6.2	2.6	8.8
Kane	0.4	4.0	4.4	0.3	3.4	3.7	0.4	3.7	4.1	4.5	0.4	4.9
Millard	21.5	27.8	49.3	18.9	26.0	44.9	18.6	24.5	43.1	28.1	18.2	46.3
Morgan	1.3	11.5	12.8	1.1	10.5	11.6	1.1	10.9	12.0	10.3	1.2	11.5
Piute	1.0	7.0	8.0	0.9	5.6	6.5	0.8	6.4	7.2	7.3	1.1	8.4
Rich	1.7	17.1	18.8	1.3	18.4	19.7	2.2	16.8	19.0	18.7	2.7	21.4
Salt Lake	9.0	23.1	32.1	9.3	24.4	33.7	10.2	24.2	34.4	34.6	9.6	44.2
San Juan	1.6	8.1	9.7	1.6	7.1	8.7	2.6	6.8	9.4	8.0	2.6	10.6
Sanpete	4.7	75.7	80.4	4.1	71.5	75.6	3.8	70.7	74.5	79.3	4.7	84.0
Sevier	4.2	24.1	28.3	3.5	25.7	29.2	3.1	25.4	28.5	29.4	4.1	33.5
Summit	0.9	15.6	16.5	0.8	14.7	15.5	0.9	13.4	14.3	14.9	1.1	16.0
Tooele	2.9	8.7	11.6	2.5	7.7	10.2	2.4	7.2	9.6	8.3	2.8	11.1
Uintah	3.9	20.2	24.1	3.4	18.1	21.5	3.1	19.4	22.5	21.3	3.4	24.7
Utah	22.5	56.5	79.0	32.4	55.2	87.6	27.5	58.5	86.0	64.3	23.0	87.3
Wasatch	1.3	9.9	11.2	1.1	9.5	10.6	1.1	9.5	10.6	9.9	1.2	11.1
Washington	6.0	7.6	13.6	5.0	6.5	11.5	5.0	6.9	11.9	8.7	3.4	12.1
Wayne	1.5	8.6	10.1	1.2	8.9	10.1	1.1	8.6	9.7	9.4	1.3	10.7
Weber	6.6	25.4	32.0	6.3	24.8	31.1	6.7	23.8	30.5	29.0	6.3	35.3
State	$178.7	$576.1	$754.8	166.2	564.7	730.9	$182.0	$556.3	$738.3	$626.3	$177.2	$803.5

Source: Utah Agricultural Statistics.

Table 65
Personal Income from Farming as Percent of Total Personal Income--Counties: 1980, 1990, 1993

County	1980	1990	1993	Percent Change 1980-93
Beaver	7.6	30.1	23.6	15.9
Box Elder	5.6	5.8	4.7	-0.8
Cache	6.1	5.0	4.9	-1.2
Carbon	0.5	1.3	0.4	-0.1
Daggett	10.8	9.3	6.4	-4.4
Davis	0.9	1.0	1.1	0.2
Duchesne	4.6	13.4	11.0	6.4
Emery	0.4	5.4	2.7	2.3
Garfield	3.8	15.4	8.6	4.7
Grand	1.4	1.6	0.5	-0.9
Iron	1.7	7.7	4.3	2.6
Juab	1.4	12.5	10.1	8.7
Kane	3.0	6.4	2.3	-0.7
Millard	23.9	15.0	15.5	-8.4
Morgan	10.6	15.9	11.9	1.3
Piute	27.2	47.2	33.6	6.4
Rich	22.4	54.7	55.7	33.3
Salt Lake	0.2	0.1	0.1	-0.1
San Juan	3.6	7.9	2.8	-0.8
Sanpete	5.8	20.9	20.7	15.0
Sevier	5.0	8.5	12.7	7.8
Summit	6.0	5.2	1.0	-5.0
Tooele	1.2	2.0	0.6	-0.6
Uintah	2.4	6.8	4.8	2.4
Utah	0.9	1.1	0.7	-0.3
Wasatch	4.7	7.5	3.6	-1.2
Washington	3.6	1.5	0.5	-3.1
Wayne	11.1	24.3	24.2	13.0
Weber	0.6	0.7	0.6	0.1
State	1.2	1.6	1.2	0.1

Source: Bureau of Economic Analysis

Table 66
Utah Farm Balance Sheet (Millions of Dollars) December 31,1987 to December 31, 1993

Category	1987	1988	1989	1990	1991	1992	1993
Assets	$5,390.3	$5,296.3	$5,063.0	$5,333.0	$5,427.8	$5,856.6	$6,118.5
Real Estate	4,197.0	4,112.7	3,881.0	4,068.0	4,240.8	4,616.2	4,880.2
Livestock and Poultry	484.4	536.5	572.0	582.7	566.3	637.9	626.9
Machinery & Motor Vehicles	429.1	428.7	444.6	459.1	472.5	471.0	468.9
Crops	112.4	123.5	94.9	114.6	95.0	90.6	117.8
Purchased Inputs	7.6	12.2	12.4	15.5	20.8	28.9	27.9
Financial	159.8	82.7	58.1	93.1	32.4	12.0	(3.2)
Claims	756.3	743.0	683.1	657.8	610.0	651.3	655.2
Real Estate Debt	447.0	428.2	390.3	368.6	305.0	351.9	347.9
Non-Real Estate Debt	309.3	314.8	292.8	289.2	305.0	299.4	307.3
Equity	4,634.0	4,553.3	4,379.9	4,675.2	4,817.8	5,205.3	5,463.3
Debt/Equity	16.3	16.3	15.6	14.1	12.7	12.5	12.0

Source: Utah Agricultural Statistics.

☆ Construction and Housing

Construction Activity

Residential Construction

Residential construction continued to expand during 1995. Multifamily construction increased most dramatically, while single-family homes declined slightly. Strong economic growth, net in-migration, lower mortgage interest rates, and low vacancy rates combined to increase residential construction. Residential units are estimated to be 20,200, the first time since 1978 that residential units have exceed 20,000 units, an increase of 3.8 percent over 1994 data.[26] The value of residential construction is estimated to reach $1.72 billion, an increase of 0.9 percent.

Toward the end of 1994, residential construction appeared to have peaked and decreased activity was anticipated. Mortgage interest rates were increasing and an anticipated moderation in growth and migration rates was projected. So why the jump in residential activity in 1995? Multifamily construction in Salt Lake and Utah Counties increased more than anticipated because of low vacancy rates and population growth. These factors created strong demand for high-density housing and the market responded accordingly. Single-family construction started slowly in 1995, but midway through the year mortgage interest rates declined, and that stimulated single-family home construction. Also, economic and job growth remained strong, thus helping to maintain the demand for multifamily and single-family homes.

Residential construction will increase slightly in 1996 because of continued demand for housing and moderate rates of growth in the economy and population, An estimated 21,500 new units will be authorized in 1996. Single-family homes will experience a repeat of 1995 because of the aforementioned moderate rates of growth. Single-family construction will benefit from stable, or slightly declining, mortgage interest rates during the year. Multifamily construction will continue to expand as well. New multifamily construction, already taking place, combined with the strong demand for housing will sustain the development of new multifamily projects. Even though high-density housing continues to encounter resistance in some localities, demand is strong enough, particularly in Salt Lake and Utah Counties, that multifamily will grow in 1996. The tight labor market for construction will be a factor in hindering residential developments but not enough of a obstruction to offset the anticipated strength of the market. Residential construction will be concentrated along the Wasatch Front and in the Southwest area in response to demand for new housing developments. Residential construction activity since 1970 is presented in Table 62 and Figure 41.

Nonresidential Construction

Nonresidential construction enjoyed another banner year in 1995. The value of nonresidential construction rose 4.4 percent to $800.0 million. Major increases were experienced in several major nonresidential categories, especially industrial buildings. The value of industrial buildings rose to $230.0 million in 1995 compared to $174.9 million in 1994. Even with the substantial number of industrial buildings receiving permits during 1994 and 1995, vacancy rates remain low at around 3.6 percent in 1995. Retail buildings showed a valuation of $160.0 million compared to $132.5 million a year ago as retail construction responded to a growing marketplace. The sector, hotel and motel buildings, reported dramatic growth, as Utah continues to cultivate greater tourism and convention business. Office buildings, religious buildings, and public buildings had slight declines in valuation. Office buildings will probably see increased activity since the vacancy rate has dropped from 5.9 percent in 1994 to 5.0 percent in 1995. Nonresidential construction valuations by major sector are presented in Table 67.

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[26]Through the first three quarters of 1995 (January - September), a total of 15,983 units were authorized. An additional 4,217 units are estimated to be added to this figure during the fourth quarter of 1995 (October - December).

Several major projects have contributed to the strong performance of nonresidential construction in 1995. Among these were the $31.6 million in Kennecott Copper modernization, the $13.9 million new conference center in Ogden and the $13.6 million high school in Cedar City. Several other large projects will also impact nonresidential construction, including the Micron facility in Lehi, the Courts Complex in Salt Lake City and the American Stores Tower in Salt Lake City. It should be remembered that the economic impacts of nonresidential construction projects extend outward due to the longer time frame required to build large projects. It is not unusual for these impacts to be stretch out over several months (or longer) during the construction phase.

A good example of this time-frame is the Micron facility in Lehi. Because of the size of this project, a special "master permit" has been issued and the city has turned this permit over to a consultant who will work with Micron. This consultant will issue all building permits under this "master permit" so that construction can stay on schedule. When the project is completed, the consultant will turn over all permits and the "master permit" to Lehi City which will then issue a "certificate of occupancy" to Micron. When that process is finished the permit will "officially" be recorded. This means that the impacts of the Micron construction projects will not appear in the data until spring or summer of 1996, even though a large part of the work and much of the impact will have occurred during 1995. Because of this type of time lag, nonresidential construction will likely have a record-setting year in 1996, with an estimated $2.5 billion in new permit-authorized activity. Moderately strong economic and job growth, and low vacancy rates for office, industrial and retail buildings will help maintain demand for nonresidential construction. Several large projects, such as Micron and Olympic venues construction, will help boost nonresidential construction. The only hindrance that nonresidential construction will encounter would be the tight labor market. This difficulty will probably be offset, to some degree, by workers from neighboring states coming to Utah because of job opportunities.

Additions, Alterations, and Repairs

The category, additions, alterations and repairs, increased 10.1 percent in 1995 to $375.0 million. Additions, alterations and repairs have benefited from strong economic growth, rising incomes and lower interest rates. Renovation activity will decrease slightly in 1996 to approximately $350.0 million as economic growth moderates and due to a shortage of labor because of strong nonresidential growth.

Total Construction Activity

The value of total construction rose 3.0 percent to $2.9 billion in 1995 compared to the $2.8 billion in 1994. The value of construction by component is shown in Figure 42. The total value of construction is projected to rise to $4.8 billion in 1996 because of significant growth in nonresidential construction. Residential construction will increase 10.5 percent to $1.9 billion, and will contribute to the well-being of the construction industry in 1996. Moderately strong economic growth will keep demand for dwellings and nonresidential building near record levels, and will help Utah's construction industry enjoy an other prosperous year.

Nonbuilding Construction

Nonbuilding construction is an important contributor to Utah's construction industry. Major projects such as highways, bridges, dams, and power plants are included in this category. Most of these construction activities do not require a permit so data are not readily available. Nonbuilding construction values were obtained by telephone interviews with personnel from the Utah Department of Transportation, Utah Department of Water Resources, Utah Division of Facilities Management and Construction, and the Bureau of Reclamation.

Nonbuilding grew slightly in 1995 to $460 million. The outlook for 1996 is for a slight increase to $600 million primarily due to increased highway construction. Other public facilities will also enhance nonbuilding construction in 1996 as the needs of a growing economy and population are met with infrastructure developments and improvements.

Housing

Losing Ground: Housing Affordability and Low-income Renters

In recent years housing affordability has become a serious problem for many Utah households. Home prices and rental rates have increased much faster than incomes as economic growth has created higher land and construction costs.

To be sure, the impact of rising prices has not been the same for all Utahns. Existing homeowners have benefited tremendously in recent years from rising prices. Higher home prices have led to increased home equity and wealth, which has enabled many homeowners to finance home improvements and a wide range of consumer spending.

For first-time homebuyers, higher housing prices have presented problems, although the consequences of increased prices have been mitigated by lower mortgage rates. Lower mortgage rates have pushed down the monthly mortgage payment thus the housing affordability for some first-time homebuyers may not have been seriously affected. But for too many young households, rising home prices and weak income growth have limited any improvement in homeownership affordability despite dramatically lower mortgage interest rates. Thus, even with lower interest rates, many prospective first-time buyers still lack the savings to cover the down payment and closing costs and the income to qualify for a mortgage loan.

For renters, the affordability situation is bleak, particularly for Utah's estimated 80,000 very low-income households living in rental housing.[27] [28] Any financial benefit for renters from lower mortgage rates are much less direct, and renters are excluded from the benefits of wealth accumulation created by increases in home equity. Low incomes and lack of savings prevent many renting households from taking advantage of favorable interest rates. To the extent that households delay becoming homeowners they remain locked out of a primary savings and investment vehicle. Thus the lack of savings and wealth prevents them from securing a home, the very asset that has proven to be the best source of wealth accumulation for the vast majority of households.

Rental Rates and Housing Affordability

Rising rental burdens have become the primary housing problem facing low-income renter households in Utah. In adjusted terms (1992 dollars) the median income of families renting housing in the Salt Lake Metropolitan Area (Salt Lake, Davis and Weber Counties) fell over 11 percent between 1984 and 1992; dropping from $20,853 to $18,525.[29] In 1984 median renter income was 54 percent of median income of homeowners; but by 1992, renters' median income had fallen to only 48 percent of median income of homeowners.

Lagging income growth combined with record-high rents have increased the rent burden for low-income households. In 1992, 46,000 renter households or nearly 40 percent of all renters in the Salt Lake Metropolitan Area paid more than 30 percent of their current income for rent; 15,000 households paid more than 50 percent of their income for rent. Rent burdens have undoubtedly worsened since 1992 as rental rates have risen dramatically during the 1992-1995 period. The Apartment Association of Utah in their Salt Lake Area Apartment Vacancy Survey reports that the average rental rate for a two bedroom/two bathroom

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[27]Estimate based on data from *1990 Census of Population and Housing Summary Tape File 3A, Table 40.*

[28]Very low-income is defined as 50 percent of median family income. For example, median family income for the Salt Lake City-Ogden Metropolitan Area Utah is estimated for FY 1995 as $42,200. Very low-income families would be those households with incomes below $21,100. Low-income is defined as between 50 percent and 80 percent of area median family income.

[29]U.S. Department of Commerce, Bureau of the Census, *American Housing Survey for the Salt Lake City Metropolitan Area, 1984 and 1992,* Government Printing Office, Washington D.C. Income data are for families and primary individuals.

unit increased from $437 in May of 1992 to $654 in August of 1995; an increase of 50 percent in three years.

Rising rental rates have made it very difficult for families renting to accumulate the savings necessary to become homeowners. The inability to purchase a home because of the savings constraint often means that families must pay more, not less, for housing. For example, $650 spent on the average two bedroom/two bath apartment in Salt Lake County would be sufficient to meet the principal, interest, taxes and insurance on an $80,000 condominium with similar square footage.

Rising rent burdens have also forced many low-income households to double-up. In a 1995 survey of families receiving AFDC support nearly 30 percent of families reported that they were living with relatives because they could not afford to pay market rental rates.[30] This doubling-up and overcrowding has reduced the quality of housing for many of these low-income families.

Supply of Rental Housing

Persistently high rent burdens are the consequence of the demand for apartments rising faster than the supply, thereby pushing rental rates higher and vacancy rates lower. Since 1990, vacancy rates in the Salt Lake Metropolitan Area have been consistently below 5 percent and in some years dipped below 3 percent. Despite these very low vacancy rates, new multifamily construction statewide has been as low as 1,500 units; less than 1 percent of the existing multifamily stock of 200,000 units. The squeeze on the supply of rental housing has been particularly difficult for low-income families that do not receive housing subsidies.

The construction of new apartment units in recent years has been impeded, despite the rising demand for units, by intense local opposition to multifamily construction. A survey of planning offices of cities and counties along the Wasatch Front showed that a large majority of cities opposed high-density multifamily projects. The notable exceptions were unincorporated Salt Lake County and Salt Lake City. Resident groups have pressured planning offices and city officials to oppose high-density multifamily projects because they believe such projects increase traffic congestion and crime rates and will ultimately lead to declines in property values and a deterioration of their quality of life. However, despite these impediments, several thousand apartment units will be constructed in 1996, which should help reduce apartment shortages.

Local opposition to multifamily units is not only causing higher rental rates but also pushing new apartment development farther and farther away from centers of employment opportunity as well as public transportation routes. Thus, the burden of transportation costs for renters is bound to increase in the future.

Housing Assistance Programs for Low-Income Renters

Among the 80,000 very low-income families in Utah, only 18,000 receive rental housing assistance. Housing assistance is provided through a complex array of federal, state and local programs (Table 69). The U.S. Department of Housing and Urban Development (HUD) is the largest source of assistance, providing housing subsidies to an estimated 9,900 low-income and very low-income households in Utah. Another federal agency, the Rural Economic and Community Development Administration (formerly Farmers Home Administration) provides rental assistance for 1,324 households in rural Utah. To meet the eligibility requirements for the HUD and RECD housing programs, the income of recipients must be below 50 percent of median income of area, adjusted by family size. In Salt Lake City-Ogden Metropolitan Area, 50 percent of the median family income for a family of four in 1995 was $21,100. The recipients' housing assistance generally pays the difference between 30 percent of the tenants' income and the total cost of rent plus utilities. The rent and utility cost cannot exceed the HUD-determined Fair Market Rent (FMR) for the area. In 1995 the FMR for Salt Lake County was $482.

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[30]Survey performed by the Bureau of Economic and Business Research, University of Utah for the Utah Department of Human Services, Office of Family Support.

The rapid rise in rental rates in the metropolitan area has put severe constraints on these federal housing programs. As rents rise recipients find fewer and fewer units that meet the FMR requirement for certificate programs (Section 8 Existing and Section 8 Moderate Rehabilitation programs). And even the effectiveness of the HUD Housing Voucher Program, a more flexible program (Table 69), has been reduced by high rental rates. And Utah's "tight" rental market has given landlords more choice of tenants and since HUD-assisted tenants cannot be evicted for one year, landlords have, with greater frequency, opted to rent to unsubsidized households. Hence, these market conditions force housing assistance recipients to make the cost/quality trade-offs and for most households, it means declining quality of housing.

Given the shortage of low-income rental housing combined with relatively low incomes in Utah, the average income of recipients of federal housing assistance is well below the "50 percent of median family income" requirement. Local housing authorities, which administer the HUD programs, give high placement priority to the lowest-income households. And local housing authorities have plenty of applicants from which to choose very low-income tenants. Salt Lake City Housing Authority, for example, has a list of 6,000 applicants waiting for availability among the 2,150 certificates, vouchers or housing units administered by the authority.

Unlike most of the active HUD programs, which provide housing assistance directly to the tenant, the State of Utah's Housing Finance Agency's (UHFA) low-income tax credit program seeks to encourage new construction of low-income rental housing. This program provides financial assistance to developers which ultimately reduces the project's cost and rents. Since 1987, UHFA's tax credit program has added nearly 4,900 units to the low-income housing stock in Utah. A participating developer agrees by contract that the rental rate plus utilities of a tax credit unit will not exceed a specific rent level. In Salt Lake County, for example, that monthly rent and utility level for a two bedroom apartment in 1995 was about $500. The income eligibility for a tax credit unit is 60 percent of median family income of the area. However, due to the demand for low-income units and the goal to serve the lowest income households first, the average income of tenants in tax credit units was only $12,584 in 1995.

In addition to federal and state efforts, Utah's 17 local public housing authorities (PHAs) are an integral part of assistance programs. These PHAs not only own and operate public housing units but they also process applications, verify eligibility and compliance and disperse HUD certificates and vouchers. In Utah local PHAs own over 2,300 low-income rental units. The income eligibility and nature of assistance for PHAs is similar to HUD programs.

The rental housing units owned by Utah's PHAs are spread throughout 12 counties, with a little more than half of the units--1,231--located in Salt Lake County. In many major urban areas public housing has become synonymous with crime, drugs, slums, and overcrowding. However, in Utah public housing projects are generally small rental projects not "large concentrations of the very poorest population" and they are relatively free of the severe social problems associated with public housing projects in deteriorating inner cities.

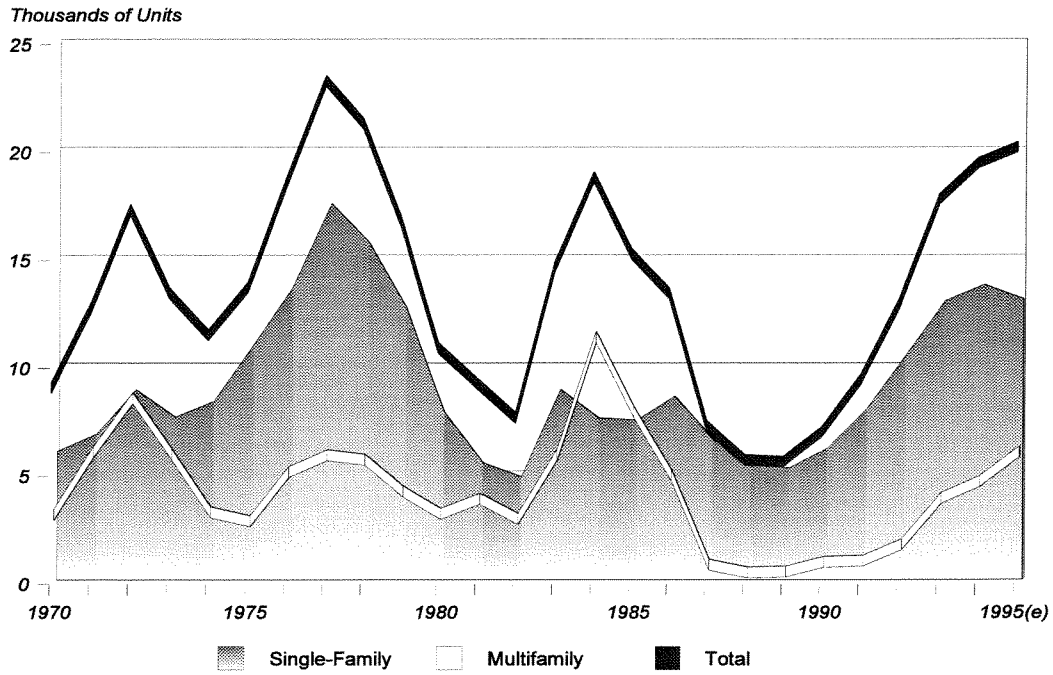
Conclusion

The well-being of 18,000 very low-income Utahns is impacted by federal, state and local housing assistance programs. Unfortunately, these programs will likely be reduced in size and scope in the next few years. There have been no new HUD certificates or vouchers issued in FY 1995-1996. HUD's financial assistance to local PHAs is also threatened. These changes in HUD programs will adversely affect the ability of PHAs to provide existing levels of service. In addition, the low-income housing tax credit program, which was made permanent by Congress in 1993 to enable developers to plan ahead for projects, appears in jeopardy. Legislation terminating or "sunsetting" the tax credit program at year-end 1997 has been passed by Congress and is part of the budget package currently under negotiation between the President and Congress.

The 60,000 very low-income renters that do not receive any housing assistance are even harder hit by a tight rental market. A rental market characterized by vacancy rates below 5 percent and rising rental rates, consigns them to the lowest quality housing. It is one of the contradictions of our time that even in periods

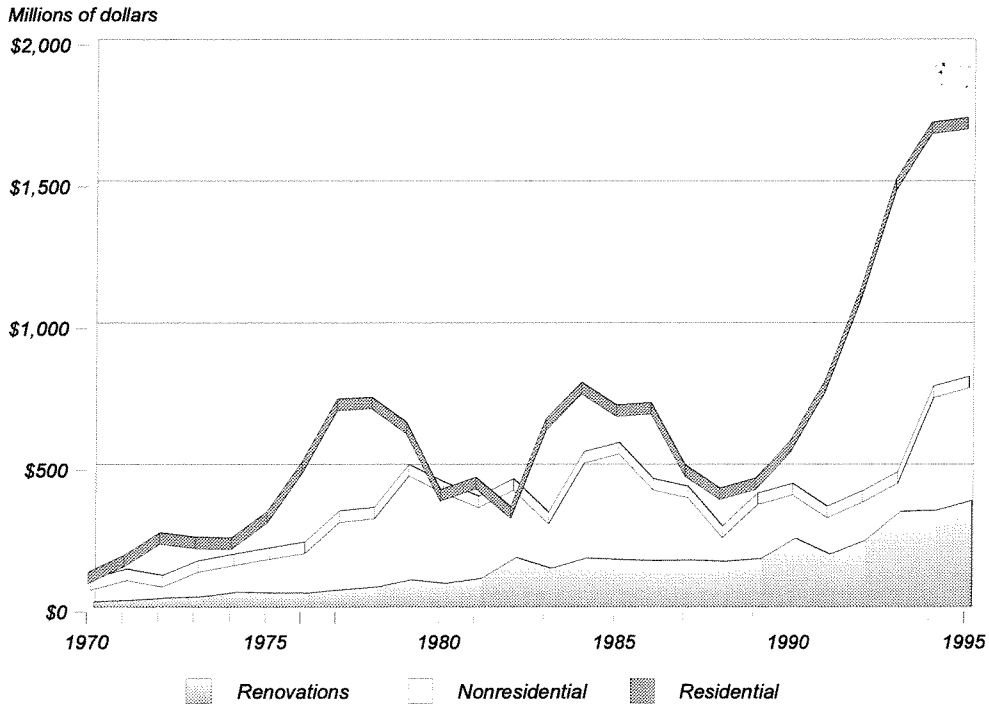
of low interest rates and rising residential construction, at both the national and state levels, the housing conditions of low-income households continue to deteriorate. ☆

Figure 41
Utah Residential Construction Activity: 1970 to 1995



Source: University of Utah, Bureau of Economic and Business Research

Figure 42
Value of New Construction in Utah: 1970 to 1995



Source: University of Utah Bureau of Economic and Business Research

Table 67
Residential and Nonresidential Construction Activity in Utah: 1970 to 1995

Year	Single Family Units	Multi-Family Units	Mobile Homes/ Cabins	Total Units	Construction Value* (millions of dollars) Residential	Nonresidential	Renovations	Total Valuation
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	101.7	931.4
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	775	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	5,179	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	13,668	4,646	1,154	19,468	1,704.1	766.5	340.6	2,811.2
1995 (e)	13,000	6,000	1,200	20,200	$1,720.0	$800.0	$375.0	$2,895.0

(r) = revised to be comparable to 1992 data.
(e) = estimate
na = not available

*Excludes additions, alterations, and repairs, and nonbuilding construction (such as highways).

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November, 1995.

Table 68
Utah Nonresidential Construction by Sector (Millions of Dollars): 1990 to 1995

Sector	1991(r)	1992	1993	1994	1995(e)	Average Percent of Total(a)
Hotels and Motels	$3,634.2	$15,342.1	$15,712.1	$19,056.2	$45,000.0	3.5
Churches and Religious Buildings	$35,846.0	$39,355.3	$32,169.3	$55,304.9	$35,000.0	7.1
Industrial Buildings	$44,266.0	$108,116.8	$128,789.4	$174,855.1	$230,000.0	24.5
Offices, Banks and Professional Buildings	$28,035.3	$56,780.1	$48,906.5	$114,362.0	$100,000.0	12.5
Stores and Other Mercantile Buildings	$71,808.8	$68,432.7	$49,294.7	$132,495.1	$160,000.0	17.2
Publicly-Owned Buildings (b)	$29,565.3	$26,654.5	$41,970.6	$128,934.6	$90,000.0	11.3
Other Nonresidential Construction	$129,204.6	$82,248.1	$146,811.7	$141,512.2	$140,000.0	23.8
Total Nonresidential Construction	$342,360.2	$396,929.6	$463,654.3	$766,520.1	$800,000.0	100.0

(e) = estimate
(r) = revised
(a) = Data represents five-year average, 1991 to 1995.
(b) = Includes only those structures built by public agencies such as state and local governments, for which permits were issued. Not all local entities require public projects to obtain a permit.

