1993

Economic Report To The Governor

STATE OF UTAH

MICHAEL O. LEAVITT, GOVERNOR

ECONOMIC REPORT TO THE GOVERNOR

1993

STATE OF UTAH

MICHAEL O. LEAVITT, GOVERNOR

PREFACE

The 1993 *Economic Report to the Governor* provides the governor, interested public policy makers, researchers, students, businessmen and other readers with the single best reference publication describing Utah's economic performance over the past year and an outlook for the coming year. The *Economic Report* attempts to capture the most significant economic events and critical trends described in other publications and bring them together into a single document.

This year's edition is the seventh in an annual series. The 1993 report features sections on economic outlook, economic development activities, economic indicators, industry focus and special topics. This year's special topics include an examination of Utah hospital charges compared with other states, an economic and social portrait of Utah from the 1990 Census, an examination of Utah's business and household tax burdens, and an analysis of enrollment in Utah's public and higher education systems.

The State Economic Coordinating Committee, a committee created by Governor Norman Bangerter and consisting of leading economists from state agencies, universities, and the private sector, prepares the *Economic Report to the Governor*. The mission of the State Economic Coordinating Committee is to improve the economy in Utah by providing economic information and analysis, leadership, and coordination that enhances economic decisions. The committee is comprised of representatives from the following organizations, a large portion of whom contribute to this document (list of contributors, page 13):

- Utah Office of Planning and Budget
- Utah Division of Energy
- Utah Department of Employment Security
- Utah Foundation
- Key Bank
- Wasatch Front Economic Forum
- Bureau of Economic and Business Research, University of Utah
- Economics Department, Utah State University
- Utah Department of Community Economic Development
- Utah State Tax Commission
- Utah Geological Survey
- First Security Bank
- Utah Division of Water Resources
- Salt Lake County Commission
- Department of Managerial Economics, Brigham Young University
- Department of Economics, Weber State University

Because this report is published in January of 1993 and provides an outlook for economic performance for 1993, the Economic Coordinating Committee will present this report to the in-coming Governor, Michael O. Leavitt.

This report includes the most recent data available as of December 11, 1992. Because most of the data for 1992 have not been finalized, preliminary estimates have been made. Revisions will be made in 1993 after all data have been collected and processed. Very little data exists at this point in time for 1992 at the county level. Most county level data is for 1991.

STATE OF UTAH

MICHAEL O. LEAVITT
GOVERNOR-ELECT

OFFICE OF THE GOVERNOR-ELECT
SALT LAKE CITY
84114

January 7, 1993

My Fellow Utahns:

I am pleased to present the seventh annual Economic Report to the Governor, which is bigger and better than ever. This report is the result of a cooperative effort of the **Utah Economic Coordinating Committee**, which is comprised of many state, university and private sector entities. This committee was extremely useful to Governor Bangerter and I believe it will be useful to me in looking at future economic and state revenue issues and resources.

The Economic Report to the Governor covers trends in employment, wages, state gross product, demographics, prices, exports, retail sales and tax revenues. It includes a section of many important industries in Utah such as defense, agriculture and tourism. It also contains a "special topics" section which examines four major topics: Health Care Costs in Utah, Socioeconomic Data from the 1990 Census, Household Tax Burden Information and Trends in Public and Higher Education Enrollment.

One of the important things illustrated in this report is Utah's excellent economic performance during 1992. Utah led the nation in employment growth from September 1991 through September 1992. We will begin 1993 with one the strongest economies in the U.S. All Utahns should be proud of these accomplishments. As Governor of the State of Utah, I will do my part in maintaining and improving Utah's strong economy.

As you read this report you will see that Utah's economy is very much influenced by national and international events such as defense spending reductions by the U.S. Congress. Our ever changing national and international economy make the Economic Report to the Governor an important source of information which can help all Utahns make better decisions about the future.

Sincerely,

Michael O. Leavitt
Governor

BTB/ch

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Utah's economy performed very well during 1992 and the State Economic Coordinating Committee projects that 1993 will be another year of solid performance. Utah's economic strength was especially encouraging since the national economy continued to experience sluggish growth.

Utah's favorable economic performance can be attributed to a more productive and diversified economy that emerged from the regional economic downturn in 1986-87. During this period, low natural resource prices hindered economic activity in the intermountain states. Since the downturn, Kennecott Copper and Geneva Steel reopened, oil prices increased, productivity improved, and many new and existing firms in prominent areas such as telecommunications, aerospace, and computer and biomedical technologies expanded. Utah's economic activity has also been enhanced because of the state's pro-business regulatory environment, moderate business taxes, and solid utility, communication, education and transportation infrastructure.

The highlights of Utah's 1992 economic performance include:

- A net increase of 22,000 jobs, the first time in over five decades that the state has experienced five consecutive years of 3 percent or higher job growth.
- An unemployment rate of 4.9 percent, 2.6 points below the nation.
- Total personal income growth of 7.0 percent, 2.4 points higher than the national rate of 4.6 percent.
- An impressive 25.7 percent increase in the total value of permit authorized construction and the creation of 3,100 new construction jobs.
- An increase in the inflation-adjusted average wage for the first time since 1984.
- An estimated net in-migration of 19,000 persons, the fourth largest in the last 40 years.
- A 6.0 percent increase in gross taxable sales.
- An increase of 5.7 percent in overall state tax collections.

According to a number of measures of economic activity, Utah's performance during 1992 ranked among the top two states. Utah ranked first in the rate of job growth from September 1991 to September 1992 and second in the percent increase in personal income from second quarter 1991 to 1992. These and other indicators suggest that Utah enters 1993 with a strong, healthy economy.

Despite many positive economic events during 1992, the national recession impacted the state. Utah's economy depends on exporting goods and services to other states. Utah exports primary metal products, electrical machinery, computer software, electrical power, medical instruments, coal, and other products. Demand for these products is affected by out-of-state economic conditions. As the economies in other states struggle, Utah's economy weakens because of reduced demand for goods and services. The most notable negative economic events during 1992 include:

- Reduced defense-related spending that resulted in a loss in defense-related manufacturing and government jobs.
- A decline in annual personal income growth from a peak of 8.8 percent in the third quarter of 1990 to 7.0 percent currently.
- An increase in the unemployment rate from the 11-year low of 4.0 percent that occurred in April 1991, to the 5 percent range in late 1992.

The 1993 *Economic Report to the Governor* includes descriptions of Utah and the nation's economic outlook, economic development activities in the state, economic indicators, industry focus and special topics. The following is a synopsis of the significant points from each of the chapters.

National Outlook

The U.S. economy struggled during 1992 because of defense spending cutbacks, global competition, burdensome debts, asset deflation, and the credit crunch. As corporations cut wages, laid off workers and reduced costs, the U.S. economy became leaner and more productive. As 1993 begins, the national economy continues to slowly rebound.

The 1993 national outlook is for a year of improved, but moderate economic growth. The national economy should increase around 2.8 percent in 1993 (measured in terms of inflation-adjusted gross domestic product). Low inflation, higher profits and productivity, lower debt service burdens, lean inventories, improved profitability and capital positions of financial intermediaries, and the likelihood of new economic proposals at the federal level, will all contribute to improved national economic conditions.

Many downside factors will hold back the economy including a more cautious Federal Reserve, market fears of excessive new fiscal stimulus and regulations, deeper defense cuts, higher tax rates, and a slowdown in economic growth overseas. Some businesses are also concerned about President-elect Bill Clinton's proposals to mandate family medical and newborn-child leave, worker training, and health benefits. Many entrepreneurs and foreign corporations may also be affected by higher tax rates.

Utah Outlook

The Utah economic outlook in 1993 is for solid, average growth. The Utah economy, when measured in terms of job growth, should grow at about 3.3 percent in 1993. The historic 1950-92 job growth rate in Utah is 3.4 percent. Regional Financial Associates (RFA), a nationally recognized forecasting group, forecasted in October 1992 that Utah would rank third in the nation in the rate of job growth for 1993. RFA also predicted that Utah was the least likely state in the nation to experience a recession in 1993.

Population, employment, wages, and incomes in Utah should all show solid growth through 1993. Population should increase at 2.4 percent; nonagricultural employment, 3.3 percent; the average wage, 3.8 percent; and total nonagricultural wages, 7.2 percent. Personal income is expected to increase by 7.2 percent in 1993.

The construction industry should continue to register the biggest gains in 1993. Anticipated construction growth will be fueled by growth and modernization in other industries, the lack of overbuilding in the 1980s, continued net in-migration, moderate mortgage interest rates, solid job creation, dwelling unit shortages, and numerous projects that have already been announced. Of particular significance is Kennecott Copper's $880 million smelter and refinery expansion.

Although Utah's outlook is generally positive, Utah remains vulnerable to many outside economic forces. Utah is dependent on international exports and exports to other states for much of its business. International exports alone accounted for $2.1 billion in sales in 1991. Many prices for Utah commodities, such as oil and copper, are determined in the international marketplace and by the exchange rate value of the dollar.

Federal land administration and defense expenditures which are critical to Utah's economy are determined by national political policies. Roughly 3,000 defense-related jobs were lost in Utah in 1992 and more layoffs are scheduled for 1993. It remains to be seen whether or not these reductions will accelerate or moderate under the new federal administration. Scheduled work force reductions in 1993 in Utah include layoffs at Hill Air Force Base, the Tooele Army Depot, the U.S. Postal Service, and National Semiconductor.

Utah's Long Term Outlook

Utah is projected to have over 1 million more inhabitants in the year 2020 than were counted during the 1990 Census. The projected population of 2,774,000 represents an average annual growth of 1.6 percent from 1990 to 2020. While this rate of growth is significantly lower than Utah's rate of 2.2 percent from 1960 to 1990, it is still double the national growth rate for the same projection period.

During the period 1991 to 2020, a net in-migration of 169,000 persons is expected to occur in the state (i.e., in-migration is expected to exceed out-migration by 169,000). However, out-migration is projected to occur during some years of this period.

Between 1990 and 2020, school age population is projected to grow by almost 150,000 children, an increase of 31 percent. A number of years in the mid- to late-1990s are expected to show an actual decline in the total school age population. This trend could be offset, however, if large levels of in-migration are sustained. After the turn of the century, growth in the school age population is projected to resume, as a new demographic cycle begins with larger age groups of women entering the childbearing years.

The age group of 40-64 year olds is expected to more than double in size in the next 30 years, increasing by over 418,000 persons. This large increase of the older adult population is a result of the aging of baby boomers. The 40-64 age group enjoys significantly higher income levels than the general population, and therefore has a greater amount of disposable income to spend on cars, trucks, upscale housing, etc. The affluence offered by higher income levels has the potential to significantly impact consumer purchases in the state.

Total state employment (including self-employment and agriculture) is projected to increase from over 831,400 jobs in 1991 to 1,343,000 jobs in 2020. This increase of over 511,000 jobs represents an average annual growth rate of 1.67 percent.

Other highlights of Utah's long term outlook include the following:

- Utah is projected to continue to have the youngest population in the nation. Utah's median age in the year 2020 is projected to be 31 years, while the nation's median age is projected to be 41 years.

- Utah's labor force will see periods of rapid increase over the next two decades. Utah will continue to have the youngest labor force in the nation. Nationally, labor shortages are occurring now in many parts of the U.S. and will become more prevalent in the future.

- Large increases in the labor supply will create periods of some out-migration in Utah's future unless job growth is larger than has been historically experienced.

Economic Development Activities

The goal of Utah's economic development activities is to manage the state's economic, cultural, and human resource infrastructure in a manner that will increase household income, facilitate job creation, increase the number of out-of-state visitors, improve productivity, expand the state's tax base, bring greater diversification to the economy, and provide Utah residents with an enhanced quality of life. To accomplish these goals, the Utah Department of Community and Economic Development follows three basic strategies:

- Nurture and assist existing Utah companies.

- Create and develop new enterprises in Utah.

- Recruit business and investment to Utah from outside the state.

Utah's ability to educate its residents, enhance and expand the infrastructure, and meet the economic, social, health, and cultural needs of residents is directly related to the level of the state's business growth. To foster business investment, financing and guidance, the Utah Department of Community and Economic Development has established a number of programs:

Utah Centers of Excellence	Investor's Mentoring Group
Small Business Development Centers	Utah Technological Finance Corporation
Deseret Certified Development Company	Capital Access Program
Industrial Assistance Fund	Enterprize Zone Tax Credits

The past year has been highly successful for Utah's international business development. Utah now has five overseas offices in Japan, Korea, Taiwan, Belgium and Mexico. From 1990 to 1991 Utah exports were up 13.4 percent to a new high of $2.06 billion. Continued strong growth is expected for 1992 increasing exports from 5.6 percent to 6.3 percent of the gross state product.

Labor Market Activity

Utah consistently ranked near the top of the nation in job creation during 1992. From September 1991 to September 1992, Utah led the nation in job growth at 3.0 percent. The state's 1992 unemployment rate remained unchanged from the 1991 figure of 4.9 percent. During 1992 Utah added 22,000 net new nonfarm jobs for a growth rate of 3.0 percent. Job growth rates improved steadily throughout the year. Construction showed the highest growth rate (10 percent) of any major industry for the second year in a row. Services added the highest number of net additions with 8,200.

Mining decreased by 200 jobs and was the only industry to show employment losses. Government expansion remained relatively slow because of defense cutbacks.

Total wages were up over 7 percent, while the average monthly wage expanded 4 percent in 1992. Utah's inflation-adjusted average wage increased for the first time since 1984.

Personal Income

Utah's 1992 total personal income (TPI) is forecast to be $27.7 billion, up 7.0 percent from the 1991 total. The state's 7.0 percent growth rate is 2.4 points higher than the national average and reflects a modest increase over 1991's growth of 6.7 percent. Utah's 1992 per capita personal income (PCI) is estimated at $15,221. This figure represents a 4.4 percent increase from 1991.

Utah's estimated 1992 per capita personal income of $15,221 was only 77 percent of the national PCI and ranked 48th among the 50 states. Because Utah's population has a large number of children, PCI comparisons portray Utah as a low-income state. However, adult per capita income based on 1990 Census adult population figures improves Utah's picture considerably: Utah's per capita income by this measure is 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 1991 in Utah was $46,900, which is 89 percent of the nation's $51,600 and ranks 28th in the nation.

Eleven of Utah's counties posted double-digit growth in total personal income from 1990-91. In two counties TPI declined from 1990-91. In two other counties TPI was virtually unchanged over the same period.

Gross State Product

In 1989 (the most recent year available) Utah's GSP measured $28.1 billion. This is approximately 1/2 of 1 percent of total U.S. gross domestic product. Utah's total output in 1989 ranked 35th in the nation, the same ranking as Utah's population.

Utah's GSP growth rate was above the U.S. average between 1977 and 1989, ranking 17th among the 50 states. The state's average annual rate of growth over this time period was 8.9 percent, while the national average was 8.4 percent. In the Rocky Mountain Region, Utah's 8.9 percent rate of growth exceeded Colorado's 8.6 percent, Idaho's 7.4 percent, Montana's 6.2 percent, and Wyoming's 6.0 percent.

Demographics

Between July 1, 1991 and July 1, 1992, Utah's population grew by approximately 45,000 people — from 1,775,000 to 1,820,000. The 1992 growth rate of 2.5 percent is the second fastest rate since 1982.

For the second year in a row, Utah experienced annual net in-migration of approximately 19,000 persons. The years 1992 and 1991 are the only two years of net in-migration since 1983. This net in-migration is primarily a result of the strong economy in Utah and weak, declining economies in many other parts of the country, especially California.

There were population increases in almost every county in Utah, although the growth was not quite as extensive as in 1991. Salt Lake County experienced the largest net in-migration with almost 7,600 persons. Four counties — Davis, Washington, Weber and Utah — also experienced net in-migration of at least 1,000 persons. Fifteen of Utah's 29 counties experienced net in-migration in 1992, compared to 20 in 1991.

Washington County led the state in population growth in 1992 with a 6.1 percent increase. Summit County was the second fastest with 5.0 percent, followed by Iron (4.0 percent) Sanpete (3.8 percent), and Morgan (3.3 percent). Fifteen of Utah's counties experienced growth of 2 percent or more, compared to 18 in 1991, and only five counties showed growth in 1990.

Prices, Inflation and Cost of Living

The pace of inflation decelerated significantly throughout 1992. The 1992 annual average increase in the Consumer Price Index for Urban Consumers is estimated at 3.0 percent. The Gross Domestic Product implicit price deflator will finish 1992 with an estimated 2.6 percent annual increase.

The cost of living in Salt Lake City, Cedar City and Provo-Orem continue to be below the national average. As of second quarter 1992, Salt Lake City's composite index measured 96.9, 3.1 percent below the national average. For the same quarter, Cedar City posted a composite index of 91.4 and Provo-Orem 96.5. Of the four areas in Utah surveyed, St. George, with a second quarter index of 100.8, was the only area with a composite index that was higher than the nation.

Export Activity

In 1991 (the most recent data available), Utah's merchandise exports totaled over $2.06 billion. In just four years Utah's merchandise exports have more than doubled, rising from $943.32 million in 1988 to $2.06 billion in 1991. This rate of increase is illustrative of the increased volume and importance of export activity globally.

Utah's largest merchandise export industries in 1991 were primary metal products, followed by electrical machinery, metallic ores, industrial machinery, transportation equipment, and scientific instruments. The largest share of Utah's merchandise exports flow to the United Kingdom, where an estimated $366 million worth of exports arrived in 1991. Canada is Utah's second largest trading partner, followed by Japan, Thailand, Hong Kong and Germany.

Gross Taxable Sales

Gross taxable sales and purchases have expanded for 17 quarters in a row. In 1992 gross taxable sales increased by an estimated 6.0 percent. Estimates of the 1992 percent changes in the components of gross taxable sales are: retail trade, 8.6 percent; taxable services, 7.1 percent; business investment purchases, -1.7 percent; and all other, 15.0 percent.

Utah's consumer sentiment index has exceeded the nation's for the past nine quarters. The state's 1992 index is estimated at 80.2, 5.2 points higher than the national index of 75.0.

Tax Collections

Overall tax collections in fiscal year 1992 increased 5.7 percent. In fiscal year 1992, the state's General Fund, Uniform School Fund, Transportation Fund and Mineral Lease payments equaled a total of $2.07 billion in 1992. Of this amount, the General Fund makes up 45 percent; Uniform School Fund, 43 percent; Transportation Fund, 10 percent; and Mineral Lease payments, 1 percent.

As a percent of total revenues the General Fund, Transportation Fund and Mineral Lease payments have declined as a percent of total revenues and of personal income. Uniform School Fund revenues have increased as a percent of total revenues and of personal income.

Regional / National Comparisons

An examination of basic demographic and economic statistics demonstrates the relatively favorable economic conditions among most mountain states compared to the national economy.

Utah experienced an estimated 2.5 percent gain in population in 1992. While estimates for the rest of the region are not available for 1992, it appears that favorable economic conditions in the mountain west will continue to attract in-migrants to the area.

From 1990 to 1991, income grew by 5.5 percent in the mountain states compared to 3.5 percent in the U.S. Personal income grew by 5.9 percent in the mountain states and by 4.7 percent in the U.S. from the second quarter of 1991 to the second quarter of 1992. During this same time, personal income grew 8.4 percent in Montana, 7.2 percent in Utah, and 6.8 percent in Nevada. These increases were the largest of all 50 states.

Six of the eight mountain states experienced a decrease in per capita personal income relative to the U.S. average from 1986 to 1991. In contrast, Idaho and Montana were respectively 78 percent and 81 percent of the U.S. average in 1986, both increasing to 80 and 82 percent respectively in 1991.

In 1991, Utah's per household income, at $46,900, was third out of the eight mountain states, and was 91 percent of the national figure of $51,600. Total personal income per household in the mountain region, at $46,000, was 89 percent of the U.S. average.

From September 1991 to September 1992 (the latest information available for all states), Utah ranked first in percent growth in nonagricultural jobs. The latest data indicate that unemployment in the mountain region is about one point below the national rate. This relatively favorable unemployment situation for the mountain states is indicative of the economic strength this region has maintained during the current national difficulties.

Agriculture

Utah has never been a leading agricultural producing state, but Utah is, however, a leading state in the production of mink pelts and sour cherries. Utah's dairymen also milk relatively productive herds — ranking 10th in the nation in milk production per cow. Utah's fledgling aquaculture has become important nationally — the state ranked 10th in the commercial production of trout in 1991.

The early 1980s was a period of financial crisis for agriculture in the U.S. and Utah was affected by this national trend. Net farm income in Utah decreased from $71.4 billion in 1980 to $36.8 billion in 1983, but increased rapidly after 1985. Much of this gain in income was due to the favorable prices received for livestock and the receipts obtained by livestock producers. The rapid increase in cattle and calf receipts has made livestock production a more dominant part of Utah agriculture than it has been in the past.

Perhaps the biggest change that occurred in agriculture during the 1980s in Utah and the nation was the rapid decline in asset values, particularly real estate. The value of assets declined from about $7.6 billion in 1981 to just over $5 billion in 1989.

Personal farm income was $292.9 million in 1990 which is more than three times the decade low of $87.2 million that occurred in 1984. Farming has not been a major direct source of personal income in Utah for several decades. However, considerable variation by county is evident.

The leading agricultural producing counties are (in order): Cache, Sanpete, Box Elder, Millard, Davis, and Duchesne. There are, however, large differences not only in the total amount of production by county, but by the products produced.

Farm earnings are relatively important in some counties, but not for the entire state. The most farm dependent counties in Utah are Rich, Piute, Beaver and Wayne.

Construction

Residential construction activity grew impressively in 1992. Single-family home construction continued to be the mainstay of residential construction growth while multifamily construction, after five years of negligible growth began to rebound. A total of 12,450 units are estimated to be authorized in 1992 an increase of 31.9 percent over 1991 figures. The dollar value of residential construction expanded 32.7 percent to $1.05 billion, the first time residential construction values have exceeded a $1 billion in a single year.

Multifamily construction, which plummeted in prior years when vacancy rates were high and credit was tight, is poised to expand in 1993. Economic growth has increased demand for multifamily structures and the low vacancy rates in metropolitan Utah will spur increased development in 1993.

Nonresidential construction activity increased in 1992, at a rate lower than residential construction. The value of nonresidential construction increased 10.9 percent to $380.0 million. The $42.0 million industrial plant in Iron County and the $20.0 million Latter-day Saint (LDS) temple in Davis County were major factors in the rise in nonresidential activity. The outlook for 1993 is brighter because of the Kennecott Smelter project and an improved climate for the construction of industrial and retail buildings as the economy expands. Nonresidential construction values are projected to be $430.0 million in 1993.

Additions, alterations and repairs increased 23.0 percent to $230.0 million in 1992. Continued economic growth, strong demand for housing and low interest rates have spurred renovations for both residential and nonresidential structures. This trend should continue in 1993 with additions, alterations and repairs increasing to a projected $240 million.

The value of total permit authorized construction increased 25.7 percent from $1.32 billion in 1991 to $1.66 billion in 1992. With increased construction activity forecast for residential, nonresidential and additions, alterations and repairs, the value of total construction is expected to rise to $1.97 billion in 1993.

Defense / Aerospace

In 1991, defense-related spending in Utah totaled $1.85 billion, a drop of more than $39 million from the $1.89 billion reported in 1990. Federal defense spending in Utah has not been as low since 1988 when total expenditures topped $1.79 billion. Nearly all of the decline is the result of a drop in Prime Contract Awards (PCAs) from $881.9 million in 1990 to $802.1 million in 1991, the lowest level since 1985.

In 1990, defense-related jobs accounted for 9 to 10 percent of all civilian employment. In contrast, by the end of 1991, spending cuts pushed defense-related employment (direct and indirect jobs attributed to this industry) to between 70,470 and 73,100, or roughly 8 to 9 percent of all civilian employment in the state. Given the continuing budget cutting trend, forecasts for 1992 indicate the loss of approximately 3,200 jobs.

Federal defense operations are primarily concentrated in four military bases, including Hill Air Force Base, Tooele Army Depot, Dugway Proving Grounds, and Ogden Defense Depot. By the end of 1991, civilian employment at military bases in Utah was 25,254, a reduction of 6.5 percent from the previous year. Although none of Utah's military bases has been slated for closure, much uncertainty still exists as to future defense spending levels, and further consolidations are anticipated.

Defense spending is concentrated in a few counties: Box Elder, Davis, Salt Lake, Tooele and Weber. This level of concentration has remained constant over the past five years with the exception of a substantial increase in expenditures in Tooele County which was the result of several large construction projects at Tooele Army Depot and Dugway Proving Grounds.

Energy and Minerals

In 1992, Utah's primary energy sectors will produce an estimated 800 trillion BTUs of primary energy. This energy will be consumed in Utah, shipped to other states and exported to overseas markets. Coal accounts for 62 percent of Utah's primary energy production, followed by natural gas, 21 percent; crude oil, 16 percent; and electricity generated from non-fossil fuel resources such as hydro and geothermal, 1 percent.

The value of primary energy production in Utah at the point of extraction is estimated to be $1.19 billion in 1992. This represents a 6 percent decline from 1991.

Employment in the energy producing sectors of oil, natural gas, coal and uranium has fallen precipitously since 1981. From a high of 11,898 jobs in 1981, employment has fallen 40 percent over the past 11 years. In 1992 employment directly attributed to energy production was 4,708 jobs, less than 1 percent of total nonagricultural jobs in the state.

Despite significant annual increases in coal production since 1983, employment in Utah's coal industry continues to decline. The installation of longwall mining equipment in Utah's coal mines has improved productivity and results in fewer coal miners producing larger amounts of coal.

The value of Utah's mineral production in 1992 is estimated at $1.9 billion, the same level as 1991. Production levels for coal and precious metals showed a slight decline, while production of industrial minerals and base metals showed an improvement. Commodity prices for base metals, precious metals and coal showed a decline over 1991 price levels, while prices for industrial minerals, especially magnesium, showed an improvement.

In 1991 Utah ranked eighth in the nation in value of nonfuel mineral production. The state ranked first in the production of beryllium, second in the production of potash and magnesium, and third in the production of copper and gold. It ranked fourth in overall metal production and accounted for almost 10 percent of the value of all domestic metal production.

Copper production from Kennecott's Bingham Canyon mine increased in 1992 to nearly 600 million pounds and accounted for over half of the value of all metals produced from Utah's mines. Kennecott has completed a $227 million expansion program involving construction of a fourth grinding and flotation circuit. This expansion increased milling capacity to 142,000 tons per day and increased copper and by-product capacity by 15 percent.

In 1991 Geneva Steel produced 875,000 tons of iron ore from its operations west of Cedar City. All of the product was shipped to the Geneva plant near Orem. Less ore will be shipped in 1992 due to lower steel production at the plant.

Information Technology

Utah's information technology industry — defined as industries which produce or provide computer-related or telecommunications-related products or services — comprised an estimated 29,589 jobs during the second quarter of 1992. This total represents 4 percent of total nonagricultural jobs in Utah. Because these jobs generally pay a higher wage than the average wage, total wages in Utah's information technology industry during second quarter 1992 comprised 6 percent of total wages and amounted to nearly $257 million.

Information technology jobs can be found in 24 of Utah's 29 counties. As a percent of non-agricultural payroll wages, information technology is most important in Utah County (16.1 percent), Salt Lake County (7.1 percent), Weber County (3.5 percent) and Summit (3.1 percent). Average wages earned by information technology workers are 67 percent higher than the state average.

Tourism

Tourism continues to play a vital role in the Utah economy. An estimated 14 million visitors traveled to Utah during 1991, spending approximately $2.9 billion (no data are available yet for 1992). In 1991, an estimated 61,200 jobs, or 8.2 percent of the total jobs in the state, were tourism-related. Winter visitors spent an estimated $152 per person per day and summer visitors spent an estimated $27 per person per day during 1991. These expenditures generated $214 million in revenues for state and local governments.

From 1981 to 1991, hotel room rents more than doubled and in inflation adjusted dollars increased at an annual average rate of 5.8 percent. This rate compares to annual growth in the overall economy of 2.8 percent (measured as the inflation-adjusted annual average growth in total personal income). Over this same period, national park visits grew at an annual average pace of 6.5 percent; Salt Lake International Airport passengers, 11.9 percent; skier visits, 4.8 percent; and tourism-related employment, 3.9 percent.

The counties of Garfield, Summit and Grand are the most tourism-dependent counties in the state by a wide margin. In all three of these counties, 1991 hotel room rents as a percent of total personal income exceeded 10 percent.

The future for tourism in Utah is positive. Many factors are expected to contribute to tourism growth in the future including the aging population, rising real disposable incomes, large increases in foreign travelers, favorable media coverage, and growth of the LDS Church (Mormon).

Utah Hospital Charges Compared to Other States

The nation continues to be challenged by the critical problem of escalating health care costs. One way of examining this issue on a state level is to compare Utah's hospital charges with other states. Medicare discharge data for 1989 provide a reasonable database for making these comparisons.

Utah ranks very low — 44th among the 50 states and the District of Columbia — in the average level of Medicare hospital charges. Even more striking are the differences in average level of Medicare hospital charges between Utah and many of the eastern or more southern states. As cases in point, average Medicare hospital charges in Michigan, Illinois, and California were respectively 142.5 percent, 143.5 percent and 172.1 percent of the average Utah Medicare hospital charge.

Seven states have lower average charges than Utah, as measured by the Utah mix of cases. Of these seven states, Iowa, Washington, and Wisconsin have larger populations and more Medicare enrollees than Utah. California and Pennsylvania, having average charges 70 percent higher than Utah's, make a large contribution to the fact that the nation's Hospital Charge Index is nearly 30 percent higher than Utah's.

The geographic placement of the states with low charges is also striking. With the exception of Maryland, the other ten of the 11 lowest charge states constitute a geographic band from the Great Lakes to the Pacific. Average hospital charges increase as one moves east or south. It is additionally of consequence for the average U.S. hospital charge that the population of the United States is more densely concentrated in the higher charge areas. The ten states in the low charge band hold less than 9 percent of the U.S. population and account in total for only 7 percent of the U.S. Medicare enrollment.

The 1990 Census: An Economic and Social Portrait of Utah

No other source provides the broad variety of data, from the block to the national level, than the U.S. Decennial Census does. The income, labor force, poverty, educational attainment and other statistics provide an economic and social portrait of Utah.

Per capita income ranks relatively low in Utah (46th), due to the highest number of persons per household (3.15) in the nation. Utah's median household and median family income rankings are more favorable (21st and 26th respectively). In 1989, median family income in Utah was $33,246, meaning that one-half of the families earned less than $33,246 while the other half earned more. Median household income was $29,470.

Utah's distribution of income is not strikingly different from the nation's. Utah has a lower percentage of households that received income of less than $10,000 and also a lower percentage of households earning more than $50,000 than the U.S. Utah has fewer very poor, fewer very rich and a larger concentration of households in the middle-income ranges than the U.S.

In Utah, 88.5 percent of all persons live in family households, which is the nation's highest percentage. The state is also first for children (under the age of 18) who live in married-couple families. Conversely, 12.5 percent of Utah's children live in households with no spouse present, placing it 51st in the nation.

Poverty exists in every county in Utah, in both cities and in rural areas. In 1989, 192,415 Utahns were below the poverty threshold which was 11.4 percent of total persons. The U.S. rate was 13.1 percent. Between 1979 and 1989, the number of persons in poverty increased by 30.0 percent in Utah while the U.S. rate increased by 15.9 percent.

Summit County's income was the highest of any county in Utah in 1989 in terms of median household income ($36,756), median family income ($40,162) and per capita income ($16,739). Summit County also had the highest percentage of high-school graduates (91.6) and labor force participation (70.5 percent) and the second-lowest rate of poverty (7.2 percent). Home to the Utah portion of the Navajo Reservation, San Juan County's income was the lowest of any Utah county in 1989 in terms of median household income ($17,289), median family income ($19,183) and per capita income ($5,907). San Juan County also had the lowest percentage of high-school graduates (59.7), its poverty rate for all persons was the highest in the state (36.4 percent) and labor force participation rate (57.3 percent) ranked 25th. San Juan County has the highest number of children as a percentage of its population (43.3) of any county *in the United States.*

Business and Household Tax Burdens

Utah ranked third among comparable states in the west for the combined business and household tax burdens at 9.5 percent of gross state product. Utah's household tax burden ranked highest among comparable western states during fiscal year 1991, but by less than 1/10 of 1 percent. Utah's business tax burden remains competitive among the seven western states compared at 3.4 percent of gross state product and a rank of fourth.

Utah's tax effort and capacity is very close to the average of the seven western states. There is a distinct difference, however, in who pays the tax. Utah household taxes were about $83 million higher than the average, while Utah businesses paid about $81 million less than the seven western states' average.

Public and Higher Education Enrollment

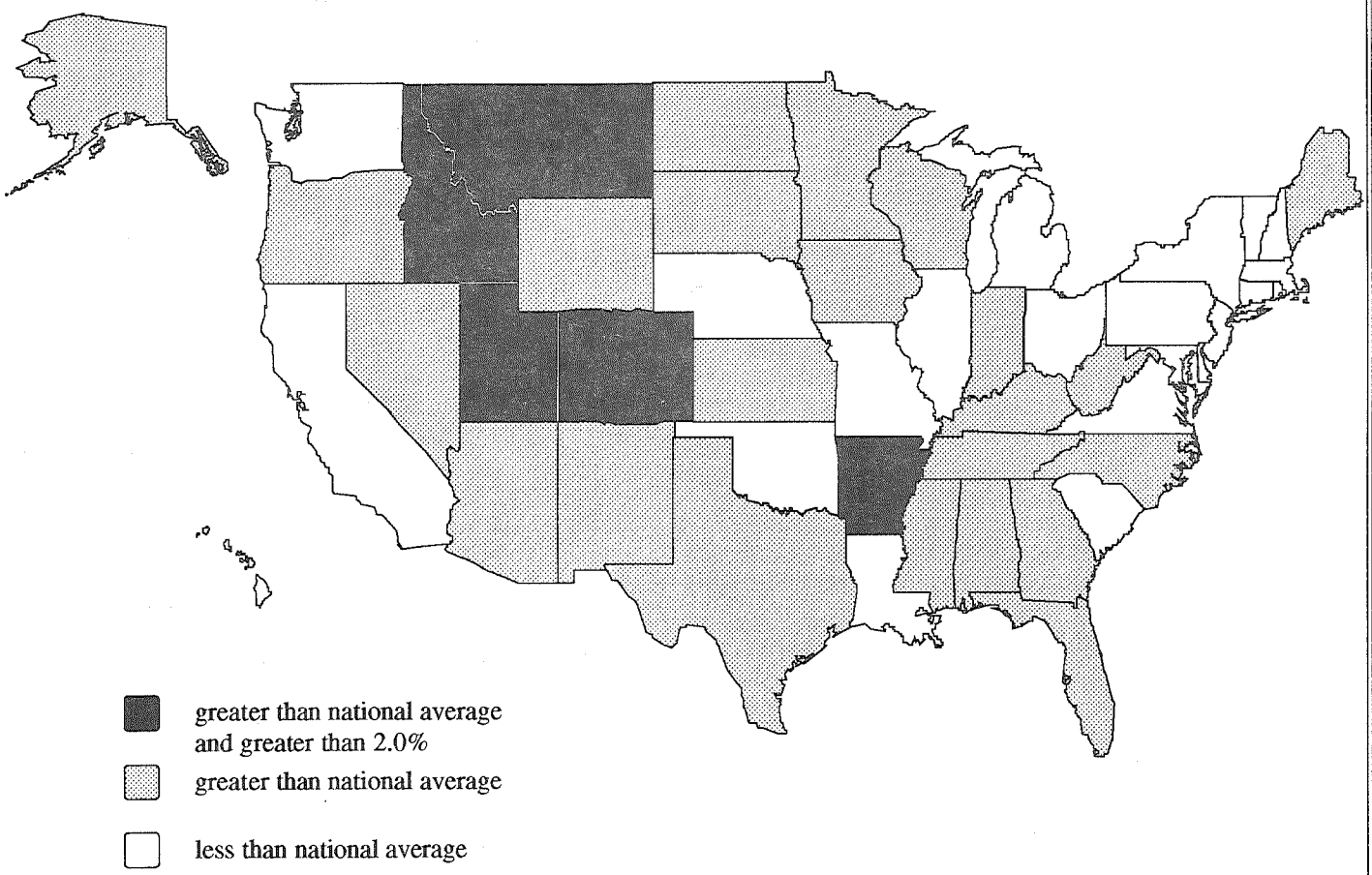
Meeting the needs of a growing enrollment in Utah's education system is one of the state's most pressing challenges. Public education enrollment has experienced strong growth in the last decade, growing by almost 92,000 students, a 25 percent increase.

In the past, public education enrollment has continued to experience significant growth even during periods of economic downturns in the state. This growth occurred because more kindergartners entered the schools then 12th graders who left. However, with the leveling off of the differential between the number of kindergartners and 12th graders, growth in public education enrollment becomes very closely tied with the economic well-being (i.e., net in-migration) of the state. If Utah does not experience substantial net in-migration in the mid-1990s, public education enrollment may actually decline for a short period.

The last ten years have seen unprecedented growth in enrollment in Utah's higher education system. Enrollment (fall headcount) increased by almost 50 percent, from 67,400 in fall 1982 to 99,000 in fall 1992. Participation rate increases explain approximately 90 percent of the growth in higher education enrollment.

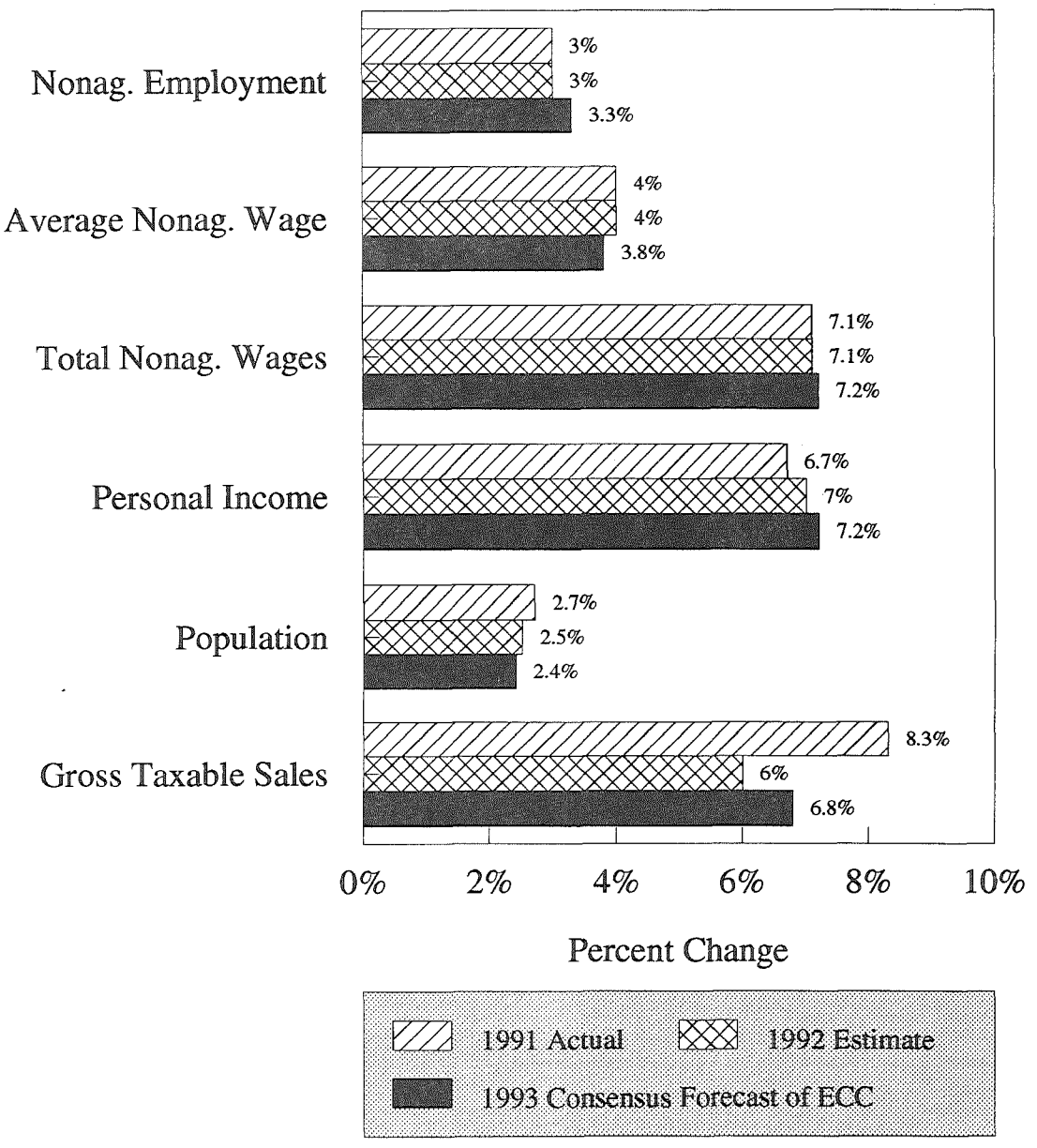
The population projections for the 1990s indicate that the number of 18-34 year olds will increase at more than three times the rate of the 1980s (12 percent vs. 3 percent). Assuming a 1991 constant (i.e., not increasing) enrollment participation rate (which is not likely), the demographic impact alone would be approximately 12,000 additional students in the 1990s. In projecting higher education enrollment an even more important consideration than the number of 18-34 year olds is the assumed participation rate. The relevant issues include, but are not limited to, employment opportunities, job retraining, limiting of admissions to institutions, entrance requirements, tuition increases, college loan availability, condition of the economy, availability of programs at institutions, and facilities' location.

Percent Change in Nonagricultural Employment and Comparison to the National Average September 1991-1992



Source: U.S. Bureau of Labor Statistics. Data found in Table 41 on page 133.