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November 1995.

Table 69
Major Housing Assistance Programs for Low-Income Renters

Program	Nature of Assistance	Tenant Eligibility	Number of Assisted Units (a)	Total Assisted Units by Program
HUD Section 8 Existing, Section 8 Moderate Rehabilitation	Provides low-income family with a certificate to pay owner the difference between 30% of their income and rent, up to FMR. Under mod. rehab. certificate tied to a rehabilitated unit.	Income less than 50% of median family income of area.	5,301	5,301
HUD Housing Voucher Program	Provides low-income family with a housing voucher to pay owner the difference between 30% of their income and the FMR. Family can choose to live in unit with rent that exceeds FMR.	Income less than 50% of median family income of area.	1,967	1,937
HUD Section 8 New Construction, Section 236 and Section 202	Provides subsidy to owner. Projects also benefit from special tax incentives for low income housing. HUD pays owner difference between tenant rent contribution—30% of income—and rent based on operating costs.	Income less than 50% of median family income of area.	2,595	2,595
UHFA Low-Income Housing Tax Credit	Provides financial assistance to developers to build rental units for low-income families.	Income less than 60% of median family income of area.	4,889	4,740
Public Housing Authorities (Local governments)	Provides publicly owned units for lowest income renters. Tenant obligation is 30% of income for rent.	Income less than 50% of median family income of area.	2,324	2,324
Rural Economic and Community Development	Provides low interest loans and subsidies for developer to build rental units in rural areas. Also provides rent subsidies to tenants.	Income less than 50% of median family income of area.	1,324	1,170
Total			18,400	18,067

(a) UHFA tax credit program and RECD rural housing program both have some Section 8 certificate and voucher recipients, therefore some double counting occurs in data in this column.

Source: University of Utah, Bureau of Economnic and Business Research, 1995

☆ Defense / Aerospace

Restructuring of the Nation's Military Forces

The end of the Cold War, combined with the growing urgency to reduce the Federal budget deficit has, in recent years, compelled the United States to reduce and realign its military forces. This activity has brought the closure of military installations throughout the nation and has vastly reduced the number of procurement contracts awarded to defense contractors. Weapons procurement will have been reduced by nearly two-thirds in constant-dollar terms from 1986 through 1995, while combined military and civilian Department of Defense (DoD) personnel will be reduced to 1980 levels by the year 1996.[31] Nationally, primary (not total) defense-related spending has experienced a modest decline of 1.6 percent from $231.6 billion in FY 1986 to approximately $226 billion in FY 1994. Table 70 and Figure 43 provide U.S. defense-related spending breakdowns.

Utah's Relationship to National Trend

Contrasting the national trend, defense-related spending in Utah has fallen relatively more rapidly than has total domestic defense-related spending from 1986 to 1994. Defense-related expenditures in Utah consist of wages and salaries paid to military and civilian DoD personnel, DoD procurement contracts with firms with Utah operations, military retirement pay, and DoD grants to state and local governments. Approximately 51 percent of the $1.5 billion in defense-related spending in the state in FY 1994 was wages and salaries of DoD employees, while 39 percent was DoD procurement awards to Utah firms.[32] Table 71 and Figure 44 present Utah's defense-related spending.

Total defense spending in Utah has declined by approximately $1 billion, or about a 41 percent decrease, from FY 1986 to FY 1994. Because other components of defense-related spending (i.e., military retirement pay and grants to state and local governments) have increased over the same period, the decline in total defense spending in Utah is primarily attributed to the reduction in DoD procurement contract awards.

Declines in Defense Procurement Contract Awards

The principal component of Utah's defense-related industrial sector is prime contract awards which represent payments made to contractors and subcontractors who provide DoD with a variety of goods and services. Defense procurement contract awards in Utah have fallen from a high of $1.7 billion in 1986 to $0.6 billion in FY 1994, a 65 percent decrease. In comparison, the nation as a whole experienced only a 16 percent decline in defense procurement contracts over the same period. Moreover, while defense procurement awards represented 66 percent of the state's defense-related spending in FY 1986, this proportion had fallen to 39 percent by FY 1994.

Thiokol Corporation (Thiokol) and Hercules Incorporated (Hercules) have for over a decade been among the top defense procurement award recipients in Utah. Both have been involved in the nation's missile defense program. As has been true for weapons procurement in general, procurement awards for the missile defense program have declined significantly and this decline has affected a large number of Utah defense contractors, including Thiokol and Hercules.

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[31]L.R. Jones, "The Pentagon Squeeze," *Government Executive*, pp. 21-27; and William E. Kovacic and Dennis E. Smallwood, "Competition Policy, Rivalries, and Defense Industry Consolidation," *Journal of Economic Perspectives*, (8:4), Fall, 1994, pp. 91-110.

[32]Defense procurement contract awards in this context refers to "the value of obligations for contract actions, and do not reflect actual Federal Government expenditures." (U.S. Department of Commerce, Bureau of the Census, *Federal Expenditures by State for FY 1994*, p. viii.) The amounts recorded here are the amounts of contract awards at the time of the award. The actual spending associated with this may occur over a period of years. The Federal Procurement Data Center (FPDC) reports these by place of performance rather than the location of the prime contractor.

Procurement contract awards to Thiokol dropped from $59 million in FY 1993 to $45 million in FY 1994, a 24 percent reduction. Experiencing an even greater loss was Hercules, who saw its procurement contract awards drop by 67 percent, from $43 million in FY 1993 to $14 million in FY 1994. In response to losses in procurement contract awards, Thiokol has announced a reduction of 170 permanent jobs in FY 1996; a further reduction of 200 permanent jobs is slated for FY 1997.

As was the case for FY 1993, the firm with the largest amount of new defense procurement contract awards for FY 1994 was EG&G Defense Materials, Inc., located in Tooele, Utah. This firm received a multi-year contract in 1989 to construct, initialize, operate, and eventually (in the year 2000) decommission the Tooele Chemical Agent Disposal Facility. EG&G's procurement contract revenues totaled $130 million in FY 1994, an increase of 54 percent from the previous year. Table 72 provides a listing of the top 25 defense procurement award recipients in Utah for FY 1994.

Geographic Distribution of Defense Spending in Utah

Defense spending in Utah is primarily concentrated in Davis, Tooele, Salt Lake, Weber, Box Elder, and Cache Counties as shown in Table 73. However, the economic and fiscal impacts of defense spending affect the entire state. Furthermore, defense spending does occur throughout the state. For example, firms located in 15 of Utah's 29 counties received defense procurement contracts in FY 1994.

Twelve Utah counties experienced reductions in the amount of revenues generated from procurement contract awards from FY 1993 to FY 1994. Counties experiencing the greatest declines in revenue over this period were Davis County (-$17 million), Box Elder County (-$13 million), and Weber County (-$7 million). These losses were offset by relatively large gains in procurement contract revenues in other Utah counties. Counties experiencing the greatest gains in procurement contract revenues from FY 1993 to FY 1994 were Tooele County (+$55 million), Summit County (+$17 million), and Carbon County (+$4 million). Collectively, Utah counties experienced an increase of $32 million dollars in defense procurement contract award revenues from FY 1993 to FY 1994, an increase of 6 percent.

Significance of Hill AFB to Utah's Defense Sector and Overall Economy

Hill Air Force Base (Hill) constitutes the largest single component of Utah's defense economy.[33] Distinguishing Hill from the vast majority of Air Force bases is the Ogden Air Logistics Center (OALC), which is the primary operation at Hill and accounts for 67 percent of the employment at the base. In general, Air Logistic Centers manage, maintain, and support weapons systems. OALC is one of only five Air Force Air Logistic Centers and has for been a major aircraft support and maintenance center for over 50 years.[34] It manages and/or maintains the F-16 Fighting Falcon, the F-4 Phantom, the C-130 Hercules, conventional munitions, and the nation's fleet of Silo-Based Inter-Continental Ballistic Missiles (ICBMs). Besides these functions, OALC has base support functions that administer/manage and support the operation of the entire base. These operations include financial management, personnel, infrastructure maintenance, the base hospital and commissary, and others. These operations provide support to the ALC and to the tenants on the base.

Hill employs 10,600 of the state's 32,700 civilian federal workers, approximately 32 percent. This figure (unlike those given in other portions of this report by the Utah Department of Employment Security), takes into account the 8,079 federal civilian employees attached to OALC plus the approximately 2,520 federal civilians employed at Hill, but who are attached to other federal agencies located outside the state for pay and personnel accounting purposes. Similar to overall declines in defense activity in Utah, employment at

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[33]Sources: Demographic and Economic Analysis Section, GOPB, *Hill Air Force Base and Utah's Defense Sector: An Economic Analysis of Two Realignment Scenarios*, September 21, 1994.

[34]Prior to 1995 BRAC rulings, five U.S. Air Force Air Logistics Centers were in full operation. However, the Air Logistic Centers (ALCs) at McClellan Air Force Base near Sacramento, California, and Kelly Air Force Base near San Antonio, Texas, were recommended by BRAC for closure in its 1995 session. Once these ALCs are closed, only Hill, Tinker Air Force Base near Oklahoma City, and Robins Air Force Base in Georgia, will have Air Logistical operations.

Hill (including both military and civilian) has dropped from 20,604 in 1983 to 15,331 in 1994.[35] Civilian DoD employment, in FY 1994, was about 69 percent of the employment on the base, and has now dropped by a greater proportion and magnitude than has military employment.[36]

The combined economic impact of Hill ranks it as the largest basic employer in the state[37]. Hill's payroll in FY 1994 was $510 million for the civilian and military personnel. This is about 3 percent of the state's 1994 non-agricultural payroll. In FY 1994, the base directly employed 10,603 civilians, 4,728 military personnel, and 1,450 reservists.

Defense Base Closure and Realignment Commission Rulings

Implications for Utah's Military Installations

On November 5, 1990, President George Bush signed the Defense Base Closure and Realignment Act, establishing the independent Defense Base Closure and Realignment Commission (BRAC). The Commission was established "to provide a fair process that will result in the timely closure and realignment of military installations inside the United States." Authorized to meet only during calendar years 1991, 1993, and 1995, the Commission's authority expires on December 31, 1995[38]. Following is a discussion of how BRAC rulings affect Utah's military installations.

Hill Air Force Base / Ogden Air Logistics Center

All five of the nation's Air Force Air Logistics Centers were considered by BRAC for closure and/or realignment in 1995. To the delight of thousands of civilian DoD employees and military personnel at Hill, the Commission ruled to realign, rather than to close, OALC. The aggregate effects of realignment have not yet been felt at OALC; however, BRAC estimates that by FY 1998 approximately 6,000 civilian DoD jobs will have been transferred to OALC from Air Logistics Centers slated for closure at McClellan Air Force Base near Sacramento, California, and Kelly Air Force Base near San Antonio, Texas. These additions to OALC are strictly tentative, however, as the Clinton Administration has recently pledged, in an attempt to minimize job losses at these Air Force Bases, to "privatize in place" most jobs at McClellan and Kelly. In addition to these tentative jobs, it is estimated 300 medical workers will be reassigned to Hill from the closing Defense Distribution Depot Ogden.

Though BRAC's rulings for Hill are generally optimistic, not all jobs will be saved at the installation. Approximately 380 involuntary civilian DoD separations are expected at Hill by September, 1996. Furthermore, approximately 100 civilian DoD jobs are expected to be lost at Hill's Utah Test and Training Range from 1997 to 1999.

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[35]This figure does not count reservists.

[36]Civilian employment has a greater impact on a dollar-for-dollar basis on the Utah economy than does military employment. This is particularly the case for military personnel who reside on-base.

[37]Economists distinguish between basic and non-basic employment. In general, basic employment is employment associated with economic activities that result in the export of goods or services from the state and, therefore, generate income from the outside. Non-basic employment serves the internal needs of the residents of the region. The other largest employers in the state are Brigham Young University and the University of Utah, both of which are primarily non-basic entities. For a further explanation of basic employment, *Exports from Utah's Regional Economies, Utah State and Local Government Fiscal Impact Model Series: 94-2*, Governor's Office of Planning and Budget, June 1994, is an excellent source.

[38]Source: Defense Base Closure and Realignment Commission, *1995 Report to the President*, Executive Summary.

Defense Distribution Depot Ogden (DDO)

Of all Utah military installations considered by BRAC in 1995 for closure and/or realignment, DDO was by far the hardest-hit. BRAC recommended the cessation of all DDO operations, except for a 36,000 square-foot cantonment for Army Reserve personnel. It was found that closing DDO "would reduce both overall excess capacity and infrastructure within the Defense Distribution Depot system and, at the same time, yield significant cost savings."[39] Due to the closure of DDO, approximately 1,000 permanent civilian DoD job reductions will result at the installation (240 voluntary, 300 medical workers to be reassigned to Hill, and 460 involuntary) by 1998.

Tooele Army Depot (TEAD)

TEAD was considered by BRAC for closure and/or realignment in the Commission's 1993 session. BRAC recommended that TEAD be realigned, thereby reducing it to a depot activity and placing it under the command and control of Red River Army Depot, TX. The conventional ammunition storage and chemical demilitarization missions were, however, retained at the installation. The bulk of TEAD's workload (i.e., its primary vehicle maintenance mission) was terminated, and was transferred to other depot maintenance activities, including the private sector. As a result, operations at TEAD's $150 million, state-of-the-art Consolidated Maintenance Facility (CMF), which opened in October 1992, ceased. CMF's closure accounted for the majority of the 1,927 civilian defense jobs lost at the installation. BRAC further ruled that all activities at the depot not associated with the remaining mission be inactivated, transferred, or eliminated, as appropriate.

Currently about 1,000 civilian defense personnel are employed at TEAD, fulfilling a broad range of mission support activities. No civilian defense employees were transferred from TEAD to other sectors of Utah's defense economy as a result of the Commission's rulings. Overall levels of activity have stabilized at TEAD and future levels are expected to remain constant. Presently, no future civilian job reductions are planned at the installation.[40]

Historically, TEAD has had a substantial impact on the local economy of Tooele County and, to a lesser extent, on the state's overall economy. TEAD's economic contributions will, however, decrease as the fiscal impacts of realignment are realized in coming years, as illustrated in Table 74. Moreover, as TEAD realigns, the mix of defense procurement contracts awarded to the installation will become more service/construction-oriented. This change will be good news for the local workforce of Tooele County, as the majority of these types of contracts are allocated to Utah firms.[41]

Outlook -- Long-Term Adjustment

Federal budget plans call for $63 billion in defense cuts over the next three years. Nationally, BRAC has called for a combined reduction of 240,000 DoD civilian and military personnel in coming years. In short, the heyday of defense spending which occurred in the mid-1980s is over, and not likely to return. Defense contractors, military bases, and attendant industries supporting defense activities will all continue to experience the long-term effects of defense cuts.

Experts anticipate that domestic defense spending will stabilize within three to four years. During that period, the defense industry will continue to restructure as contractors and subcontractors struggle with intense competition and soaring overcapacity.

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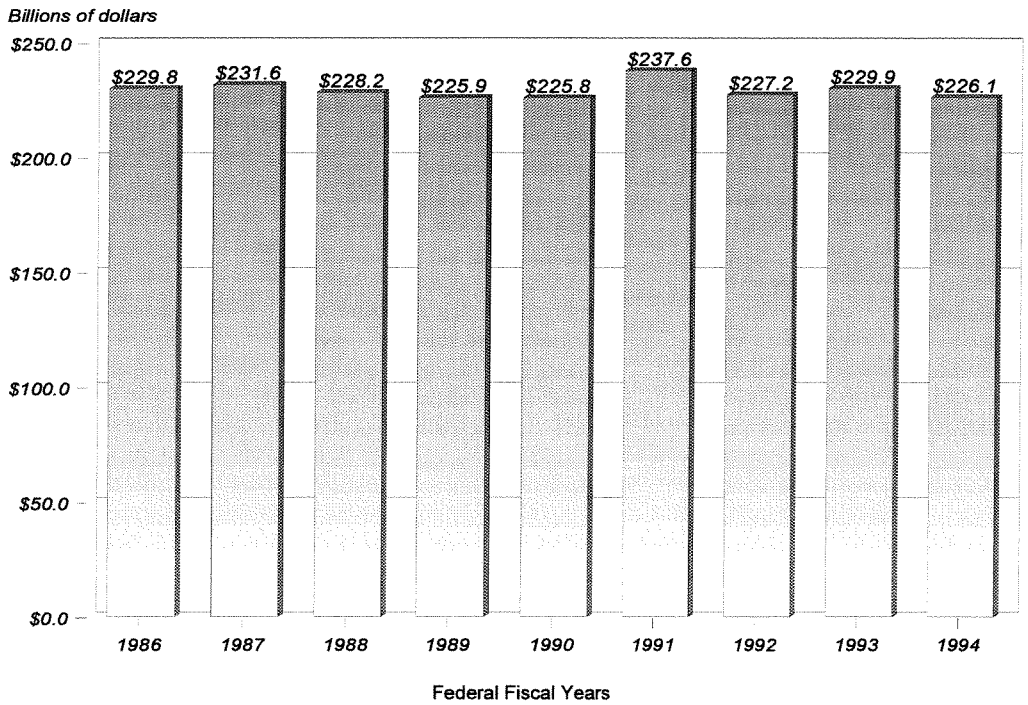
[39]Source: Defense Base Closure and Realignment Commission, *1995 Report to the President*, pp. 1-123.

[40]Data for TEAD obtained from Malcolm T. Walden, Chief, Base Realignment and Closure Office, TEAD.

[41]Source: TEAD's Automated Procurement Database.

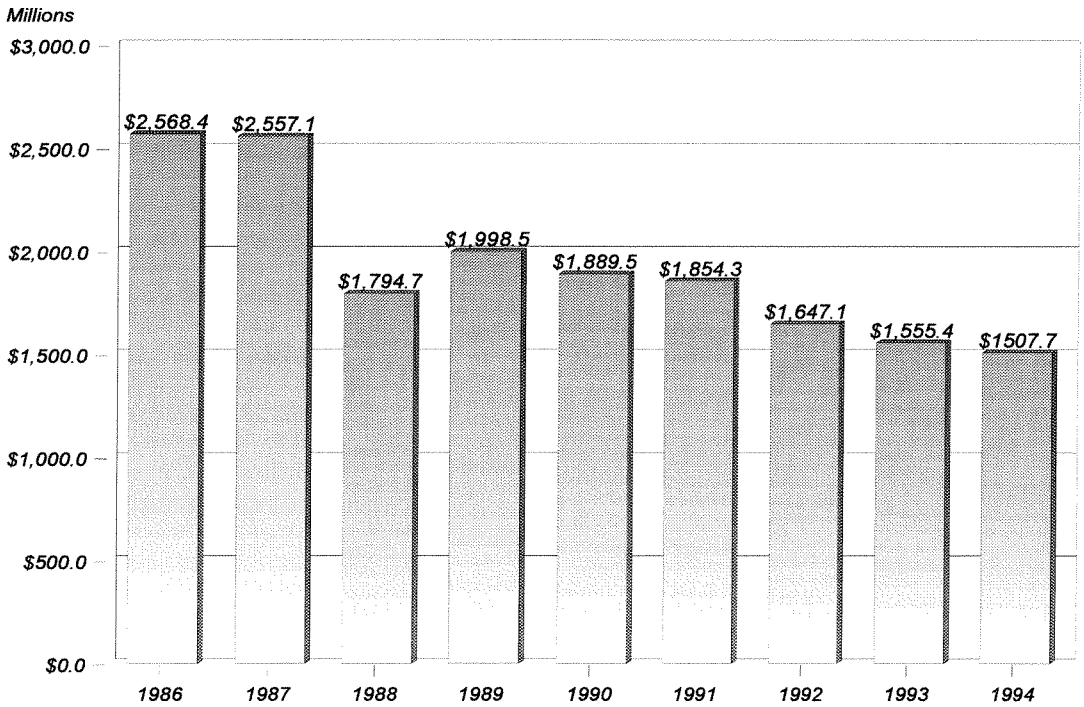
Though jobs were lost, Utah fared considerably better than did the majority of states in the BRAC process. The notion of additional defense-related jobs being brought into the state from other less-fortunate military installations (i.e., those terminated by BRAC), illustrates the resiliency of Utah's defense industry. The value of this industry, in terms of myriad fiscal impacts it has on the state's economy and the abundant contributions it makes to the nation's military, cannot be overstated. ☆

Figure 43
Federal Defense Related Spending in U.S.--Total for All States and Territories: 1986 to 1994



Sources: Bureau of the Census and the Department of Defense

Figure 44
Federal Defense-Related Spending in Utah: FY 1986 to 1994



Source: Bureau of the Census and the Department of Defense

Table 70
Primary U.S. Federal Defense-Related Spending (Selected Categories)--All States and Territories (Thousands of Dollars): FY 1986 to FY1994

Fiscal Year	Wages and Salaries*	Procurement Contract Awards	Military Retirement	State/ Local Grants	Total
1986	$61,900,746	$150,055,345	$17,769,127	$111,366	$229,836,584
1987	65,097,948	147,616,385	18,732,723	127,430	231,574,486
1988	67,270,619	142,175,108	18,640,881	113,637	228,200,245
1989	72,771,040	132,259,473	20,669,532	172,125	225,872,170
1990	69,103,253	135,259,039	21,235,041	175,978	225,773,311
1991	75,254,721	139,570,721	22,669,073	111,454	237,605,969
1992	73,851,077	129,124,509	24,024,591	223,899	227,224,076
1993	73,947,670	129,996,047	25,752,104	241,816	229,937,637
1994	73,470,136	125,982,520	26,478,356	212,466	226,143,478
Percent Change 1986-1994	18.7%	-16.0%	49.0%	90.8%	-1.6%
Absolute Change 1986-1994	$11,569,390	($24,072,825)	$8,709,229	$101,100	($3,693,106)

* Does not include fringe benefits.

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

Table 71
Federal Defense-Related Spending--Utah Total (Thousands of Dollars): FY 1986 to FY1994

Fiscal Year	Wages and Salaries*	Procurement Contract Awards	Military Retirement	State/ Local Grants	Total
1986	$784,567	$1,688,947	$94,612	$301	$2,568,427
1987	$794,294	$1,358,327	$98,743	$5,766	$2,257,130
1988	$817,787	$876,681	$98,876	$1,318	$1,794,662
1989	$870,295	$1,010,016	$108,005	$10,186	$1,998,502
1990	$890,892	$881,947	$115,442	$1,232	$1,889,513
1991	$922,035	$806,169	$125,526	$598	$1,854,328
1992	$852,772	$651,076	$134,844	$8,431	$1,647,123
1993	$847,053	$555,653	$146,743	$5,932	$1,555,381
1994	$763,608	$587,195	$152,426	$4,514	$1,507,743
Percent Change 1986-1994	-2.7%	-65.2%	61.1%	n/a	-41.3%
Absolute Change 1986-1994	($20,959)	($1,101,752)	$57,814	n/a	($1,060,684)

* Does not include fringe benefits.

Sources: Wages and salaries, military retirements, state/local government grants -- U.S. Department of Commerce, Bureau of the Census; prime contract awards -- Federal Procurement Data System, U.S. Department of Defense.

Table 72
Top 25 Firms with Utah Operations Receiving DOD Federal Contract Awards: FY1994

Rank	Contractor	Number of Awards	Aggregate Awards (thousands of dollars)
1	EG&G	1	$130,376
2	Thiokol Corporation	1	44,642
3	Utah State University/USU Foundation	3	21,671
4	Sacros/Sacros Research Group.	3	18,791
5	Montgomery Watson Americas	2	14,097
6	Hercules Incorporated	1	13,988
7	Crysen Refining Inc.	1	12,454
8	Unisys Corp./Paramax Systems Corp.	4	7,726
9	Phillips Petroleum Company	1	7,641
10	The Horsley Company Inc.	2	7,127
11	Kitco Incorporated	1	6,550
12	Dames & Moore Inc.	1	6,234
13	Beneco Enterprises Inc.	3	5,754
14	Teleflex Incorporated	1	4,921
15	Utah Power & Light Company	2	3,796
16	Pacificorp	1	3,787
17	E-Systems Inc.	1	3,758
18	Litton Systems Inc.	1	3,703
19	Lockheed Engineering & Science	1	3,606
20	Varian Associates Inc.	1	3,428
21	EDO/EDO Western Corporation	2	3,378
22	Dale B. Stevens Construction	2	3,170
23	Redcon Incorporated	2	2,815
24	A&A General Contractors Inc.	2	2,802
25	Envirocare of Utah Inc.	2	2,596

Source: DOD Federal Contract Awards over $25,000 for all 50 states, performed in Utah in FY 1994 (DOD Summary Report), March 10, 1995.

Table 73
Department of Defense Contract Awards by County (Thousands of Dollars): FY1993 and FY1994

Federal Fiscal Years			1993 to 1994	
County	1993	1994	Absolute Change	Percent Change
Beaver	$0	$0	$0	N/A
Box Elder	58,735	45,615	(13,120)	-22.3%
Cache	28,270	24,465	(3,805)	-13.5%
Carbon	2,680	6,842	4,162	155.3%
Davis	153,486	136,330	(17,156)	-11.2%
Duchesne	0	355	355	N/A
Emery	0	0	0	N/A
Grand	0	0	0	N/A
Iron	0	113	113	N/A
Juab	46	562	516	1121.7%
Kane	1,079	0	(1,079)	-100.0%
Millard	468	0	(468)	-100.0%
Morgan	1,048	0	(1,048)	-100.0%
Rich	0	0	0	N/A
Salt Lake	121,151	117,962	(3,189)	-2.6%
San Juan	0	853	853	N/A
Sanpete	31	0	(31)	-100.0%
Sevier	77	0	(77)	-100.0%
Summit	5,036	21,913	16,877	335.1%
Tooele	140,189	195,546	55,357	39.5%
Uintah	104	1,132	1,028	988.5%
Utah	17,330	17,137	(193)	-1.1%
Washington	402	99	(303)	-75.4%
Weber	25,521	18,271	(7,250)	-28.4%
			0	
State	$555,653	$587,195	$31,542	5.7%

Source: U.S. Department of Defense, Federal Procurement Data Systems.
Updated: March 29, 1995

Table 74
TEAD Procurement Spending in the U.S., Utah and Tooele County (Current Dollars): FY1990-1996

U.S. TEAD Procurement Awards	1990	1991	1992	1993	1994	1995(e)	1996(e)
TEAD Procurement Awards to:	$43,658,589	$43,285,539	$41,535,602	$46,067,446	$35,572,946	$21,400,000	$16,000,000
U.S. Firms Outside Utah	$21,703,091	$17,444,465	$18,842,625	$31,961,416	$25,980,821	$9,630,000	$7,200,000
As a Percent of Total	49.71%	40.3%	45.36%	69.38%	73.03%	45.00%	45%
Utah State Firms	$18,755,067	$23,985,247	$20,654,546	$13,280,062	$8,699,779	$10,700,000	$8,000,000
As a Percent of Total	42.96%	55.41%	49.73%	28.83%	24.46%	50.00%	50.00%
Tooele County Firms	$3,200,431	$1,855,827	$2,038,431	$825,968	$892,346	$1,070,000	$800,000
As a Percent of Total	7.33%	4.29%	4.91%	1.79%	2.51%	5.00%	5.00%

(e) = estimates

Source: C/Support Branch, Contracting Divsion, TEAD

☆ Energy and Minerals

Energy

Energy Production

In 1995, over 13,000 workers assisted in the production of an estimated 945 trillion BTU of primary energy in Utah. Coal accounted for 60 percent of the total primary energy production in Utah, while natural gas contributed 26 percent. An additional 12 percent was produced in the form of crude oil. Electricity generated from non-fossil fuel resources such as hydro and geothermal energy, made up the remaining two percent. Energy produced, either in its present form or converted to other energy sources such as motor fuel, was used for consumption in Utah, shipped to other states and exported to overseas markets.

At the point of extraction, the value of Utah primary energy production was an estimated $1.3 billion in 1995. Coal, valued at $527 million, ranked first in value among Utah's primary energy resources and accounted for 41 percent of the total value of all energy produced. The value of natural gas and crude oil production was $359 million and $348 million, respectively, while electricity generated from non-fossil fuel sources contributed $48 million.

Crude Oil

In 1995, crude oil prices increased for the first time since 1990. In April 1995, crude oil prices peaked at $19.16 per barrel after reaching a five year low of $13.73 in March of 1994. This price increase mirrored a run-up in oil prices in the world crude oil market. However, since April, crude prices have retreated somewhat. The average price in 1995 is expected to be $17.50 per barrel.

Drilling activity in Utah increased by nearly 71 percent in 1995 as the average number of active rotary rigs increased from seven to 12. Oil well completions are projected to increase by 52 percent in 1995, from 63 to an estimated 96 completions.

Utah crude oil production continued the eight year decline that began in 1986. Production from oil wells in Utah's producing fields fell to a projected 19.9 million barrels in 1995, a decrease of 3.9 percent from 1994's 20.7 million barrels. The continued decrease in Utah's oil production has prompted an investigation into the feasibility of bringing more oil in from outside of the state and possibly building a new pipeline. Although San Juan County again led all Utah counties with an estimated 6.4 million barrels of production, most of its oil was exported to New Mexico and Texas refineries. Duchesne County is expected to be the second largest producing county with 5.6 million barrels; followed by Summit County, whose production fell to a projected 4.3 million barrels in 1995, and Uintah County where production remained unchanged with an estimated 3.1 million barrels.

Petroleum Products

The petroleum industry in Utah has gone through several changes over the past year. With the closure of Pennzoil's Roosevelt refinery in the fall of 1994, only five refineries are now producing petroleum products in Utah. Refineries have undergone several turnarounds which were designed to increase refining capacity. By second quarter 1996, the capacity of Utah's remaining five refineries should more than make up for the loss of refining capability at the Pennzoil Refinery. Although refinery utilization rates for the first seven months of 1995 had increased, overall production of petroleum products declined slightly; and production by Utah's five refineries exceeded 1.9 billion gallons in 1995.

A strong demand for petroleum products in Utah continued in 1995. Utahns consumed an estimated record 899 million gallons of motor fuel, 429 million gallons of distillate fuels, and 196 million gallons of aviation fuel in 1995. Exports of petroleum products as well as imports increased in 1995.

Motor fuel prices began the year 12 cents higher than that of January 1994. Continued higher prices are partially attributed to supply interruptions caused by refinery turnarounds. Higher crude oil prices also influenced motor fuel prices which reached their highest level since 1992. However, after adjusting for inflation, motor fuel prices were still lower than they were in 1960.

Low sulfur diesel prices increased in 1995 due to an increase in demand from the trucking and construction industries. A mild winter boosted demand much earlier than previous years.

Natural Gas

The number of completed natural gas wells increased in 1995 after 1994's decline of 42 percent. Gas well completions in 1995 represent a 23 percent increase from 1994. A portion of these completions was located Carbon County. Several companies are exploring and developing the coalbed gas fields that lie southeast of Price along what is known as the Sandstone Fairway. River Gas of Utah, the major developer, has completed 78 wells in the Drunkards Wash field since September of 1993.

The average wellhead natural gas price continued to decline in 1995 to a projected $1.16 per thousand cubic feet, 24 percent below 1994's average price. Deregulation of the natural gas industry has led to more volatility in prices as markets react to short-term shifts in supply and demand. As with crude oil prices, natural gas prices are now primarily determined in futures markets. The relatively lower price in 1995 is consistent with the market's optimism concerning supplies of natural gas. For example, the integration of the North American market has given the United States access to diverse and plentiful low cost supplies of natural gas, primarily in Canada. In addition, natural gas finding costs have fallen as a result of technological advancements, which also puts downward pressure on wellhead prices.

Utah production of natural gas also declined in 1995. An estimated six year low of 309 billion cubic feet of natural gas was produced by Utah's wells in 1995. This represents an 11 percent decrease over gross production in 1994. Net production, gross production less reinjected and flared gas, also declined this year to 230 billion cubic feet. Anschutz Ranch East entered its "blow down" phase in June of 1995. Prior to June, nitrogen was stripped from the natural gas produced from the field and reinjected to maintain reservoir pressure. This enhanced the recovery of both crude oil and natural gas. With the advent of the blow down phase, nitrogen is no longer being reinjected. Hence, the gross production of both crude oil and natural gas has declined. The decision to enter the blow down phase is based on economics. The field is expected to continue to produce economically feasible quantities of crude oil and natural gas for the next decade.

Coal

Utah coal production in 1995 was about 25 million tons. This achievement was the first time in the 126 year history of recorded coal production in Utah that this much coal was produced. Coal in Utah is produced in Carbon, Emery and Sevier Counties. Emery County accounts for 64 percent of Utah's total production in 1995 with Carbon and Sevier Counties accounting for 20 percent and 16 percent.

The value of coal produced in 1995 is likely to surpass the $527 million mark. The average price for Utah coal has fallen precipitously since 1982 but appears to be stabilizing around $21 to $22 per ton. However, on an inflation-adjusted basis, prices during the next few years are expected to continue their downward trend.

Higher demand on the part of eastern United States electric utilities as well as Pacific Rim countries will lead to this increased Utah production. In order to comply with the Clean Air Act Amendments of 1990, eastern U.S. electric utilities are beginning to switch to Utah coal which has a lower sulfur content than most of the coal found in the eastern United States. Exports of Utah coal in 1995, primarily to Pacific Rim countries, increased to an estimated 3.1 million tons, a 16 percent increase over 1994's level. By the end of the decade, Utah's coal industry is expected to be exporting five million tons of coal to Pacific Rim countries.

Almost 74 percent of Utah coal production was consumed by electric utilities in the United States, with over 60 percent consumed by electric utilities in Utah. Approximately 13 percent of Utah coal production was

exported overseas with the remaining production consumed by industrial consumers, coke plants, and residential and commercial consumers in Utah and other states.

As a result of a high degree of mechanization and a highly skilled workforce, productivity continues to rise in the Utah coal industry. Productivity in Utah coal mines, which was just under two tons per miner-hour (tpmh) in 1980 and 1981, is likely to reach a new high of 6.54 tpmh in 1995. Rising worker productivity led to more competitive prices for Utah coal and bodes well for the future of the Utah coal industry.

Electricity

Electricity production in 1995 lagged behind the levels in the same 1994 period. Though winter and spring temperatures varied little between 1994 and this year, the summer of 1995 experienced milder temperatures, translating into lower cooling loads. Based on this fact, and assuming average loads for the balance of the year, it is reasonable to conclude that total electricity production from all sources fell short of 1994's 34,463 gigawatt hours.

In every month of 1995, coal-fired generation was lower than the comparable figure for 1994. Petroleum-based generation has closely tracked last year's levels, but natural gas-fired generation has been higher in every month except June and July. Hydroelectric and renewable energy sources have generally been lower through the beginning of the year, yet registered higher year-over-year levels in June and July.

The state's electric utilities are currently generating power from five different fuel sources. Coal-fired sources account for 95 percent of total generation followed by two percent each of natural gas and hydroelectric sources. Petroleum-based generation and renewable resources account for the remainder.

As for existing facilities, PacifiCorp has indicated its intentions to upgrade the performance of several of its largest thermal plants. The utility indicated in February of this year that it will consider repowering Gadsby #1 and #2, located in Salt Lake City, which may add another 137 MW of gas-fired capacity.

Below the Wasatch Front, PacifiCorp has definite plans to upgrade the Huntington #2 plant with new turbine blades, which will add between 10-12 MW. Huntington #1 will receive an overall upgrade of 46 MW in 1997. The Hunter facility, located south of Huntington, will also benefit from engineering improvements. In 1997, plant #3 is scheduled for a 30 MW repowering. In addition, PacifiCorp indicates that plants #1 and #2, both Westinghouse models, may receive new turbine blades adding between 10-15 MW to each plant.

While fossil-based generation is expected to dominate in Utah, there are signs of increasing interest in renewable resource development. Over the past two years, Utah has become a leader in solar development in the West. In 1994, PacifiCorp committed to participate in a 10 MW Solar II molten salt central receiver project. PacifiCorp has also offered its technical expertise and funding to develop a stirling dish solar project. Research and development on this project began in September 1994.

Off the drawing boards and fully operational are two significant solar projects found in southern Utah. Under the engineering guidance of the Office of Energy and Resource Planning (OERP), Arches National Park now operates five separate PV systems (total capacity 4.5 kW) which offsets oil consumption and air pollution by reducing diesel plant run-time from 24 hours per day to two hours per day. The Office's engineers also played a significant role in the seven kW Maze facility, now in operation, located in Canyonlands National Park.

Finally, in a cooperative effort between OERP, federal and utility partners, the Dangling Rope Marina, situated in the Glen Canyon Recreation area, now hosts a $1.2 million 100 kW PV project. Among the largest solar developments undertaken in recent years, this project spotlights Utah as a leader in the development of alternative energy resources.

Uranium

During August 1995, Energy Fuels Nuclear went through the start-up process of what was intended to be a limited and temporary operation of uranium processing in its White Mesa Mill located in Blanding, Utah. By

September it was on line and production had started. Ore was trucked in from the Arizona strip, which is located just south of the Utah border, to Blanding for processing. Some ore also came from the Colorado plateau near Uravan, Colorado, which is located just east of LaSal, Utah. Production from White Mesa Mill likely exceeded 1.5 million pounds of uranium (U_3O_8) in 1995. This operation provided 65 new jobs in Utah. White Mesa Mill, which was on a standby basis, employed an average of about 30 employees. After uranium processing started in September, employment went up to 95. This operation should continue through January 1996, by which time two million pounds of U_3O_8 will have been produced.

Energy Industry Employment

Employment in Utah's energy industry was just over 13,000 workers in 1995, down two percent from 1994. As a percent of total Utah non-agricultural employment, 1995 employment in Utah's energy industry accounted for an estimated two percent. The energy industry's share of total Utah non-agricultural employment has been declining since 1982 when it reached a peak of four percent.

Employment in the three primary energy producing sectors, oil and gas, and coal and uranium decreased in 1995 by roughly two percent. Employment gains in the uranium sector partially offset a small employment loss in the oil and gas sector and a larger employment loss in the coal sector.

Employment in the oil and gas production sector reached a nine year high in 1993 of 3,600. Although this is the highest level since 1985, it was still 39 percent less than the peak employment year of 1981. Employment in 1995 was an estimated 2,324 workers, which represents a 35 percent decline from 1993's level but is essentially even with 1994's level.

Petroleum refinery employment decreased as a result of the closure of Pennzoil's Roosevelt refinery. Current employees are being retained to help with mothballing the refinery. Since Pennzoil plans to continue to purchase crude oil, there is no anticipated reduction in employment in the oil and gas production sector as a result of the refinery closure. Closure will result in the ultimate loss of 75 jobs at the Pennzoil refinery.

Employment in the Utah coal industry has fallen from a high of 5,063 workers in 1982 to a projected 2,019 in 1995. Rising productivity and a reduction in the number of operating mines were contributing factors.

The seven year decline in employment in the electricity industry was interrupted with a modest two percent increase in 1994. However, employment resumed the downward trend again in 1995. The long decline is primarily the result of the Utah Power/Pacific Power merger of 1986. The decline in employment is expected to level off because the price reductions required by the merger agreement have been completed and the majority of personnel cost reductions made possible by the merger have been accomplished.

Minerals

Summary

The value of Utah's mineral production in 1995 is estimated to be $2.5 billion, an increase of more than $300 million from 1994, making 1995 an all-time high. Contributions from each of the major industry segments are:

- ☆ base metals, $1,198 million, (48 percent of total),
- ☆ coal, $540 million, (22 percent of total),
- ☆ industrial minerals, $429 million, (17 percent of total), and
- ☆ precious metals, $310 million, (13 percent of total).

The growth in Utah's mineral valuation by industry segment for 1993-1995 is shown in Figure 46. Prices rose sharply for base metals (copper, molybdenum, and magnesium) in 1995 while coal and precious metals showed slight improvement. Industrial mineral prices increased modestly for some commodities and declined in other commodities.

Outlook

The outlook for 1996 continues to be favorable. Utah has established record-level production and valuation in each industry segment for the past two years. Whereas a new record is not expected in 1996, total mineral valuation will remain at near-record levels. Total mineral valuation has increased $650 million over the past two years, due mostly to the substantial rise in base metal prices. In 1996 the estimated value of base metals is predicted to decline due to a slight drop in overall production and a moderate decline in prices. Coal production statewide has set new records for the past two years while coal prices have moved forward slightly. In 1996 coal production is expected to establish yet another record with coal prices remaining flat.

The value of industrial minerals produced in Utah is expected to make modest gains in 1996. Production will continue to increase in some commodities, such as gypsum, salt, phosphate, cement, and limestone, and sand and gravel, and will remain level in most other commodities. The demand for most industrial minerals largely depends on local and regional economies where the products are consumed. Due to Utah's and neighboring states' strong economies, the market for many industrial minerals will continue to expand.

The value of precious metals is expected to drop slightly in 1996 due to declining production levels from primary producers. USMX's Goldstrike mine in Washington County is scheduled to complete heap-leaching operations and close in 1996. The Mercur mine, Tooele County, is beginning to scale down its operation due to reserve depletion and will produce less each year until the mine closes within the next four years. Kennecott's Bingham Canyon mine, which producers more than half of Utah's precious metals as a byproduct, will produce slightly more gold and silver in 1996.

Summary of Operations

Through mid-November 1995, the Utah Division of Oil, Gas and Mining received six Regular Mine permit applications (five acres and larger disturbance) and 36 Small Mine permit applications (less than five acres disturbance). These numbers represent an increase of two Regular Mine permit applications and a decrease of 11 Small Mine permit applications compared to 1994.

Active Regular Mine permits can be subdivided into the following categories:

- ☆ base metals 4
- ☆ precious metals 5
- ☆ coal 12
- ☆ industrial minerals 43 (includes building and decorative stone)

National Rankings

The U.S. Bureau of Mines ranked Utah seventh in the nation in the value of nonfuel minerals produced in 1994. Utah ranked:

- ☆ first in beryllium and gilsonite;
- ☆ second in potash and copper;
- ☆ third in molybdenum, gold, and iron ore;
- ☆ fourth in magnesium and phosphate rock;
- ☆ sixth in salt;
- ☆ 11th in oil and gas production, and
- ☆ 14th in coal production.

Nonfuel Minerals Production Trends

According to the U.S. Bureau of Mines, between 1984 and 1994, the value of nonfuel mineral production in Utah increased from $526 million to over $1.43 billion (Figure 47). The total for 1994 represents an all-time

high for nonfuel mineral valuation for the state, exceeding 1993's total by $80 million. The Utah Geological Survey's estimate for nonfuel mineral production value for 1995 is $1.9 billion.

Mineral exploration statewide continues at a slow pace. Notices of Intent (NOI) to explore on public lands filed with the Division of Oil, Gas and Mining to mid-November 1995, totaled 19 compared to 34 for all of 1994, 54 for 1993, and 65 for 1992. While exploration continues to decline, the number of applications for Regular Mine permits (six) is the highest in the past three years. Several Small Mine permits have been issued to operators who plan to expand to a Regular Mine permit once exploratory and initial development work has been completed. These new mines will increase the number of precious and base metal operations and have a moderate effect on the total value of production.

Base and Precious Metals

Copper

Copper is the single-largest contributor to the value of nonfuel minerals in the state. Significant price increases over the past two years have pushed the value of copper to historic highs and the value of base-metal production statewide to over $1 billion for the first time. Copper production from Kennecott's Bingham Canyon mine in Salt Lake County will decrease slightly in 1995 from 1994 production of about 330,000 tons of copper metal. Since 1990, annual copper production has ranged from a low of 250,000 tons to a high of more than 330,000 tons. With the completion of the modernization and expansion program that began in 1988, Kennecott's copper production should stabilize at a rate slightly higher than 300,000 tons annually.

Magnesium Metal

Magnesium metal was the second-largest contributor to the value of base metals in 1995. Magnesium metal is produced from Great Salt Lake brines by Magnesium Corporation of America (Magcorp) at its electrolytic plant at Rowley in Tooele County. The plant has a capacity to produce 42,000 tons of magnesium metal (99.9 percent purity) annually and is the fourth-largest magnesium plant in the world. The increased value in magnesium is due to a strong demand for the metal aided by the curtailment of several overseas operations.

Beryllium

Brush Wellman, Inc. continued to be the nation's leading producer of beryllium metal. Beryllium ore is mined at Brush Wellman's Topaz mine in Juab County and processed with domestic and imported beryl at the company's plant a few miles north of Delta in Millard County. In 1995, more than 400,000 pounds of beryllium hydroxide were produced at the Delta plant and sent to the company-owned refinery and finishing plant in Ohio. Production of beryllium hydroxide was up sharply from 1994's production of about 300,000 tons, due to the completion of a multi-year government contract for processing beryl from the National Defense Stockpile. The demand for beryllium alloys and beryllium oxide has increased modestly over the past several years as alloys are being introduced into components for the automobile and telecommunications industries. The demand for beryllium metal has decreased as national defense requirements have declined.

Molybdenum

The sole molybdenum producer in Utah is Kennecott's Bingham Canyon mine which will produce over 20,000 tons of molybdenum concentrate in 1995. Kennecott was one of only 10 molybdenum producers in the United States in 1994. Molybdenum is recovered as a by-product from the milling operation. A continued strong demand for molybdenum is forecast for 1996.

Iron Ore

Geneva Steel is the sole producer of iron ore in Utah. In 1995, the company will produce slightly more than 100,000 tons of ore from its mine west of Cedar City in Iron County for use in its steel plant at Vineyard,

Utah County. This is a substantial decrease from 1994 production of nearly 200,000 tons of iron ore. The change in process for steel making at the Geneva plant has increased the use of higher iron, lower silica-content taconite pellets from Minnesota and decreased use of lower iron-content ore from their Cedar City mine. The change from an open-hearth process to the new Q-BOP process has also decreased the use of limestone from the company's Utah County limestone quarry.

Gold

Gold production statewide in 1995 is estimated to be about 755,000 Troy ounces,10,000 Troy ounces less than 1994. Producers consist of four surface mines and one mine dump heap-leach operation. In descending order of production they are: 1) Kennecott's Bingham Canyon mine, 2) Kennecott's Barneys Canyon mine, 3) American Barrick's Mercur mine, 4) USMX's Goldstrike mine, and 5) North Lily Mining Company's North Lily leach operation. In 1994 the Bingham Canyon mine was the fourth-largest gold producer in the United States. In 1995, two mines had an increase over 1994 production and two mines experienced a decrease in production. The dump heap-leach operation (North Lily) contributed a minor amount of gold in 1995, and was idle during 1994.

The Goldstrike mine in Washington County discontinued mining operations in 1994; however, gold continues to be recovered from active leach dumps. Production, albeit at a much lower rate, will continue into 1996. The Mercur mine in Tooele County will phase out its mining operation during the next several years due to reserve depletion and will produce at lower levels until mining and leaching is complete. The North Lily mine dump heap-leach operation near the town of Eureka, Juab County will continue to produce small amounts of gold and silver intermittently.

Silver

Silver is produced as a secondary metal by all but one (Barneys Canyon mine) of the primary gold producers and by Kennecott's Bingham Canyon mine as a byproduct metal. Kennecott is by far the largest silver producer in the state. In 1995, silver production statewide is estimated at about 4.1 million Troy ounces, approximately 600,000 Troy ounces less than in 1994. As several of the gold producers curtail operations in coming years, silver production will decline accordingly.

Industrial Minerals

Industrial minerals continued to be an important contributor to Utah's mineral industry. Major commodities produced include:

- ☆ common clay,
- ☆ crushed stone,
- ☆ dolomite,
- ☆ gilsonite,
- ☆ gypsum,
- ☆ lime,
- ☆ limestone,
- ☆ magnesium chloride,
- ☆ phosphate,
- ☆ Portland cement,
- ☆ potash,
- ☆ sand and gravel, and
- ☆ salt.

Commodities produced in lesser amounts include bentonite, fuller's earth, building stone, decorative stone, lightweight aggregate, masonry cement, gemstones, and industrial sand.

Salt, Magnesium Chloride, Potash (Potassium Chloride), and Sulfate of Potash

Salt and brine-derived products are the largest contributors to the value of industrial minerals in Utah. In addition to salt, other brine-derived products include magnesium chloride, potash (potassium chloride), and sulphate of potash.

The production of salt and brine-derived products statewide is estimated to exceed 3.2 million tons in 1995, an increase of 600,000 tons from 1994's production of 2.6 million tons. Salt production alone is estimated to be 2.6 million tons in 1995, with most of the production coming from three operators using brine from Great Salt Lake. These operators are: 1) GSL Minerals, Inc., 2) Morton Salt Company, and 3) Akzo Nobel Salt, Inc. In addition, three other companies produce salt and/or potash from operations not related to the Great Salt Lake: 1) Reilly Chemical Company at Wendover in Tooele County, 2) Moab Salt Company near Moab in Grand County, and 3) Redmond Clay and Salt Company near Redmond in Sanpete County (salt only). The production of salt and brine-derived products is expected to continue to expand over the next several years.

Portland Cement, Lime, Limestone, and Dolomite

Portland cement and lime were respectively the second-and third-highest value industrial minerals produced in 1995. Two operators produce Portland cement in Utah: Holnam, Inc. and Ash Grove Cement Company. Holnam's Devil's Slide plant is located east of Morgan in Morgan County, and Ash Grove's Leamington plant is located east of Lynndyl in Juab County. The two plants have a combined capacity of more than 1 million tons of cement annually. Holnam is completing a feasibility study to double the capacity of the Devil's Slide plant and will make a decision in early 1996.

Lime usage 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 (quick lime) and hydrated lime in Utah, with a combined capacity of more than 1 million tons per year. Both operations serve markets in Utah and surrounding states. Continental Lime's plant is located in the Cricket Mountains, approximately 35 miles southwest of Delta in Millard County and is rated one of the 10 largest lime plants in the United States. Chemical Lime of Arizona's plant is located near Grantsville in Tooele County.

Five companies produced about 180,000 tons of limestone for the manufacture of steel, for reducing flue-stack emissions in electric power generation plants, and for aggregate in the construction industry. In descending order of production they are: 1) Geneva Steel Company's Keigley quarry in Utah County, 2) Cotter Corporation's Papose mine in San Juan County, 3) Emery Industrial Resources' Cherry Hill Park mine in Utah County, 4) Rancho Equipment Services' Topaz Valley mine in Juab County, and 5) Western Clay Company's limestone quarry in Sevier County.

In addition to producing iron ore and limestone, Geneva Steel also produces about 100,000 tons of dolomite from a quarry located near the southeast end of Utah Lake in Utah County. The majority of the dolomite is used in the blast furnace operation at the Geneva plant while the remainder is crushed to a fine powder and marketed as "rock dust" for use as a coal dust suppressant in underground coal mines.

Phosphate

Utah's only phosphate operation (SF Industries' Little Brush Creek Mine) is located 11 miles north of Vernal in Uintah County. SF Industries is a partnership comprised of Farmland Industries of Kansas City, Missouri and J. R. Simplot, Inc. of Boise, Idaho. SF Industries mines roughly 2.5 million tons of ore annually, which is processed into 900,000 tons of concentrate and transported in slurry form to the company's Rock Springs, Wyoming fertilizer plant via a 90-mile-long, underground pipeline. The mine operates at a nearly constant annual rate since its product is used exclusively in its company-owned manufacturing facility.

Potash

Potash (KCl and K_2SO_4) production is estimated at 150,000 tons in 1995, about 50,000 tons less than 1994 production. Two companies produce potash in Utah: Reilly Chemical Company, from subsurface brines

near Wendover in Tooele County; and Moab Salt Company from solution mining of a sylvite bed near Moab in Grand County. In addition, a substantial quantity of sulfate of potash (K_2S0_4) is produced by GSL Minerals, Inc. from Great Salt Lake brines. GSL Minerals is the largest domestic supplier of sulfate of potash, a key ingredient in a specialty fertilizer marketed primarily to Pacific Rim countries as well as tobacco-growing states in the eastern United States.

Gilsonite

Gilsonite is an unusual solid hydrocarbon which has been mined in Utah for more than 100 years. The three mines which produce gilsonite are all located near the town of Bonanza in Uintah County. In descending order of production they are: 1) American Gilsonite Company, 2) Zeigler Chemical and Minerals Company, and 3) Lexco, Inc. Total production is estimated to be slightly over 60,000 tons in 1995, 15,000 tons less than in 1994. Gilsonite is used in over 150 products ranging from printing inks to explosives, and is marketed worldwide.

Clay and Bentonite

Four companies produced nearly 300,000 tons of structural clay and over 40,000 tons of bentonite in 1995. In descending order of production the companies are: 1) Interstate Brick Company, 2) Interpace Industries, 3) Redmond Clay and Salt Company, and 4) Western Clay Company. ECDC Environmental LC, a major producer in 1994, did not produce clay in 1995 due to stockpiled resources. Clay is used primarily in the production of bricks and as a sealant for open-pit storage of drilling fluids and oil, heap-leach pads in the mining industry, irrigation ditches, and industrial- and municipal- waste landfills. Bentonite is used primarily as a drilling mud in the oil and gas industry, a pet-waste absorbent, and as a sealant in civil engineering applications.

Gypsum

Five companies produced nearly 300,000 tons of gypsum in 1995, the same amount produced in 1994. In descending order of production, the companies are: 1) U.S. Gypsum Company, 2) Thomas J. Peck & Sons, 3) Georgia Pacific Corporation, 4) H.E. Davis & Sons, Inc., and 5) D.K. Gypsum Industries. In 1995 Georgia Pacific Corporation re-opened its wallboard plant near Sigurd in Sevier County which had been idle since 1992. The majority of gypsum produced in Utah is used for the manufacture of wall board, but several small operators supply raw gypsum to regional cement companies where it is used as an additive to retard the setting time of cement.

Events Affecting Utah's Mineral Industry

Energy Fuels Nuclear, Inc. resumed uranium-processing activities at its White Mesa mill south of Blanding (San Juan County) in August 1995. The mill had been idle since late 1991. The initial milling campaign is scheduled for six months (August 1995 through January 1996) and will produce nearly 2 million pounds of U_3O_8 from approximately 200,000 tons of stockpiled ore. Future milling campaigns are dependent on the uranium and vanadium markets.

Kennecott Utah Copper Corporation completed its $880 million smelter-refinery expansion and modernization project in early 1995. The new smelter, which utilizes "state-of-the-art" flash-smelting and flash-converting techniques, has a capacity of 1.1 million tons of concentrate per year, an increase of nearly 70 percent over previous capacity. The smelter is rated as the cleanest in the world, recovering 99.9 percent of all sulfur-dioxide emissions. The new refinery will increase annual output from 220,000 to 310,000 tons of cathode copper and lower unit cash costs for refining by 35 percent. Kennecott continued permitting its $510 million program to expand its tailings pond by 3,500 acres. As part of this program, Kennecott will build a 2,500 acre wildlife preserve to replace affected wetlands. The tailings-pond-expansion project is expected to be completed by 1997.