Annual Percent Change
Utah Economic Indicators



Source: State Economic Coordinating Committee (ECC)

Actual and Estimated Economic Indicators

U.S. AND UTAH INDICATORS	UNITS	1990 Actual	1991 Actual	1992 Estimate	1993 Forecast	Percent Change 90-91	Percent Change 91-92	Percent Change 92-93
PRODUCTION AND SPENDING								
U.S. Real Gross Domestic Product	Billion 1987$	4,877.5	4,821.0	4,910.3	5,049.3	-1.2	1.9	2.8
U.S. Real Personal Consumption	Billion 1987$	3,260.4	3,240.8	3,307.9	3,400.7	-0.6	2.1	2.8
U.S. Real Bus. Fixed Investment	Billion 1987$	538.1	500.2	512.2	542.9	-7.0	2.4	6.0
U.S. Real Defense Spending	Billion 1987$	283.3	282.8	263.0	248.6	-0.2	-7.0	-5.5
U.S. Real Exports	Billion 1987$	510.0	539.4	567.3	595.8	5.8	5.2	5.0
U.S. Industrial Production Index	1987=100	109.2	107.1	108.4	111.8	-1.9	1.2	3.1
Utah Coal Production	Million Tons	22.0	21.9	21.5	22.0	-0.5	-1.8	2.3
Utah Oil Production	Million Barrels	27.6	25.2	22.5	20.4	-8.7	-10.7	-9.3
Utah Copper Production	Million Pounds	528.9	529.8	600.0	610.0	0.2	13.3	1.7
SALES AND CONSTRUCTION								
U.S. New Auto and Truck Sales	Millions	13.9	12.3	12.8	14.2	-11.5	4.1	10.9
U.S. Housing Starts	Millions	1.21	1.02	1.23	1.40	-15.7	20.6	13.8
U.S. Residential Construction	Billion Dollars	215.6	190.3	215.9	248.2	-11.7	13.5	15.0
U.S. Nonresidential Structures	Billion Dollars	201.1	180.1	166.7	165.9	-10.4	-7.4	-0.5
U.S. Final Priv. Domestic Sales	Billion 1987$	4,557.9	4,479.3	4,581.7	4,734.7	-1.7	2.3	3.3
Utah New Auto and Truck Sales	Thousands	61.2	55.5	61.2	65.3	-9.3	12.0	7.0
Utah Dwelling Unit Permits	Thousands	7.0	9.4	12.5	14.9	34.7	31.9	19.7
Utah Residential Permit Value	Million Dollars	579.4	791.0	1050.0	1312.5	36.5	32.7	25.0
Utah Nonresidential Permit Value	Million Dollars	422.9	342.4	380.0	430.0	-19.0	11.0	13.2
Utah Retail Sales	Million Dollars	8,424	8,939	9,710	10,345	6.1	8.6	6.5
Utah Total Gross Taxable Sales	Million Dollars	14,774	15,998	16,950	18,110	8.3	6.0	6.8
DEMOGRAPHICS AND SENTIMENT								
U.S. Population	Millions	250.0	252.7	255.4	257.9	1.1	1.1	1.0
U.S. Consumer Sentiment of U.S.	1966=100	81.8	77.6	75.0	83.8	-5.1	-3.4	11.7
Utah Fiscal Year Population	Thousands	1,729.0	1,775.0	1,820.0	1,864.0	2.7	2.5	2.4
Utah Fiscal Year Net Migration	Thousands	-3.6	19.0	19.0	17.0	na	na	na
Utah Consumer Sentiment of Utah	1966=100	82.5	82.1	80.2	85.0	-0.5	-2.3	6.0
PROFITS AND PRICES								
U.S. Corp. Profits Before Tax	Billion Dollars	355.4	334.7	378.8	444.4	-5.8	13.2	17.3
U.S. Domestic Profits Less F.R.	Billion Dollars	254.1	251.2	286.8	349.0	-1.1	14.2	21.7
U.S. Oil Ref. Acquis. Cost	$ Per Barrel	22.3	19.1	18.5	19.8	-14.6	-2.9	6.9
U.S. Coal Price Index	1982=100	97.5	97.2	94.9	96.0	-0.3	-2.4	1.2
U.S. Ave. Copper Cathode Price	$ Per Pound	1.23	1.09	1.04	1.05	-11.2	-4.9	1.0
U.S. No. 1 Heavy Melting Scrap	$ Per Metric Ton	105.5	91.8	90.0	93.5	-13.0	-2.0	3.9
Utah Oil Prices	$ Per Barrel	22.6	20.0	19.2	20.6	-11.6	-4.0	7.3
Utah Coal Prices	$ Per Short Ton	21.8	21.6	21.8	22.0	-0.9	0.9	0.9
INFLATION, MONEY AND INTEREST								
U.S. CPI Urban Consumers	1982-84=100	130.7	136.3	140.5	144.7	4.2	3.1	3.0
U.S. GDP Implicit Deflator	1987=100	113.2	117.8	120.9	124.1	4.0	2.6	2.6
U.S. Money Supply (M2)	Billion Dollars	3,298.3	3,402.6	3,474.1	3,596.2	3.2	2.1	3.5
U.S. Real M2 Money Supply (GDP)	Billion 1987$	2,913.7	2,888.9	2,873.5	2,897.8	-0.8	-0.5	0.8
U.S. Federal Funds Rate	Percent	8.10	5.69	3.52	3.47	-29.8	-38.1	-1.4
U.S. Bank Prime Rate	Percent	10.01	8.46	6.25	6.54	-15.5	-26.1	4.6
U.S. Prime Less Federal Funds	Percent	1.91	2.77	2.73	3.07	45.0	-1.4	12.5
U.S. Prime Less Pers. Cons. Defl.	Percent	4.60	4.50	3.30	3.50	-2.2	-26.7	6.1
U.S. 3-Month Treasury Bills	Percent	7.49	5.37	3.39	3.42	-28.3	-36.9	0.9
U.S. T-Bond Rate, 30-Year	Percent	8.61	8.14	7.68	7.87	-5.5	-5.7	2.5
U.S. Mortgage Rates, Effective	Percent	10.0	9.3	8.3	8.6	-7.0	-10.8	3.6
EMPLOYMENT, WAGES AND INCOME								
U.S. Nonagricultural Employment	Millions	109.79	108.31	108.45	110.05	-1.3	0.1	1.5
U.S. Average Nonagriculture Wage	Dollars	24,982	25,964	26,862	27,915	3.9	3.5	3.9
U.S. Total Nonagriculture Wages	Billion Dollars	2,742.8	2,812.2	2,913.2	3,072.0	2.5	3.6	5.5
U.S. Personal Income	Billion Dollars	4,649.7	4,814.5	5,036.0	5,323.0	3.5	4.6	5.7
U.S. Unemployment Rate	Percent	5.5	6.8	7.5	7.3	na	na	na
Utah Nonagricultural Employment	Thousands	723.6	745.4	767.5	793.0	3.0	3.0	3.3
Utah Average Nonagriculture Wage	Dollars	19,728	20,518	21,342	22,144	4.0	4.0	3.8
Utah Total Nonagriculture Wages	Million Dollars	14,275	15,294	16,380	17,560	7.1	7.1	7.2
Utah Personal Income	Million Dollars	24,269	25,890	27,702	29,697	6.7	7.0	7.2
Utah Unemployment Rate	Percent	4.3	4.9	4.9	4.7	na	na	na

Source: State Economic Coordinating Committee.

ECONOMIC OUTLOOK

NATIONAL OUTLOOK

The Recession and the Election

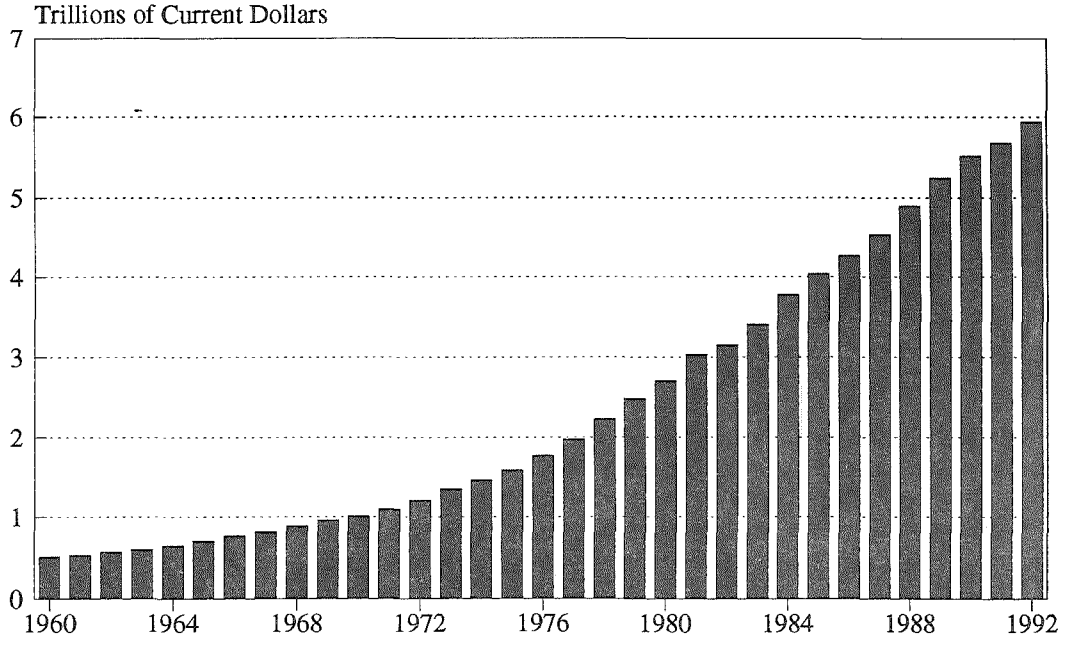
Much discussion is occurring in the media and the economics profession these days over whether or not the country is still in a recession. The National Bureau of Economic Research (NBER), a private organization in Cambridge, Massachusetts, is the official business cycle dating committee. This group has been hesitant to date the recession due to the sluggishness of the recovery and fears that the economy could once again experience declines in inflation-adjusted gross domestic product (GDP)(Figure 1).

The textbook definition of a recession is two consecutive quarters of declining real gross domestic product. By this definition the economy was in a recession from the third quarter of 1990 through the first quarter of 1991, and is now in a period of slow recovery. The strong 3.9 percent growth in real GDP in the third quarter of 1992 could mean that the NBER may soon meet to announce the end of the recession.

The NBER considers many variables, however, in dating a recession. One of these variables is job growth. Establishment employment peaked at 110.2 million jobs in the second quarter of 1990. Job growth bottomed out at 108.2 million in the first quarter of 1992. Wharton Econometric Forecasting Associates (WEFA) predict that three years will be required (third quarter 1993) for the number of jobs to return to their second quarter 1990 level.

Sluggish job growth may have contributed to Governor Bill Clinton's recent victory over President George Bush. Private sector jobs are virtually at the same level today (fourth quarter 1992) as when President Bush took office in first quarter 1989. The approximate 1 million jobs that were added during this period occurred in the government sector. Manufacturing lost about 1.3 million jobs during President Bush's term. And, unlike previous recessions, approximately 40 percent of the reductions were white-collar layoffs.

Figure 1
Gross Domestic Product



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

Factors Behind the Recession

Generally agreed-upon explanations for the recession include defense spending cutbacks, global competition, burdensome debts, asset deflation, and the credit crunch. According to *Business Week* magazine, defense-related cutbacks have accounted for two-thirds of this year's losses in factory jobs. California's aerospace industry shrunk by a sixth in the last two years and has declined by more than 80,000 jobs since May 1991. A recent study at Carnegie Mellon University estimates that inflation-adjusted GDP growth would be a full percentage point higher than the current rate without the defense slowdown.

In order to improve profit margins and successfully compete in the international marketplace, corporations have cut wages and laid off workers. Corporate restructuring and cost cutting have produced leaner, more productive work forces. A recent study by the McKinsey Global Institute found that U.S. employees were more productive than those in other major industrialized nations. U.S. Labor Department studies have also shown greater increases in comparable pay rates abroad.

High debt levels have constrained consumer spending. And, instead of borrowing to expand, many companies have trimmed their debt levels. Federal government debt quadrupled to $4 trillion in the last ten years and is still growing with an annual deficit hovering around $300 billion. The deficit now consumes approximately three-fifths of net private savings, according to *The Economist* magazine. The federal debt and consumer debt are shown in Figures 2 through 5.

Asset deflation has also held back consumer and business spending. Lower rents and a glut of excess space in the commercial and industrial sector were responsible for a 5.3 percent drop in third quarter nonresidential construction contracts. Commercial construction, a major engine of growth in the 1983 rebound, fell 23.6 percent in 1991, and is expected to fall 21.4 percent in 1992.

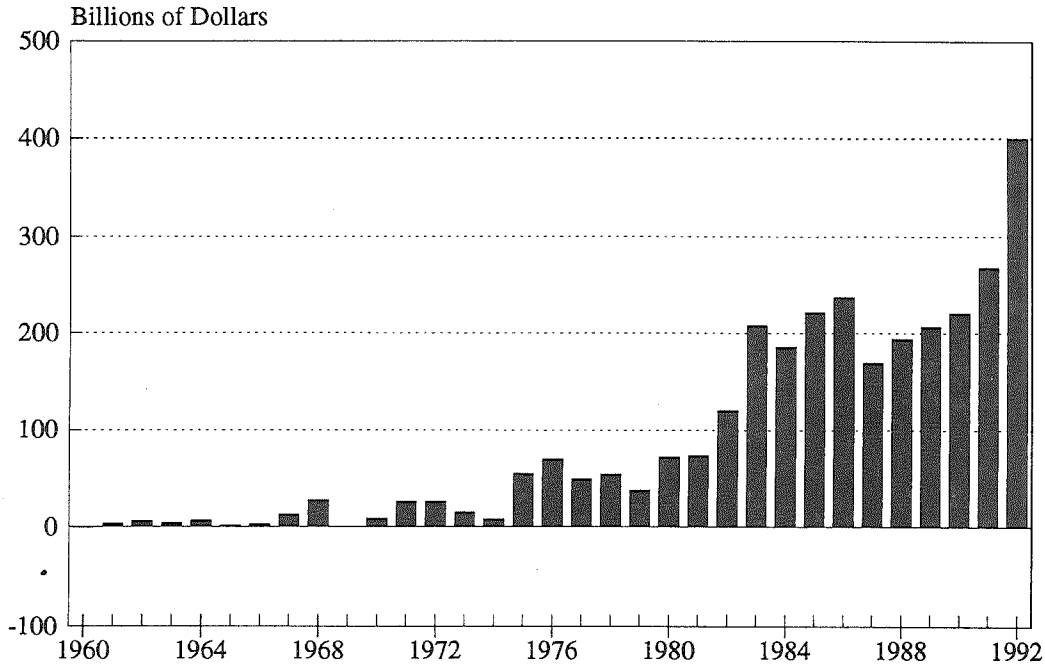
Bank non-performing real estate assets have more than doubled to $90.5 billion in the last four years, and bank-loan portfolios have lost much of their value. The Congressional Budget Office estimates that as much as $21 billion may be needed over the next three years to rescue failing banks. The Federal Reserve reported in November, however, that future losses in the industry have been "significantly overstated".

Banks are required by regulators to reserve 8 percent of their capital against business loans, whereas they are not required to maintain any reserves against government securities. This favorable treatment of government securities and declining real estate values have contributed to the current credit crunch by making banks hesitant to grant commercial loans.

Commercial and industrial loans increased slightly in September 1992, but were still 4.1 percent below the September 1991 level. As of September 1992 banks had more money invested in government securities than in loans to businesses. An October 1992 *Wall Street Journal* article stated that these holdings now make up 21.8 percent of bank assets, up from 14.9 percent in August 1989. A November Federal Reserve survey found that loans to households were improving; whereas, loans to businesses had not changed much over the previous quarter.

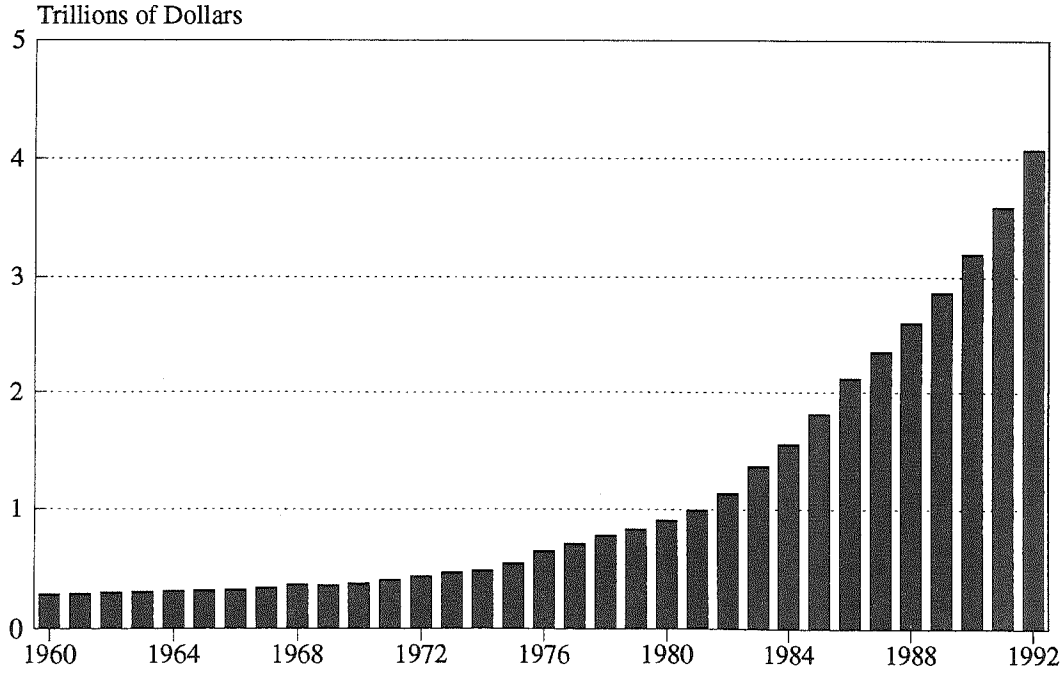
Strict bank and insurance lending regulations are preventing 30 percent of small businesses from getting the loans needed, according to the U.S. Chamber of Commerce. Approximately two out of every three new jobs created during the 1980s came from small businesses. Both business failures and start-ups increased during 1992. Failures were up 14 percent for the first nine months and start-ups increased 6.9 percent for the first six months.

Figure 2
Federal Deficit



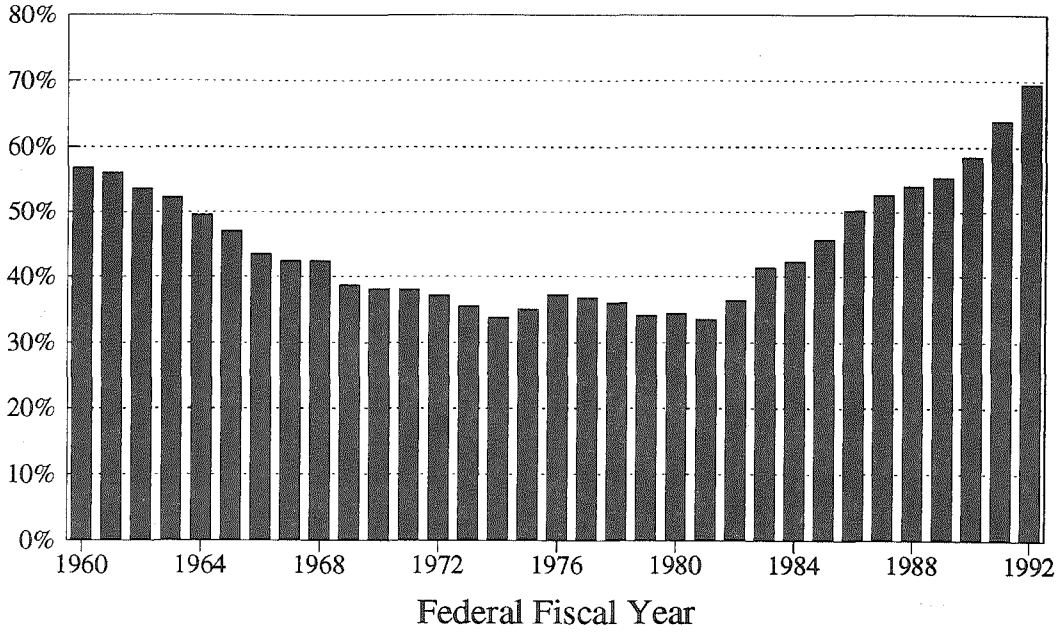
Source: U.S. Office of Mgt. & Budget

Figure 3
Gross Federal Debt



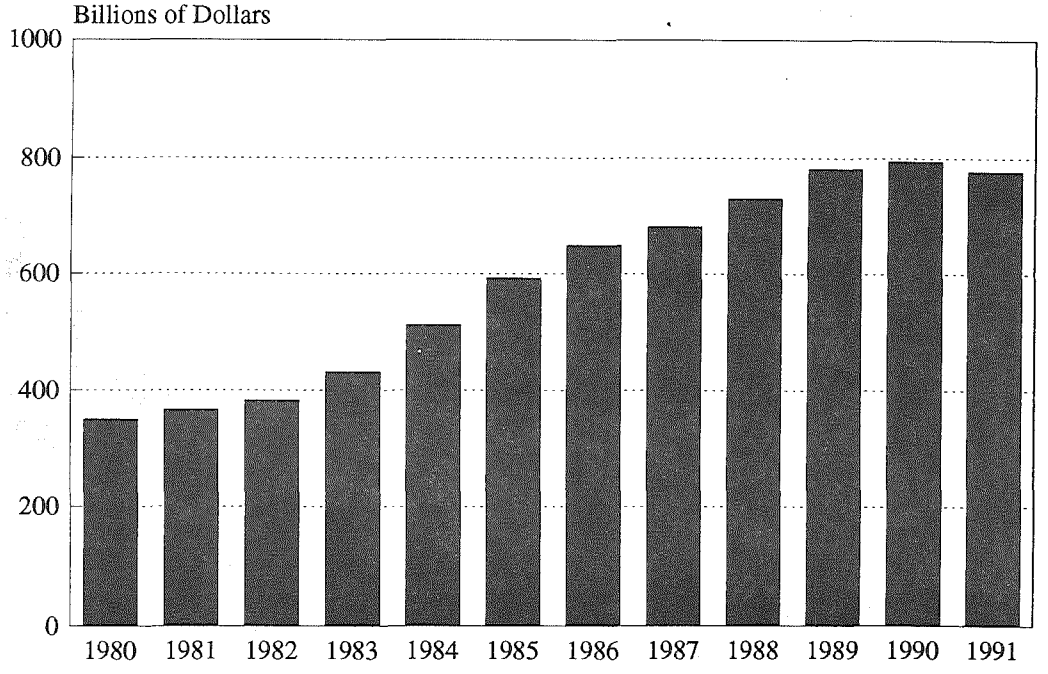
Source: U.S. Office of Mgt. & Budget

Figure 4
Gross Federal Debt as a Percent of Gross Domestic Product



Source: U.S. Office of Mgt. & Budget

Figure 5
U.S. Consumer Credit Outstanding



Source: Bd. of Gov. Federal Reserve Sys.

Outlook for the National Economy

The 1993 national outlook is for a year of improved, moderate economic growth. The 2.5 to 3.5 percent recovery in inflation-adjusted GDP expected in 1993, however, has no post World War II precedent. First-year growth rates have averaged 6.9 percent after postwar recessions. The weakest recovery was 3.5 percent in 1980-81, and it subsided just 12 months later.

Factors signaling recovery include low inflation, higher profits and productivity, lower debt service burdens, lean inventories, the improved profitability and capital positions of financial intermediaries, and portions of President-elect Clinton's economic proposals. A November 7th article in *The Economist* showed that since 1973 economies in lower-inflation countries have grown faster than economies in higher-inflation countries.

Lower labor costs helped contain inflation in 1992. Yearly wage growth stood at 2.4 percent in October, down from 3 percent a year ago and the weakest pace since mid-1987. Consumer Price Index urban-consumers (CPI-U) inflation should average about 3 percent in 1992 and remain around 3.2 percent in 1993.

Higher profits and productivity are paving the way to better job prospects in 1993. Nonfarm business sector productivity fell 1 percent in 1989, was flat in 1990, and grew only 0.1 percent in 1991. It has since averaged about 2.8 percent for the first nine months of 1992.

After-tax profits fell 3.7 percent in 1991, but are expected to increase 11.3 percent in 1992 and 15.6 percent in 1993. Operating profits increased 10 percent in the third quarter. A July 1992 study by Regional Financial Associates (RFA) showed a strong correlation between job growth and lagged growth in corporate profitability.

Lower interest rates have reduced the burden of servicing household debt. RFA estimates that the share of disposable income devoted to interest and principal payments will decrease from 18.1 percent in 1990 to 16.5 percent in 1992. And, as of October 1992, households pared their level of installment debt to 16.2 percent, the lowest rate in seven years.

Business inventories have been around 1.5 times monthly sales since mid-year, down from 1.55 in 1991, and much lower than the 1.67 reading during the 1982 recession. New "just-in-time" procedures imported from Japan contributed to the decline. Still, with inventories so lean, a pick-up in sales could boost factory activity. Both factory orders and orders for durable goods increased in September and October. The National Association of Purchasing Managers' index increased in October and November, indicating improved activity in the manufacturing sector.

Retail sales rose a strong 0.9 percent in October, the fourth uptick in a row and the sixth in the last seven months. Personal income growth jumped 1 percent in October, its biggest increase in ten months. The University of Michigan's consumer sentiment index climbed to 83.6 in early November after registering 73.3 in October. And, the unemployment rate dropped to 7.2 percent in November, down from an eight-year high of 7.8 percent in June 1992.

Thanks to record profits in 1992, more banks are in a stronger position to lend in 1993. Most banks are now well capitalized with core equity above 6 percent. And, of the few banks with less than 2 percent capital reserves, which will be closed after December 19th, many may be absorbed by healthy banks. The move into government securities and away from loans could reverse itself if interest rates begin to move upward.

The newly elected administration has advanced several proposals that could boost the economy in 1993 and beyond. These include an incremental investment tax credit for business purchases of equipment; a capital gains tax cut for small business owners; loosening of mortgage and bank lending restrictions; an extension of the research and development tax credit for businesses; and, an increase in spending on infrastructure, education, and job-training.

The strong 3.9 percent growth in real GDP in the third quarter makes it increasingly likely that fiscal stimulus to "jump-start" the economy will be small in magnitude, limited in duration, and focused on productive investment.

The new administration is now more likely to focus on long-run productivity problems associated with the economy. Sustainable improvements in productivity come from ongoing investments in equipment, research, and training; not from one-time, cost-cutting layoffs.

Many downside factors will hold back the economy. Some of these include a more cautious Federal Reserve; market fears of excessive new fiscal stimulus and regulations; deeper defense cuts; higher tax rates; and, a slowdown in economic growth overseas, coupled with a drop in exports. Slow growth in inflation has given the Federal Reserve room for further easing of short-term rates. The Federal Reserve has reduced interest rates 32 times over the past three years. Excessive short-term interest rate reductions could, however, re-ignite inflation and boost long term rates. The Federal Reserve is likely to wait and see the extent of any new fiscal packages before taking further action. Bond investors want to feel assured that a new economic program will not lead to higher deficits, interest rates, and inflation.

Some businesses are also concerned about President-elect Clinton's proposals to mandate family medical and newborn-child leave, worker training, and health benefits at their expense. Many entrepreneurs and foreign corporations would also be affected by higher tax rates. The new administration has also proposed to raise income taxes on foreign corporations and on families with incomes over $200,000 (from 31 percent currently) to a top rate of 36 percent.
The President-elect has also stated that he intends to assess a 10 percent surcharge on incomes over $1 million. The tax increases on upper incomes would pay for an expanded earned income tax credit for the poor and a middle-class tax cut. The tax changes would be redistributive, rather than a source of funds to pay for program proposals, such as college education loans for all (repayable through public service work).

Program funding would come from economic growth, mandated business expenses, price controls (cost-containment), and defense cuts. Clinton has proposed cutting defense spending by over a third by 1997, $38 billion more over the next four years than the last Bush budget. Accelerated defense cuts may be delayed, however, until 1994-95.

The National Association of Manufacturers recently calculated that exports accounted for over 70 percent of U.S. growth since 1990. Real exports rose by 74.5 percent between 1985 and 1991. During this period, the U.S. share of world exports increased from 19 percent to 27 percent.

High interest rates brought on by German reunification, and equity and property price deflation in Japan and parts of Europe have recently produced slower growth overseas and a decline in U.S. exports. Exports to Europe were flat in the first eight months of 1992, and exports to all countries fell 6 percent in August — their sharpest drop since 1987. Exports increased in September, but the improvement may not be sustainable.

UTAH OUTLOOK

The Previous Ten Years

Utah's economy performed well over the past decade except for a downturn in 1986 - 1987 brought about by declining oil prices, the completion of the Intermountain Power Project, and the temporary closures of Kennecott Copper and Geneva Steel. A structural shift occurred over this time period away from government jobs and goods-producing industries, toward private sector employment and services-producing industries.

The state added over 206,000 jobs from 1982 to 1992 with most of the growth, 176,000 jobs, occurring in the private sector. Private sector employment increased from 77.5 percent of total jobs in 1982 to 79.6 percent in 1992. Goods-producing industries (mining, construction, and manufacturing) decreased from 23.3 percent to 19.4 percent of total employment. Services-producing industries (transportation, communications, and public utilities; wholesale and retail trade; services; and finance, insurance, and real estate) increased from 54.1 percent in 1982 to 60.1 percent in 1992.

Services and retail trade experienced the biggest services-producing gains. Services gained 86,750 jobs and increased from 19.6 percent of total employment in 1982 to 25.6 percent in 1992. Retail trade gained 47,000 jobs and increased from 17.3 percent to 18.8 percent of total employment. Mining was the only industry that lost jobs, with 9,800 job losses and a decrease from 3.2 percent of total employment to 1.1 percent.

Many factors contributed to the services-producing gains including income and population increases, changes in technology, the increased use of contracted-out business services, greater participation of women in the work force, and the substitution of capital for labor in goods-producing industries. Thousands of coal, copper, and oil and gas mining jobs were eliminated during this period.

Government added about 30,300 jobs but decreased as a percent of total jobs from 22.5 percent in 1982 to 20.4 percent in 1992. Federal employment increased only 750 jobs during this period; whereas, state jobs increased 12,500 and local employment went up by 17,150 jobs. Only state employment gained as a percent of total jobs, however, with an increase of 5.9 percent in 1982 to 6.0 percent in 1992.

Jobs and the average wage each increased about 37 percent from 1982 to 1992. The average yearly wage, adjusted for CPI wage-earners inflation, decreased 4 percent, however, from $22,235 to $21,342 in 1992 dollars. This lower real average wage per job meant that job growth would have to exceed population growth in order for real per capita total wages (inflation- and population- adjusted total wages) to increase. Indeed, population increased 16.8 percent during this period while jobs increased 36.8 percent. This allowed real per capita nonagricultural total wages to increase by 12.4 percent from $8,006 in 1982 to $9,000 in 1992.

The Utah economy out-performed the U.S. economy in employment growth over the past decade, but fell behind in CPI inflation and population adjusted personal income growth. Real per capita personal income grew 16.6 percent from $13,049 to $15,221 in Utah between 1982 and 1992; whereas, it grew 19.3 percent from $16,529 to $19,718 nationwide (in 1992 dollars).

Nonagricultural job growth in Utah during this period increased around 37 percent compared to 21 percent for the nation. Real per capita income grew faster in the nation than in Utah from 1982 to 1992, partly due to the real wage per job increasing 5.9 percent nationwide, from $25,371 to $26,862 in 1992 dollars, while it declined 4 percent in Utah.

Recent Conditions

The Utah economy grew steadily from its 1986 - 1987 downturn until 1990. Employment growth in 1987 was only 1 percent; by 1990 it had reached 4.7 percent. Total nonagricultural wages (the combination of employment and average wage growth) increased from 3.1 percent in 1986 to 8.6 percent in 1990. Growth improved due to the reopening of Kennecott Copper and Geneva Steel, increased oil prices, and expansions of new and existing firms in prominent areas such as telecommunications, aerospace, and computer and biomedical technologies.

Utah was not immune to the national recession, however, which began in July 1990. Employment growth slowed to 3 percent by 1991 and nonagricultural growth slowed to 7.1 percent. Despite a slowdown in Utah's economic activity since 1990, Utah's performance has ranked near the top of all states. Utah placed third in state rankings of personal income growth and second in nonagricultural job growth in 1991, a year when jobs nationally declined 1.3 percent.

Utah's personal income rate of growth was almost double the national average in 1991. And, although Utah's per capita income ranked 48th in the nation in 1991, the state had the ninth fastest increase in per capita income growth for that year. Population growth surged in 1991 largely due to a big jump in net in-migration — 19,000 persons. While this surge helped increase the unemployment rate from 4.3 percent in 1990 to 4.9 percent in 1991, it also helped improve the growth in new dwelling unit permits, residential construction values, and retail sales.

In many ways 1992 was a repeat performance of 1991. In both years net in-migration remained at 19,000, job growth was 3 percent, wage growth was 4 percent, the unemployment rate remained constant at 4.9 percent, and total nonagricultural wage growth was again 7.1 percent. Although average wage growth remained unchanged for 1992, it improved significantly when adjusted for inflation.

The CPI wage-earners inflation adjusted average wage in Utah increased in 1992 for the first time since 1984. The real wage per job decreased every year between 1985 and 1990 partly due to lower paying jobs in service-producing industries replacing higher wage jobs in goods-producing industries. The real wage remained constant in 1991. While wage growth in the last two years is encouraging, it remains to be seen if the trend toward lower real wages in Utah has permanently reversed itself.

Utah's national rankings also held fairly stable in 1992. Utah ranked second in the nation in the rate of growth in personal income from second quarter 1991 to second quarter 1992. The state ranked first in the nation in year-over total nonagricultural job growth through September 1992, second in housing permits and second in office employment growth rates, and first in the rate of growth in manufacturing exports through August 1992. And, while Utah ranked number one as the best managed state in the nation in the May 28, 1991 issue of *Financial World* magazine, it ranked second in the U.S. in the May 12, 1992 issue.

Quality operations in state government were further recognized by Fitch bond rating service when it assigned the highest quality triple AAA rating to Utah's most recent bond issuance. Fitch cited the state's "conservative financial operations and economic gains of recent years," its budget surplus, and its Rainy Day fund reserve as reasons for the high rating. Utah was also mentioned in the October 1992 issue of State Policy Reports as one of the few fortunate states that didn't overborrow, overestimate revenues, underestimate spending, or "shoot themselves in the fiscal foot" by state court decisions or voter initiatives.

Utah and its cities have received favorable press coverage over the past year from numerous national sources including *Business Week* magazine, the *Wall Street Journal*, the *Washington Post* newspaper, *Time* magazine, *Financial World* magazine, ABC news, and the Federal Reserve Board of San Francisco's Weekly Letter. Utah won the 1992 title of "Most Livable State" from Morgan Quitno, publisher of *State Rankings and State Perspectives*. Utah was ranked first by Ernst & Young as having the most affordable homeowners' and renters' markets. And, Utah was one of five states to make the Corporation for Enterprise Development's "honor roll" of economic performance.

Industries that did particularly well in Utah in 1992 were: construction with a 9.8 percent increase in job growth; retail trade at 4.6 percent; and services with a 4.4 percent increase over 1991. New firm openings and major

expansions of existing firms exceeding 100 workers in 1992 included, but were not limited to the following, Standard Industrial Classification (SIC) codes are listed also:

SIC:		SIC:	
2329	Odyssey of America, Inc.	4724	Morris Air Service
3249	Piper Impact	5099	International Electronics
3364	Magnesium Corp. of America	5331	Wal Mart Stores
3429	Zero Enclosures	5331	Kmart Corporation
3441	SME Industries	6141	Discover Card Services, Inc.
3463	Cressona Aluminum	6141	Prime Option Services
3469	Natter Manufacturing, Inc.	7011	Holiday Inn Reservations Center
3672	Compeq Manufacturing	7372	Novell, Inc.
3672	ESAM	7372	WordPerfect Corporation
3714	Morton International, Inc.	7389	Franklin Quest International
3728	Lucas Western, Inc	7389	Nutek
3841	Merit Medical Systems, Inc.	8062	University of Utah Hospital
3999	OEA	9711	Defense Logistics Agency
4512	Continental Airlines		

Utah lost jobs in 1992 in its defense-related durable manufacturing and federal government industries, and in its mining industry. Contractions and closures exceeding 100 workers in 1992 included, but were not limited to, layoffs at the following:

SIC:		SIC:	
1222	Soldier Creek Coal Company	3764	Thiokol Corporation
2329, 2331	Catalina	3764	Hercules, Inc.
3231	Safelite Auto Glass	3812	Litton Systems, Inc.
3312	Geneva Steel	3812	Airspace Management
3441	Stott, Inc.	5912	Phar-Mor
3672, 3571	Unisys	7389	Matrixx Marketing
3674	Signetics Company	9711	Hill Air Force Base
3728	McDonnell Douglas	9711	Ogden Defense Depot

Layoffs at defense installations and defense-related business have been particularly apparent. Prime contract defense awards in Utah declined from $1.7 billion in 1986 to $0.8 billion in 1991.

Outlook

The economic outlook for Utah in 1993 is for solid, average growth. The Utah economy should grow at about 3.3 percent in 1993. The historic 1950-92 job growth rate in Utah is 3.4 percent. Regional Financial Associates (RFA) forecasted in October 1992 that Utah would rank third in the nation in the rate of job growth for 1993. RFA also predicted in October that Utah was the least likely state in the nation to experience a recession in 1993.

Population, employment, wages, and incomes in Utah should all show solid growth through 1993. Population growth should increase at 2.4 percent. Nonagricultural employment is expected to grow around 3.3 percent, the average wage is expected to increase by 3.8 percent, total nonagricultural wages should increase by about 7.2 percent, and personal income is expected to increase by 7.2 percent in 1993.

The construction industry should continue to register the biggest gains in 1993. Anticipated construction growth of 6.9 percent will be fueled by growth and modernization in other industries, the lack of overbuilding in the 1980s, continued net in-migration, moderate mortgage interest rates, solid job creation, dwelling unit shortages, and numerous projects that have already been announced.

Announced projects for 1993 and beyond include, but are not limited to:

- Construction of a smelter and refinery at Kennecott Corporation;
- Upgrades of oil refineries owned by Flying J and Amoco;
- Development of Winter Olympic sports facilities;
- Addition of runway at the Salt Lake International Airport;
- Construction of Utah Tax Commission building;
- Development of Whitney Canyon gas pipeline;
- Construction of Utah Valley Community College sports complex;
- Renovation of Salt Palace convention center;
- Building of Payless and Wal-Mart distribution centers;
- Improvements at Tooele Depot hazardous waste storage facilities;
- Additions to Delta Airlines reservations center;
- Expansions at South Towne Mall; and
- Additions at Novell, Incorporated.

Many economic conditions fall within Utah's control. Utah has a pro-business regulatory environment; moderate business taxes; a balanced, comprehensive tax system; and, a solid utility, communications, education and transportation infrastructure. The state also has low violent crime rates; numerous recreational opportunities; a youthful and educated labor force; inexpensive housing; good universities; healthy lifestyles; inexpensive health insurance and worker's compensation; and, a strong work ethic that should continue to favorably influence business location decisions.

Although Utah's school are challenged by Utah's unique demographics, Utah has the highest literacy rate in the nation, and continues to score above average on national aptitude tests. Results from 1990 Decennial Census of Population and Housing showed that, of all states, Utah and the District of Columbia had the second highest percentage of high school graduates ages 25 and older. Utah ranked 15th for the percentage of people who have obtained a bachelor's degree or higher.

Nationwide, higher education appropriations decreased 1 percent from fiscal year 1991 through fiscal year 1993 for the first time since these statistics have been kept. In contrast, Utah increased its appropriations to higher education over this same time period by 13 percent, the fifth highest rate of increase in the nation. And, Utah universities and colleges ranked third in per capita federal research and development obligations in fiscal year 1990.

Utah has a favorable business climate. Effective July 1, 1991, Utah law provided for the creation of limited-liability companies. This form of incorporation allows businesses, including professionals, the tax advantages of partnerships and the liability protection of corporations. Utah is also a right-to-work state that provides enterprise-zone income tax credits to companies in economically distressed areas.

Several companies have announced permanent workforce expansions and new firm openings in 1993. These include Morton International, Novell Inc., Kennecott's Barneys Canyon Mine, Weider Foods, R.R. Donnelley & Sons, Morris Air Service, Associated Financial Services, Holiday Inn Reservations, Payless, Wal Mart, South Towne Mall, South Davis Community Hospital, Fidelity Investments, and Anderson Hickey.

Still, Utah remains vulnerable to many economic forces largely beyond its control. Utah is dependent on international exports and exports to other states for much of its business. International exports alone accounted for $2.1 billion in sales in 1991. International competition and technological changes often force Utah companies to shutdown, modernize, or upgrade their products and services. And, many prices for Utah commodities, such as oil and copper, are determined in the international marketplace and by the exchange rate value of the dollar.

Finally, federal land administration and defense expenditures which are critical to Utah's economy are determined by national political policies. Roughly 3,000 defense-related jobs were lost in Utah in 1992, and more layoffs are scheduled for 1993. It remains to be seen whether or not these reductions will accelerate or moderate under the new federal administration. Scheduled workforce reductions in 1993 in Utah include layoffs at Hill Air Force Base, the Tooele Army Depot, the U.S. Postal Service, and National Semiconductor.

UTAH'S LONG TERM OUTLOOK

Utah is projected to have over 1 million more inhabitants in the year 2020 than were counted during the census in 1990. The projected population of 2,774,000 represents an average annual growth of 1.6 percent from 1990 to 2020. While this rate of growth is significantly lower than Utah's annual rate of 2.2 percent from 1960 to 1990, it is still double the national growth rate for the same projection period. Part of the lower growth shown in the current projections is a consequence of the lower growth experienced in Utah in the 1980s. Although these rates of growth have slowed at the state level, there are some individual multi-county districts which show more growth, while others show less growth. Table 1 provides a summary of Utah's long term outlook.

Components of Population Change

Population change in any area over time results from three phenomena: (1) Births, (2) Deaths, and (3) Net in- or out-migration. Utah's birth rate has historically been the highest in the nation. Total fertility (a measure of average births per woman) in Utah is still high relative to the national average. Utah's rate steadily declined during the 1980s, while the national rate held fairly constant at about 1.8 births per woman until the past two years, when it began increasing.

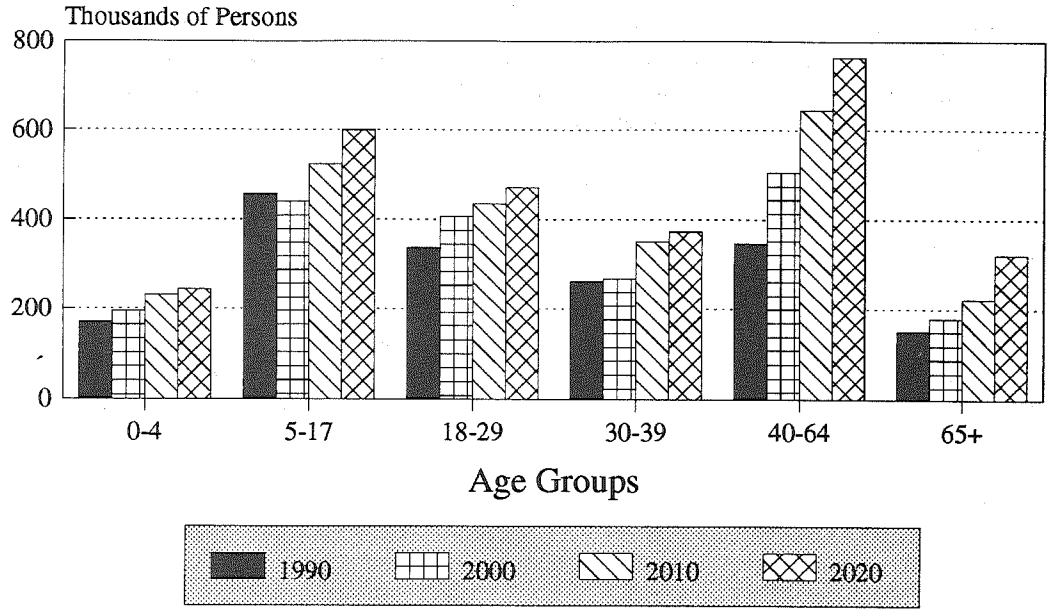
After a historical comparison of Utah and U.S. fertility rates a reasonable assumption was made that the Utah total fertility rate would stabilize at a level above the U.S. average. For the purpose of these projections, Utah's total fertility rate was assumed to remain constant at approximately 2.6 births per woman through the projection period. It is projected that 1.27 million births will occur to Utah residents between 1991 and 2020. The number of births is expected to taper off over the next few years, followed by another surge expected in the mid-1990s as another generation begins to age into the childbearing years.