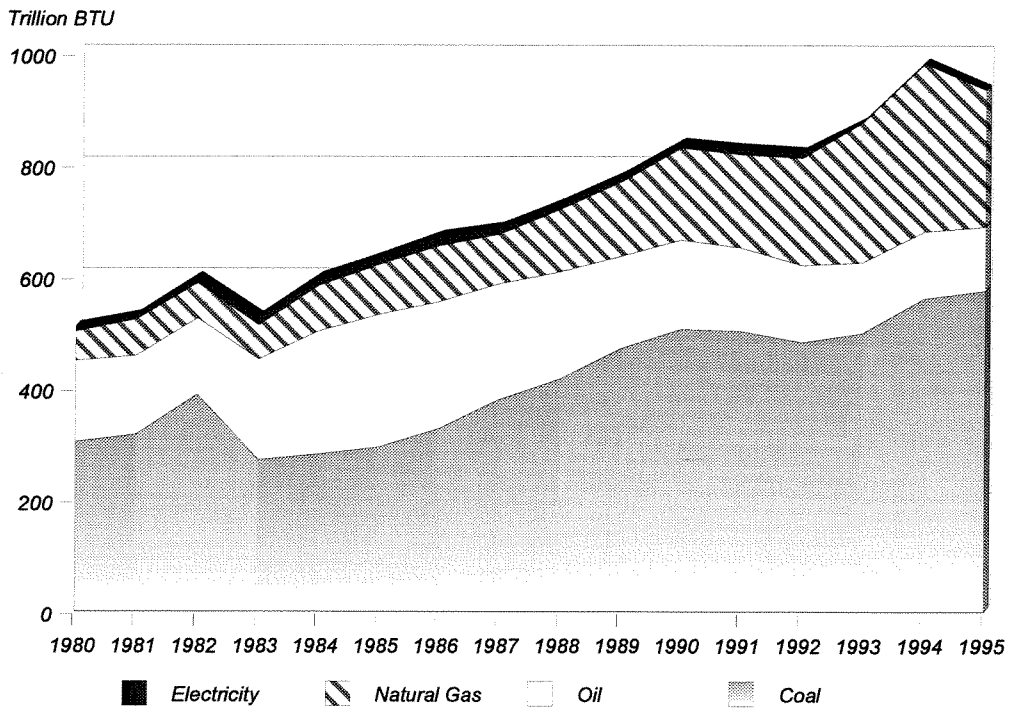
Summo Minerals Corporation plans to develop its Lisbon Valley copper mine in San Juan County approximately 35 miles southeast of Moab. At full production, the mine should produce 34 million pounds of cathode copper per year over the minimum 10-year mine life. Ore will be mined from three open pits.

Minable reserves are 42.6 million tons at a grade of 0.43 percent copper. The mine is scheduled to begin production in 1997 and should provide 105 full-time jobs.

The joint venture between Chief Consolidated Mining Company (operator) and Akiko Gold Resources Ltd. continued exploration of the Burgin lead-zinc deposit in the East Tintic district near the town of Eureka in Utah County. Twenty underground drill holes were planned for 1995. Of the 18 holes drilled to mid-November, 16 had significant ore grade intercepts in lead, zinc, and silver; and seven intersected a north-trending gold zone in the southwest part of the deposit. Revised reserve numbers are being calculated and total reserves are expected to approach the requisite 2 million tons necessary to begin development. A mine plan has been developed and a feasibility study should be completed in early 1996.

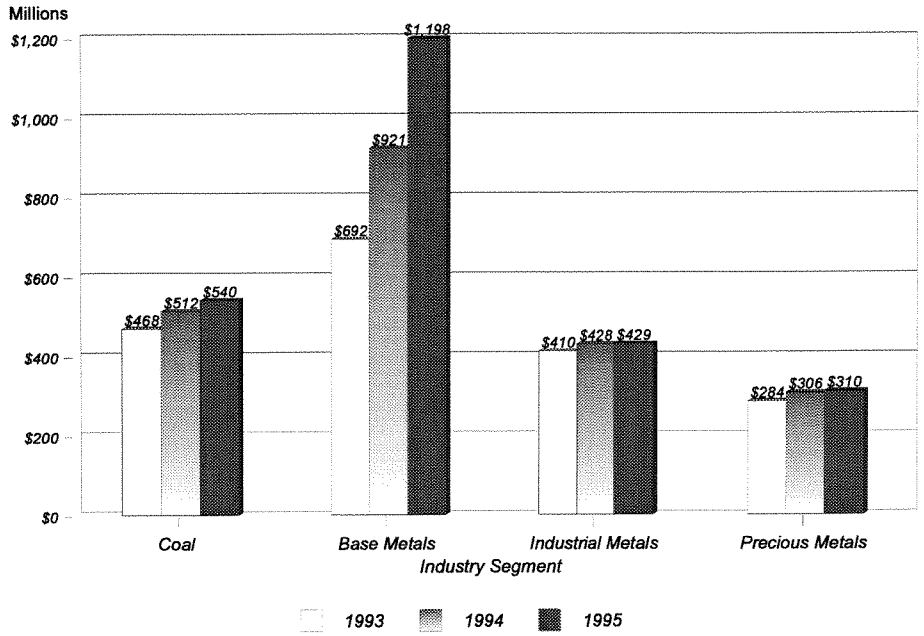
Centurion Mines Corporation announced a copper-molybdenum discovery near the O.K. mine in Beaver County. Current reserves are calculated at 4.7 million tons at a grade of 0.53 percent copper and 0.023 percent molybdenum. Centurion is evaluating bringing the deposit into production without a partner and is also considering a joint venture with the partner as operator. The O.K. Mine has not produced commercial quantities of ore since 1973. ☆

Figure 45
Utah Energy Production by Primary Source: 1980 to 1994



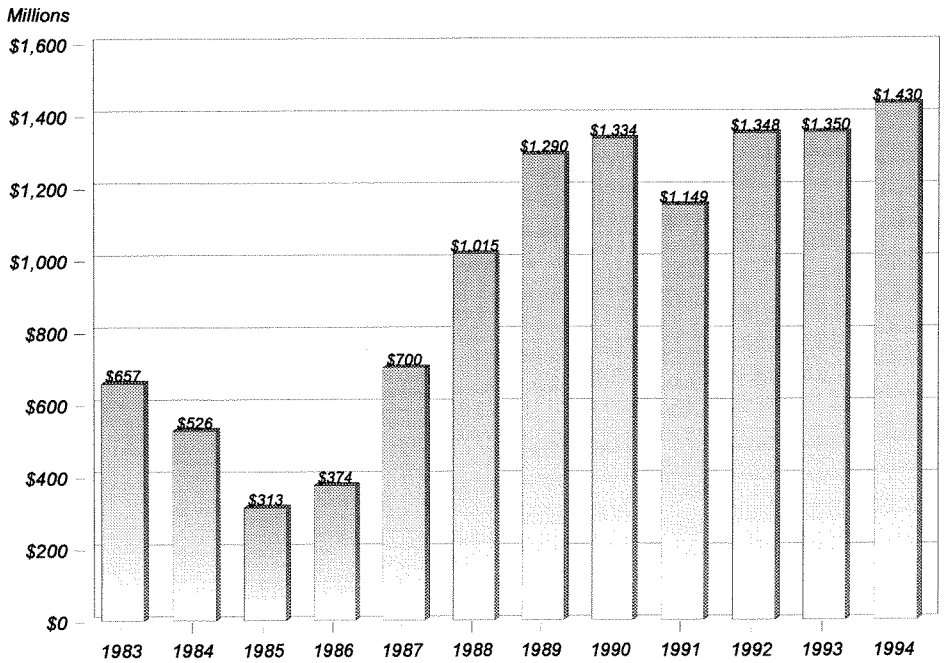
Source: Utah Office of Energy and Resource Planning

Figure 46
Mineral Valuation--Gross Value Estimate: 1993 and 1995



Source: Utah Geological Survey

Figure 47
Value of Nonfuel Minerals: 1983 to 1995



Source: Bureau of Mines

Table 75
Supply and Disposition of Crude Oil (Thousand Barrels) in Utah: 1980 to 1995

	Supply			Disposition			
Year	Field Production	Marketed Production	Imports	Utah Crude Exports	Refinery Receipts	Refinery Inputs	Refinery Stocks
1980	24,979	24,529	28,769	8,232	45,516	45,599	665
1981	24,309	25,744	27,257	7,866	43,700	42,673	762
1982	23,595	22,966	25,477	7,826	41,246	40,368	614
1983	31,045	31,043	20,886	8,316	43,615	43,185	632
1984	38,054	41,693	19,234	13,616	43,672	43,746	607
1985	41,144	41,167	19,002	14,597	45,549	45,021	695
1986	39,244	39,233	21,609	15,721	45,132	45,034	559
1987	35,835	35,779	21,966	12,137	45,664	44,483	612
1988	33,346	33,263	23,947	8,411	48,882	47,618	599
1989	28,513	28,606	24,441	6,179	46,775	46,767	609
1990	27,712	27,623	29,117	7,725	49,104	48,985	656
1991	25,930	25,941	31,677	8,961	48,646	48,852	749
1992	24,077	23,962	32,903	6,901	50,079	49,776	513
1993	21,819	21,766	34,493	7,758	48,554	48,307	645
1994	20,661	20,603	36,190	8,048	48,802	48,506	806
1995 (e)	19,869	19,987	34,944	7,920	47,020	47,186	800

(e) = estimate

Source: Utah Office of Energy and Resource Planning, Energy Data Information System

Table 76
Supply and Consumption of Petroleum Products (Thousand Gallons) in Utah: 1980 to 1995

	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	1,069,984
1991	1,894,201	477,078	76,566	721,812	253,470	327,852	276,402	1,579,536	1,105,248
1992	1,931,817	442,428	67,998	752,178	241,080	338,772	245,028	1,577,058	1,105,889
1993	1,948,257	449,694	71,064	790,902	236,544	344,731	233,147	1,605,324	1,024,397
1994	1,931,944	485,310	90,426	855,317	203,294	353,311	239,900	1,651,821	1,153,457
1995(e)	1,911,312	526,261	90,413	899,071	195,604	428,900	258,871	1,782,445	1,213,525

(e) = estimate

Source: Utah Office of Energy, Energy Data Information System.

Table 77
Supply and Consumption of Natural Gas (Million Cubic Feet) in Utah: 1980 to 1995

	Supply			Consumption by End-Use					
Year	Gross Production	Lease Use	Net Production	Residential	Commercial	Industrial	Electric Utilities	Other	Total
1980	87,766	39,909	47,857	42,949	22,503	38,386	4,758	8,445	117,041
1981	90,936	32,071	58,865	40,589	21,753	35,568	2,732	1,231	101,873
1982	100,628	44,260	56,368	53,003	27,798	34,574	2,573	7,091	125,039
1983	96,933	42,233	54,700	42,813	23,640	29,632	740	5,756	102,581
1984	183,062	109,908	73,154	47,719	27,023	31,606	576	9,390	116,314
1985	208,803	129,897	78,906	44,884	25,120	27,072	657	10,202	107,935
1986	239,411	148,375	91,036	47,199	25,434	21,589	704	14,391	109,317
1987	262,045	165,685	96,360	40,597	21,685	16,914	556	18,493	98,245
1988	278,463	176,538	101,925	43,356	20,672	25,310	537	18,251	108,126
1989	278,437	157,992	120,445	45,438	20,537	29,032	758	17,248	113,013
1990	323,151	173,757	149,394	43,408	20,660	31,094	516	20,594	116,272
1991	329,470	179,175	150,295	52,605	28,056	34,236	4,684	14,602	134,183
1992	317,755	143,904	173,851	47,635	25,248	36,969	5,558	13,895	129,304
1993	337,852	110,781	227,071	51,539	25,662	39,067	5,014	14,673	135,956
1994	347,832	143,780	271,665	48,921	26,616	36,680	8,900	29,254	147,032
1995 (e)	309,324	125,206	230,400	53,689	29,278	46,914	14,264	32,188	161,777

(e) = estimate

Source: Utah Office of Energy and Resource Planning, Energy Data Information System

Table 78
Oil and Natural Gas Development in Utah: 1980 to 1995

			Wells Completions			
Year	Drilling Permits	Average Active Rotary Rigs	Oil	Gas	Dry	Total
1980	523	43	71	99	140	310
1981	678	68	199	168	205	572
1982	664	41	172	136	156	464
1983	588	36	167	110	150	427
1984	622	46	228	80	141	449
1985	392	28	201	71	102	374
1986	219	13	109	53	57	219
1987	195	8	55	24	46	125
1988	165	6	62	27	44	133
1989	97	5	44	16	23	83
1990	252	5	49	16	28	93
1991	402	11	80	92	37	209
1992	372	13	62	177	48	287
1993	171	6	63	131	28	222
1994	306	7	63	76	24	163
1995 (e)	329	12	96	94	26	216

(e) = estimate

Source: Utah Office of Energy and Resource Planning, Energy Data Information System

Table 79
Supply and Consumption of Coal (Thousand Short Tons) in Utah: 1980 to 1995

	Supply				Consumption by End-Use				
Year	Utah 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 (e)	25,024	25,635	2,450	13,445	193	1,100	686	12,661	14,640

(e) = estimate

Source: Utah Office of Energy and Resource Planning, Energy Data Information System

Table 80
Energy Prices in Utah: 1980 to 1995

	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)	Electricity (Kwh)	No. 2 Distillate (gallons)	Motor Fuel (gallons)	Aviation Fuel (gallons)	Natural Gas (MCF)
1980	$25.63	$19.79	$1.86	$29.63	$0.05	–	–	–	$3.12
1981	$26.87	$34.14	$1.87	$32.79	$0.05	–	–	–	$3.43
1982	$29.42	$30.50	$2.47	$33.38	$0.05	–	–	–	$3.10
1983	$28.32	$28.12	$2.56	$30.64	$0.05	$0.83	$0.86	–	$3.15
1984	$29.20	$27.21	$3.16	$32.14	$0.06	$0.85	$0.82	–	$3.52
1985	$27.69	$23.98	$3.23	$31.62	$0.07	$0.80	$0.81	$0.84	$3.23
1986	$27.64	$13.33	$2.90	$31.33	$0.07	$0.50	$0.53	$0.55	$3.00
1987	$25.67	$17.22	$1.80	$26.90	$0.07	$0.63	$0.58	$0.57	$4.58
1988	$22.85	$14.24	$1.70	$28.58	$0.06	$0.52	$0.56	$0.53	$4.27
1989	$22.00	$18.63	$1.61	$27.87	$0.06	$0.63	$0.65	$0.63	$4.33
1990	$21.78	$22.61	$1.70	$26.47	$0.06	$0.73	$0.75	$0.80	$4.52
1991	$21.56	$19.99	$1.56	$26.20	$0.05	$0.65	$0.68	$0.77	$4.56
1992	$21.83	$19.39	$1.62	$26.51	$0.05	$0.65	$0.69	$0.74	$4.62
1993	$21.17	$17.48	$1.85	$25.89	$0.05	$0.68	$0.59	$0.71	$3.77
1994	$20.07	$16.38	$1.52	$24.86	$0.05	$0.61	$0.57	$0.66	$3.31
1995 (e)	$21.56	$17.50	$1.16	$21.56	$0.05	$0.65	$0.64	$0.70	$3.09

(e) = estimate

Source: Utah Office of Energy, Energy Data Information System.

Table 81
Supply and Consumption of Electricity (Gigawatthours) in Utah: 1980 to 1995

	Supply			Consumption by End-Use				
Year	Fossil Fuel	Renewables	Total	Residential	Commercial	Industrial	Other	Total
1980	11,291	823	12,114	3,293	3,569	3,800	512	11,174
1981	11,139	623	11,762	3,476	3,909	3,930	530	11,845
1982	10,867	1,024	11,891	3,630	3,033	4,610	745	12,018
1983	11,030	1,394	12,424	3,678	3,375	4,786	769	12,608
1984	12,359	1,429	13,788	3,825	3,935	4,656	950	13,366
1985	14,283	1,128	15,411	3,996	4,272	4,663	658	13,589
1986	15,235	1,584	16,819	3,984	4,262	4,583	662	13,491
1987	25,326	1,020	26,346	3,991	4,127	4,570	784	13,472
1988	28,870	767	29,637	4,186	4,356	5,259	765	14,566
1989	29,761	735	30,496	4,134	4,365	5,622	782	14,902
1990	31,622	638	32,260	4,188	4,713	5,553	772	15,225
1991	29,368	789	30,160	4,458	5,009	5,674	722	15,862
1992	32,155	766	32,921	4,458	5,170	6,085	668	16,381
1993	32,494	966	33,460	4,680	5,109	6,086	921	16,797
1994	33,549	914	34,463	5,033	5,862	6,322	944	18,161
1995 (e)	30,710	925	31,648	5,077	5,374	6,854	755	18,059

(e) = estimate

Source: Utah Office of Energy and Resource Planning, Energy Data Information System

Table 82
Energy Employment in Utah: 1980 to 1995

Year	Uranium	Coal	Oil/Gas Production	Petroleum Refineries	Petroleum Distribution	Electricity	Natural Gas Distribution	Total
1980	1,532	4,536	4,519	879	2,075	3,777	2,863	20,181
1981	1,471	4,512	5,915	939	2,363	3,948	2,769	21,917
1982	1,113	5,063	5,401	875	2,302	4,163	2,960	21,877
1983	744	3,148	4,493	859	2,236	4,249	2,992	18,721
1984	376	2,784	3,962	811	1,952	4,736	2,809	17,430
1985	281	2,858	3,845	816	1,997	5,031	2,451	17,278
1986	353	2,770	2,426	794	1,933	5,262	2,360	15,898
1987	344	2,577	1,903	778	1,677	5,046	2,308	14,633
1988	290	2,575	2,023	788	1,418	4,687	2,279	14,060
1989	261	2,506	1,891	826	1,452	4,592	2,233	13,761
1990	235	2,535	2,138	897	1,371	4,452	2,238	13,866
1991	96	2,265	2,451	905	1,390	4,386	2,243	13,736
1992	91	2,216	2,455	843	1,379	4,172	2,212	13,367
1993	44	2,196	3,600	1,013	1,298	4,168	2,262	14,581
1994	66	2,132	2,338	997	1,248	4,232	2,342	13,354
1995 (e)	108	2,019	2,324	942	1,254	4,176	2,286	13,096

(e) = estimate

Note: These data differ from State of Utah Department of Employment Security data found elsewhere in this report.

Source: Utah Office of Energy and Resource Planning, Energy Data Information System

☆ High Technology

For the second consecutive year, employment in Utah's high technology sector declined. Based on trends in the largest high tech groups (Software, Aerospace, and Biomedical/Medical Products) technology-related employment dropped an estimated 2.0 percent in 1995 with two of the three largest groups--Software and Aerospace--reporting job losses of 563 and 781 respectively. A brief analysis of the three largest components of Utah's high technology sector is included here.

Software

Software surpassed Aerospace as the largest component of Utah's high technology sector in 1992. It continues to maintain its dominant position despite a loss of over 500 jobs during 1995. The single most noteworthy event in the software sector in 1995 was Novell's purchase of WordPerfect in February 1994. One important consequence of the Novell purchase was the consolidation of the two companies and resultant loss of between 1,500 to 2,000 jobs.

While the layoffs at Novell represent between 15 percent and 20 percent of total high tech software employment in 1995, the sector as a whole only reported a 5.5 percent decline. The apparent shift of workers from companies that manufacture prepackaged software to companies that provide computer programming services kept employment in the sector somewhat stable. From 1993 to mid-1995, employment at companies that manufacture software dropped almost 19 percent (7,465 in 1993 to 6,073 in 1995). The corresponding increase in employment at companies which provide programming services increased 53 percent (1,352 in 1993 to 2,068 in 1995). Furthermore, nearly one-quarter of the existing computer programming service companies were not in business prior to January 1995. This information suggests that a fair number of workers who lost their jobs in the Novell/WordPerfect merger found employment at other computer-related companies or formed their own businesses.

At present, employment in the software sector is concentrated at one company, Novell, Inc., which employs approximately 5,000 workers. To a very large extent, the viability of Utah's software industry is premised on Novell's activities. Novell's announcement in October 1995 of its intention to sell the applications division (formerly WordPerfect) which will affect over 800 employees (with an expected layoff of 380 employees) does not bode well for the software sector in the short term. In the event that Novell sells its applications division and the resulting company remains in Utah, modest employment reductions will likely continue. Alternatively, employment in Utah's software sector would be severely affected if the applications division were sold and moved out of state. While some employees may be able to find employment in other computer-related businesses, the ability of local computer companies to absorb hundreds of displaced workers is limited.

Biomedical/Medical Products

The biomedical/medical products group was Utah's high tech star performer in 1995, and is currently the second largest group in the high tech sector. Since 1993, employment growth in biomedical/medical products has averaged 12.0 percent per year despite a tightening health care environment and layoffs at Becton Dickinson Vascular Access, one of the sector's largest employers. Sustained growth has been particularly notable in companies that manufacture surgical appliances.

A growing component of the biomedical/medical group is genetics. Only a handful of companies in Utah are engaged in genetics research, but one in particular, Myriad Genetics, has performed exceptionally well. Myriad Genetics was founded in 1991 using technology developed at the University of Utah and the Howard Hughes Medical Institute. The company went public in 1995, currently employs approximately 70 people and is worth an estimated $22 million.

Utah's largest high tech biomedical/medical product companies include Ballard Medical Products, Bard Access Systems, Becton Dickinson Vascular Access, Merit Medical Systems, OEC Diasonics, and Utah Medical Products.

Growth in Utah's high tech biomedical sector should continue despite ongoing FDA regulatory issues and the emergence of large, managed health care organizations. Demand for medical products will be driven by the increased cost of providing medical services to an aging population and the high cost of treating catastrophic illness such as AIDS and cancer.

Aerospace

Aerospace-related employment continued its nine-year downward trend. At one time aerospace was the largest segment of Utah's high tech sector employing over 14,400 workers. As defense budgets tightened and national security concerns lessened with the collapse of the Soviet Union, this segment of Utah's high tech sector experienced dramatic employment losses. By the end of 1995, employment in the aerospace sector had dropped to an estimated 6,200 workers.

Employment in the aerospace segment is at its lowest point in nine years and nothing on the horizon suggests it has stabilized. Federal budget reductions and industry restructuring are a matter of fact. Federal money, specifically spending for defense and NASA activities, is an important source of revenue for Utah's aerospace companies. These monies are becoming increasingly scarce. Nationwide, aerospace companies that had previously depended on federal dollars are moving into commercial applications and competition throughout the industry is growing fiercer. Utah's high tech aerospace companies will continue to face uncertainties in the coming months.

The largest employers in the Aerospace Components sector are Thiokol Corporation and Alliant Tech Systems which purchased the Utah operations of Hercules Aerospace Company in April 1995.

Other Shining Stars

One of the brightest stars in Utah's high tech sector is the Automotive Products group, namely Morton International, Inc. Based in Ogden, Utah, Morton International produces automotive safety products, including automobile airbags. The company presently employs 5,200 workers and has recently announced expansion plans that could include a new manufacturing facility and the addition of 500 employees.

A notable addition to Utah's high technology sector will be Micron Technology. This semiconductor manufacturer will initially employ 1,100 workers and is scheduled to begin operations in 1996 in Lehi, Utah.

Conclusion

Employment in Utah's high tech sector is currently concentrated in three groups--Software, Biomedical/Medical Products and Aerospace Components. Two of these groups, Software and Aerospace Components, reported employment losses in 1995. Only Biomedical/Medical products posted employment gains during the year.

While Aerospace employment has been steadily declining for the past nine years, employment growth in the software sector has compensated for the loss. However, increased concentration in the software industry nationwide is exerting pressure on local software companies. Compounding national market pressures is the uncertainty of WordPerfect's future in Utah. Depending on the outcome of Novell's sale of WordPerfect, the software sector could see significant employment reductions over the next two years. Employment gains in the biomedical/medical products group combined with growth in some of Utah's smaller high tech segments have offset, to some degree, employment losses in Aerospace and Software.

While challenges to sustained growth in the high tech sector as a whole will continue to come from these groups in the short term, the construction of Micron Technology's semiconductor plant and the continued expansion of Morton International could have important employment consequences for the sector over the long term. ☆

☆ Tourism, Travel, and Recreation

The travel, tourism, and recreation industry is an increasingly important component of overall state, national, and international economic activity. The WEFA Group (international economic consultants) estimates that the industry accounts for 11.0 percent of world GDP and 10.3 percent of U.S. GDP. Employment shares are estimated at 10.5 percent and 11.1 percent, respectively. Early indications are that the industry experienced a record year in 1995 in the United States, with over $400 billion in receipts.

The travel, tourism, and recreation industry is usually defined to include the activities of persons traveling to and staying in places outside their usual environment. The 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 or other frequently-visited places. Some researchers attempt to count only overnight visits or visits to places more than 100 miles from home. Others allow the traveler or person being surveyed to determine whether his or her travel was outside the "usual environment." In any event, the industry includes an array of goods and services produced and consumed by both travelers and non-travelers alike and is, therefore, subject to some difficulty in measurement. For example, a waitress, a construction worker, or a truck driver might owe his or her job to either spending by travelers or spending by residents. Usually, it is a combination of both that sustains the employment. Measurement, then, of the travel, tourism, and recreation industry is a difficult proposition. Even the methodology used by the U.S. National Park Service and others to count visitors is subject to change from year to year. Users of the data in this section are cautioned to keep this in mind.

Tourism in Utah

Utah's tourism industry is large and diverse. Table 83 provides a profile of the Utah travel industry. The state boasts an enviable array of attractions that include:

- ☆ Five national parks
- ☆ Utah Jazz NBA basketball
- ☆ Salt Lake Buzz Triple A baseball
- ☆ Six national monuments
- ☆ World class skiing and resorts
- ☆ Two national recreation areas
- ☆ Numerous historic and prehistoric sites
- ☆ One national historic site
- ☆ LDS Temple Square and Family History Library
- ☆ Seven national forests
- ☆ 48 state parks
- ☆ Abundant wildlife and wilderness
- ☆ Great Salt Lake
- ☆ Mountains, deserts, and rivers
- ☆ A major metropolitan area and convention facilities

Review of 1995

When all of the numbers are counted, 1995 is expected to be a record or near-record year for Utah tourism. Most traveler destinations and parks experienced the highest level of visitation ever. Over 15 million out-of-state visitors came to or through Utah during 1995. Early indications are that while increases occurred statewide, the Wasatch Front and Southeastern Utah experienced the greatest growth over 1994. For example, the hotel/motel occupancy rate in the metropolitan area averaged near or slightly above 80 percent for the year, despite steady additions to the number of beds. And at least three major visitor destinations in Southeastern Utah (Arches National Park, Rainbow Bridge National Monument, and Hovenweep National Monument) experienced double-digit increases in recreation visits over 1994. Most other destinations in the area were not far behind.

Obviously, a major event for 1995 was the selection of Salt Lake City to host the 2002 Winter Olympic Games. This designation heightens awareness of Utah as a travel destination and brings with it a considerable amount of international interest and attention.

The 1994-1995 ski season in Utah was a record one, in terms of snowfall, length of the season, and in the number of skier visits. An estimated 3.1 million skier visits were made to Utah resorts, a significant increase over the previous record year in 1992-1993 when 2.85 million visits were made.

The continued growth in popularity of the national parks is gradually forcing some adjustments in the way crowds are handled. A shuttle system is being developed in Zion National Park and should be operational in 1997 or 1998. Other parks, particularly Bryce Canyon, are also candidates for a shuttle system. Alleviating traffic congestion will go a long way toward improving park visitors' experiences. Changes in fee collection and use are also long overdue and may soon change. Currently, all fees collected in the parks are forwarded to the general treasury in Washington. Proposed legislation in Congress would allow each park to keep some or all of its fees for park improvements. Other changes that may happen involve public-private partnerships and the relationship between the parks and concessionaires.

Economic Impact

Travelers spent approximately $3.55 billion in Utah in 1995. Because the industry includes a portion of the activities from other industries--construction, retail and wholesale trade, services, finance, and other sectors of the economy--it is not generally ranked in terms of being the first or second largest industry in the state (the problem lies in what constitutes an industry). It is safe to say that travel, tourism, and recreation comprises one of the largest and most important economic activities in Utah and in the country. Traveler spending in Utah now exceeds the contribution to GDP of the agriculture and mining industries combined.

Traveler spending in Utah accounts for roughly 73,000 jobs. The $3.55 billion in spending generates some $262 million in taxes for state and local governments.

Outlook

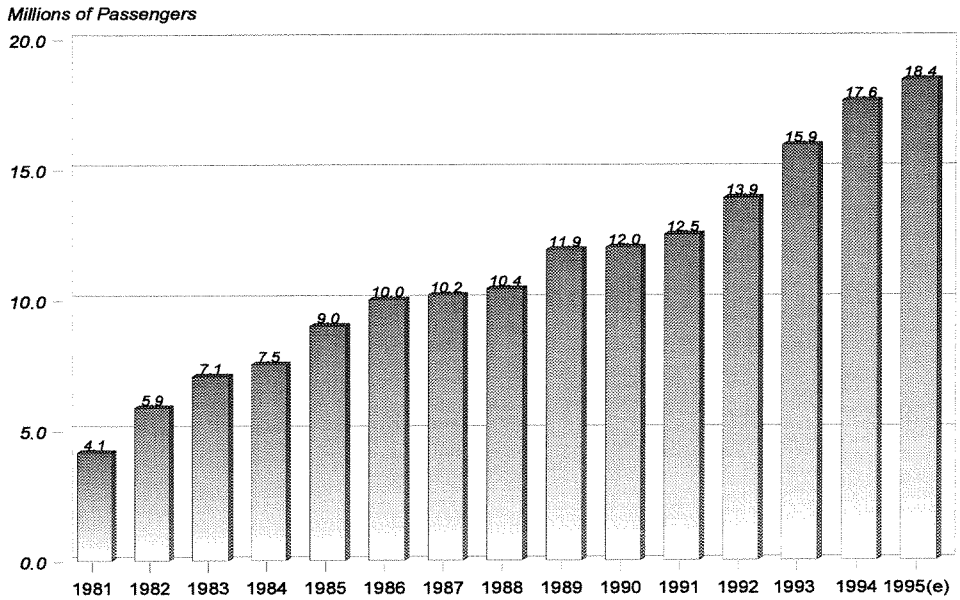
Utah's travel industry is expected to continue to be one of the fastest growing segments of the state's economy. Several factors will contribute to this growth in 1996 and beyond:

- ☆ Popularity of national parks, the American Southwest, and historic and prehistoric sites;
- ☆ Awareness of and interest in Utah as a result of hosting the 2002 Winter Olympics;
- ☆ Relatively inexpensive gasoline and favorable airfares;
- ☆ Favorable demographics, including aging of the population;
- ☆ Growth in the LDS Church;
- ☆ Favorable exchange rates for foreign travelers;
- ☆ Interest and publicity from the 1996 statehood centennial;
- ☆ Interest arising from a major feature article on Utah in the January 1996 *National Geographic* magazine.

Some other factors could eventually work to reduce or eliminate growth in the travel industry. These include:

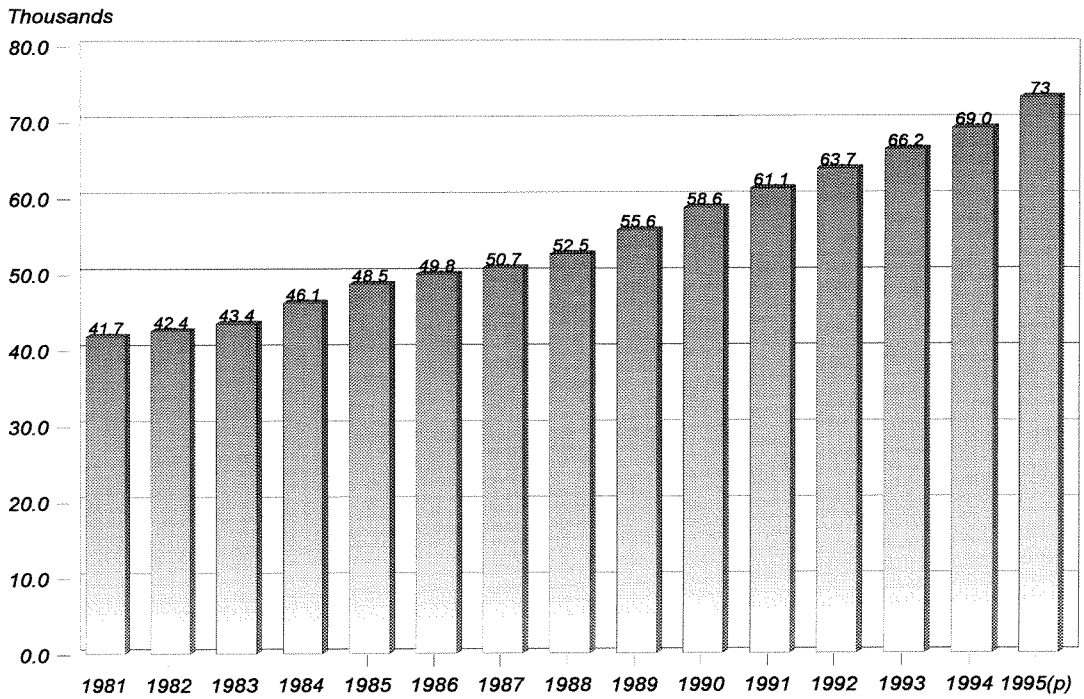
- ☆ Capacity constraints. The peak seasons in the national parks and on the ski slopes are relatively crowded. Most of the growth taking place now is in the shoulder seasons.
- ☆ National and international economic uncertainties. If energy prices were to rise suddenly and substantially, the travel industry would be among the first to feel the pain. ☆

Figure 48
Salt Lake International Airport Passengers: 1981 to 1995



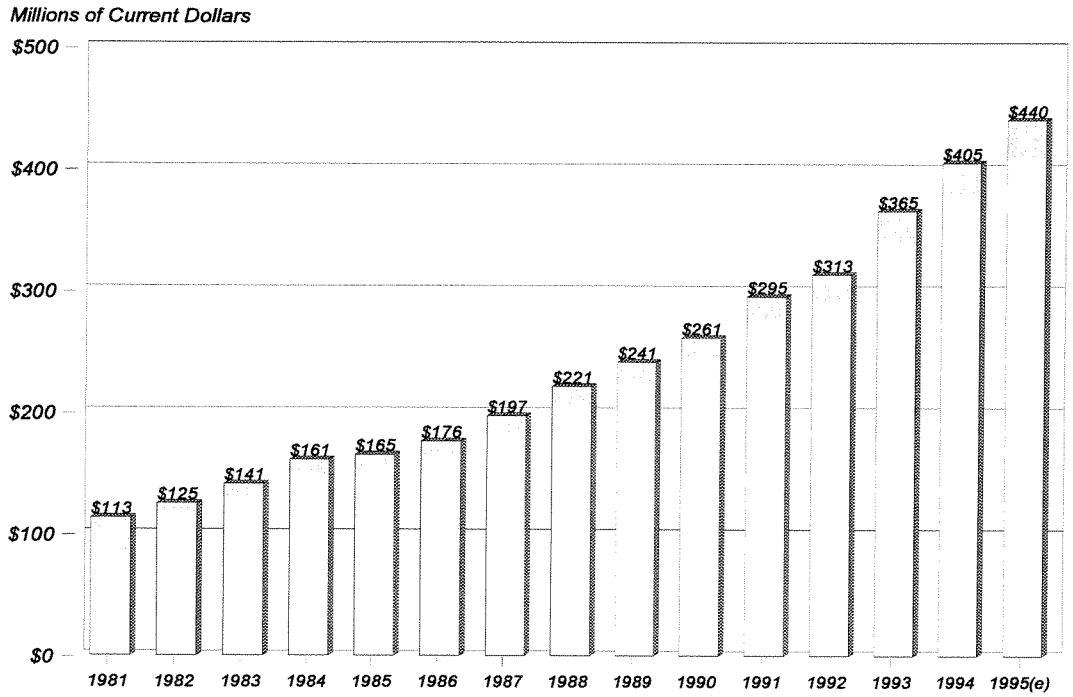
Source: Salt Lake Airport Authority

Figure 49
Travel-Related Employment in Utah: 1981 to 1995



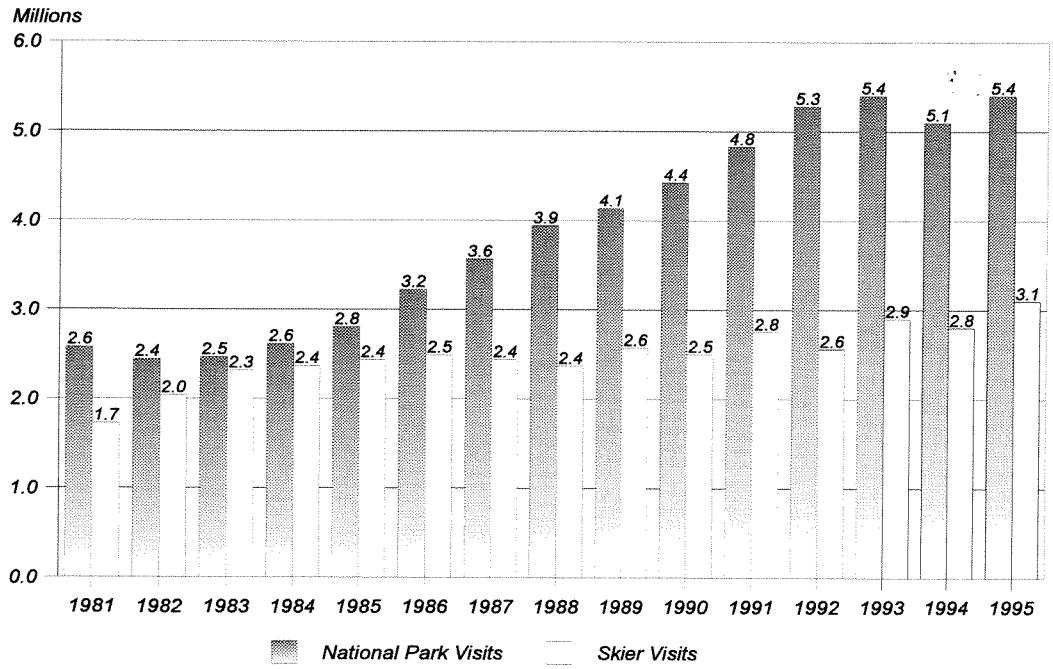
Source: Governor's Office of Planning and Budget

Figure 50
Utah Tourism Indicators--Hotel Room Rents: 1981 to 1995



Source: Utah State Tax Commission

Figure 51
Utah Tourism Indicators--National Park and Skier Visits: 1981 to 1995



Source: National Park Service & Utah Ski Association

Table 83
Profile of the Utah Travel Industry: 1990 to 1995

Category	1990	1991	1992	1993	1994	1995(p)
Total Spending by Out-of-State Travelers (billions)	$2.7	$2.9	$3.1	$3.3	$3.4	$3.6
Total Number of Out-of-State Visitors (millions)	13.0	14.0	14.4	15.0	15.2	15.5
Number of U.S. Visitors	12.4	13.3	13.6	14.1	14.3	14.5
Number of Foreign Visitors	0.6	0.7	0.7	0.9	0.9	1.0
Total Travel and Recreation-Related Employment	58,560	61,100	63,700	66,200	69,000	73,000
Percent of All Utah Jobs	8.1%	8.2%	8.3%	8.3%	8.1%	8.1%
Total State and Local Taxes Generated by Travel Spending (millions)	$196	$214	$225	$240	$247	$262
State Government Portion	$147	$161	$169	$180	$185	$193
Local Government Portion	$49	$53	$56	$60	$62	$69
Total National Park Recreation Visits (millions)	4.4	4.8	5.3	5.4	5.1	5.4
Total Skier Visits (millions)	2.5	2.8	2.6	2.9	2.8	2.8
Taxable Room Rents (millions)	$261	$295	$313	$361	$370	$370
Hotel/Motel Occupancy Rates	63.8%	69.4%	70.3%	71.9%	73.7%	73.9%

(p) = preliminary estimate

Sources: Estimates based on information from U.S. Travel Data Center (Washington D.C.), Utah State Tax Commission, Utah Department of Transportation, National Park Service, and Ski Utah.

Table 84
Utah Tourism Indicators: 1981 to 1995

Year	Hotel Room Rents (Current$)	Hotel Room Rents (1994$)	National Park and Monument Visits	State Park Visits	Salt Lake Int'l Airport Passengers	Skier Visits	Travel, Tourism and Recreation Employment
1981	$113,273,174	$184,801,009	3,604,759	6,430,174	4,149,316	1,726,000	41,694
1982	124,787,207	191,771,428	3,547,385	6,436,488	5,861,477	2,038,544	42,442
1983	140,728,877	209,539,081	3,538,331	5,214,498	7,059,964	2,317,255	43,378
1984	161,217,797	230,111,639	3,819,315	4,400,103	7,514,113	2,369,901	46,072
1985	165,280,248	227,797,963	3,975,100	4,846,637	8,984,780	2,436,544	48,533
1986	175,807,344	237,885,302	4,562,393	5,387,791	9,990,986	2,491,191	49,845
1987	196,960,612	257,123,757	4,844,947	5,489,539	10,163,883	2,440,668	50,689
1988	220,687,694	276,652,452	5,369,296	5,072,123	10,408,233	2,368,985	52,485
1989	240,959,095	288,179,305	5,520,983	4,917,615	11,898,847	2,572,154	55,637
1990	261,017,079	296,165,515	5,764,409	5,033,776	11,982,276	2,500,134	58,560
1991	295,490,324	321,741,667	6,220,786	5,425,129	12,477,926	2,751,551	61,100
1992	312,895,967	330,737,505	6,668,900	5,908,000	13,870,609	2,560,805	63,700
1993	364,632,516	370,593,739	6,884,366	6,950,063	15,894,404	2,850,000	66,200
1994	405,342,342	370,000,000	6,816,350	6,953,400	17,564,149	2,800,000	69,000
1995 (e)	440,000,000	440,000,000	6,957,000	6,967,000	18,424,000	3,100,000	73,000
Percent Change							
1981-95	288.4	138.1	93.0	8.3	344.0	79.6	75.1
1994-95	8.6	18.9	2.1	0.2	4.9	10.7	5.8
Average Annual Rate of Change							
1981-95	10.2	6.4	4.8	0.6	11.2	4.3	4.1

(e) = estimate

Sources: Utah State Tax Commission, National Park Service, Utah Division of Parks and Recreation, Salt Lake Airport Authority, Utah Ski Association, and Governor's Office of Planning and Budget.

Table 85
National Park and Monument Recreation Visits: 1981 to 1995

National Parks

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 (e)	870,000	982,000	457,000	640,000	2,414,000	5,363,000
Percent Change						
1981-95	166.5%	107.1%	408.3%	60.9%	87.3%	108.1%
1994-95	11.9%	-4.5%	6.3%	5.7%	6.3%	4.9%
Annual Average Rate of Change						
1981-95	7.3%	5.3%	12.3%	3.5%	4.6%	5.4%

National Monuments

Year	Cedar Breaks	Dinosaur	Natural Bridges	Rainbow Bridge	Timpanogos Cave	Total National Monuments	Total National Parks and Monuments
1981	402,680	345,784	60,131	114,555	104,497	1,027,647	3,604,759
1982	374,695	396,938	55,209	172,126	104,630	1,103,598	3,547,385
1983	329,268	427,375	56,368	161,551	98,475	1,073,037	3,538,331
1984	353,092	493,140	59,123	177,971	119,688	1,203,014	3,819,315
1985	385,381	418,187	61,179	177,038	128,622	1,170,407	3,975,100
1986	425,732	430,891	73,069	283,597	124,410	1,337,699	4,562,393
1987	430,559	412,089	88,243	210,708	137,279	1,278,878	4,844,947
1988	477,493	474,452	98,559	238,307	138,694	1,427,505	5,369,296
1989	480,276	436,303	103,822	238,307	126,876	1,385,584	5,520,983
1990	417,330	450,368	101,958	255,420	114,247	1,339,323	5,764,409
1991	456,000	447,781	124,596	258,346	104,745	1,391,468	6,220,785
1992	392,600	480,400	139,200	256,200	120,400	1,388,800	6,668,900
1993	557,824	534,274	151,504	211,254	90,803	1,545,659	6,884,366
1994	710,981	480,576	137,214	298,651	77,528	1,704,950	6,816,350
1995 (e)	512,000	501,000	149,000	352,000	80,000	1,594,000	6,957,000
Percent Change							
1981-95	27.1%	44.9%	147.8%	207.3%	-23.4%	55.1%	93.0%
1994-95	-28.0%	4.2%	8.6%	17.9%	3.2%	-6.5%	2.1%
Annual Average Rate of Change							
1981-95	1.7%	2.7%	6.7%	8.3%	-1.9%	3.2%	4.8%

Source: National Park Service, Socio-Economic Statistical Unit.

Special Topics

☆ Utah Economic History

Natural Resource Development and Federal Investment in Utah: Two Defining Events in Utah's Economic History

After seven attempts and a half century of trying to achieve statehood, Utah became the 45th state on January 4, 1896. Many events of economic importance preceded statehood, including Brigham Young's planning of the economy, the California Gold Rush, the coming of Johnston's Army, the completion of the transcontinental railroad, and mining in Bingham Canyon. The 100 years since statehood further advanced Utah on a path of abundant economic, political, and social change. This change has followed U.S. economic history generally, but has also been distinctively shaped by the people and events that have made Utah's economy what it is today.

In this, the Centennial edition of the *Economic Report to the Governor*, the State Economic Coordinating Committee recognizes two factors that have dominated and defined economic growth in Utah over the past 100 years. These factors are:

1) The development of Utah's natural resources, focusing on the development of copper, uranium, coal, crude oil, natural gas, and coal industries.

2) The policies and investments of the federal government, with specific attention to investments in public works projects during the Great Depression; creation of military installations prior to, during, and after World War II; investments in water reclamation projects; and, payments in defense procurement. As an added point of interest, the development of Utah's tax structure is described.

These factors have been identified with a recognition that many occurrences of equal or greater importance have not been included in this essay. For instance, the policies and practices of the Mormon Church are pivotal to understanding Utah's economic history. This is true in terms of the way Mormons' high fertility rates have impacted population growth, Mormon colonization and attitudes toward mining affected migration patterns, and Mormon economic pursuits for self-sufficiency inspired a broader industry mix than the market alone would have created. In recent years, Utah's emergence as a more diversified economy is of importance. This diversity includes the waning role of the federal government and the emerging role of computer hardware and software, tourism, health care, and a wide variety of educational, legal, financial, and business services. This essay, however, simply assimilates the collective judgement of the Economic Coordinating Committee on two dominant factors over the past 100 years that help explain the current size and composition of Utah's economy. These factors are the development of Utah's natural resources and investments by the federal government.

Other Resources on Utah's Economic History

A variety of publications, videos, and exhibits are planned as part of Utah's centennial celebration. Table 86 provides a selected list of the centennial projects that include information about Utah's economy. For those looking for more comprehensive information about Utah's economic history, several seminal publications are recommended:

Utah, The Right Place, by Thomas G. Alexander--This volume is the first of a five-volume set that has been commissioned and funded by state appropriation as Utah's official Centennial history. The remaining four volumes are not published as of December 1995.

Utah History Encyclopedia, edited by Allan Kent Powell--This encyclopedia is a 674-page volume that describes in encyclopedic form, Utah's people, events, places, and other subjects. The contributions of multiple authors are included.

Great Basin Kingdom, by Leonard J. Arrington--This is an economic history of the Latter-Day Saints (Mormons) from 1830-1900. This volume has had tremendous staying power as the first great work on Utah's economic history, although the time period mostly precedes statehood.

New Utah's History, by Ellsworth -- This book provides a broad history of Utah, including, Utah's geography, native peoples, Mormon pioneers, the territorial period, the progressive era, and modern history.

Utah's History, by Richard D. Poll -- A comprehensive history of Utah, past and present.

A chronology of selected economic events affecting Utah is shown in Table 87.

Natural Resources Development in Utah

Utah, like its western neighbors, is a state rich in natural resources. These natural resources include base and precious metals (copper, magnesium, beryllium, molybdenum, iron ore, gold, and silver); industrial minerals (sodium chloride, cement, lime, phosphate, potash, gilsonite, clay, dolomite, magnesium chloride, gypsum); and energy-producing resources (coal, natural gas, crude oil, petroleum products, and uranium). All of these resources, to varying degrees and at varying times, and coupled with the transportation resources that made prospecting, mining, refining, and moving products to market feasible, have played a defining role in economic growth in Utah. Today, the Utah economy produces an estimated 945 trillion BTU of primary energy with a point-of-extraction value of $1.3 billion. The value of nonfuel mineral production is $2 billion. This discussion proceeds with an examination of the evolution of Utah's copper and uranium industry, and then highlights the development of the coal, crude oil and liquids, and natural gas industries. A chronology of events in Utah's energy history is provided in Tables 88 through 90.

Copper

Prospecting for copper proceeded statehood by several years. By 1903, however, the Utah Copper Company was organized by the father of Utah copper, an engineer named Daniel C. Jackling. Jackling helped introduce a rich copper tradition in Utah that was spurred by outside and well-known investment interests such as Standard Oil, the Rockefellers, and Guggenheims.

While the beginning of Utah's largest and dominant copper legacy started with the first claims posted in Bingham Canyon, the 1910 merger of the Guggenheims' Kennecott Copper Corporation, Boston Consolidated Mining Company, and Utah Copper Company into one massive operation formed the solid foundation for what is now one of the largest open-pit copper mines in the world.

The success of Kennecott during the early years of statehood can also be traced to the innovation of open-cut copper mining. This method used steam and electric shovels to remove surface rock and to dig out ore. The technique made even the mining of low grade ore, when done in mass quantities, economically viable.

During this early history, the economic success and impact of copper mining was further strengthened by the construction of smelters to process the ore. Three smelters were of significance during the early part of the century: American Smelting and Refining (Murray), United States Smelting, Refining, and Mining Company (Midvale), and International Smelting and Refining Company (Tooele).

The production of copper in Utah has almost always been significant. Copper production reached a high point during World War II, when it is said that the Bingham mine produced one-third of the copper used by the allies during the war.[42] In terms of employment, copper mining peaked at 7,000 employees during the 1960s.

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[42] *Utah History Encyclopedia*, edited by Allan Kent Powell, p. 116.

In recent years, Utah's copper industry has made remarkable achievements. The output of Utah's copper industry has steadily increased as production costs have been dramatically reduced by large capital investments in new technology. These achievements are particularly noteworthy as Kennecott closed operations in 1985 due to noncompetitive production costs from outdated technology, high wages, and low commodity prices resulting from a strong dollar and world glut of copper.

Since reopening in 1987, Kennecott has spent approximately $2 billion in capital investments ($450 million for a mine crusher, conveyor transportation system, and a slurry pipeline; $880 million to build a new smelter; and $500 million for an enlargement of the tailings impoundment facility). These investments are among the largest ever committed by a private firm in Utah's history. Today Utah's copper industry employs roughly 2,000 people and the personal income impact from Kennecott alone is estimated to be over 1 percent of the state total.[43]

Uranium

Although uranium development has not had the measurable economic impact of Utah's copper, coal, oil, and natural gas industries, uranium development impacted Utah's early mining development and settlement of the Colorado Plateau. The world's first uranium boom began when Madame Marie Curie successfully isolated radium from pitchblende in 1898. That same year, uranium, vanadium, and radium were found to be present in carnotite minerals found on the Colorado Plateau. A small prospecting boom ensued and was followed by a second boom during World War I when it was discovered that vanadium, when added to molten steel, increased the strength.

The birth of Utah's modern uranium industry largely coincided with federal stockpiling of fissionable materials for its nuclear weapons program. In the period immediately following World War II, the Atomic Energy Commission stimulated the nascent industry with road construction, price supports, and bonuses for high-grade uranium resource production. Collectively, these subsidies led to the development of the MiVida Strike in Lisbon Valley, the White Canyon discovery in San Juan County, the Marysvale discovery in Piute County, and other discoveries in the San Rafael Swell area of Emery County. By 1958, the federal government reached its target stockpile level and curtailed production. Subsequently, by 1960, Utah produced only six million pounds, a significant reduction from earlier years.

Utah's uranium industry experienced a modest resurgence in the 1970s due largely to the limited global supply and fears engendered by the OPEC oil crisis. The mid-1970s further witnessed the strong growth of the nuclear power industry; and, as a result, spot prices for uranium ore reached as high as $40. Uranium producers in the west, and Utah in particular, hoped sustained prices would revitalize the industry. Unfortunately, only the least-cost producers, such as Australia and Canada, would prove to benefit from these prices. Facing stiff price competition, and the cancellation of many U.S. nuclear power facilities in the decade between 1975 and 1985, U.S. producers severely curtailed their uranium ore production. At present, United States uranium ore production capacity, from nine mills, stands as 40 million pounds per year. In recent years, however, only 2.6 million pounds per year have been produced.

For Utah, the implication of these economic facts is compelling. Utah miners have neither explored nor drilled for uranium extensively since the mid-1980s. There are currently four operators in Utah: Atlas Minerals, Rio Algom, Umetco/Energy Fuels, and Plateau Resources. In 1990, the last year of recorded production, these producers processed 79,000 short tons of ore for a total of 3.4 million tons of uranium concentrate. At $15.70 per pound this generated $53.4 million in revenues. Of note, at the current price of roughly $13 per pound, none of these producers have facilities in operation.

The Coal Industry

Just two years after Utah's settlement in 1847, miners discovered coal in Iron County. Shortly thereafter, explorers found significant resources in Sanpete and Summit Counties. In the 1880s, Carbon and Emery Counties registered significant deposits as well.

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[43] *1995 Economic Report to the Governor*, p. 196.

By the turn of the century, Utah's annual coal production shattered the one million ton mark. Carbon County's Wasatch Plateau field, discovered in 1874, accounted for the majority of tonnage. In the nearby Book Cliffs, the Castle Gate mine opened in 1889, adding considerably to the state's production. By the 1890s the D&RGW railroad and Pleasant Valley Coal Company transformed the Carbon-Emery region into one of the most significant coal producing areas in the West. For the next several decades, this region alone produced 80 percent of the state's coal.

At the turn of the century, coal-fired steam literally powered the American economy. The transportation sector, both water and rail, as well as residential heating and the industrial sector would not have existed without stable production of high-quality coal resources. Adding to these sectors, the coal required to power steamships in World War I helped to quadruple demand for Utah coal between 1900 and 1920.

Between the wars, the tide began to turn. The post-war recession softened prices as annual demand fell to two-thirds of the level registered during the war years. Pessimism in the industry heightened as oil development increased and Utah consumers switched to natural gas piped in from Wyoming. As the general economy rebounded in the mid-1920s, coal markets regained some ground with the addition of Columbia Steel's Ironton plant near Provo; nevertheless, the decade remained a battleground among energy producers.

During this period, across the United States, a lack of discipline in commodity markets resulted in excess production and declining prices. These factors, in addition to the dangerous working conditions facing miners, prompted President Roosevelt and the U.S. Congress to pass the Norris-La Guardia and Wagner Acts which supported union organization. John L. Lewis, head of the United Mineworkers Union, seized this challenge and compelled workers to organize. By 1936, some 94 percent of all Utah coal miners joined the union.

While the forces of economic competition played havoc with Utah's coal industry, political turmoil in Europe would soon prove to be its savior. In 1942 Henry Kaiser, noted for his progressive worker insurance policies, increased Carbon County production to supply coke for his Fontana Works in California. In the early 1940s, Geneva Steel completed its plant in Orem while engineers pushed the Ironton Steel plant to full capacity. A mere 8 percent of total production during the Great Depression, coking coal accounted for 30 percent of total supplies during the war. After the war, in 1947, coal production reached 7 million tons in Utah as steel mills around the country stepped up production to meet the infrastructure needs both here and abroad.

The coal industry boom would prove short lived however. Through the 1950s and 1960s coal steadily lost share in the residential heating market as the federal government released natural gas supplies originally reserved for wartime use. During that period, steam locomotion suffered as well. By 1958, steam-powered engines fell prey to their diesel brethren and moved less than two percent of total railroad freight. These events appeared to signal a sharp decline in coal consumption. However, increased concerns over energy security in general prompted the federal government to restrict oil imports.

This fact, combined with natural gas shortages, prompted electric utilities to forego oil in favor of coal-fired plants. In 1957 Utah shipped slightly less than 6 percent of its coal to electric utilities. By the early 1970s, this figured reached nearly 22 percent or one million tons.