Not surprisingly, the number of deaths in the state is expected to rise continually through 2020, even though the survival rates for each age level are assumed to remain constant. The reason for this increase is that the population as a whole becomes more heavily concentrated in the older, age groups which experience lower survival rates. For example, in 1990, it is estimated that 11.8 percent of the population was 60 years old or older. By 2020, this age group is projected to increase to 16.3 percent (Figures 6 and 7 provide projected populations by age group). The number of deaths over the next 30 years should total almost 400,000.

Migration is typically the most volatile component of population change because it varies with demographic changes and economic conditions. Since 1950, there have been two extended periods of net out-migration (1951 to 1968 and 1983 to 1990) and one extended period of net in-migration (1969 to 1982) in Utah. These periods depict the volatility of migration. For the decade of the 1980s, the total net out-migration for the state was approximately 25,000. This total is very different from the 1970s, when there was a net in-migration of 150,000 people.

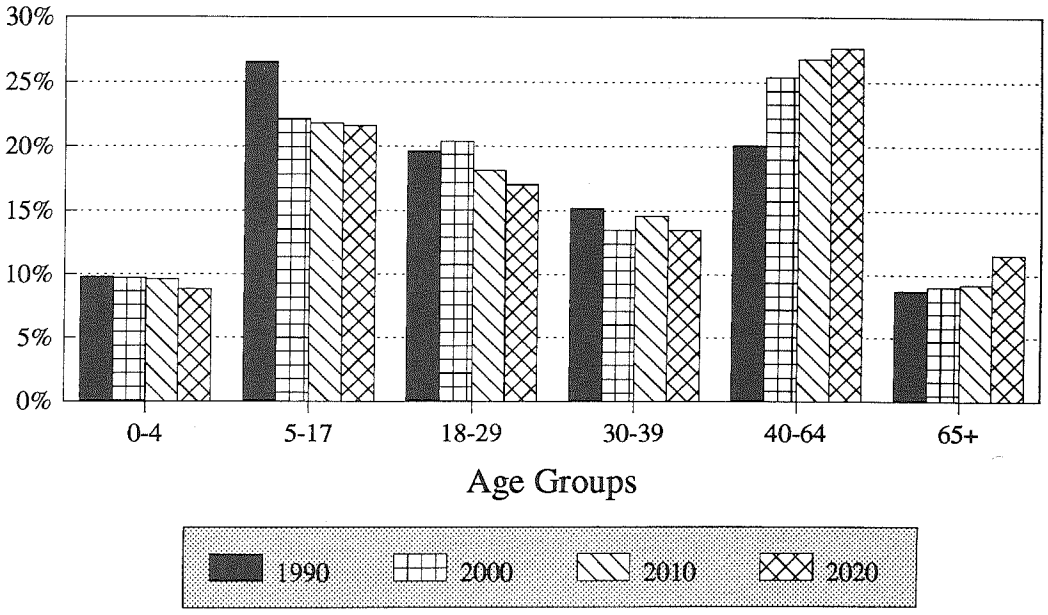
During the period 1991 to 2020, a net in-migration of 169,000 people is expected to occur in the state (i.e., in-migration is expected to exceed out-migration by 169,000). However, out-migration is projected to occur during some years of this period. Out-migration occurs when the economy does not grow fast enough to provide enough jobs for the growing labor force. Population growth usually still occurs during these periods of net out-migration due to natural increase.

Figure 6
Utah Population by Age Group for Selected Years



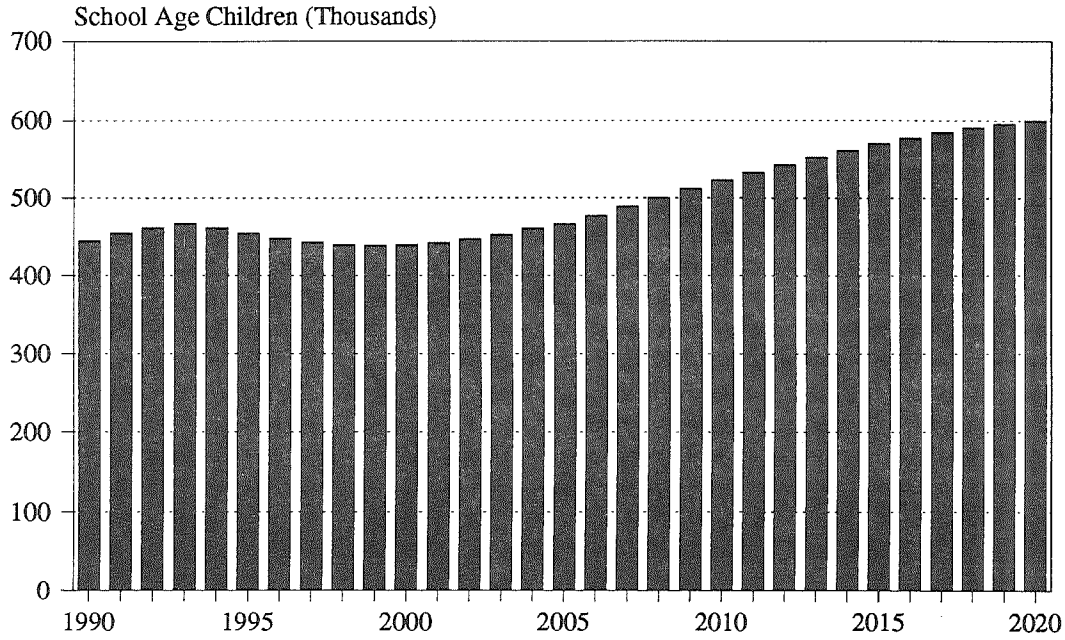
Source: 1990 Census and UPED Model,
Utah Office of Planning and Budget

Figure 7
Percent of Total Utah Population by Age Group for Selected Years



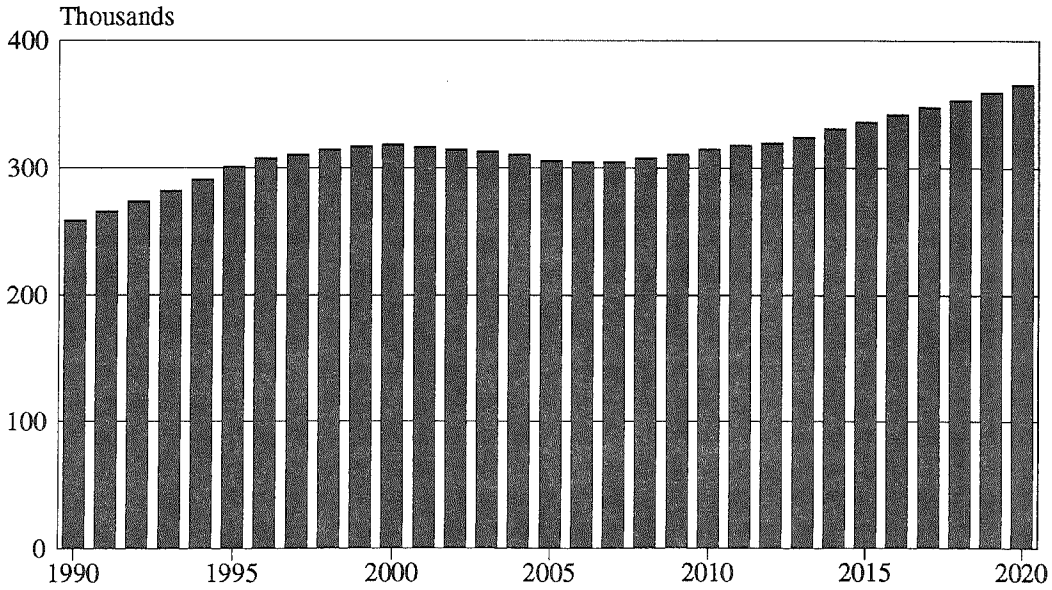
Source: 1990 Census and UPED Model,
Utah Office of Planning and Budget

Figure 8
Utah School Age Population (Ages 5-17)



Source: UPED Model,
Utah Office of Planning and Budget

Figure 9
Utah's Young Adult Population (Ages 16-24)



Source: UPED Model,
Utah Office of Planning and Budget

School Age Population

The ratio of school age population to total population increased in the 1980s, from 23.5 percent in 1980, to almost 26 percent in 1990. However, it is expected that this ratio will begin to decline in the 1990s. The decline in fertility rates, the age structure of women in the childbearing years and the out-migration from 1983 to 1990 are responsible for the slowdown in the growth of the school age population. A number of years in the mid- to late- 1990s are expected to show an actual decline in the total school age population. This trend could be offset, however, if large levels of in-migration are sustained. Also, it should be kept in mind that while total enrollment may decline, it will be concentrated in the elementary grades. Enrollment in the middle and secondary schools will, in fact, increase during the period of projected enrollment declines. After the turn of the century, growth is projected to resume, as a new demographic cycle begins when larger age cohorts of women enter the childbearing years. Between 1990 and 2020, school age population is projected to increase by almost 150,000 children, an increase of 31 percent (Figure 8). Table 2 present population projections by selected age groups.

Adult Population

The age group of 40-64 year olds is expected to more than double in size in the next 30 years, increasing by over 418,000 persons. This large increase of the older adult population is a result of the aging of baby boomers. This group comprised 20 percent of the population in the 1990 Census, and is expected to account for almost 28 percent of the population by the year 2020. The 40-64 age group enjoys significantly higher income levels than the general population, and therefore has a greater amount of disposable income to spend on cars, trucks, upscale housing, etcetera. The 1990 Census indicates that a full one-third (33.8 percent) of householders aged 45-64 have household income greater than $50,000. This compares to less than 15 percent enjoying that level of income for the rest of the population. Clearly, the affluence offered by higher income levels will significantly impact the future economy in the state (Figure 9).

Labor Force

Increases or decreases in the labor force are caused by one or more of the following circumstances: 1) More entrants joining the labor force for the first time (defined as entrants from 16 to 24 years of age); 2) The labor force participation rates for persons already in the 16-64 age group change; or 3) The net migration changes the number of people in the labor force pool. The most dramatic change which will be occurring in the 1990s is the number of new entrants moving into the labor force. While the 16-24 age group actually declined in the 1980s by 3 percent, the 1990s will show an increase of more than 23 percent in this group, which is twice the national rate of growth for this group. Over the entire 30-year projection period, this age group will increase by over 40 percent. Because of this growth, Utah will continue to have the youngest labor force in the nation. This factor has positive implications for future employers in the state, including an ample supply of labor.

Employment

Total state employment (including self-employment and agriculture) is projected to increase from over 831,400 jobs in 1991 to 1,343,000 jobs by 2020. This increase of over 511,000 jobs represents an average annual growth rate of 1.67 percent. The overall pattern is a significant movement away from dependence on the state's traditional goods-producing economic base and toward service-producing industries as the driving sectors in the Utah economy (Figure 10 and Table 3).

The more specific industries which are projected to have the fastest growth rates (an annual average of at least 2.5 percent) over the 30-year projection period include (by two-digit Standard Industrial Classification (SIC) code):

SIC	
87:	Engineering and management services,
73:	Business services,
45:	Air transportation,
36:	Electronic and other electric equipment manufacturing,
07:	Agricultural services,
76:	Miscellaneous repair services, and
37	Transportation equipment manufacturing.

Summary of Long Term Projections

The following is a summary of the long term projections for Utah relative to the rest of the nation:

- The total fertility rate of Utah women is assumed to remain constant at approximately 2.6 average births per woman throughout childbearing years. Total fertility rates nationally have been increasing and are now in the 2.0 range.

- Projected rates of population growth in Utah are higher than the rest of the nation. Utah is projected to have a 1.6 percent rate of growth between now and 2020, while the nation is projected to grow at less than half that rate.

- Utah is projected to continue to have the youngest population in the nation. Utah's median age in the year 2020 is projected to be 31 years, while the nation's median age is projected to be 41 years. The differences in age between Utah and the U.S. are projected to actually increase over the next two decades.

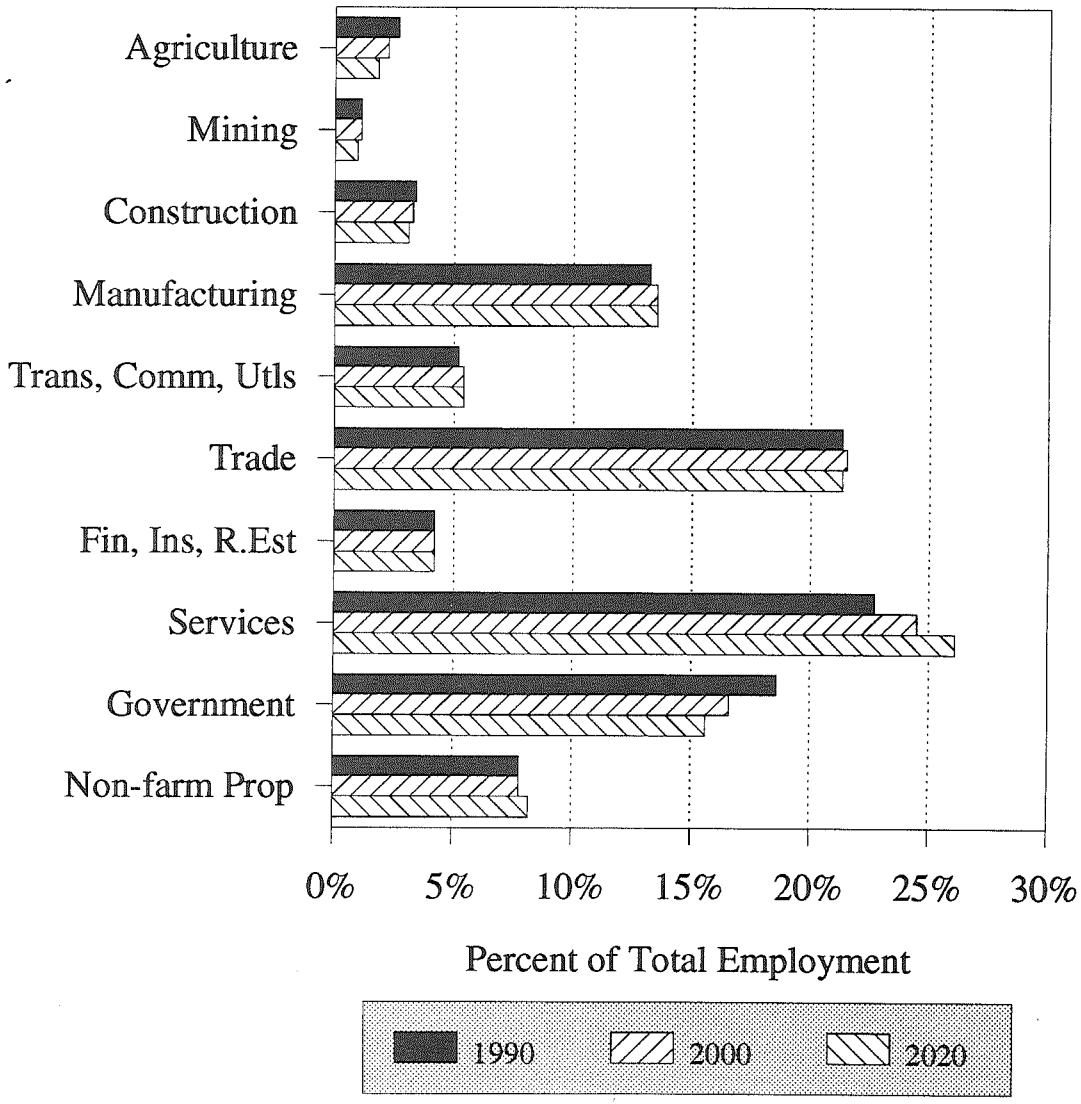
- Utah's labor force will see periods of rapid increase over the next two decades. Utah will continue to have the youngest labor force in the nation. Labor shortages are occurring now in many parts of the U.S. and will become more prevalent in the future.

- Large increases in the labor supply will create periods of some out-migration in Utah's future unless job growth is larger than has been historically experienced.

Implication of the Projections

Utah can be expected to experience continued relatively good growth through the last decade of the 20th century and well into the 21st century. The population growth rate in Utah is projected to be twice the growth projected for the nation. Growth in Utah will not be evenly distributed across the state. In particular, some rural counties, historically dependent on natural resource development, will not be able to provide adequate jobs to employ all of their young people as they age into the labor force. Indeed, as has already been observed in the years 1983 to 1990, the entire state will experience periods of net out-migration as a result of inadequate employment opportunities. The overall state-level picture for most projection years is one of adequate job growth to meet Utahns' employment needs. Within the state the geographic distribution of new jobs may cause migration from rural areas to metropolitan counties. Migration is extremely volatile and difficult to project and is subject to cycles in various industries. The expectations, as expressed in these projections are, of course, based on a set of crucial assumptions about future economic and demographic behavior. The assumptions represent a consensus best effort of a large number of planners, officials, and analysts at both state and local levels. The projections and assumptions are plausible and reasonable as viewed from this point in time.

Figure 10
Utah Employment by Industry for Selected Years



Source: 1990, Ut. Dept. of Employment Security; 2000-2020, Utah Office of Planning & Budget

Table 1
Utah Economic and Demographic Projections Summary

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	Average Size
1995	1,879,000	--	454,000	--	896,000	--	807,000	--	608,000	--	3.09
1996	1,894,000	0.8%	448,000	-1.3%	909,000	1.5%	820,000	1.6%	616,000	1.3%	3.07
1997	1,912,000	1.0%	443,000	-1.1%	924,000	1.7%	833,000	1.6%	627,000	1.8%	3.05
1998	1,933,000	1.1%	440,000	-0.7%	941,000	1.8%	849,000	1.9%	638,000	1.8%	3.03
1999	1,960,000	1.4%	439,000	-0.2%	959,000	1.9%	866,000	2.0%	651,000	2.0%	3.01
2000	1,992,000	1.6%	440,000	0.2%	979,000	2.1%	884,000	2.1%	666,000	2.3%	2.99
2001	2,023,000	1.6%	443,000	0.7%	997,000	1.8%	900,000	1.8%	679,000	2.0%	2.98
2002	2,057,000	1.7%	447,000	0.9%	1,015,000	1.8%	917,000	1.9%	694,000	2.2%	2.96
2003	2,094,000	1.8%	453,000	1.3%	1,035,000	2.0%	936,000	2.1%	709,000	2.2%	2.95
2004	2,137,000	2.1%	460,000	1.5%	1,057,000	2.1%	956,000	2.1%	727,000	2.5%	2.94
2005	2,172,000	1.6%	467,000	1.5%	1,077,000	1.9%	974,000	1.9%	741,000	1.9%	2.93
2006	2,215,000	2.0%	477,000	2.1%	1,097,000	1.9%	992,000	1.8%	758,000	2.3%	2.92
2007	2,260,000	2.0%	489,000	2.5%	1,118,000	1.9%	1,012,000	2.0%	775,000	2.2%	2.92
2008	2,308,000	2.1%	500,000	2.2%	1,140,000	2.0%	1,031,000	1.9%	794,000	2.5%	2.91
2009	2,358,000	2.2%	512,000	2.4%	1,162,000	1.9%	1,052,000	2.0%	812,000	2.3%	2.90
2010	2,408,000	2.1%	524,000	2.3%	1,185,000	2.0%	1,073,000	2.0%	831,000	2.3%	2.90
2011	2,447,000	1.6%	534,000	1.9%	1,201,000	1.4%	1,087,000	1.3%	847,000	1.9%	2.89
2012	2,486,000	1.6%	543,000	1.7%	1,217,000	1.3%	1,102,000	1.4%	862,000	1.8%	2.88
2013	2,524,000	1.5%	553,000	1.8%	1,234,000	1.4%	1,116,000	1.3%	877,000	1.7%	2.88
2014	2,563,000	1.5%	562,000	1.6%	1,250,000	1.3%	1,131,000	1.3%	893,000	1.8%	2.87
2015	2,602,000	1.5%	570,000	1.4%	1,266,000	1.3%	1,146,000	1.3%	909,000	1.8%	2.86
2016	2,638,000	1.4%	578,000	1.4%	1,282,000	1.3%	1,160,000	1.2%	924,000	1.7%	2.86
2017	2,673,000	1.3%	585,000	1.2%	1,298,000	1.2%	1,174,000	1.2%	939,000	1.6%	2.85
2018	2,708,000	1.3%	591,000	1.0%	1,313,000	1.2%	1,188,000	1.2%	953,000	1.5%	2.84
2019	2,741,000	1.2%	596,000	0.8%	1,328,000	1.1%	1,201,000	1.1%	968,000	1.6%	2.83
2020	2,774,000	1.2%	600,000	0.7%	1,343,000	1.1%	1,215,000	1.2%	982,000	1.4%	2.82

Note: These projections are long term projections and are not always consistent with short term forecasts. Long term projections provide a future perspective which is relatively unaffected by their beginning level.

Source: Utah Office of Planning and Budget, UPED Model.