The coal market's rebound was largely caused by the introduction of longwall mining. In the 1960's, the Kaiser Coal company installed one of the first two longwall panels in the country at its Sunnyside mine. By 1984, seven of 24 of Utah's underground coal mines were longwall mining operations. Most recently, in 1993, six of 15 of Utah's mines were longwall mining operations. Longwall mining is one of two basic methods of underground coal mining. The other method is room-and-pillar mining, historically the traditional method used in the United States, which relies on existing coal seams to support the mine roof.

Because longwall mining is essentially a continuous, highly mechanized operation, longwall productivity is potentially higher than room-and-pillar productivity. Longwall mining also offers improved safety through better roof control, more predictable surface subsidence, and better opportunity for full automation. On the other hand, capital costs for longwall equipment are much higher than for room-and-pillar equipment,

productivity during development ("blocking out") of the longwall panels is typically low, and large amounts of dust and methane are generated during the mining process.

Conversion to coal proved to be even more important during the OPEC supply shocks of the 1970s. Between 1971 and 1978, Utah coal production roughly doubled and the state shipped 50 percent of its production to electric utilities. By the 1980s, as environmental issues gained prominence, many consumers sought Utah coal for its low-sulfur properties. As a result, the reach of Utah's coal shipment extended to include the eastern United States and overseas markets of Japan, Korea, and Taiwan.

In the 1980s, in large part because of coal's attractiveness, a consortium called the Intermountain Power Project (IPP), in Millard County, began operation as a municipal electric utility. While the Intermountain Power Agency owns 100 percent of the IPP, the City of Los Angeles is the operator. The IPP delivers significant coal-fired electric power generation to the California market. The first electric utility plant, Intermountain 1, began its initial year of operation in 1986. It was followed the next year by a second plant, Intermountain 2. Both plants have a 891.9 megawatt nameplate capacity.

Today, Utah's coal is distributed across a wide range of end uses. Electric utilities consume roughly 16 million tons or 72 percent of total production. Industrial uses account for 12 percent or slightly less than 3 million tons. Overseas exports, largely used in fossil-fired power plants, amount to 12 percent of production. Coking applications and residential/commercial heating, once large end uses, now manage only 2 percent each.

The Crude Oil and Liquids Industry

The State of Utah is remarkable in that three-fourths of its territory is situated in known oil and gas provinces. The principal areas include the Uintah Basin in the northeast, the Paradox Basin in the southeast, and the northern Overthrust Belt. Historically, Utah's oil provinces have been ranked among the most geologically complex, remote, rugged, and expensive to explore in the continental United States.

State records indicate that producers drilled over 630 dry wells before the first commercial oil well was brought into production in 1948. Over the past 35 years, exploration and drilling activity have fluctuated considerably. Seismic crew-months, a measure of exploration activity, started from a high of 239 in 1960 to a low of 35 only six years later. Activity peaked again by the early 1980s, but has declined steadily ever since. Notably, by 1990, drilling cost per foot in Utah reached $115.86, among the highest levels in the United States. Since 1960, oil well completions have remained in the majority with a slight uptick in natural gas activity since 1992. As of 1993, reserves of crude oil and condensates stand at 403 million barrels.

Utah remains in the upper one-third of crude oil and condensate producers in the United States. In 1993, the state lifted 26.1 million barrels from 1,818 wells. San Juan County dominated crude oil production with 6.8 million barrels, followed by Duchesne (6.4), Summit (4.5), and Uintah (3.5). In 1993, Amoco Rockmount dominated production with just under 4 million barrels from its single well in the Anschutz Ranch East Field in Summit County. Mobil Oil's 255 wells accounted for just under 12 percent or 2.5 million barrels. ANR Production lifted just under 2.4 million barrels. Together, these three firms accounted for over 40 percent of the crude oil production in Utah.

Utah's petroleum refining capacity currently stands at 154,500 bpd (barrels per day). Chevron refines the most crude followed by Amoco and Phillips 66. Of historical note, compliance with the 1990 Clean Air Act Amendments resulted in significant refinery downtime following the legislation, but refining capacity has recovered in recent years to the 1992 capacity utilization level of 88 percent.

Of the nearly 40 million barrels of petroleum products consumed by Utahns in 1994, nearly half is dedicated to motor gasoline consumption, followed by distillate oil consumption (21 percent), and aviation jet fuels (15 percent). Some fuels, including liquefied petroleum gases, lubricants, and fuel oils, have registered steady declines in recent years.

The Natural Gas Industry

The history of Utah's natural gas industry closely parallels that of crude oil operations. Because natural gas is generally found in conjunction with crude and natural gas liquids, the history of exploration activity is roughly similar. In terms of U.S. ranking by reserves, both associated and non-associated, Utah is in the middle of the pack with 2.2 trillion cubic feet (TCF) of natural gas as of 1993. To the state's benefit, the ratio of associated (relatively pure methane) and non-associated (gas and liquids) has increased over time (87 percent vs. 13 percent).

As with the search for crude, the number of natural gas wells drilled in recent years has moved in lockstep with declining prices. After a surge in prices during the 1980s, drilling programs have never recovered to their previous levels. In spite of technology improvements, new field wildcats represent only a small fraction of total wells drilled (10 percent). Expiration of some fuel tax credits in 1992 and generally suppressed prices are the forces behind the decline in drilling programs.

Utah produces the vast majority of its natural gas from 15 fields located in seven different counties. Of the 4.7 TCF produced since the industry's start in 1959, Summit County has produced 38 percent of the total. Other prolific fields include Lisbon and Greater Aneth, both located in San Juan County and the Natural Butted Field in Uintah County. In 1993, Summit ranked first with a production rate of 215 billion cubic feet (BCF) produced from just 36 wells. This contrasts with other counties such as Uintah and Grand, which produce only a fraction of Summit's total.

Natural gas is produced by several dozen operators. Amoco Rockmount lifts more than two-thirds of all gas produced in Utah. Coastal Oil and Gas has more than 10 times the number of wells as Amoco but produces just 12 percent of the total. Enron and Chevron contribute only minor amounts to the state's total natural gas production. It is worth noting that natural gas production reached near-record levels in 1993 as producers benefited from the "non-conventional" tax credit extended to them.

While some of Utah's larger natural gas fields are at a mature stage of their productive life, new production from coalbed natural gas sources is expected to increase in the future. In particular, River Gas of Utah has drilled several natural gas wells to develop coalbed resources in Carbon County. This drilling should proceed south into Emery County by the end of this decade. In all likelihood, coalbed resources will comprise an increasingly important fraction of Utah's total natural gas resource base.

Utahns consume natural gas in every sector of the state's energy economy. Of the total 1993 consumption of 138 BCF, the residential sector accounted for 38 percent. The commercial sector consumed 16 percent, while electric utilities represented 5 percent of the total. Demand for natural gas is expected to remain high as prices have remained relatively low over the past several years.

Federal Investments in Utah

Economic historians have written at length about the pervasive involvement of the federal government in the Utah economy. This importance preceded statehood and is perhaps best epitomized, in the extreme, by the attempts of the federal government to disincorporate the Mormon Church and seize church properties by way of the Edmunds-Tucker Act passed in 1887. Prior to statehood the federal government also provided massive subsidies for the construction of the transcontinental railroad and telegraph. The prominent role of the federal government in shaping the Utah economy since statehood has included the construction of public works during the Great Depression; the building of military installations prior to, during, and after World War II; defense buildups during the Korean and Vietnam War, and defense procurement during the Cold War. Federal investment in Utah has been so extensive that one notable historian characterized Utah during the era of the Great Depression to the end of the Cold War as a "colony of Washington".[44]

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[44] *Utah The Right Place*, Thomas G. Alexander, p. 458.

In addition to public works projects and federal defense spending in Utah, the policies and investments of the federal government in building railroads, highways, reclamation projects, national parks and monuments, forest conservation, as well as the employment associated with other federal functions such as the post office, Internal Revenue Service, and federal land management agencies, have all had a profound influence on the Utah economy.

An instructive way to demonstrate Utah's dependence on the federal government since World War II is to compare earnings in the state from the federal government with total earnings. Figure 52 presents these data. This comparison yields two important points:

1. Utah has historically been significantly more dependent on federal expenditures than the U.S. average. Since the start of the Great Depression the peak periods of federal involvement in the Utah economy were World War II, the Korean War, and Vietnam War. In all of these conflicts, Utah's military installations served as logistical centers and transit points for servicing military needs. During World War II, federal government earnings, as a percent of total earnings in Utah, climbed as high as 27 percent, meaning that one in every four dollars in the economy stemmed from federal earnings. The comparable national percentage at this same time is just 16 percent. In the Korean and Vietnam conflicts federal government earnings in Utah approached 16 percent. This compares to a national average during the same periods of around 7 percent. In these years, Utah's economy was more than twice as dependent on federal expenditures than the U.S. average.

2. Utah's current dependence on the federal government has waned almost relentlessly since 1971. During this period, federal government earnings, as a percent of total earnings, have fallen from approximately 15 percent of total, to under 7 percent currently. This decline has occurred as a result of the declining number of federal defense jobs, the slow growth in non-defense jobs, and the relatively rapid growth of Utah's private sector. Even with this unyielding drop, federal government earnings in relation to total earnings in Utah, are still higher than the national average.

The following discussion elaborates on the role of the federal government in the Utah economy during the Great Depression, World War II, and the Cold War.

The Great Depression (1929-1942)

October 24, 1929 launched the beginning of the longest sustained period of high unemployment and depressed economic activity of modern times in both Utah and the nation. The Great Depression impacted Utah's economy much like it impacted the nation, showing up as dramatic reductions in economic production, unprecedented levels of unemployment, and losses of income. No other single event, except perhaps the impact of World War II as the catalyst for Utah's defense economy, has had such a profound effect on the size and composition of Utah's economy as the Great Depression and the public works projects that occurred. The ultimate impacts of the Depression in Utah were reductions in economic activity, large public (largely federal) investments in infrastructure, and enduring changes in Utah's tax code.

Reductions in Economic Activity

The impact of the Great Depression on Utah's economy was more severe than in many other states. This occurred because Utah already had a marginal farm economy; and the other large industry, mining, was dramatically impacted. While the nation flourished during the 1920s, Utahns were poor and the economy was stagnant. This meant as the Great Depression started, Utah was already suffering worse conditions than the nation and ultimately meant the depression caused more suffering in Utah than the nation as a whole. Among other signs of economic collapse, between 1929 and 1933 the following occurred in Utah's economy:

- ☆ Per capita income fell from $546 to just $293.
- ☆ Value of mining dropped from $115 million to just $23 million.
- ☆ Farm income plunged from $69 million to $30 million.

- ☆ Unemployment peaked at a record 36 percent, compared to a national peak of 26 percent.
- ☆ 25 Utah banks failed[45].

Public Investment

Perhaps the most long-lasting impacts of the Great Depression on Utah are the sizable public investments that occurred as part of the federal government's attempt to jump-start the economy. The public works programs of the federal government ultimately resulted in investment in thousands of miles of highways, roads, public buildings, sidewalks, sewer systems, forest conservation, and water projects.

Among the federal programs or agencies that impacted Utah were the following:

Federal Employment Relocation Act (FERA)
National Industrial Recovery Act (NIRA)
Civilian Conservation Corps (CCC)
Works Project Administration (WPA)
Public Works Administration (PWA)
Agricultural Adjustment Acts
Home Owners Loan Corporation
Farm Credit Administration
National Youth Administration

The story is told that Governor Henry Blood traveled to Washington D.C. and asked the Franklin D. Roosevelt administration to fund public works projects in Utah totaling $57 million, 12 times the state's biennial budget. Governor Blood returned to Washington several times seeking federal assistance. During the Great Depression, Utah benefited from well over a $100 million in public investments.

Utahns received more than their fair share of federal assistance largely because of the astute political leadership, the large amount of federal lands, and the level of economic hardship in Utah. Per capita federal spending in Utah during the 1930s was ninth among the 48 states, the percentage of Utah workers on federal relief projects was above the national average, and Utahns received seven federal dollars for every one dollar sent to Washington.[46]

Major Changes in Utah Tax Code[47]

Growth and development in the 1920s, coupled with the Great Depression of the 1930s, produced abundant agitation for tax reform throughout the state. For example, in 1932, delinquency in payment of property taxes was over 50 percent in four counties, with a state average of about 22 percent. With the heavy dependence on property taxes to finance state and local government at that time, these high delinquency rates were devastating to the functioning of governmental units.

This interest in tax reform generated a number of special investigating committees, all authorized by the Legislature, with committee members appointed by the Governor. A review by one of these committees in particular, the Tax Revision Commission of 1929, set the groundwork for sweeping changes in Utah's tax structure during the early 1930s . The Commission's recommendations had a profound effect, resulting in constitutional and legislative tax changes that substantially modified the administration and the tax profile of

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[45] *Utah, The Right Place*, p. 311.

[46] *Utah History Encyclopedia*, Allan Kent Powell, p. 137, University of Utah Press.

[47] Information for this section, unless otherwise noted, is borrowed with the exclusive permission of the author from the Bureau of Economic and Business Research, University of Utah, *History of Utah's First Century of Taxation and Public Debt 1896-1995*, pp. 23-42, by Jewell J. Rasmussen, Professor Emeritus, Department of Economics, University of Utah, 1995.

Utah in subsequent years. A brief discussion of the major tax changes resulting from the Commission's recommendations is provided here; however, a detailed chronology of the major events in Utah's tax history is offered in Tables 91 and 92.

Individual and Corporate Franchise Income Taxes
Prior to 1930 the property tax served as the principal source of revenue for both state and local governmental operations in Utah. As mentioned above, the economic depression which began in 1929 produced a serious crisis in Utah governmental finances. Property tax delinquencies increased at an alarming rate. In several areas of the state, less than half the taxes levied were actually paid when due.[48]

In the face of this tax crisis, a legislatively-enacted individual income tax was imposed in 1931 with the purpose of shifting part of the tax load from property to income. This purpose is evidenced by two provisions in the original statute: first, the offset of property taxes paid against the state individual income up to one-third of the computed amount of the income tax; and second, 75 percent of the receipts was to be credited to the state district school fund (25 percent to the state general fund), thus reducing the property tax levy necessary to raise the constitutionally-required sum of $25 per census child of school age in Utah. The original act of 1931 required every person age 21 and over (with certain exclusions) to file an income tax return and pay a filing fee of $1 regardless of the amount of income earned.

In addition to the individual income tax, a corporate franchise tax was also established in 1931 by the Legislature to relieve the burden on the property tax. When enacted, this measure imposed a tax on national banks according to or measured by net income allocated to Utah at the rate of 3 percent, and likewise imposed a tax on every bank or other corporation, for the privilege of exercising its corporate franchise and for the privilege of doing business within this state at the rate of 3 percent of its net income allocated to Utah.

In the first two years of the operation of the two tax measures, the corporate tax produced slightly more revenue than did the individual income tax. However, in later years the individual income tax generated many times the return of the corporate measure (Table 94). Still today, both of these taxes serve as primary sources for state and local governmental revenue in Utah.

Sales and Use Tax
Like the individual and corporate income taxes, Utah's sales and use tax came into existence as an emergency measure to deal with problems growing out of the economic depression. The Great Depression, which sharply reduced the collectible returns from property and income taxes, while at the same time greatly increasing the need for money to assist the growing number of unemployed persons, made an additional source of taxation in Utah a necessity. As noted in Table 93, property tax accounted for about five-sixths of state and local tax revenues in the late 1920s. Whereas tax delinquency had been about 6 percent in 1928 and 1929, the delinquency rate increased dramatically from 1929 to 1932, amounting to one-fifth of total property taxes and to almost two-fifths of rural taxes in 1932.

In desperation the Utah Legislature, like many other states were doing at the time, resorted to a tax on consumption for revenue. When passed, the act was considered an emergency and temporary tax: "Emergency Revenue Act of 1933" and provided for its termination on April 1, 1935 or sooner by proclamation of the Governor.

The original law called for a tax of 3/4 of 1 percent on the purchase price of all goods sold in the state. This rate was almost immediately increased to 2 percent during a special session of the Legislature in 1933. Although originally intended to be a temporary measure, the tax has since become a permanent and dominating fixture in Utah's tax system. Annually the sales and use tax produces more revenue than any other tax in Utah (Table 94).

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[48]Utah Foundation, *State and Local Government in Utah*, pp. 85, 1962.

World War II (1941-1945)

The large federal defense expenditures prior to and during World War II commenced what amounted to a half century of economic dependence on federal defense expenditures. Utah's defense industry has been the backbone of the Utah economy for nearly one-half a century. Because of World War II, many Utahns received their first wage and salary job. The War also raised Utahns' per capita incomes to a level higher than their national counterparts for the first and only time since the 19th century. Finally, the War further fueled Utah's involvement in the national mainstream, as opposed to a continued existence as a relatively isolated western state.

The long-lasting significance of World War II is evidenced in the legacy of military installations built for the War. Facilities were located in Utah because it was inland and presumably safe from foreign attack; situated close to vacant lands that would be used for training and testing; had favorable weather conditions; ideally located around a transportation system that provided favorable access to the major military ports in San Francisco, Seattle, and Los Angeles; and had a large and productive workforce. In addition to revitalizing Fort Douglas, the Utah General Depot (later to become the Defense Depot Ogden), the Tooele Ordnance Depot (later called the Tooele Army Depot), Wendover Air Field (later absorbed into Hill Air Force Base), Dugway Proving Grounds, and Hill Field (later called Hill Air Force Base) all had their beginnings during this World War II period. A total of 14 military installations operated during World War II, employing 40,000 military and civilian personnel.

Federal Land Management Agencies

During the last half of the 18th century and first half of the 19th century, the federal government acquired most of the land west of the Appalachian Mountains, eventually owning more than 1.5 billion acres that had never been in private ownership. Much of this land has now been titled to private citizens, local governments, and industry. However, in Utah, the federal government still owns approximately 63 percent of the land base. Only Alaska and Nevada have a higher percentage of land owned by the federal government. Nationally, one-third of the land is owned by the federal government.

In Utah the major federal land management agencies are the Bureau of Land Management, Forest Service, National Park Service, and Department of Defense. The Bureau of Land Management alone manages 21.7 million acres in Utah, an area larger than 13 states. Utah has five national parks, six national monuments, two national recreation areas, and seven national forests.

In addition to these federal land resources, the Bureau of Reclamation owns and operates 23 dams in Utah. In addition to dams, the Bureau has built several pumping plants, 348 miles of conveyance works, and 213 miles of distribution facilities. Total federal investment for reclamation projects for Utah as of September 30, 1994 totaled $1.8 billion.[49] Table 95 shows federal investment in Utah through the Bureau of Reclamation.

The most important contribution of the Bureau of Reclamation to Utah water development is the Central Utah Project (CUP), a complex system of 18 new or enlarged dams and reservoirs; hundreds of miles of aqueducts, tunnels, drains, and canals; and pumps, power plants, diversion and treatment facilities. The U.S. Congress authorized the CUP in 1956, construction started in May 1959, and completion is not expected until 2004. Upon completion, the CUP will have been one of the largest construction projects ever undertaken in Utah, at a total cost of $3.5 billion (1994 dollars).

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[49]U.S. Department of Interior, Bureau of Reclamation, Upper Colorado Region, Resource Management Office, and *Utah's Water Development Framework*, Jay M. Bagley, March 1979. This estimate excludes federal investment that has or will occur on the Bonneville Unit of the Central Project after September 1994.

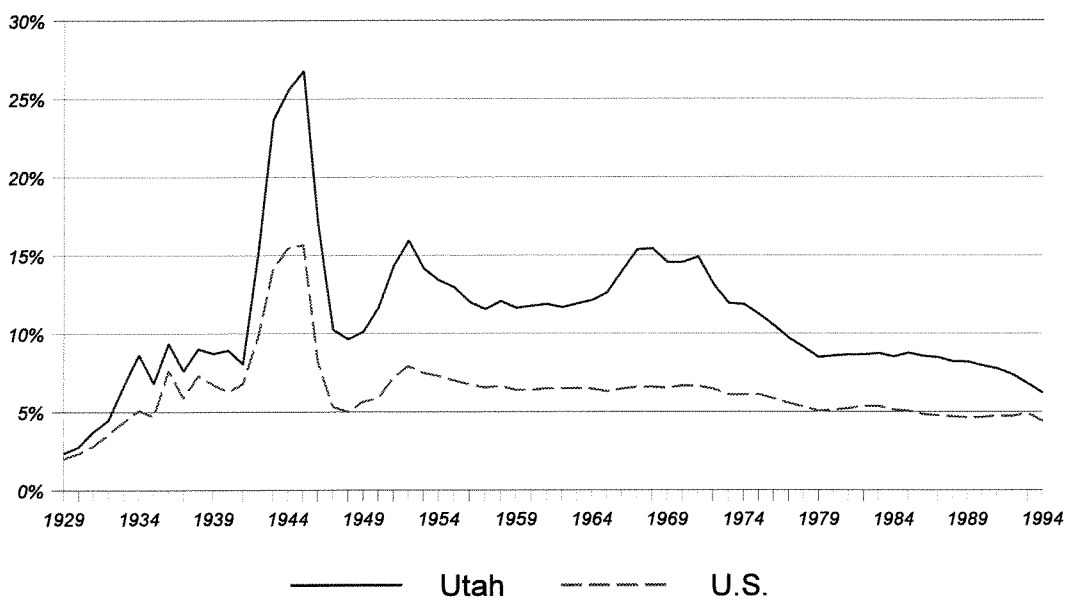
Other Wars and Defense Procurement

Utah's legacy of defense procurement stretches back several decades prior to the Cold War. Many of Utah's large defense contractors have roots in Utah well before the beginning of the cold war: Hercules (1912), Sperry/Unisys (1956), and Thiokol (1957). Like World War I and World War II, the Korean War and Vietnam War helped propagate Utah's defense economy by bolstering federal employment and furthering the need for the development of the nation's weaponry and missile resources. During the Korean War, 2,070 officers and men from the Utah National Guard were called to serve. All of Utah's defense installations increased employment. An estimated 47,000 Utahns served in the Vietnam War from 1964 to 1973 and federal expenditures in the Utah economy again soared. The Cold War further extended federal military investments in Utah, but to a smaller degree than wartime conflicts.

Currently, the mainstay of defense activity is split almost evenly between defense operations (largely military bases) and defense contracting/subcontracting activities. Utah's contribution to defense procurement has traditionally been concentrated in the U.S. missile programs, with heavy accumulation of procurement in guided missiles, space vehicles, propulsion units and parts. Components of two of the country's largest unclassified strategic systems--the MX and Trident 2--are manufactured in Utah. Defense contractors in Utah also manufacture propulsion units for a variety of Department of Defense missile programs.

Utah has, however, experienced a shifting trend toward service-based procurement activity in recent years. This shift in defense procurement spending is primarily attributed to the massive downsizing of the nation's military forces in response to the ending of the Cold War. As has been true for weapons procurement in general, procurement awards for the aforementioned missile defense program have declined significantly. This decline has affected a large number of the state's defense contractors, including its largest--Thiokol Corporation and Hercules Incorporated. The decline in defense procurement spending in Utah is detailed extensively in the Defense/Aerospace chapter of this report. ☆

Figure 52
Federal Government Earnings as a Percent of Total Earnings--Utah and U.S.: 1929-1994



Source: U.S. Bureau of Economic Analysis

Table 86
Centennial Projects with Economic References

Publications:

State History Project	The project is Utah's official Centennial history and is funded by state appropriation. When completed the project will include five volumes: one general with four specific to time periods. The first volume, titled Utah, The Right Place is currently available and was written by Thomas Alexander.
County History Project	This extensive project will document the history of each county in the state as well as Native American tribes. It is funded by state appropriation and will result in thirty separate histories -- one for each of the 29 counties plus one on Native American tribes. Each volume is written by a different author and publication will occur throughout the Centennial year.
Utah History Encyclopedia	This encyclopedia is a 674 page volume that describes Utah's people, events, places, and other Utah subjects in encyclopedic form. Authors of individual articles contributed their work as their gift to the Utah Statehood Centennial.
Centennial Utah: The Beehive State on the Eve of the Twenty-first Century	This 248 page volume examines the history and status of business and industry in the State of Utah. It features both historical and contemporary photography.
The History Blazer	This publication is a collection of vignettes about the people and events in Utah history. At times events of economic significance will be noted. Issues have been published monthly since January 1995 and will continue throughout the Centennial year.
Beehive History	This publication is a continuing effort of the Utah State Historical Society. Each issue includes scholarly articles on a related theme. Past editions have included economic topics such as mining and minerals and transportation and communication.
History of Government and Politics	This book will survey the Utah political scene, although the title has not yet been determined,. Material for the publication is being gathered by two Utah political observers, Bud Scruggs and David B. Magleby. The book is scheduled for release in late 1996.
The Spirit of Utah	This publication is a magazine written to celebrate Utah's Centennial. The premiere issue was published in October 1995 and focused on Utah's prehistoric and early Utah landscape. Future issues will focus on explorers, the Mormon migration, the struggle for statehood, and modern Utah written in chronological order.
Utah Historical Quarterly	This periodical was established in 1928 to publish articles, documents, and reviews contributing to knowledge of Utah's history. The Quarterly is an ongoing publication that is published four times a year by the Utah State Historical Society.

Videos:

"A Lasting Heritage, The Centennial History of Utah"	This commercially-produced video examines the broad trends of Utah history including the pre-historic times, Native American history, early explorers, the great migration, the colonization, the struggle for statehood, and modern Utah. The video lasts 45 minutes and will be sold via an aggressive marketing campaign.
Treasure House-The Utah Mining Story:	This video presents a two-hour documentary about Utah's mining industry.

Exhibits:

This Place Utah	This exhibit is a collection of works by and about Utah that is displayed at the LDS Museum of Church History and Art. The display will continue through Spring of 1996.

Source: Utah Centennial Commission.