Table 2
State of Utah Population Projections
by Selected Age Groups

Age Group	1990	2000	2010	2020
0-4	169,633	194,027	230,430	243,132
5-17	457,811	439,854	523,840	599,946
18-29	337,307	405,997	434,806	471,089
30-39	261,786	268,002	350,876	373,153
40-64	346,355	505,267	646,245	765,048
65+	149,958	178,901	221,646	321,651
15-44	789,847	907,167	1,039,702	1,169,948
Total	1,722,850	1,992,048	2,407,843	2,774,019
Median Age	25	27	29	31
Dependency Ratio	82	69	68	72

Percent of Total Population

Age	1990	2000	2010	2020
0-4	9.8%	9.7%	9.6%	8.8%
5-17	26.6%	22.1%	21.8%	21.6%
18-29	19.6%	20.4%	18.1%	17.0%
30-39	15.2%	13.5%	14.6%	13.5%
40-64	20.1%	25.4%	26.8%	27.6%
65+	8.7%	9.0%	9.2%	11.6%
15-44	45.8%	45.5%	43.2%	42.2%
Total	100.0%	100.0%	100.0%	100.0%

Source: Utah Office of Planning and Budget, UPED Model.

Table 3
State of Utah Employment Projections by Industry

Industry	1990		2000		2020		Average Annual Growth
	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	
Agriculture (1)	21,044	2.6%	21,975	2.2%	23,674	1.8%	0.4%
Mining	8,602	1.1%	10,224	1.0%	12,628	0.9%	1.3%
Construction	27,828	3.4%	32,502	3.3%	41,844	3.1%	1.4%
Manufacturing	107,085	13.2%	131,679	13.4%	181,140	13.5%	1.8%
TCU (2)	42,266	5.2%	52,438	5.4%	72,094	5.4%	1.8%
Trade	172,315	21.3%	210,404	21.5%	285,824	21.3%	1.7%
FIRE (3)	34,114	4.2%	41,530	4.2%	56,576	4.2%	1.7%
Services	183,613	22.7%	239,573	24.5%	350,259	26.1%	2.2%
Government	150,522	18.6%	162,524	16.6%	209,609	15.6%	1.1%
Non-Farm Proprietors	62,971	7.8%	76,281	7.8%	109,723	8.2%	1.9%
Total Employment	810,360	100.0%	979,150	100.0%	1,343,371	100.0%	1.7%
Non-Ag Wage and Salary (1)	728,701	89.9%	884,181	90.3%	1,214,960	90.4%	1.7%

(1) Both agriculture and non-ag wage and salary employment include agricultural services.
(2) Transportation, communications, and utilities.
(3) Finance, insurance, and real estate.
(4) Includes private household employment; excludes agricultural services.

Source: Utah Office of Planning and Budget, UPED Model.

ECONOMIC DEVELOPMENT ACTIVITIES

ECONOMIC DEVELOPMENT ACTIVITIES

The goal of economic development activities is to manage Utah's economic, cultural, and human resource infrastructure. This management should be in a manner that will increase household income, facilitate job creation, increase out-of-state visitors, improve productivity, expand the state's tax base, and bring greater diversification to the economy, as well as provide Utah residents with an enhanced quality of life. To accomplish this goal, three basic strategies are being followed:

- Nurturing and assistance to existing Utah companies,
- Creation and development of new enterprises in Utah, and
- Recruitment of business and investment to Utah from outside the state.

Education and Infrastructure

Perhaps Utah's greatest asset in recruiting businesses and investment is the quality of its workforce. New and expanding firms in Utah benefit from the availability of well-educated workers with a strong work ethic. In Utah, as well as nationally, the trend in the workplace is clearly toward increased educational requirements for new entrants into the labor force and for the continual retraining of current employees.

To maintain this quality workforce, Utah provides a high level of financial support for its education system. In 1990 Utah ranked fifth among states in state and local expenditures for both public and higher education per $1,000 of personal income. Utah also ranked third in state and local expenditures for higher education per $1,000 of personal income. In addition, vocational programs range from those offered by five community colleges and five area vocational centers to "custom fit" training programs, short-term intensive training and high-technology training.

As a result, Utah ranks among the leading states in the educational attainment of its population. Utah is second in the nation in percent of persons 25 and older who have completed high school and also has the highest literacy rate in the nation.

A second prerequisite for economic growth and development is transportation infrastructure. Transportation is becoming a major consideration in living, working and doing business in Utah. Three railroads, an international airport that is the 28th busiest in the country, and an east-west / north-south interstate highway system combine to provide the Utah economy with an excellent transportation system.

However, with highway traffic counts and public transportation ridership increasing approximately 10 percent per year, congestion is growing along the Wasatch Front. Although a recent light rail initiative was not approved in Salt Lake County, there are still plans to widen I-15 from Davis County to Utah County and to complete the West Valley highway.

In addition, unlike other metropolitan airports, the Salt Lake City International Airport has acquired adequate property for future expansion. This capability to expand services, terminals and runways should ensure the future quality of air service in Utah without the problems and delays associated with congestion and overcrowding.

Utah's ability to educate its residents, enhance and expand the state's infrastructure, and meet the economic, social, health, and cultural needs of its residents is directly related to the level of Utah's business growth. The Utah Department of Community and Economic Development has developed several programs to assist new and existing businesses.

New and Existing Business Expansions

Through economic development efforts, and aided by favorable media coverage, Utah has received positive reviews in such publications as *Forbes, Fortune, Money, Time, The Economist,* the *New York Times*, and *Financial World.* Over 44 companies made official site visits during 1992 and in the past year 25 companies relocated to Utah. Altogether, new companies have brought approximately 3,000 new jobs and over $66 million in payroll to Utah. These economic development efforts have been emphasized by Governor Bangerter's task forces on aerospace, bio-medical, and information technology, along with groups such as the Utah Information Technologies Association and the Utah Biomedical Council.

Among the companies new to Utah are:

- Payless Drugs (Weber County);
- Piper Impact, an airbag housing and base manufacturer (Summit County);
- OEA, an airbag inflator manufacturer (Box Elder County);
- Lucas Western, an aerospace parts supplier (Summit County);
- Anderson-Hickey, a steel furniture manufacturer (Iron County);
- E.S.A.M., an electronics manufacturer (Washington County);
- Weider Foods (Salt Lake County);
- and Cressona Aluminum (Utah County).

Overall, Utah has seen strong growth in the areas of business services, auto parts manufacturing, and finance, insurance, and real estate. Expanding companies such as Franklin Quest International, Novell Inc., WordPerfect, Morton International (airbag manufacturers), and Discover Card have added another 3,000 jobs to the Utah economy.

Within business services, employment in computer-related services, led by Novell Inc., and WordPerfect Corp., has grown by a third in the past two years to over 9,000 jobs. Payroll has grown even more rapidly with average salary levels above $35,000 per year. Also in business services, such companies as Franklin Quest International and Matrixx telemarketing deserve mention. This diverse industry group has grown over 50 percent in the past year and now employs almost 8,000 Utahns.

Despite an overall modest decline in manufacturing employment in 1991 and no growth in 1992, motor vehicle parts and accessories manufacturing (principally Morton International's airbag division and its supplier companies) has grown rapidly to become a major industry in the state. With a growth rate of 100 percent in the last four years, almost 3,000 Utahns are now employed in motor vehicles and equipment manufacturing, with average annual wages in the top 20 percent for Utah. The next two to three years are expected to see continued strong growth, and employment in this sector may double again.

Another sector that has experienced outstanding growth in the past year is personal credit institutions, notably Discover Card. This industry has grown from 1,100 employees in 1990 to 1,900 in 1991. With the potential of Prime Option Services adding several thousand more jobs, this industry is poised for even faster growth; and while average salaries are not in the same category as those of motor vehicle parts, salary rates are still above the state average.

International Business

The past year has been highly successful for Utah's international business development. Utah now has five overseas offices in Japan, Korea, Taiwan, Austria and Mexico. Recruitment of international corporations has resulted in the following recent arrivals: Artma from Austria, Compeq Manufacturing from Taiwan, and Forval, Daifuku and ICIS from Japan. In all, from 1990 to 1991, Utah exports were up 13.4 percent to a new high of $2.06 billion. Continued strong growth is projected for 1992 increasing exports from 5.6 percent to 6.3 percent of the gross state product.

In addition, the Utah International Business Development Program has established several resource databases that include the International Procurement Database (Pronto); Utah Export Database, which contains exporting Utah

companies; Utah Client Database; International Financial Database; the National Trade Data Bank; and the High-Tech Database.

Tourism and the Olympics

Travel and tourism represent one of the most important activities in the Utah economy. The travel industry has enjoyed steady growth over the past decade and continues to grow at a rate faster than that of the overall economy. Out-of-state travelers spent an estimated $2.9 billion in Utah in 1991. Approximately 61,000 Utahns were employed in travel-, tourism-, and recreation-related jobs in 1991.

The long term outlook is for travel and tourism in Utah to continue growing faster than the economy as a whole. This is especially true given favorable media coverage in recent years resulting from the relative strength of Utah's economy and the state's efforts to secure the Winter Olympic Games. Although Salt Lake City eventually placed second to Nagano, Japan in the quest for the 1998 Winter Olympic Games, Salt Lake City is the United States candidate for the 2002 Winter Olympic Games.

The selection for the 2002 host city will be made at the International Olympic Committee meetings in Budapest, Hungary in 1995. While the outlook for a successful bid is promising, regardless of the outcome the favorable image of the state's winter sports facilities will continue to build tourism and enhance the quality of life in Utah.

Technology and Capital Availability

For the past several years government, education, and the private sector have worked toward the goal of improving access to new technology and capital for business investment. Utah has established a number of programs to foster this investment.

The Utah Centers of Excellence Program seeks to create economic growth by helping Utah businesses access university technology to improve their products and services. In 1992 there were 24 centers located at Utah's colleges and universities, representing developments in the areas of aerospace, natural resources/agriculture, biomedical and information technologies.

Presently funded Centers have been issued 54 patents and entered into 60 licensing agreements. In the past year 14 businesses have been created through the Centers of Excellence Program, including Advanced Laminate Technology, Rocky Mountain Engineering, Medi-Sight, Performance Composites, Helix Technologies, Mountain Lamb Co-op, Engineering Geometry Systems, FemtoScan Corporation, and Technology Management Associates.

To increase the availability of growth capital for high-tech companies, the Utah Office of Business Creation has put together the Investor's Mentoring Group (IMG). The IMG is comprised of Utahns with experience building successful businesses and venture capitalists representing over $4 billion in funds. Local mentors are helping these venture capitalists find and evaluate potential Utah investments, as well as providing post-investment direction to ensure their success.

In the past year the state-wide network of nine Small Business Development Centers (SBDC) was extended into the Uintah Basin. The SBDC provided business counseling assistance to 1,149 small businesses, a substantial increase in program activity and outreach. Also, the Innovation Assistance Program was created in conjunction with the SBDC to help private inventors bring their ideas and products to market.

The Utah Technology Finance Corporation provides grants and loans to small Utah businesses for new products and start-ups with sound technology and promise for commercial success and growth. Funding is used for development ventures such as prototyping, testing, or refinement, and is intended to provide seed money to bring a product or service from creation into commercialization.

The Deseret Certified Development Company (Deseret CDC), created with initial state financial support, is licensed by the U.S. Small Business Administration (SBA) to provide long term financing to expanding businesses. The Deseret CDC has created SBA-insured loans totaling $8.8 million and continues to expand. In addition, in 1991

the Capital Access Program was created by the Utah State Legislature to encourage commercial lending in slightly higher-risk areas such as new businesses, high technology businesses, or business in rural areas.

Finally, the Industrial Assistance Fund was also established in 1991 by the Utah State Legislature. The Industrial Assistance Fund is a $10 million incentive fund that can be used by any company that can demonstrate an ability to: 1) generate over $10 million per year of new expenditures (including payroll) in Utah for five years; and 2) show that the new Utah expenditures with vendors and subcontractors are 5.7 times as great per year as the loan received.

Rural Economic Development

In 1988 the Utah State Legislature passed the Utah Enterprise Zone Act. Within these zones, a manufacturing firm which creates new jobs or invests in new plants or equipment is eligible for corporate franchise or personal income tax credits. To date, over 40 businesses have qualified for Enterprise Zone tax credits.

Utah Small Cities, Inc. is a nonprofit corporation involving local and regional economic development interests in a coordinated effort to identify and address rural economic development issues.

A rural Utah tourism report has been issued by a group composed of the Utah Office of Planning and Budget, the Department of Community and Economic Development, and the Bureau of Economic and Business Research. This report discusses issues, trends, financing, infrastructure and recommendations for tourism in rural Utah.

Economic Development and Employer Planning System

The Utah Economic Development and Employer Planner System (EDEPS) database is now available from the Department of Community and Economic Development. EDEPS is an analytic tool designed primarily for business and economic planners.

EDEPS contains national, state, and area data that are organized to facilitate analysis of economic health, industry performance, population trends, income characteristics, and market potential. It also helps users analyze business opportunities and best locations, examine labor supply and demand, identify training resources, and study other factors that play a role in decision-making regarding business expansion or retention and new firm start-ups.

More information about any of the programs outlined in the sections above may be obtained by calling the Division of Business and Economic Development, (801) 538-8700.

ECONOMIC INDICATORS

LABOR MARKET ACTIVITY

Highlights

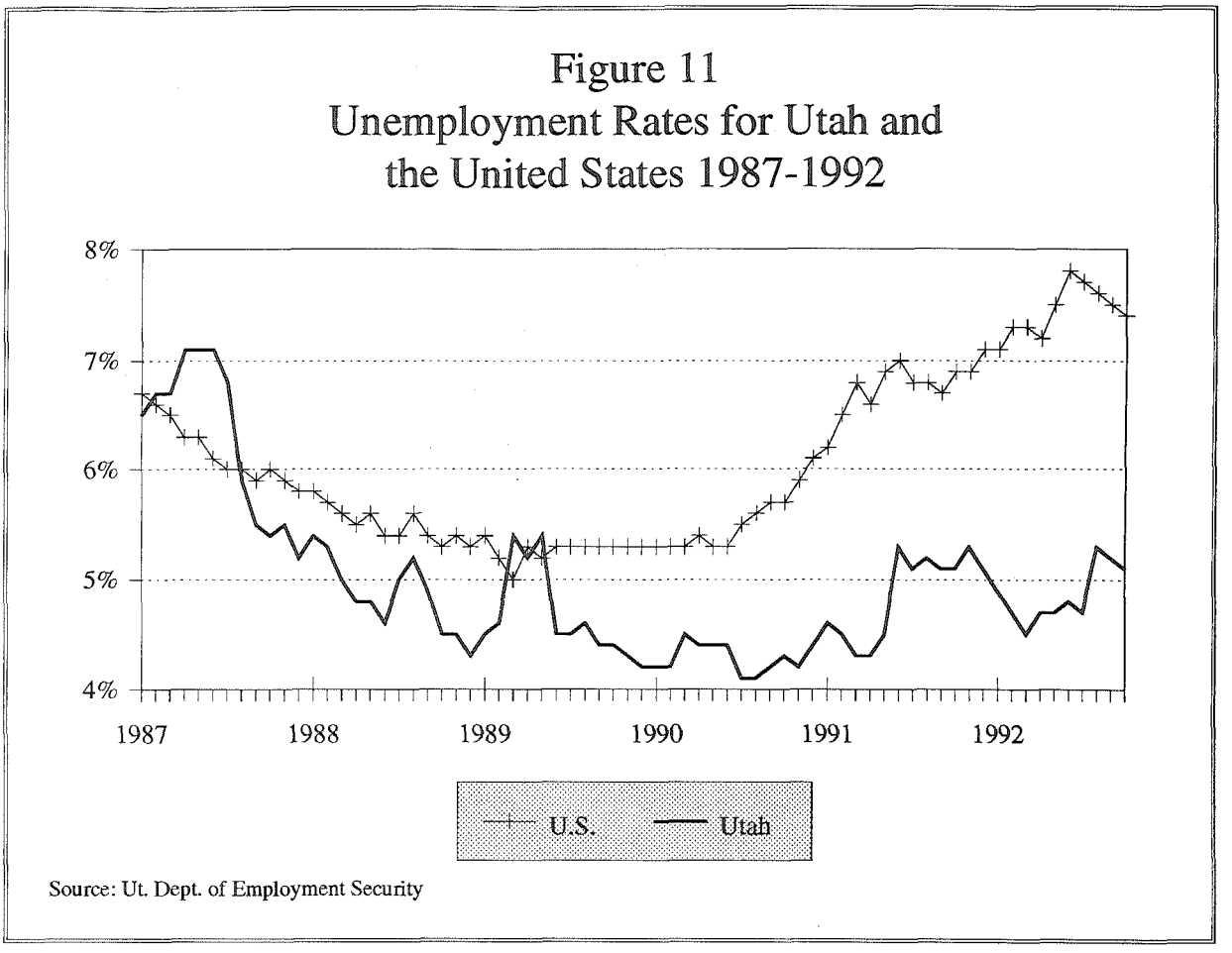
The following 12 items highlight labor market activity in Utah in 1992:

- Utah's 1992 unemployment rate remained unchanged from the 1991 figure of 4.9 percent.
- Some of the unemployment in 1991 and 1992 occurred due to in-migration.
- In 1992, Utah added 22,000 new nonfarm jobs for a growth rate of 3.0 percent. Job growth rates improved steadily throughout year.
- Utah felt the effects of the national downturn and defense spending cuts in 1992, but avoided the recession.
- Construction showed the highest growth rate (10 percent) of any major industry (for the second year in a row), while services added the highest number (8,200) of net additions.
- Mining was the only industry to show employment losses — 200 jobs.
- Government expansion remained relatively slow because of defense cutbacks.
- Total wages were up over 7 percent, while the average monthly wage expanded 4 percent in 1992.
- Utah's average wage was about 1 percent higher than the CPI inflation in 1992.
- Roughly 71 percent of the population 16 years and older was in the labor force in 1992.
- Young people, women, and men in Utah 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

While the U.S. economy limped along, Utah managed a moderate labor market performance in 1992. The state saw steady, if not robust job growth, while expansion nationally fell far behind the state's moderate 3 percent lead. Utah consistently ranked near the top of the nation in job creation during 1992. The state started the year with very low unemployment — just above 4 percent. However, toward the end of summer, unemployment took a decided jump to 5.3 percent. Ironically, Utah's relatively strong economy seems to be the reason behind this surge in joblessness. The rise came primarily from an influx of out-of-state workers looking for work. Utah's "good figures" attracted many unemployed individuals from depressed areas. Table 4 present Utah labor force data.

Overall, 1992 unemployment averaged 4.9 percent — equal to the 1991 rate. An average of 40,000 individuals were out of work during 1991 — only 1,000 more than last year. For most of the year, Utah's unemployment rate registered between 2.5 and 3.0 percentage points below the national average — the largest gap in over 30 years (Figure 11 and Table 5).



During 1992, Utah added roughly 22,000 new nonfarm jobs for a growth rate of 3.0 percent (Figure 12 and 13). This rate equaled the growth rate experienced in 1991 — although different industrial sectors fared differently in the two years. Utah continued to create jobs while the nation struggled to maintain positive expansion.

Construction continued its unusually strong performance in 1992. Usually during any kind of national slowdown, Utah's goods-producing industries feel the economic squeeze (Figure 14). However, in 1991 and 1992, construction showed the highest growth rate of all the major industries — an astounding 10 percent (3,100 jobs). A strong housing market and a few large nonresidential projects kept this sector humming.

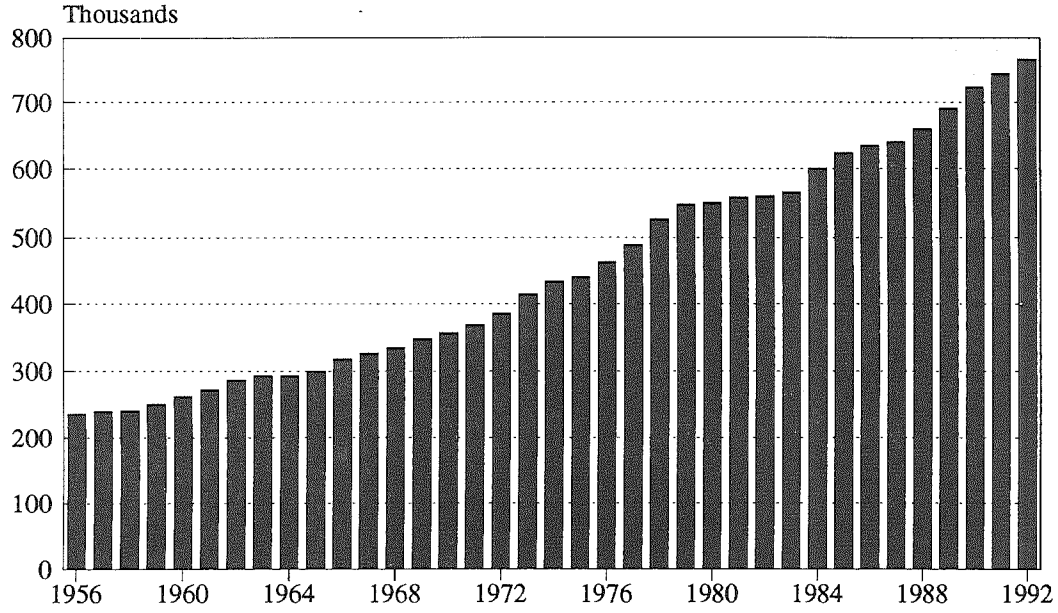
The other two goods-producing industries did not fare quite as well. Mining lost 200 jobs as mines continued to close and productivity increased. After holding out against the national recession for many months, manufacturing succumbed to the economic pressure with a net decline in employment during part of the year, yet despite the U.S. downturn and cuts in defense spending, manufacturing managed a slight (0.4 percent, 300 jobs) gain. Particularly hard hit by defense cuts and the U.S. recession were the electronics industry and the aerospace sector. However, other manufacturing categories — such as motor vehicle parts, food products, and sporting / athletic equipment — picked up the slack with strong expansion.

Transportation, communications, and utilities added only 1,400 new jobs in 1992 (Figure 15). While air transportation recouped its previous losses, other sectors showed job growth by year end.

Services showed stronger than average growth with an expansion rate over 4 percent and the largest number of new jobs — 8,200. Computer services (software companies) and medical services provided much of the new employment in this sector.

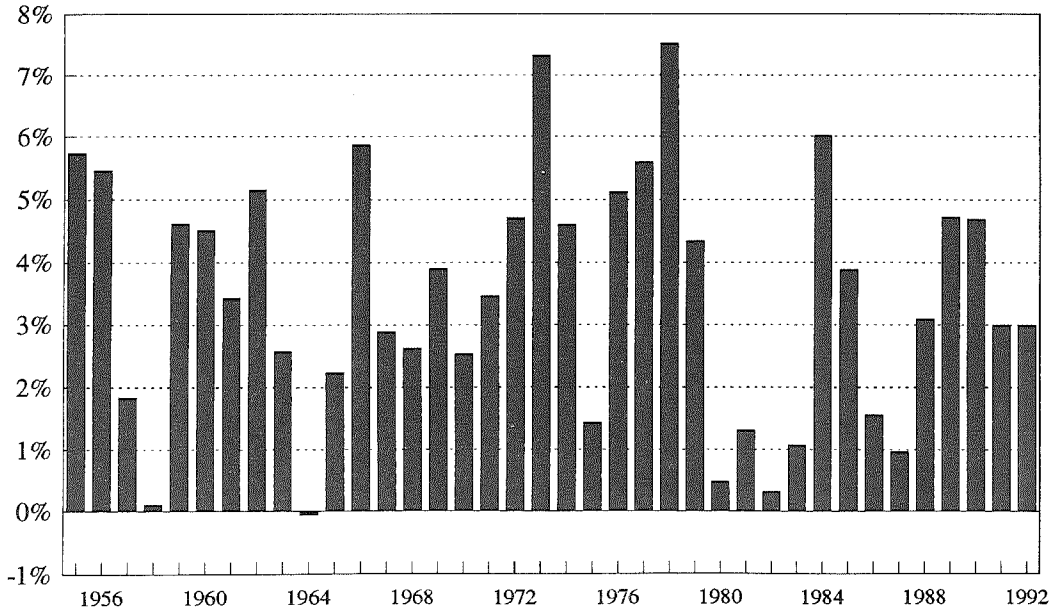
Finance, insurance, and real estate generated 1,300 new jobs in 1992, a growth of 3.6 percent. The location of several new financial services centers in the state was the primary cause of this relatively strong employment expansion.

Figure 12
Utah Nonagricultural Employment
1956-1992



Source: Ut. Dept. of Employment Security

Figure 13
Utah Nonagricultural Employment
Annual Percent Change

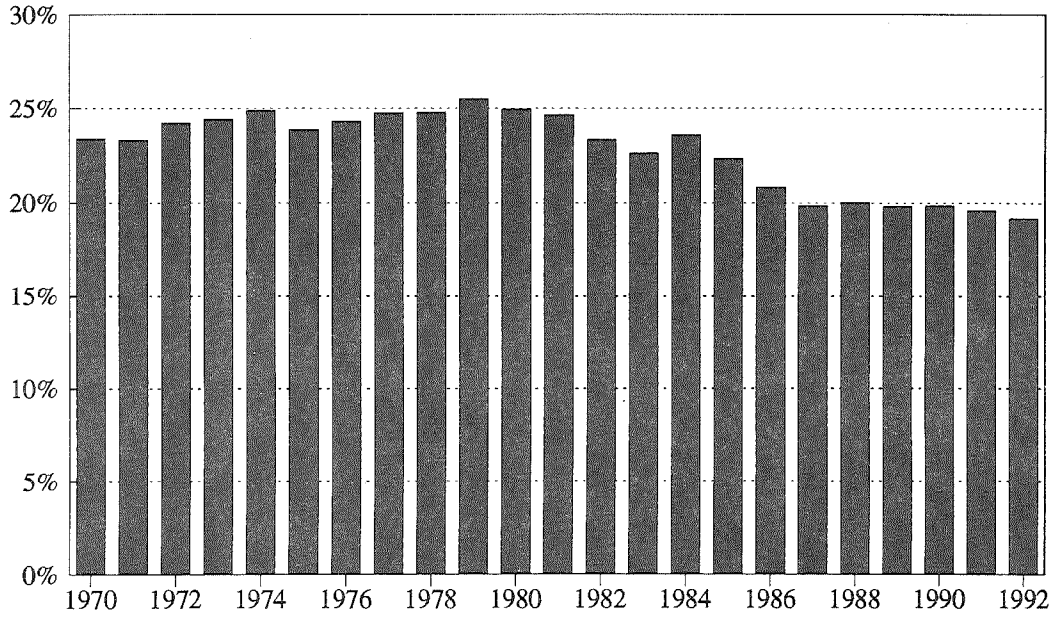


Source: Ut. Dept. of Employment Security

Trade experienced average expansion. The addition of several new large retail stores pushed this sector's employment total up roughly 3.0 percent — a net increase of 5,100 jobs. The entrance of several factory outlets and national stores boosted retail trade employment in 1992.

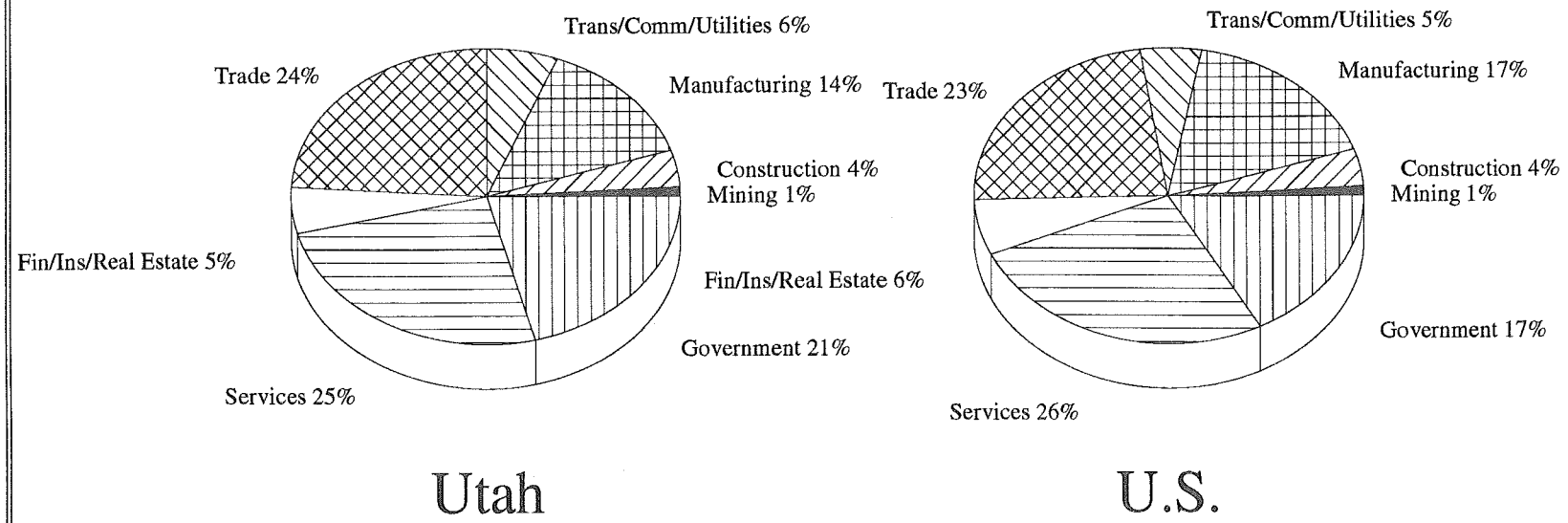
Government managed to add 2,900 new jobs in 1992 despite substantial cutbacks in federal defense employment. Robust growth on the part of state and local governments more than offset the losses in federal employment. Government ended 1992 with a 2 percent growth rate. Table 6 and 7 provide employment by industry. Table 8 and 9 list Utah's largest employers.

Figure 14
Percent of Utah Employment in Goods-Producing Industries



Source: Ut. Dept. of Employment Security

Figure 15
Employment by Industry
1991



Source: Ut. Dept. of Employment Security

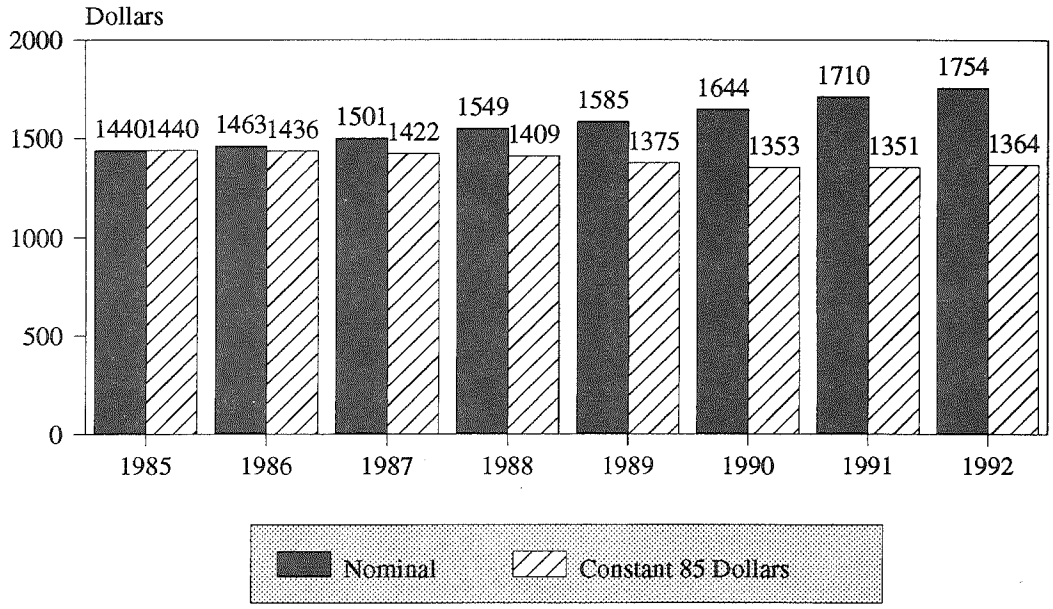
Wages

Expansion in wages proved even stronger than employment growth. Final 1992 figures are expected to show a 7.1 percent increase in total nonfarm wages. This figure compares favorably to the 3 percent growth in jobs.

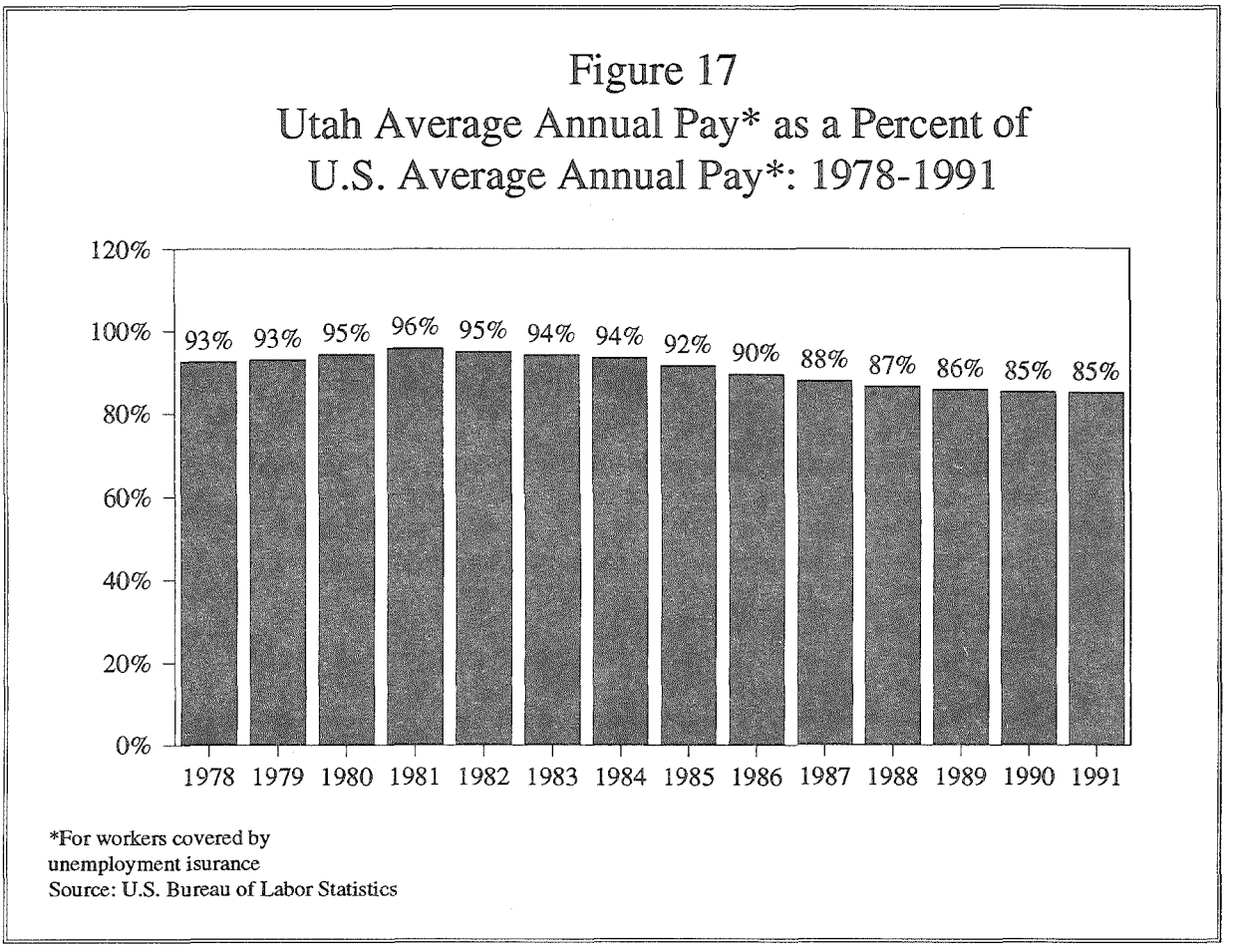
Utah's average monthly wage reflected the sturdy expansion in total wages (Figure 16 and Table 10). The state's 1992 average monthly wage is expected to reach $1779 — up 4 percent from 1990. Utah annual pay as a percentage of U.S. annual pay has declined from a high of 96 percent in 1981 to a low of 84.9 percent in 1991 (Figure 17). Nevertheless, in 1992, Utah workers actually saw their wages increase 1 percent faster than inflation.

The loss of high paying goods-producing jobs in the early- and mid- 1980s contributed to this overall 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. However, a lower cost of living helps offset the lower average wage.

Figure 16
Utah Nonfarm Average Monthly Wages
Nominal and Constant* Dollars



*Constant 1985 $ using CPI-U
Source: Ut. Dept of Employment Security



Labor Force Characteristics

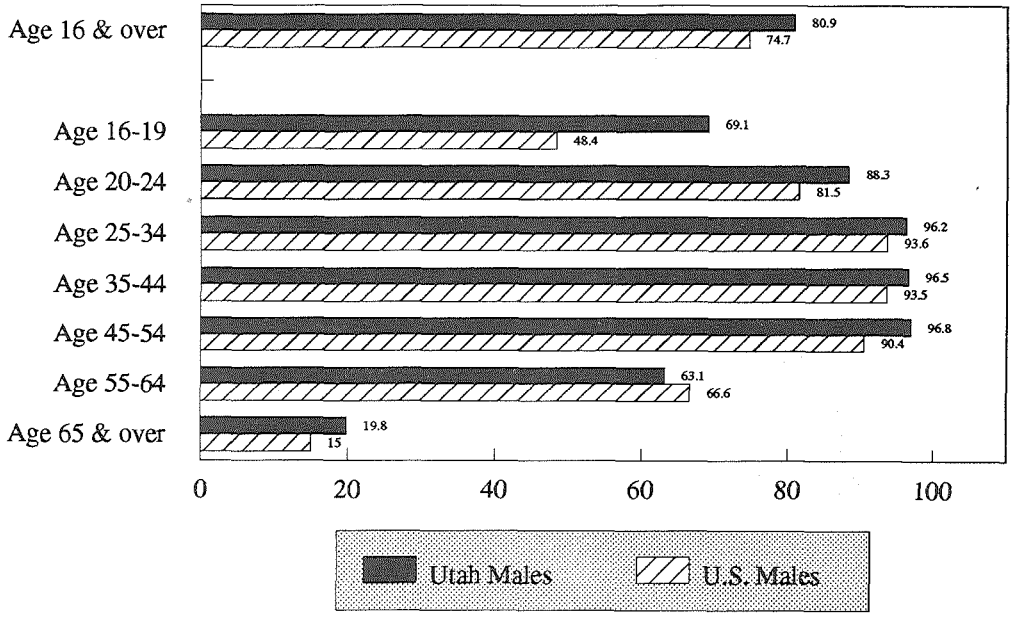
What was the composition of Utah's labor force in 1991 (the most recent data available)? Roughly 71 percent of the state's civilian, noninstitutionalized population — over the age of 16 — participated in the labor force during the year. This "participation rate" ranks significantly higher than the national average of 66 percent. Both Utah women (61 percent) and Utah men (81 percent) take part in the labor market than national counterparts (57 and 76 percent respectively). Tables 11 through 14 provide characteristics of the Utah labor force.

Not surprisingly, individuals between the ages of 20 and 54 are most likely to be in the state's work force. The participation rate for this group averages about 84 percent. Men between the ages of 25 and 34 were the most likely to work — 96 percent were labor force members. However, women between the ages of 20 and 24 participated in the labor force at the highest rate — 78 percent (Figures 18 and 19).

Just why are Utahns more likely to work than their national counterparts? Is it just Utah's much touted work ethic? Not entirely, Utah has a relatively young population, and young people are more likely to work — particularly given recent trends toward early retirement. Plus, Utah's teenagers are much more likely to work than U.S. teenagers in general. In Utah, 68 percent of 16-19 year olds are working or looking for work compared with 52 percent nationally. 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 high education levels and "work ethic" account for most of the difference between Utah and U.S. participation rates.

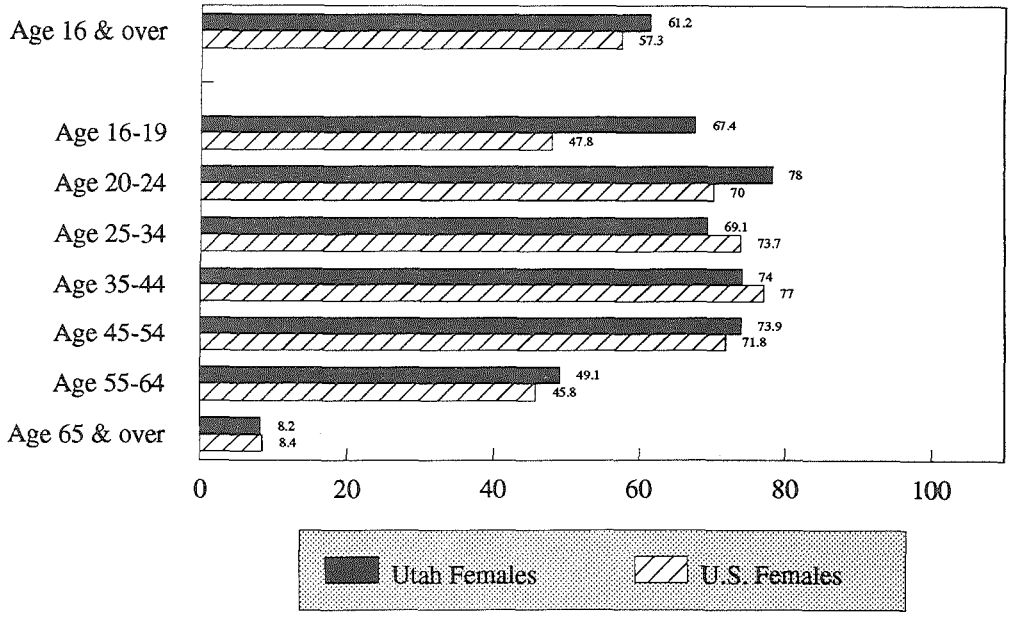
Single (never married) Utahns are most likely to work — 77 percent participate in the labor force. However, never married men (79 percent) are less likely to work than married men (83 percent), while single women (74 percent) are more likely to work than married females (60 percent). Those in the "other marital status" group (separated, divorced, widowed) are least likely (of both sexes) to be labor force members — 52 percent of women and 74 percent of men. Of course, this "other" group includes a larger number of older people — participation rates include those over 65 years of age.

Figure 18
Labor Force Participation Rates
Males 16 and Over: 1991



Source: U.S. Bureau of Labor Statistics

Figure 19
Labor Force Participation Rates
Females 16 and Over: 1991



Source: U.S. Bureau of Labor Statistics

Roughly 96 percent of experienced Utah workers are employed in nonagricultural industries. Trade, services, and government each employ about one-fifth of the experienced labor force. Government employs a noticeably larger share of individuals in Utah than it does in the nation generally. This stems from the state's large school age population which requires a large number of jobs in the educational sector. Manufacturing employs another 17 percent of experienced Utah workers. Smaller sectors include mining (less than 1 percent); construction (5 percent); transportation, communications, and utilities (6 percent); and finance, insurance, and real estate (6 percent). Agriculture accounts for only 4 percent of experienced workers, while about 10 percent of Utahns are self-employed.

Occupational Outlook 1992 to 1997

Occupational projections and trends mirror trends in Utah industries. The product or service delivered by the state's 300 different industries determines the kinds and levels of workers needed to satisfy the demand.