Table 87
Chronology of Selected Economic Events Affecting Utah

1847	Mormon Pioneers Enter the Salt Lake Valley
1848-1851	California Gold Rush Impacts
November 1850	University of Deseret (University of Utah) Opens
April 1860	Arrival of the Pony Express
October 1861	Completion of the Transcontinental Telegraph and Closure of the Pony Express
1865, 1869, and 1870	Bingham Canyon, Tintic, and Park City Silver and Lead Mining Begins
March 1868	Zions Cooperative Mercantile Institution (ZCMI) Founded
May 1869	Completion of Transcontinental Railroad
1883	Completion of D&RGW (Rio Grande) Railroad Near Central Utah Coal Deposits
August 1889	Initiation of Salt Lake City's Public Transit System (Electric Streetcars)
1893-1896	National Depression
January 1896	Utah Becomes the 45th State
1903	Utah Copper Company Created
1906	Open Cut Copper Mining Begins
1912	Utah Power & Light Company and Hercules (Alliant Techsystems) Founded
July 1914	Transcontinental Telephone Completed
1917-1918	World War I
1919	Zion National Park Founded
1919-1922	Post-War and Uranium Recession
1922	KZN (KSL) Radio Established
1929-1942	Great Depression and the Smoot-Hawley Tariff Act
1938	Ski Industry Begins (Alta Ski Lift Dedicated)
1940	Hill Air Force Base (Hill Field) Activated
1942-1945	World War II
1942-1944	Geneva Steel Plant Constructed
1946-1959	Uranium Boom in Southeast Utah
1947	Utah Copper Company Becomes Kennecott
November 1948-September 1949	Post-WWII Recession
1950-1953	Korean War
July 1953-May 1954	Post-Korean War Recession
1956	Interstate Freeway System Authorized
October 1956-August 1964	Flaming Gorge Dam Construction
October 1956-September 1966	Glen Canyon Dam Construction

Table 87 (Continued)
Chronology of Selected Economic Events Affecting Utah

1956-1958	Aerospace Industry Beginnings -- Sperry Univac (Unisys 1956), Thiokol 1957, Hercules (missile work) 1958, and Litton 1958
August 1957-April 1958	National Recession
1958	Closure of Utah Naval Supply Depot
May 1959	Central Utah Project Construction Begins
April 1960-February 1961	National Recession
1964	Central Utah Water Conservancy District Founded
1964-1973	Vietnam War Involvement
1967	National Semiconductor Founded
1968	Evans and Sutherland Founded
December 1969-November 1970	National Recession Due to Vietnam War
October 1973	Arab-Israeli War
1973-1984	Intermountain States' Energy Boom (Run-up in Oil Prices)
November 1973-March 1975	National Recession Due to Energy Crisis
1976 and 1983	WordPerfect and Novell Founded
1979	Iranian Revolution
January 1980-July 1980	National Recession Due to Oil Price Run-up (Iranian Revolution)
1980	Iomega Founded
July 1981 to November 1982	National Recession Due to Federal Reserve Monetary Tightening
1981-1987	Intermountain Power Project (IPP) Constructed
May 1982	Western Airlines (Delta) Airport Hub Established
September 1985	Closure of Kennecott Copper
August 1986	Closure of Geneva Steel
1986	Energy Downturn Begins (Oil Prices Collapse)
June and September 1987	Kennecott and Geneva Reopened
1989	Morton International Founded
July 1990-March 1991	National Recession
August 1990-March 1991	Persian Gulf War
April 1993	Kennecott's New Smelter Construction Begins
1993	Treasury Department Decides Not to Close Ogden's IRS Center
1993	BRAC Decision to Realign Tooele Army Depot
June 1995	Salt Lake City Chosen for 2002 Winter Olympics
June 1995	BRAC Decision to Close Defense Depot Ogden, But Not to Close Hill Air Force Base
June 1995	Micron Technology Begins Construction

Table 88
A Short Chronology of Events in Utah's Energy History: Crude Oil

Crude Oil Major Finds and Production History:	
1847	Explorers discover oil seeps near the Utah-Wyoming border.
1891	First Utah oil well drilled in Grand County. Well depth reaches 1,040 feet.
1904	Development begins in Rozel Point seep in Box Elder County and the Virgin Field in San Juan County.
1939	Utah Oil Refining Company builds first crude oil pipeline from Wyoming to refinery in North Salt Lake City.
1948	The first commercial oil well was completed after drilling 550 test wells, in what would become the Ashley Valley Field, Uintah County, by Equity Oil Company. Chevron opens a 17,000 bpd (barrels per day) refinery in Salt Lake City. Salt Lake Pipeline Company, an affiliate of Standard Oil, completes a 182-mile pipeline from Rangley Colorado to Salt Lake City.
1951	The California Company strikes commercial quantities of crude oil at Red Wash Field in Uintah County. The field's wells lift 100,000 barrels per month.
1956	Greater Aneth field discovered in San Juan County. The Texas Company and Superior Oil wells produce 1704 bpd and 605 bpd.
1959	Chevron Oil discovers significant reserves in Duchesene County's Bluebell Field.
1968	The first commercial production from the Bluebell Field begins with six wells completed
1970	Altamont Field discovered in Duchesene County. Shell Oil completes a well in the Cedar Rim Field that produces 1,100 bpd.
1975	American Quasar completes a well in Summit County, in the Jurassic Nugget of Pineview Field opening up the Overthrust Belt for its first commercial production. Oil flows at 540 bpd.
1979	Persian Gulf insecurity lifts Rocky mountain crude prices from $10.33 in April to an amount over $17 by year end. Concern leads to increased study of shale oil
1980	Amoco Production Company tests the Overthrust formation in Summit County. The firm's "1 Bountiful Livestock" well yields 1500 bpd and establishes the Anshutz Ranch East Field.
1985	Utah crude oil production reaches an all-time high of 41.1 million barrels.
1986	Utah crude slide to $11 after having recovered to $24.75 per barrel in January 1985, Major operators curtail exploration and production budgets by as much as 35 percent. The rig count during this period falls in lockstep with prices. At 2,850, oil sector employment declines 42 percent from the 1981 high of 4,873.

Table 89
A Short Chronology of Events in Utah's Energy History: Natural Gas

	Natural Gas Major Finds and Production History:
1891	Utah explorers accidentally discover natural gas in the Farmington Bay area of Davis County while searching for water.
1895	Davis County well count reaches 20 and producers ship natural gas to Salt Lake City by way of wooden pipes.
1949	Frontier Refining Company locates gas in Grand County's Bar X Field.
1972	Natural Buttes field discovered in Uintah County.
1975	American Quasar produces 270,000 cfd (cubic feet per day) from the Jurassic Nugget formation in Summit County's Pineview Field,
1977	The single-well Hogback Ridge gas field is opened in Rich County.
1980	Amoco produces 8.5 million cfd from a 700-foot thick gross pay section, operating in the Anschutz Ranch East Field,
1993	River Gas of Utah begins drilling for coalbed natural gas in Carbon County.
1994	Utah natural gas gross production reaches an all-time high of 348 billion cubic feet.
	Other Historical Benchmarks:
1970	Utah energy consumption per dollar of gross state product reaches its highest level ever.
1978	Era of natural gas industry deregulation begins with the passage of the Natural Gas Policy Act of 1978 by the U.S. Congress.
1981	Crude oil and natural gas wellhead prices settle at their highest inflation-adjusted level ever. Total Utah oil and gas well completions peaked at 572 per year.
1985	Utah crude oil annual production peaked at 38 million barrels.
1995	Retail motor fuel prices in Utah fall to their lowest, inflation-adjusted level ever.

Table 90
A Short Chronology of Events in Utah's Energy History: Coal and Uranium

	Coal
1849	Coal was discovered for the first time in Utah by a Mormon exploration party in Kolob Coal Field in Iron County.
1859	The first coal mine was developed within 40 miles of Salt Lake City at Coalville. This coal field produced a total of 4.3 million tons of coal by the end of the 1980s.
1870	This year was the first year of recorded coal production in Utah; productionr was 6,000 tons.
1874	Coal was first discovered in the Wasatch Plateau Field, which is now the most productive coal field in Utah and to date has produced 386 million tons of coal.
1878	The first large mine to be opened in the Wasatch Plateau Coal Field was Utah Fuel Company's Mud Creek mine in Pleasant Valley, south of Scofield.
1889	Coal was first discovered in the Book Cliffs Field, which to the end of the 1980s had the highest cumulative production and to date has produced 270 million tons of coal.
1900	Production in Utah surpassed the one million ton mark.
1907	The Consolidated Fuel Company opened the West Hiawatha mine and started building Southern Utah Railroad from Hiawatha to Price.
1925	The first coal fired electric utility plant, the 20-MW Jordan Plant in Salt Lake City went into operation.
1938	Carson W. Smith, President of the Consolidated Coal & Coke Company of Denver, approached Harold Silver, a native of Utah who had recently moved to Colorado, at the Denver Athletic Club and asked him if he could design a machine that would solve the coal mining problems of the day.
1946	The first continuous miner entered commercial operation.
1947	Joy Manufacturing Company of Pittsburgh, Pennsylvania, bought Silver's invention and agreed to pay him royalties. This machine was listed in Time Incorporated's book Machines in 1964, to be the 150th major invention in the history of the world.
1951	The Kaiser Coal Company purchased the first two continuous miners in Utah for its Sunnyside Sunnyside operations.
1954	The first unit of Utah Power's Carbon Plant went into operation. The two units of the carbon plant eventually created a half-million-tons per year market for Utah coal.
1961	The Kaiser Coal Company installed one of the first two longwall panels in the country in its Sunnyside mine in Utah. This installation was the first longwall panel west of the Mississippi. This longwall panel was purchased from Dowty Corporation of England.
1974	The first unit of the Huntington Plant was completed. This unit together with the second unit, which was completed in 1977, created a 2.5-million-ton market for Utah coal.

Table 90 (Continued)
A Short Chronology of Events in Utah's Energy History: Coal and Uranium

	Coal, continued:
1977	The first unit of the Hunter Plant went into operation. The three units of the Hunter Plant, which were completed in the early 1980s, created a market for Utah coal to the tune of four million tons per year.
1979	Coal production exceeded the 10 million mark for the first time, closing the year at 12.1 million tons.
1981	Utah's coal exports to Pacific Rim countries, approached 3.5 million tons, although exports had been negligible prior to 1980,
1986	Unit number 1 of IPP (Intermountain Power Project) was commissioned. This 860 MW unit was able to burn two to 2.5 million tons of coal per year.
1988	Unit number 2 of IPP went into operation. The two units of IPP created about five million tons of electric utility coal market for Utah coal. This tonnage amounted to about 25 percent of the total production.
1989	Coal production surpassed the 20 million ton mark.
1995	Two of Utah's coal operators signed long-term contracts with Tennessee Valley Authority (TVA) for a total of 2 million tons per year, representing the first major shipments of compliance coal to the Eastern utility market since 1985.

	Uranium
1898	The discovery of radium gave an added boost to mining radioactive ores other than pitch- blende from the Colorado Plateau. Deposits of uranium were located in San Rafael Swell, around the La Sal Mountain, in areas northwest of Moab, and in the Henry Mountains..
1914	The start of World War I ushered in a great demand not only for uranium but the associated metal, vanadium, which was used for hardening steel.
1936	The increased demand for vanadium stimulated the mining of ore in Utah.
1937	G. J. (Tony) Mastrovich discovered deposits of vanadium and uranium in Shootering Canyon. Canyon.
1940	The Blanding Mines Company opened a mill in Blanding primarily for vanadium processing.
1948	The Atomic Energy Commission (AEC) announced a guaranteed minimum price for the purchase of domestic uranium ores and concentrates, shortly after the agency was formed. This action substantially increased prospecting and processing of uranium in Utah.
1949	The Hite Uranium Mill, located at the site of present day Lake Powell, went into operation processing uranium (U3 O8).
1949	The Monticello Vanadium Processing Mill started processing uranium under the ownership of the newly formed Atomic Energy Commission (AEC).

Table 90 (Continued)
A Short Chronology of Events in Utah's Energy History: Coal and Uranium

	Uranium, continued:
1951	Charles Steen discovered the MiVida Uranium Field in Lisbon Valley of San Juan County. This field had the highest grade of ore in the state.
1956	The Atlas Mill in Moab started a uranium-processing operation.
1957	The Mexican Hat Uranium Processing Mill started operation.
1957	Utah's production of 6.6 million pounds of yellow cake amounted to 39 percent of total U.S. production.
1961	Utah production peaked at 7.4 million pounds of yellow cake, which was about 30 percent of the total U.S. production of 25 million pounds.
1972	Rio Algom Corporation of Canada opened its new mill in La Sal.
1977	Uranium prices, which stood at below $6 per pound, increased to more than $43 per pound within a short span of five years. Utah production increased to 2.5 million pounds.
1980	Energy Fuels Nuclear opened its Blanding mill.
1981	Plateau Resources, a wholly owned subsidiary of Consumers Power Company of Jackson, Michigan, opened its uranium processing plant at Ticaboo, Utah. The Tony M mine of Shootering Canyon supplied this mill.
1984	Altas Mineral Corporation stopped production of uranium from its Moab mill in March, and put the mill on standby mode.
1986	Utah production of 5.8 million pounds reached an all-time high of 43 percent of total U.S. production despite the falling prices of uranium in the world market,
1988	Rio Algom Corporation stopped ore production from its mine in September and closed its Humeca Mill in La Sal in December
1989	The Consumers Power Company sold the Shootering Canyon mine to a Maryland corporation by the name of Nuclear Fuel Services, following a decade of falling uranium prices.
1991	Production of uranium from the only operating mill (White Mesa) was halted.
1995	Energy Fuels Nuclear reopened White Mesa Mill in Blanding to produced about 1.5 million pounds of U3 O8, despite very low world uranium prices ($11.85 per pound).

Table 91
Major Events in Utah Taxation

EVENT	DESCRIPTION
Farmland Assessment Act of 1969	Under this Act, farmland could now be assessed on the basis of its agricultural use value rather than its actual market value. Additionally, farmland was made subject to "rollback" taxes if the originally intended use of the farmland changed.
Utah's Income Tax System is Coordinated with Federal System: 1973	In 1973 the Legislature enacted a revised and simplified individual income tax that was coordinated with the federal income tax. The simplification achieved by coordinating the two systems was a great step forward in reducing the cost and hastle of filing two completely different sets of tax returns.
Property Tax Revolt of 1978-1979	In 1978 interest and activity in taxation, especially the property tax, were extremely high in Utah. This is attributed primarily to backlash from California's infamous "Prop. 13" (a program used by California voters to force a reduction in government activities by limiting governmental revenue) and to increases in property taxes across the Wasatch Front during the mid-1970s. Broad public dissatisfaction with the taxation system led to major property tax reform in 1979. The major tax relief in 1979 took the form of tax rebates to all homeowners and renters who applied.
Appropriations and Taxation Limitations Act of 1979	The Utah Legislature enacts a statute which placed statutory limits on the appropriations authority of the state and on the taxing authority of local governments in Utah. After the effective dates of these limitations, state legislative appropriations could not increase more than 85 percent of the increase in the state's total personal income. For local governments, the maximum revenues could not exceed the sum of the previous year's tax revenue, plus an adjustment for the increase in population and an adjustment equal to 90 percent of the increase in state per capita personal income.
Changes in the Allocation of Local Sales Tax Revenue: 1983	In 1983 the Legislature approved an increase in the local option sales tax which had been put in place in 1959. If a local government chose to increase the tax, it must also have agreed to a new method of allocating the local tax which phased in population as a factor, beginning with 25 percent in 1983-1984 and increasing to 50 percent in 1988 and thereafter. Most of the cites and counties increased the local sales tax to 7/8 percent. The allocation of the sales tax on a basis other than point-of-sale - in effect, revenue sharing among local governments - becomes a reality in Utah.
Tax Rollback Issue of 1987-1988	The large tax increases of the 1986-1987 fiscal year resulted in reactions for reductions and limitations of taxes. The Tax Coalition of Utah, Inc. placed several initiatives before the Legislature which called for a rollback of taxes and for the limitation of growth in future government spending. These initiatives were, however, defeated by a well-organized effort by leading citizens.
State Appropriations and Tax Limitations Act of 1989.	This Act limited appropriations from unrestricted General Fund, Uniform School Fund, Transportation Fund, and other previously unrestricted revenue sources. Act grew out of mounting public concern over state spending and tax limitation of the 1980s.
The Amax Court Decision of 1990: Implications for Utah Property Taxation	For all of the years since 1981 except two, homeowners as well as county-assessed real property had been allowed a 20 percent discount on assessed property values, but this discount was not allowed on state-assessed property nor on personal property. This practice was challenged by the Amax Magnesium Corporation with respect to its 1986 property assessments by the State Tax Commission. On July 18, 1990, the Utah Supreme Court ruled that if state-assessed property is assessed by the same methods employed by local county assessors, then state-assessed property cannot be denied the 20 percent deductions allowed on locally assessed real property. Although this case applied only to the Amex Corporation, it had broad implications for all other state-assessed property as well as locally assessed personal property. The major shifts in the property tax burden created by the Amex decision were: (1) taxes on state-assessed property would be reduced to some degree; (2) property taxes on primary residential property would be somewhat increased; and (3) taxes on other locally assessed business property would be increased somewhat more than residential taxes.

Source: Bureau of Economic and Business Research, "History of Utah's First Century of Taxation and Public Debt 1896-1995," by Jewell J. Rasmussen, Professor Emeritus, Department of Economics, University of Utah.

Table 92
Major Events in the Early Years of Utah Taxation

Title and Legal Citation	Year First Enacted	ORIGINAL BASIS OF TAX	ALLOCATION OR USE	HISTORICAL CONTEXT
General Property 59-2-913	1849	66.7% of "reasonable cash value" for residential property, 95% for other real property, and 100% for personal property. Farmland assessed according to agricultural value.	School districts, municipalities, counties, and special districts.	Use of property tax in Utah dates back to the State of Deseret. Throughout the first half of Utah's history, property taxes were the dominant source of state and local revenue. The fiscal significance of this tax has, however, declined considerably over the years (see table ?).
Motor Fuel 59-13-201	1923	Gallons of motor fuel sold or used.	To transportation fund: 75 percent for highways, 25 percent to local roads.	Originally, a tax of 2-½ cents per gallon applied to all motor vehicle fuel sold in the state. A license was also required for all distributors and retail dealers of motor vehicle fuels.
Utah State Tax Commision Created	1931			This Commission replaced the Board of Equalization which had been created in the 1896 Utah Constitution.
Individual Income 59-10-104	1931	Taxable income as determined for federal income tax purposes with downward adjustments for interest on U.S. government securities, one-half of the federal taxes paid, and designated retirement income and upward adjustments for 25% of the federal personal exemption allowances and state income taxed deducted on federal return.	To Uniform School Fund; distribution to local school districts under minimum school program.	When enacted, its major purpose was to shift part of the tax load from property to income. Like the sales and corporation franchise taxes, this tax was enacted, in large measure, to combat skyrocketing property tax delinquency which resulted from the Great Depression.
Corporation Franchise 59-77-102	1931	Net income allocable to State (Special gross receipts tax for certain exempt corporations). When first enacted, the tax rate levied was 3 percent of the corporation's net income allocated to Utah.	To Uniform School Fund; same as above.	Utah's Legislature imposed this tax on banks and other corporations for the privilege of exercising its corporate franchise and for the privilege of doing business with the state.
Sales and Use 59-12-204	1933	Retail sales or use of tangible personal property, admissions, meals, services on personal property, hotel, motel, laundry and dry cleaning. In 1933, a sales tax was levied at a rate of 2 percent of purchase price. This state sales tax rate remained unchanged until 1961, at which time it was raised to 2-1/2 percent.	To General Fund, except 1/64 earmarked for Olympic Fund. Initially, all revenue went to an Emergency Relief Fund.	Utah's general sales tax was passed at a time of fiscal crises for both state and local governments. Due to Great Depression, property tax delinquency ran rampant in the 1930s. To offset this, the Utah legislature turned to an "emergency" tax on consumption.
State Mine Occupation Tax	1937			The Legislature approved a bill approving this tax in order to replace anticipated tax revenue lost by the homestead exemption bill (which itself was vetoed by the Governor). The intent of this tax was to divert mine tax revenue from the local political units in which the mines were located to the state government for general use.

Sources: Bureau of Economic and Business Research, "History of Utah's First Century of Taxation and Public Debt 1896-1995," by Jewell J. Rasmussen, Professor Emeritus, Department of Economics, University of Utah; and Utah Foundation, *State and Local Government in Utah*, pp. 105-106, 1992.

Table 93
Sources of State and Local Property Tax Revenue in Utah (Thousands of Dollars): Selected Years

	1897	1907	1917	1927	1935	1945	1955	1966	1975	1985	1993
Sources of revenue:											
State general purposes	443	834	0	0	0	0	0	0	0	0	0
State general fund	0	0	1,530	1,684	1,177	0	0	0	0	0	0
State support of district schools	317	460	1,462	3,703	3,942	1,928	0	0	0	0	0
District school taxes	548	1,380	2,537	6,567	0	0	0	0	108,284	329,470	528,118
Schools, district taxes (no state aid)	0	0	0	0	0	0	31,222	0	0	0	0
Schools, state and district	0	0	0	0	0	0	0	79,769	0	0	0
Local units of government *	0	0	3,651	5,759	12,338	17,915	19,913	42,704	72,654	258,870	425,435
State road taxes	0	0	637	2,386	0	0	0	0	0	0	0
State bounty taxes	0	0	115	93	0	0	167	163	0	0	0
State, special agriculture	0	0	0	0	26	186	0	0	0	0	0
Special livestock taxes	0	0	0	0	0	0	0	0	152	0	0
Other purposes (1917 only)	0	0	51	0	0	0	0	0	0	0	0
Total property tax revenues	**1,308**	**2,673**	**9,967**	**20,192**	**17,483**	**20,083**	**51,302**	**122,636**	**181,090**	**588,340**	**953,553**
Property taxes as a percent of total	**96.9**	**93.8**	**91.4**	**85.8**	**67.9**	**41.8**	**44.1**	**39.8**	**28.3**	**26.2**	**26.4**

* Includes property taxes paid to cities, counties, and special taxing districts.

Source: Bureau of Economic and Business Research, University of Utah,"History of Utah's First Century of Taxation and Public Debt 1896-1995," Jewell J. Rasmussen, Professor Emeritus, Department of Economics, University of Utah, 1995.

Table 94
State and Local Non-Property Tax Revenue in Utah (Thousands of Dollars): Selected Years

	1897	1907	1917	1927	1935	1945	1955	1966	1975	1985	1993
Sources of non-property tax:											
Taxes based on sales to customers											
Fees (1897, 1907, 1917, 1927)	27	115	339	95	0	0	0	0	0	0	0
Retail sales and use taxes	0	0	0	0	2,491	7,298	18,836	63,668	0	0	0
Retail sales and use (state and local)	0	0	0	0	0	0	0	0	197,589	690,888	1,117,306
Cigarette taxes and licenses	0	0	0	0	243	548	1,825	0	0	0	0
Cigarette stamp tax (1927 only)	0	0	0	128	0	0	0	0	0	0	0
Oleomargarine tax and licenses	0	0	0	0	26	100	594	0	0	0	0
Beer and special liquor taxes	0	0	0	0	0	2,213	4,608	7,206	14,061	35,669	35,182
Beer taxes	0	0	0	0	167	0	0	0	0	0	0
Tobacco products	0	0	0	0	0	0	0	5,236	7,070	13,184	25,767
Autos for hire tax (1927 only)	0	0	0	25	0	0	0	0	0	0	0
Utah Sports Authority	0	0	0	0	0	0	0	0	0	0	5,760
Taxes on motorist											
Motor fuel taxes	0	0	0	1,304	2,536	3,847	13,282	26,012	48,471	111,569	184,032
Vehicle registration	0	0	168	655	1,207	1,388	4,307	7,923	13,191	24,822	35,321
Taxes based on net income											
Individual income tax	0	0	0	0	2130	2,329	6,484	40,588	104,919	435,510	838,823
Inheritance tax	0	29	202	255	120	189	504	2,284	3,785	4,786	7,606
Corporation franchise tax	0	0	0	0	350	1,471	2,927	10,597	18,003	65,918	79,144
Taxes on business measured by gross income											
Insurance premiums tax	14	34	71	180	190	576	1,533	3,462	8,038	22,262	33,998
Unemployment compensation tax	0	0	0	0	0	5,472	3,960	9,874	21,269	123,584	136,658
Mine, oil, and gas occupation tax	0	0	30	0	0	857	1,760	3,359	5,769	49,354	20,284
Public utility regulation tax	0	0	0	0	7	58	107	119	496	0	0
Miscellaneous license taxes and fees											
Non-property agricultural fees	0	0	0	0	34	94	0	0	0	0	0
Fish and game licenses and fees	0	0	33	95	143	398	1,584	2,453	4,415	0	0
Micellaneous state business fees	0	0	0	0	114	180	530	550	6,500 (e)	0	0
Non-property local taxes and fees	0	0	0	0	430	910	2,089	1,869	5,000 (e)	51,500	84,508
Misc. state government	0	0	0	0	0	0	0	0	0	25,064	58,760
Corporation license tax (1917 and 1927)	0	0	108	199	0	0	0	0	0	0	0
Total non-property taxes	**42**	**177**	**942**	**3,336**	**8,271**	**27,928**	**64,930**	**185,200**	**458,522**	**1,654,110**	**2,663,149**
Non-property taxes as a percent of total	**3**	**6**	**9**	**14**	**32.1**	**58.2**	**55.9**	**60.2**	**71.7**	**73.8**	**73.6**
Grand total: State and local taxes and fees	**1,350**	**2,850**	**10,909**	**25,528**	**25,754**	**48,011**	**116,233**	**307,836**	**639,612**	**2,242,450**	**3,616,702**

(e) = estimates

Source: Bureau of Economic and Business Research, University of Utah, "History of Utah's First Century of Taxation and Public Debt 1896-1995," Jewell J. Rasmussen, Professor Emeritus, Department of Economics, University of Utah, 1995.

Table 95
Federal Investment in the State of Utah through the Bureau of Reclamation

Project	Number of Dams	Total cost (a) (thousands of dollars)
Central Utah Project (CUP)		
Bonneville Unit (b)	6	$1,088,338
Jensen Unit	1	83,799
Vernal Unit	1	23,085
Subtotal for CUP	8	1,195,222
Emery County Project	2	16,756
Hyrum Project	1	4,154
Moon Lake	1	1,801
Ogden River Project	1	19,788
Provo River Project	1	39,734
Scofield Project	1	1,060
Strawberry Valley Project	1	29,589
Weber Basin Project	6	127,782
Weber River Project	1	3,231
Total Projects Within Utah	23	1,439,117
Colorado River Storage Project		
Utah's 23 Percent Share (c)	(d)	336,873
Total Federal Investment for Utah	23	1,775,990

(a) Not all project purposes have been included in this table and, thus, the breakdown of costs by selected purposes will not sum the total cost.
(b) Since the Bonneville Unit is still under construction, total cost is the amount the United States has invested up through September 30, 1994.
(c) For the purposes of this table, Utah's share of the federal investment in the Colorado River Storage Project is based on Utah's 23 percent share of the Upper Colorado Basin water supply as determined by the Upper Colorado River Basin Compact of April 6, 1949.
(d) Flaming Gorge is the only Colorado River Storage Project dam located in Utah. Although Lake Powell Reservoir extends into Utah, Glen Canyon Dam is located in Arizona.

Source: U.S. Bureau of Reclamation, Upper Colorado Region, Resource Management Office.

Table 96
Federal Government Employment in Utah by Function: June 1995

Category	Number
Total Federal Employment	32,556
Defense Department	12,280
Hill AFB*	7,667
Ogden Defense Depot	1,550
Tooele Army Depot	1,230
Other Defense	1,833
Land Administration	3,013
U.S. Forest Service	1,737
Bureau of Land Management	736
National Park Service	540
U.S. Postal Service	5,025
Internal Revenue Service	6,071
Veterans Administration Hospital	1,750
Other Categories	4,417

*Does not include the 2,500 federal employees who work at HAFB but who are attached to other federal agencies located outside the state.

Note: Some of these agencies' employment levels experience seasonal fluctuations.

Source: Utah Department of Employment Security, Labor Market Information and Research.

☆ Meeting the Challenges of Growth

The following discussion about Utah's growth has been extracted from an unpublished, draft working paper prepared by the Governor's Office of Planning and Budget during 1995. The figures used are based on mid-year information (usually reflecting 1994 as the most recent year) , rather than the end-of-year estimates shown elsewhere in this report.

We are living at a wonderful time in the history of our state. Utah is quickly becoming known worldwide as a great place to live and to do business. In the last six months, Utah has been named as the site for the 2002 Winter Olympics, honored as the nation's Most Livable State, and recognized as the Best Managed State in the country. Our robust economy continues to be one of the strongest in the nation, creating thousands of quality, high paying jobs and enabling our children to stay here in Utah rather than move out of state to find jobs.

We have plenty to be proud of as we approach our centennial year in 1996. It would be easy to become complacent and careless amidst this prosperity. But we owe it to our children and grandchildren and ourselves to preserve the legacy of quality that has made Utah a unique and wonderful place to call home. Preserving our quality of life for the next 100 years will depend on our ability to meet the growing demands on our state caused by an annual population growth rate that is twice the national average.

The State of Utah has experienced unprecedented growth in recent years and projections are that this trend will continue and may even accelerate. The economic development and other benefits of this growth, as well as the overall quality of life enjoyed here in Utah, can continue only so long as the state's infrastructure and other resources are adequate to handle the increased demands. As the number of people and vehicles grow, the pressures on the infrastructure and resources such as transportation facilities, housing, and schools multiply, resulting in a diminished ability to accommodate a rapidly growing economy and population.

Along the Wasatch Front concerns are growing about air quality, economic development, open space and agricultural preservation, traffic congestion, water availability and many others. The Wasatch Front (Salt Lake, Davis, Utah, and Weber Counties) is projected to grow by nearly one million more residents by the year 2020. The adjacent counties of Tooele, Morgan, Summit and Wasatch are also relevant since they all have strong ties to the Wasatch Front and are impacted by the Wasatch Front's growth.

We have an opportunity now to do the planning and implement growth management, air quality, water, and transportation strategies which will take us where we want to go in terms of quality growth. If we don't act proactively, e.g., manage the impacts of growth, then we will have missed a window of opportunity to determine our own future.

Growth Summit

Earlier this summer, the Governor and leaders of the Utah State Legislature jointly announced a ***Growth Summit*** to address critical infrastructure challenges created by this unparalleled growth. Growth will be a defining issue for the last part of the 1990s and the ***Growth Summit*** will begin the state's formal efforts to preserve a century of quality in Utah. As we proceed with discussions and planning efforts, Utahns must remember that the issue is not growth, but quality. Stopping or controlling growth is unrealistic. Utah's population is young and the economy is vibrant. Both of these factors mean that Utah will continue to grow. Our generation's objective must be to preserve quality. Limiting growth would impact one major part of the quality of our state, that is, having our families around us. We do not want to send our children and grandchildren out-of-state for lack of employment opportunities. Our focus, then, is to manage growth in a way that preserves our enviable quality of life.

The purpose of the ***Growth Summit*** was to create an environment leading to legislative solutions for transportation funding, development of a water policy, and tools for preservation of open space and wildlife habitat protection.

Quality Growth

Although the state has painfully little control over the factors that cause people to migrate from one place to another, we need to balance growth, economic development, and environmental impacts. In some cases we need to become a catalyst to help change behavior.

Utah has now experienced net in-migration totaling almost 80,000 in the last four years. This year's net in-migration is the highest absolute level of migration experienced in the last 40 years, however not the highest as a percent of the base population. Utah also experienced a remarkable employment growth rate of 6.2 percent in 1994. While there are a number of factors which contribute to strong population growth, healthy employment growth is a very significant component.

High levels of in-migration, particularly over a sustained period, create a dilemma for state and local government. Although in-migration is a sign of a strong economy and more tax revenues, it creates real challenges. New residents require government services and place added pressure on the state's infrastructure and education system.

The challenge we face is not limiting growth. With 70 percent of the population growth coming from within our own state, stopping growth is not a realistic option. Our challenge is to manage growth in a way that preserves and enhances our quality of life.

In order to promote a clear, cohesive vision of the future the Governor has asked state agencies and the cities of Utah to consider six big gears in addressing quality growth. The governor's six big gears which promote a clear, cohesive vision of the future: slow investment of bricks and mortar; fuel the economic resettlement of rural Utah; use what we have better; become a generation of planners; make quality our comparative advantage; and individual responsibility and community values.

We need significant long-term planning and investment in the critical areas of transportation, air quality, water, open space and wildlife habitat protection if we are to maintain the quality of life that we have come to enjoy. An important element of quality of life has always been our ability to travel about the state with relative ease. Everyone that travels in Utah today recognizes the urgent need to upgrade our transportation system. Traffic congestion is becoming increasingly severe and will only worsen as thousands of additional motorists travel our roads in the coming years.

Clean water is another essential element in our way of life. We depend on water for our homes, for economic development and agricultural purposes, and for recreational opportunities. Although we have sufficient water for the next few years, existing water supplies are inadequate to meet our future needs. As with transportation, we have billions of dollars in unfunded water development needs.

One of Utah's greatest assets is the beauty of its wide, open spaces. The large fields, ranges and agriculture lands that stretch across our state are an important part of our heritage and economy. Local government's ability to preserve these open spaces for future generations is becoming increasingly difficult as the demand for residential and commercial property continues to rise.

Population/Economic Growth

Current and Historic Data:

- ☆ Utah's economy is experiencing a large, sustained, and broad-based expansion; seven years of 3 percent job growth or better, unprecedented in Utah's history.
- ☆ Utah's current population growth while high is <u>not</u> unprecedented in terms of our own history.
- ☆ Utah's population is projected to surpass 2.0 million people during our centennial year in 1996, reach 2.13 million by the turn of the century, and ultimately climb to 3.11 million by the year 2020.

- ☆ The average annual increase in population is projected to be approximately 40,000 more people per year during the 1990s, 47,000 per year during the first decade of the new century, and 51,000 per year from 2010 to 2020.

- ☆ Annual population growth rates in Utah are projected to be over twice the national average.

- ☆ The regional context for this expansion is rapid growth in all of the intermountain states, largely due to a favorable business climate, technological innovations that allow firms to be farther away from the markets they serve, capital investments that are paying off, and an enviable quality-of-life.

- ☆ The current boom will eventually subside and return to still strong, but more sustainable levels even though the economic/demographic outlook is for continued strong growth in Utah and the intermountain region.

- ☆ The population, over the next 25 years of the Wasatch Front and adjacent counties, is projected to increase by approximately 1,101,400 persons, making the total population of the eight county area 2,495,000.

- ☆ Migration alone is not the primary source of Utah's population growth. Approximately 71 percent of Utah's population growth over the next three decades is projected to occur because of our own natural increase.

- ☆ These projections are based on the most current data; have been reviewed by economists, demographers, and local governments; and appear plausible and reasonable at this time.

- ☆ These projections are numerical/baseline projections used for planning purposes but do not necessarily represent what is possible or what is desirable.

Transportation

Transportation planning has been a continuing effort since the 1960s, when UDOT developed its first Long Range Plan. Today, planning in urban areas is performed through federally-mandated Metropolitan Planning Organizations (MPO's). The MPO process develops a consensus from local elected officials, representatives from UDOT, UTA, and major transportation agencies in the area. UDOT coordinates the transportation planning effort for rural areas through the local officials in a similar process.

Projected Transportation Highway Needs

Since 1990, UDOT has concentrated its efforts to preserving our existing highways. That preservation strategy has resulted in a leveling off of the decline of pavement deterioration, but the rapid growth in population has led to traffic congestion on many of the state's major and minor transportation facilities. Although traffic congestion is not as severe in rural areas, major increases in population are creating a significant strain on their infrastructure as well. Increased automobile and truck traffic, along with an aging infrastructure, has led to the deterioration of the physical condition of many of the bridges in the state.

In order to support growth, the transportation system will need to be significantly upgraded over the next 20 years. We need to preserve existing highway and transit facilities, increase safety, and increase efficiency to move people and goods. To accomplish these goals in the short term, UDOT identifies projects as part of the five-year, Statewide Transportation Improvement Plan (STIP). Nearly $1 billion has been programmed to complete these projects in the next five years. In addition, the current STIP identifies 72 projects that should be completed over the next decade to meet Utah's capacity needs. But, no funding has been identified for these projects. Estimated costs for these projects total approximately $2.5 billion.

Trends in Travel Patterns

Nationally and in Utah, people are driving their cars more frequently and for longer distances. Also, the number of people riding in each vehicle has decreased. Vehicle miles traveled (VMT) has risen

dramatically, nearly three times the rate of population growth. The average Utahn drove 2,500 more miles in 1990 than in 1980, an increase of 25 percent.

By the year 2015, the Wasatch Front is expected to have a population in excess of 1,250,000. The daily VMT will exceed 30 million miles. Travel models make it possible to estimate future performance of the transportation system. The Long Range Plan prepared by the Wasatch Front Regional Council (WFRC) includes approximately $1 billion of capacity improvements, a 16-mile fixed guideway transit line, and a significant expansion of the buses. Even with this expansion, the capacity will not be sufficient to keep pace with the growth. Analysis indicates that average speeds will fall by 2 mph, and "rush hour" or peak speeds will fall by nearly 10 mph. **It is important to note that without planned improvements, overall average speeds can be expected to drop to 25 mph and peak speeds to below 10 mph.** For reference, these are approximately the current traffic conditions of the Los Angeles Area.

Outlook for the Future

It is unlikely, even with increased funding, that UDOT will be able to build enough facilities to keep up with the projected traffic demand. Other areas around the country face similar issues. UDOT is looking at other areas of the country and applying that knowledge to the Utah problem.

There is no single solution to congested roads; but a variety of tools, in addition to adding capacity, can be used. An essential part is an expanded transit system; this is included as part of the WFRC's Long Range Plan. Traffic flow can be improved using technology to better time traffic signals and improve flow on freeways through ramp metering. Programs such as increased carpooling, telecommuting, and compressed work schedules can also reduce travel demand. UDOT must aggressively pursue a multifaceted balanced solution to efficiently move people and goods in Utah.

Air Quality

Air quality is a growth management issue both for health reasons and for the implications of not attaining the national ambient air quality standards have on transportation. In terms of health, it is important to keep in mind, as a society, we are willing to tolerate a controlled level of pollution in order to enjoy the comforts afforded by an advanced industrial economy. Beyond a certain minimum standard, we are willing to trade better health for more goods and services. Clearly, we don't want the urban air shed along the Wasatch Front to deteriorate to the level of Mexico City, but we don't need the air to be pristine either. In terms of transportation, the federal government requires assurance that the national ambient air quality standards can be maintained for a 20-year period before it will fund highway improvements.

Air Quality Status

All of the Wasatch Front counties (Weber, Davis, Salt Lake, and Utah) have exceeded the national standards for one or more pollutants since 1990 at least once. Since then, the standards for carbon monoxide (CO), small particulate matter (PM_{10}), and ozone (O_3) have been exceeded a total of more than 80 times in the four counties. None of the standards for other pollutants EPA monitors have been exceeded. During 1994, Salt Lake County exceeded the standards once for both CO and PM_{10}, Utah County exceeded the standard for CO once, while none of the other counties exceeded any of the standards. The O_3 standard has not been exceeded anywhere since 1992, although during the summer of 1994, O_3 measurements approached the standard a number of times in Salt Lake County.

Over the next few years, then, it appears Salt Lake and Utah Counties are likely to exceed one or two of the standards once or twice during any given year. A particularly long winter inversion or an exceptionally hot summer might increase the number of time standard are exceeded. Beyond 2000 it is less clear what the air quality situation will be. Whether exceeding the national standards a few times in a given year constitutes a serious risk to the public health and welfare is a question reasonable people can disagree about. Regardless of whether exceeding the standards constitutes a serious risk, if the Wasatch Front counties cannot assure long term maintenance of the standards, then highway funding and construction may be jeopardized.

State Implementation Plans

The Clean Air Act requires the governor of each state to submit a plan, known as the State Implementation Plan (SIP), to EPA demonstrating how areas which have not attained the national standards will implement programs to attain the standards. The Department of Air Quality In Utah prepares the SIP, which the Utah Air Quality Board adopts and the governor submits to EPA. Utah's SIP is currently four inches thick with supporting technical documents that stack 12 feet high. The SIP contains sections on each pollutant for which some area in Utah has not attained the national standards. Each section contains sub-sections for each area which has not attained the standard for the particular pollutant. For example, the PM_{10} section contains sub-sections for what are called the Utah County non-attainment area, the Salt Lake County-Magna non-attainment area, and the Salt Lake non-attainment area, which includes the southern part of Davis County.

The SIP contains a baseline inventory of the emissions' sources for each criteria pollutant in each non-attainment area. These sources are broken into four broad categories:

- ☆ On-road vehicles;
- ☆ Industry (usually companies emitting more than 100 tons annually);
- ☆ Non-road vehicles (small engines, aircraft and locomotives); and
- ☆ Area (gas stations, lawn mowers, dry cleaners, wood-burning stoves, etc.).

Based on population, employment, and VMT forecasts, forecasts of the emissions from each source of each criteria pollutant in each non-attainment area are contained in the SIP. For areas which do not attain the national standard, those forecasts must be projected out to the time when the standard is attained. For areas which have attained the standard, those forecasts must be projected out for ten years.

Conformity with Transportation Plans

In terms of transportation, if vehicle miles traveled (VMT) continue to grow in the future as they have in the past, assuming new cars are not dramatically cleaner than at present, the national standards will be difficult to attain or maintain. Thus, the primary control contained in the SIP is a program of enhanced inspection and maintenance designed to reduce emissions from the vehicle fleet. This program is by far the most cost effective control strategy available. Also contained in the SIP are a number of transportation control measures (TCMs) which are designed to reduce VMT, but are very costly programs to implement for a very small emission reduction.

VMT, and hence vehicle emissions, are forecast assuming the transportation network evolves according to what is known as the Long Range Plan (LRP). To receive federal highway funds, the state must produce both a 20-year LRP and a Transportation Improvement Program (TIP), which lists specific projects to be completed within a five year planning horizon. The transportation network contained in both the TIP and the LRP must be structured so that vehicle emissions fall within parameters used to develop the SIP. That is, both the Transportation Improvement Program and the Long Range Plan must conform to the State Implementation Plan.

Transportation projects, such as the next phase of the Bangerter Highway, which have been included in the LRP prior to the non-conformity determination in December of 1994 will likely proceed. Projects which have already been funded will proceed since non-conformity only prevents approval of additional funds. In the near term, lack of funding rather than non-conformity will constrain highway construction. As the period of non-conformity extends, new projects which expand capacity will not be able to be built unless they conform to the SIP.

Water Development

Water Supply and Infrastructure

Water is essential for Utah's way of life, for economic development and the preservation of our cultural heritage. Existing water supplies are inadequate to meet anticipated future needs. Conservation alone is

inadequate to meet anticipated future needs also. The federal government has withdrawn financial support for future water development in Utah other than that authorized in the Colorado River Completion Act.

While the state has an overriding and compelling public interest to continue to plan for and help fund water projects, the state will not be able to afford to contribute to water projects in the way it has historically. Moreover, the federal government will no longer subsidize new water development. The state must identify alternative water-financing mechanisms beyond general funds and property tax revenues. Some of the issues and concerns follow:

- ☆ Water and wastewater funding requests over the next decade total $2.25 billion.
- ☆ Utah currently has the second highest per capita culinary water use in the country. (Nevada is number one--both states have extremely dry climates).
- ☆ Utah has the third lowest culinary water rates in the nation.
- ☆ Water users must clearly pay more.
- ☆ Higher water rates that are directed or market driven are another critical component of Utah's growth strategy.
- ☆ Drinking water and wastewater infrastructure replacement and expansion are essential to meet the needs of communities on and off the Wasatch Front, and are perhaps more important.
- ☆ Water infrastructure capacity is essential to meet the needs of expanding as well as new business.
- ☆ Tax laws and reductions in federal funds severely limit the amount of money and financing options for infrastructure developments.
- ☆ Conservation of water does not automatically expand or enhance water infrastructure.
- ☆ Business expansion and development can be drawn by infrastructure capacity.

Open Space

Open space and its preservation are integral parts of any growth management policy or plan. The availability of open space has undoubtedly been a major component of the quality of life associated with the Wasatch Front. Maintaining tracts of land in open space is becoming more difficult to accomplish when facing the more immediate pressures of population growth and urban sprawl.

Wildlife Habitat

Wildlife habitat is necessarily linked to open space preservation as migration corridors and critical ranges are increasingly encroached upon by growing urban areas. Decreasing range lands will lead to a depleted wildlife population, and subsequently threaten the areas's fragile biodiversity. Open space planning should guide growth away from these important wildlife areas so as to provide long-term land protection for various species.

Growth Summit Proposals

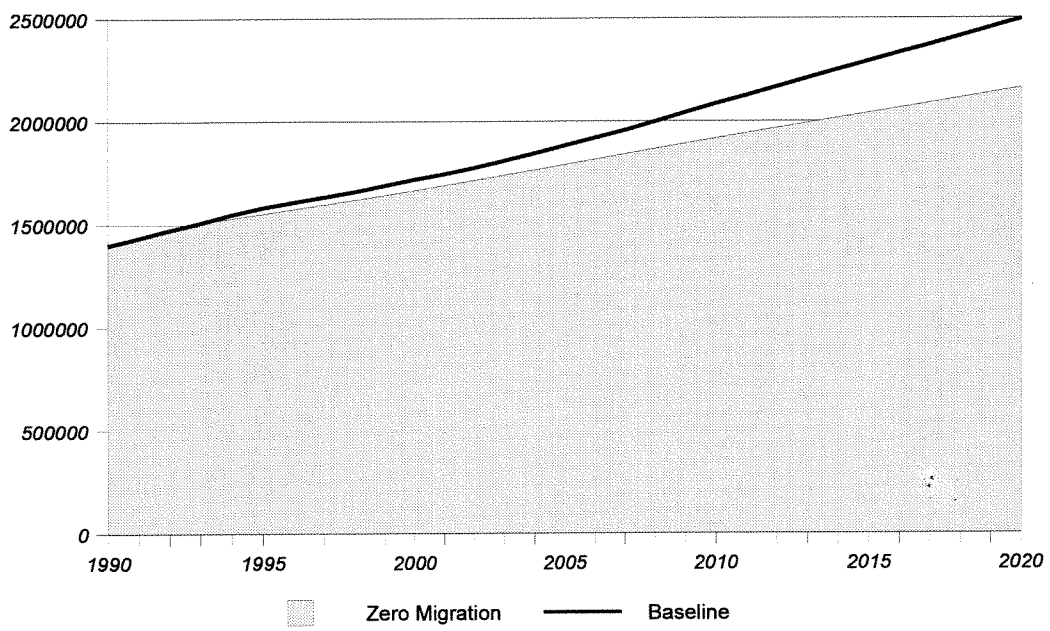
Between the three working groups--Republicans, Democrats, and local government--there were over 60 specific recommendations made addressing such diverse issues as better planning for growth, increasing local government's capacity to financially address local growth impacts, transportation funding, water conservation requirements, and open space preservation.

Tables 97 to 99 at the end of this chapter compares the proposals from each group. Even in their diversity however, there are striking similarities. For instance, all three groups generally agreed to indexing future

gas tax increases; developing a comprehensive transportation system that addresses all modes of transportation together and includes increasing system efficiency, reducing travel demand and improving air quality; funding water projects from user fees; promoting public education regarding water conservation, tying conservation and graduated water rate pricing to future water loans; preserving private property rights; no net reduction in privately-owned land as a result of preservation efforts; and better regional planning at all levels of government.

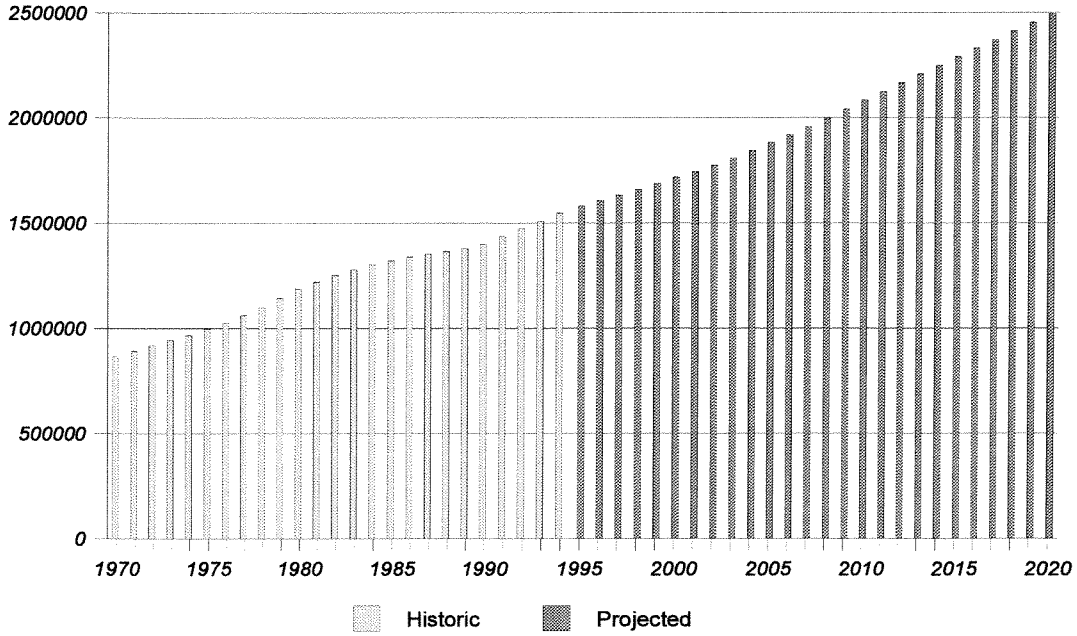
Governor Michael Leavitt was pleased by the level of citizen involvement in the summit. The Growth Summit was a great success, the governor said. "These are critical issues and I am pleased that citizens all across our state engaged in meaningful discussions about ways we can collectively and individually preserve our enviable quality of life. The summit was an important step in defining solutions." The governor expects legislation to be in place by the end of the 1996 legislative session in March, implementing many of the proposals offered by the public and the three working groups. ☆

Figure 53
Comparison of Baseline Population Projections with Zero Net Employment-Related Migration--Wasatch Front and Mountainland Multi-County Districts



Source: Governor's Office of Planning and Budget

Figure 54
Historic and Projected Annual Population Change--Wasatch Front and Mountainland Multi-County Districts: 1970 to 2020



Source: Governor's Office of Planning and Budget

Table 97
Summary of Growth Summit Proposals: Transportation

Issue	Local	Republican	Democrat
Designate a % of State transportation funds for alternative transportation	x	x	x
Streamline the current State process for acquiring funds for alternative transportation	x		x
Using State surplus funds to establish a revolving loan fund to acquire rights-of-way	x	x-state only	x
Develop and coordinate demand management	x	x	x
State use general fund surplus and projected savings for state road projects		x	x
Increase efficiency of current road system	x	x	x
Reduce State taxes and increase local taxing authority	x	x	
Establish a process to transfer roads between State and local governments	x	x	
Allow local governments to pay upfront costs to accelerate construction of State roads		x	
May support some special purpose toll roads		x	
Establish a Metropolitan Transportation Authority			x
Increase funding to transportation fund by $156.6 million	x		
Statewide gas tax increase	x	x	
Increased vehicle registration fees	x		
Increased weight/distance fees for commercial trucks	x		x
Allocation of sales tax on transportation related items	x		x
Index Gas Tax	x	x	x-conditional
Local Option Gas Tax	x		x-conditional
Authorize additional local taxing authority		x	
Change current State/local allocation to 70/30	x		x
Maintain current State/local allocation of 75/25		x	
Discontinue diversion of transportation	x		x-conditional
Base allocation formula among local governments on population and road miles	x		
Continue allocation of 1/16 cent sales tax to transportation	x		
Evaluate allocation of severance tax	x		

Source: Lunaria Consulting for Utah League of Cities and Towns.

Table 98
Summary of Growth Summit Proposals: Water

Issue	Local	Republican	Democrat
Launch a water conservation campaign	x	x	x
Water rates should promote conservation		x	x
State develop incentives for secondary water systems and recycling waste water	x		
Address the use or lose issue	x		
Update State Water Master Plan	x		
Cities and Counties should be authorized to protect their watershed	x		
Develop demand management strategies		x	
Improve efficiency of water delivery systems		x	
Use the State Water Development Commission to coordinate among jurisdictions			x
Empower local governments to control how and when development occurs in relation to water supply			x
State and local governments should avoid using general tax funds for water projects	x		x
State should maintain responsibility for large projects	x	x-inferred	x-inferred
Continue existing loan programs for small communities	x	x-conditional	x-conditional
All loan programs should be interest bearing		x-inferred	x
Continue allocation of 1/16 cent sales tax to water projects	x		x
Require all levels of governments to help pay for dam safety		x	
Increase 1/8 cent sales tax for dam safety revolving loan fund			x
Allow water sponsors access to bond market		x	x

Source: Lunaria Consulting for Utah League of Cities and Towns.

Table 99
Summary of Growth Summit Proposals: Open Space and General Issues

Issue	Local	Republican	Democrat
Open Space			
State should create a private nonprofit open space conservancy to serve as clearinghouse, provide technical assistance and administer grants & loans	x		x-conditional
Amend State Statutes so that development takes place within urban growth boundaries	x		
Local govt has first right of refusal for purchase of state lands	x		
Provide technical assistance to local governments	x	x	x
Regional planning is necessary	x	x	x-conditional
Maintain economic viability of agriculture	x		x
Mandate public involvement in decision making			x
Pursue land exchanges : federal and private	x	x	
Pursue land enhances: govt. to govt.	x	x	
Provide local governments with the flexibility to impose a local option tax	x		x-conditional
State provide funding for matching grants, revolving loan funds and grants	x		
Establish parks and open space trust fund			x

Issue	Local	Republican	Democrat
General Issues			
Fiscal Home Rule	x	x-limited	x-limited
Urban Growth Boundaries	x		
State Funding for Planning Position to assist rural jurisdictions	x		x
State provide matching funds for rural planning	x		
State should encourage and support AOGs in assuming more responsibility for regional planning	x	x	x
State should require local governments to involve special districts in planning, and special districts should be required to comply with local plans	x		

Source: Lunaria Consulting for Utah League of Cities and Towns.

Appendix

☆ Appendix

Select Publications of the Organizations Comprising the Economic Coordinating Committee. This list includes only the reports which are particularly relevant to the *Economic Report to the Governor.* To obtain a complete list of the publications of each agency or copies of reports, contact the appropriate agencies.

Governor's Office of Planning and Budget
116 State Capitol, S.L.C., Ut. 84114 (801) 538-1036

Regular Reports

Economic Report to the Governor (Annually)
Economic and Demographic Projections Report (Biennially)
Executive Budget (Annually)
Governor's Summary of Legislative Action (Annually)
State Planning Report (Annually)
Utah Data Guide (Quarterly)
Utah Demographic Report (Annually)
Utah Economic and Demographic Profiles (Annually)
Utah Economic and Demographic Projections (Triennially)
Utah Planning Newsletter (Quarterly)

Special Reports

Microns Utah Valley Plant: The Economic, Demographic, and Fiscal Impacts
Utah Tourism Financing: A Status report From the Governor's Tourism Finance Committee
Utah Local Government Fiscal Database: An Overview and Evaluation
State of Utah Economic and Demographic Projections 1994: Highlights
Utah Migration Database: Sources, Methods, Limitations, and Analysis
The Base Period 1992 Utah Multiregional Input-Output (UMRIO-92) Model: Overview, Data Sources, Methods, Limitations, and Analysis
Exports from Utah's Regional Economies
Fiscal Impact Model: Analytical Foundations, Research Findings, and Sensitivity Analysis
Utah Ski Database
Andalex Resources and the Smoky Hollow Mine: A Fiscal Impact Analysis and Overview
1990 Census Briefs: Age Distribution, Cities and Counties, Equal Employment Opportunity Data, Income and Poverty, Minorities
2002 Utah Winter Olympic Games: Preliminary Economic Impact Analysis
Federal Land Payments in Utah
Rural Utah Tourism Report
The Value of the 1990 Census to Utah
Utah's Defense Economy
Utah in the Global

Utah Geological Survey
2363 Foothill Dr., S.L.C., Ut. 84109-1491 (801) 467-7970

Survey Notes (Quarterly)

Utah Department of Community and Economic Development
324 South State, Suite 500, S.L.C., Ut. 84111 (801) 538-8700

Regular Reports
Legislative Report of the Permanent Community Impact Fund (Annually)
Legislative Report of the Utah Disaster Relief Board (Annually)
Small Cities Community Development Block Grant Program (Annually)
Utah Directory of Business and Industry (Annually)
Utah Export Directory (Bi-Annually)
Utah Facts (Annually)
Environmental Permit Brochure (Annually)
Directory of Agribusiness Financial Resources (Annually)

Special Reports
Going Into Business in Utah
Governor's Blueprint for Utah's Economic Future
Poverty in Utah (Triennially)
Utah's Rural Development Strategy
Tourism Indicators
Zions Capital And Business Resource Guide (Published by Zions Bank)

Utah Department of Employment Security
140 East 300 South, S.L.C., Ut. 84111 (801) 536-7400

Regular Reports
Annual Report of Labor Market Information
Employment, Wages and Reporting Units by Firm Size (Annually)
Labor Market Information by Planning District (Quarterly)
Occupations in Demand (Semi-Annually)
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Utah Equal Employment Opportunity Information--1990 Census
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Gross Taxable Retail Sales and Purchases (Quarterly)
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The Review of Sales and Use Tax Exemption for Manufacturing Machinery
Salt Lake Valley Zip Code Sales, 1992
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University of Utah, S.L.C., Ut. 84112 (801) 581-6333

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The 1990-91 Utah Skier Survey, Final Report
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