Of eight major occupational categories, (representing the 700 job titles), by far the largest — both in number of jobs and number of different job titles — is the production, operating, and maintenance category. One-fourth of the total 841,200 jobs in 1992 is included in this group. During the five-year period, 18,400 new employment positions will swell the ranks of this category; expansion will average 1.7 percent per year, exactly the same as the growth rate for all occupations.

After production-related occupations, clerical occupations account for the next largest share of jobs in Utah. Over 144,000 individuals are employed in this group, which will add 10,600 new positions. Although this is a substantial number of employment opportunities, the rate of job creation in the clerical category (1.5 percent per year) is slower than the rate for all occupations. This slower rate of job creation is due in part to the rapid infusion of productivity enhancing computer technology into the office environment.

Higher than average rates of growth are anticipated in the sales and service categories. Sales occupations will realize a 1.8 percent per year rate of employment growth with service occupations feeling a 2.0 percent per year increase. Increases in the sales and service job categories result from the increase in demand for goods and services in the trade and services industry categories.

Employment in the professional occupational category will grow by 9,800 new jobs over the five-year period. Professional occupations, as a group, will experience a slower than average rate of job growth of 1.5 percent per year.

Technical occupations will enjoy the fastest rate of job growth of any of the eight job categories. Although small in terms of total jobs, this category will experience the quickest pace of job creation with a rate of 2.3 percent per year or 4,600 new jobs over the five-year period.

Management and administrative occupations account for a small 6.8 percent portion of total employment. By 1997 some 5,900 new positions are projected in this category — 2.1 percent — over the five year period.

Employment in agricultural occupations will continue to claim the smallest number of new jobs — less than 800 new jobs will be added to the count of workers in agricultural occupations in Utah over the 1992 to 1997 period.

Managerial / administrative, technical, sales, and service occupational groups will increase their share of total jobs between 1992 and 1997. Those occupational groups just holding their own or declining in their share of total jobs are production / operating / maintenance, professional, clerical, and agriculture.

Each year of the five-year projections period will yield an average of 35,000 job openings. Most of these will originate not from growth in the economy, but from the net number of openings created when workers leave one occupation and move to another. In fact, 20,600 jobs will result from net movement within the labor market. The remaining 14,400 will occur from new job creation in the labor market.

Training Requirements of Utah Jobs

During the 1992-to-1997 period, roughly 44 percent of jobs in Utah will call for short term training of less than six months, another 40 percent will require training from six months up to, but not including a baccalaureate (B.S.) degree, and 16 percent will call for a B.S. degree or more. The trend in training requirements shows a slightly declining percent of jobs requiring a B.S. degree with an increase in jobs calling for six months and up to a B.S. degree.

Conclusion

On the surface, 1992 seems to be a repeat of 1991. Both the unemployment rate and the nonfarm job growth rate were identical in both years. However, Utah ended 1991 in a decline. But, the state completed 1992 on the upswing — with the rate of job expansion increasing and unemployment declining. The state also managed on of the best labor market performances in the nation, attracting many workers from out-of state.

Table 4
1991 Utah Labor Force, Employed and Unemployed Persons by District and County

Planning District and County	Civilian Labor Force	Employed	Unemployed	Unemployment Rate
State Total	804,000	735,000	39,000	4.9%
Bear River	49,513	47,420	2,092	4.2%
Box Elder	16,278	15,548	730	4.5%
Cache	32,363	31,023	1,340	4.1%
Rich	872	850	23	2.6%
Wasatch Front	531,881	507,084	24,796	4.7%
North	157,639	149,619	8,020	5.1%
Davis	80,527	76,899	3,628	4.5%
Morgan	1,629	1,527	102	6.3%
Weber	75,484	71,194	4,290	5.7%
South	374,241	357,465	16,776	4.5%
Salt Lake	363,299	347,105	16,194	4.5%
Tooele	10,942	10,360	583	5.3%
Mountainland	133,467	127,331	6,136	4.6%
Summit	8,621	8,052	570	6.6%
Utah	120,204	114,995	5,209	4.3%
Wasatch	4,642	4,284	358	7.7%
Central	20,824	19,255	1,569	7.5%
Juab	2,185	2,043	142	6.5%
Millard	5,023	4,782	241	4.8%
Piute	388	332	56	14.4%
Sanpete	6,228	5,600	628	10.1%
Sevier	5,974	5,554	420	7.0%
Wayne	1,026	945	82	8.0%
Southwestern	36,683	34,678	2,005	5.5%
Beaver	1,986	1,892	94	4.7%
Garfield	1,514	1,324	190	12.5%
Iron	9,418	8,965	452	4.8%
Kane	2,511	2,326	186	7.4%
Washington	21,254	20,171	1,083	5.1%
Uintah Basin	13,161	12,259	903	6.9%
Daggett	494	480	14	2.8%
Duchesne	4,480	4,119	361	8.1%
Uintah	8,187	7,659	528	6.4%
Southeastern	18,478	16,978	1,500	8.1%
Carbon	8,047	7,456	591	7.3%
Emery	3,271	2,960	311	9.5%
Grand	3,214	2,978	236	7.3%
San Juan	3,947	3,585	362	9.2%

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

Table 5
Utah Unemployment Rates by District and County

	1985	1986	1987	1988	1989	1990	1991(p)
State Total	5.9	6.0	6.4	4.9	4.6	4.3	4.9
Bear River	4.8	4.3	4.5	3.8	3.8	4.0	4.2
Box Elder	4.5	4.1	4.3	3.8	3.8	4.4	4.5
Cache	5.1	4.4	4.5	3.8	3.9	3.9	4.1
Rich	3.7	5.1	5.8	4.0	2.0	2.9	2.6
Wasatch Front	5.3	5.4	5.8	4.7	4.5	4.1	4.7
North	4.9	5.5	6.0	5.1	5.0	4.7	5.1
Davis	4.0	4.8	5.3	4.4	4.3	4.1	4.5
Morgan	6.5	7.2	8.3	7.0	8.2	5.9	6.3
Weber	5.9	6.2	6.7	5.8	5.6	5.4	5.7
South	5.5	5.3	5.7	4.5	4.3	3.9	4.5
Salt Lake	5.5	5.3	5.6	4.5	4.3	3.8	4.5
Tooele	6.0	6.3	7.4	5.6	4.6	5.3	5.3
Mountainland	6.8	6.7	7.3	4.6	4.6	3.9	4.6
Summit	7.8	8.6	8.6	6.5	6.2	5.7	6.6
Utah	6.5	6.3	6.9	4.3	4.3	3.7	4.3
Wasatch	11.3	13.3	13.5	8.7	8.3	6.6	7.7
Central	8.9	10.2	10.0	7.9	7.2	6.5	7.5
Juab	15.5	15.8	15.3	9.7	7.7	6.4	6.5
Millard	5.5	6.6	7.5	5.6	5.2	4.2	4.8
Piute	13.3	14.8	12.6	12.7	7.6	11.4	14.4
Sanpete	13.2	14.9	13.4	11.2	10.4	9.1	10.1
Sevier	7.4	7.9	7.4	6.0	5.6	5.5	7.0
Wayne	8.1	9.4	9.4	6.9	6.4	7.5	8.0
Southwestern	6.0	5.9	6.3	4.9	4.9	4.7	5.5
Beaver	6.1	6.8	6.3	5.4	5.3	4.9	4.7
Garfield	13.5	12.3	12.2	8.6	9.5	10.5	12.5
Iron	6.2	6.3	6.5	4.9	4.7	4.5	4.8
Kane	8.6	7.1	7.6	6.1	6.9	6.1	7.4
Washington	4.7	4.8	5.4	4.4	4.3	4.2	5.1
Uintah Basin	9.1	13.1	13.2	9.2	8.5	6.7	6.9
Daggett	3.9	4.1	3.4	2.8	2.0	1.5	2.8
Duchesne	10.5	15.4	16.4	12.0	10.6	8.1	8.1
Uintah	8.5	12.0	11.8	8.0	7.7	6.3	6.4
Southeastern	10.9	10.7	10.9	8.6	8.1	7.1	8.1
Carbon	10.0	10.1	10.3	8.5	8.2	6.4	7.3
Emery	12.9	12.6	14.9	9.3	7.6	8.0	9.5
Grand	13.1	12.9	11.0	8.8	9.5	7.2	7.3
San Juan	9.0	8.2	8.4	7.9	7.4	7.5	9.2

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

Table 6
Utah Labor Force, Nonagricultural Jobs and Wages

	1986	1987	1988	1989	1990	1991	1992(p)	Percent Change 86-87	Percent Change 87-88	Percent Change 88-89	Percent Change 89-90	Percent Change 90-91	Percent Change 91-92
Civilian Labor Force (thousands)	754.0	757.0	759.0	789.0	792.0	804.0	813.0	0.4%	0.3%	4.0%	0.4%	1.5%	1.1%
Employed	709.0	709.0	722.0	752.0	758.0	765.0	773.0	0.0%	1.8%	4.2%	0.8%	0.9%	1.0%
Unemployed	45.0	48.0	37.0	37.0	34.0	39.0	40.0	6.7%	-22.9%	0.0%	-8.1%	14.7%	2.6%
Unemployment Rate	6.0%	6.4%	4.9%	4.6%	4.3%	4.9%	4.9%						
Nonagricultural Jobs (thousands)	634.1	640.3	660.1	691.2	723.6	745.2	767.5	1.0%	3.1%	4.7%	4.7%	3.0%	3.0%
Mining	7.8	8.0	8.1	8.1	8.6	8.6	8.4	2.6%	1.2%	0.0%	6.2%	0.0%	-2.3%
Construction	32.2	26.7	25.0	25.9	27.8	31.5	34.6	-17.1%	-6.4%	3.6%	7.3%	13.3%	9.8%
Manufacturing	92.1	92.5	99.0	103.1	107.1	105.7	106.1	0.4%	7.0%	4.1%	3.9%	-1.3%	0.4%
Trans., Comm., and Util.	37.5	37.9	39.4	40.9	42.3	42.4	43.8	1.1%	4.0%	3.8%	3.4%	0.2%	3.3%
Trade	152.4	152.6	156.5	166.4	172.4	178.8	183.9	0.1%	2.6%	6.3%	3.6%	3.7%	2.9%
Finance, Ins., and Real Estate	32.9	33.8	33.4	33.4	34.1	35.8	37.2	2.7%	-1.2%	0.0%	2.1%	5.0%	3.9%
Services	137.9	147.5	155.9	167.2	180.8	188.4	196.6	7.0%	5.7%	7.2%	8.1%	4.2%	4.4%
Government	141.3	141.5	142.7	146.3	150.6	154.0	156.9	0.1%	0.8%	2.5%	2.9%	2.3%	1.9%
Nonagricultural Wages (millions)	11,131	11,536	12,271	13,148	14,275	15,294	16,380	3.6%	6.4%	7.1%	8.6%	7.1%	7.1%
Average Monthly Wage	1,463	1,501	1,549	1,585	1,644	1,710	1,779	2.6%	3.2%	2.3%	3.7%	4.0%	4.0%
Adjusted for Inflation (1985$)	1,436	1,422	1,409	1,375	1,353	1,351	1,364	-1.0%	-0.9%	-2.4%	-1.6%	-0.1%	1.0%

(p) = preliminary
Source: Utah Department of Employment Security, Labor Market Information Services.

Table 7
1991 Nonagricultural Employment in Utah by District, County and Major Industry

	Total	Mining	Construction	Manufacturing	Transportation Communications, and Utilities	Trade	Finance, Insurance, and Real Estate	Services and Misc.	Government
State Total	745,202	8,596	31,528	105,733	42,421	178,753	35,852	188,360	153,959
Bear River	45,170	11	1,596	16,805	959	8,032	901	6,057	10,809
Box Elder	15,312	10	505	7,981	332	2,766	261	1,279	2,178
Cache	29,465	1	1,090	8,820	612	5,181	608	4,711	8,442
Rich	392	0	0	4	15	85	32	67	189
Wasatch Front	517,748	3,188	21,869	69,373	33,337	126,813	29,727	127,360	106,081
North	128,518	77	5,223	19,227	4,557	29,496	3,822	26,654	39,462
Davis	59,753	69	2,903	7,564	2,436	14,623	1,526	10,252	20,380
Morgan	1,036	0	74	233	10	350	16	54	299
Weber	37,732	7	2,246	11,431	2,111	14,524	2,280	16,349	18,784
South	389,232	3,112	16,646	50,146	28,781	97,318	25,905	100,705	66,619
Salt Lake	379,013	2,884	16,325	49,193	28,468	95,885	25,753	99,530	60,975
Tooele	10,217	227	321	953	313	1,433	152	1,175	5,643
Mountainland	109,881	186	4,847	14,532	2,719	25,969	3,398	41,140	17,090
Summit	8,273	115	424	458	254	2,149	960	2,713	1,200
Utah	99,046	72	4,141	13,975	2,380	23,177	2,394	37,695	15,212
Wasatch	2,567	0	282	99	85	645	45	732	679
Central	15,661	588	787	1,640	1,331	3,585	353	2,254	5,123
Juab	1,951	73	125	318	37	501	28	386	483
Millard	3,504	197	286	120	719	699	71	466	946
Piute	205	0	0	39	13	20	5	11	117
Sanpete	4,420	0	169	690	123	880	116	437	2,005
Sevier	5,025	318	156	612	426	1,390	127	900	1,296
Wayne	560	0	52	61	13	98	7	55	274
Southwestern	28,499	251	1,517	2,474	1,466	8,106	992	6,819	6,874
Beaver	1,401	2	46	86	157	394	38	188	490
Garfield	1,494	9	19	174	56	205	23	531	477
Iron	7,934	62	245	719	328	2,179	233	1,600	2,568
Kane	1,607	12	31	62	46	474	41	452	489
Washington	16,067	166	1,176	1,434	880	4,855	656	4,049	2,851
Uintah Basin	11,298	1,609	315	352	1,110	2,451	194	1,894	3,149
Daggett	367	0	3	0	32	36	0	83	213
Duchesne	3,854	448	122	146	455	793	86	414	1,348
Uintah	7,075	1,161	190	206	623	1,621	107	1,396	1,589
Southeastern	16,942	2,953	598	557	1,498	3,795	286	2,836	4,833
Carbon	7,625	1,359	149	307	436	1,923	139	1,340	2,024
Emery	3,437	1,000	273	16	788	441	37	281	846
Grand	2,580	168	64	60	112	939	73	557	605
San Juan	3,299	426	112	174	161	493	38	657	1,357

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

Table 8
Utah's Largest Private and Public Nonagricultural Employers
Ranked by Employment Size
March 1992

Rank	Firm Name	Approximate Employment
1	University of Utah	14,000
2	Brigham Young University	13,500
3	Hill Air Force Base	11,000
4	Granite School District	7,500
5	U.S. Treasury Dept.	6,500
6	Thiokol Corporation	6,500
7	Smith's Food King	6,000
8	Jordan School District	6,000
9	Utah State University	5,500
10	Davis School District	5,000
11	Utah Social Services	5,000
12	Delta Airlines	4,500
13	Salt Lake County	4,000
14	U.S. Post Office	4,000
15	Alpine School District	3,500
16	Albertsons	3,500
17	Salt Lake School District	3,500
18	WordPerfect	3,500
19	ZCMI	3,500
20	Tooele Army Depot	3,500
21	Hercules	3,000
22	Pacific Corp.	3,000
23	U.S. West Communications	3,000
24	LDS Hospital	3,000
25	Basic Manufacturing & Technology	3,000
26	Weber School District	3,000
27	Matrixx Marketing	2,500
28	Kennecott Mining	2,500
29	Weber State University	2,500
30	Salt Lake City Corp.	2,500
31	U.S. Defense Depot-Ogden	2,500
32	K Mart	2,500
33	Healthtrust, Inc.	2,500
34	Utah Valley Regional Medical Cntr	2,000
35	Sears Roebuck & Company	2,000
36	McKay-Dee Hospital	2,000
37	Shopko Stores	2,000
38	U.S. Veterans Administration Hosp.	2,000
39	First Security Bank of Utah	2,000
40	Morton International	2,000
41	Proform Fitness	2,000
42	Zions First National Bank	2,000
43	Provo School District	2,000
44	Primary Children's Medical Center	2,000
45	FHP of Utah	2,000
46	Utah Dept. of Transportation	2,000
47	Fred Meyer Incorporated	1,500
48	American Express Company	1,500
49	Union Pacific Railroad	1,500
50	Utah State Corrections	1,500

Source: Utah Department of Employment Security.

Table 9
Utah's Largest Private Nonagricultural Employers
Ranked by Employment Size
March 1992

Rank	Firm Name	Approximate Employment
1	Brigham Young University	13,500
2	Thiokol Corporation	6,500
3	Smith's Food King	6,000
4	Delta Airlines	4,500
5	Albertsons	3,500
6	WordPerfect	3,500
7	ZCMI	3,500
8	Hercules	3,000
9	Pacific Corp.	3,000
10	U.S. West Communications	3,000
11	LDS Hospital	3,000
12	Basic Manufacturing & Technology	3,000
13	Matrixx Marketing	2,500
14	Kennecott Mining	2,500
15	K Mart	2,500
16	Healthtrust, Inc.	2,500
17	Utah Valley Regional Medical Cntr.	2,000
18	Sears Roebuck & Company	2,000
19	McKay-Dee Hospital	2,000
20	Shopko Stores	2,000
21	First Security Bank of Utah	2,000
22	Morton International	2,000
23	Proform Fitness	2,000
24	Zions First National Bank	2,000
25	Primary Children's Medical Center	2,000
26	FHP of Utah	2,000
27	Fred Meyer Incorporated	1,500
28	American Express Company	1,500
29	Union Pacific Railroad	1,500
30	Wal-Mart Stores	1,500
31	JC Penney Company	1,500
32	O.C. Tanner Manufacturing	1,500
33	SOS Service	1,500
34	PST Vans Inc.	1,500
35	Harmon City	1,500
36	Holy Cross Hospital	1,500
37	Discover Card	1,500
38	Mountain Fuel Supply	1,500
39	Abbott Laboratories	1,500
40	NuSkin International	1,500
41	Novell, Inc.	1,500
42	7-Eleven Stores	1,500
43	Pizza Hut	1,500
44	First Security Service Co.	1,500
45	United Parcel Service	1,500
46	Deseret Industries	1,000
47	Unisys Defense Systems	1,000
48	CR England & Sons	1,000
49	St. Marks Hospital	1,000
50	Cottonwood Hospital	1,000

Source: Utah Department of Employment Security.

Table 10
Utah Average Monthly Wage by Industry

Industry	1986	1987	1988	1989	1990	1991	Percent Change 1986-87	Percent Change 1987-88	Percent Change 1988-89	Percent Change 1989-90	Percent Change 1990-91
Total Nonagricultural Jobs	1,463	1,501	1,549	1,585	1,644	1,710	2.6%	3.2%	2.3%	3.7%	4.0%
Mining	2,758	2,708	2,820	2,905	2,976	3,002	-1.8%	4.1%	3.0%	2.4%	0.9%
Construction	1,636	1,665	1,742	1,799	1,843	1,917	1.8%	4.6%	3.3%	2.4%	4.0%
Manufacturing	1,864	1,896	1,968	2,009	2,066	2,125	1.7%	3.8%	2.1%	2.8%	2.9%
TCU	2,087	2,175	2,270	2,355	2,424	2,552	4.2%	4.4%	3.7%	2.9%	5.3%
Trade	1,052	1,063	1,103	1,133	1,173	1,231	1.0%	3.8%	2.7%	3.5%	4.9%
FIRE	1,568	1,641	1,702	1,760	1,818	1,907	4.7%	3.7%	3.4%	3.3%	4.9%
Services	1,226	1,315	1,350	1,385	1,458	1,534	7.3%	2.7%	2.6%	5.3%	5.2%
Government	1,574	1,597	1,625	1,663	1,735	1,805	1.5%	1.8%	2.3%	4.3%	4.0%

Notes: TCU = Trade, Communication and Utilities. FIRE = Fire, Insurance and Real Estate.
Source: Utah Department of Employment Security, Labor Market Information Services.

Table 11
Utah and U.S. Labor Force Participation Rates

	1950	1960	1970	1980	1990	1991
UTAH	52.2	57.4	58.4	64.2	70.5	70.8
Male	82.5	82.3	77.4	79.3	80.5	80.9
Female	25.3	33.5	41.5	49.8	60.6	61.2
U.S.	54.0	60.0	58.0	62.0	66.4	65.6
Male	80.0	83.3	79.7	75.1	76.1	74.7
Female	30.0	37.7	43.3	49.9	57.5	57.3

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

Table 12
Characteristics of Utah Unemployed Persons
1991 Annual Averages

	Total		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
Total Unemployed	39,000	100.0%	21,000	100.0%	18,000	100.0%
Age of Unemployed						
16-19 Years	10,000	25.6%	5,000	23.8%	5,000	27.8%
20-24 Years	8,000	20.5%	4,000	19.0%	4,000	22.2%
25-34 Years	10,000	25.6%	5,000	23.8%	5,000	27.8%
35-44 Years	6,000	15.4%	4,000	19.0%	2,000	11.1%
45-54 Years	4,000	10.3%	3,000	14.3%	1,000	5.6%
55+ Years	2,000	5.1%	1,000	4.8%	1,000	5.6%
Marital Status						
Single, Never Married	17,000	43.6%	10,000	47.6%	8,000	44.4%
Married, Spouse Present	16,000	41.0%	8,000	38.1%	7,000	38.9%
Other: Widowed, Divorced, and Separated	7,000	17.9%	3,000	14.3%	3,000	16.7%
Length of Unemployment						
Less than 5 Weeks	18,500	47.4%	8,200	39.0%	10,300	57.2%
5-14 Weeks	12,200	31.3%	7,400	35.2%	4,800	26.7%
15-26 Weeks	5,000	12.8%	3,200	15.2%	1,800	10.0%
27 Weeks and Over	3,300	8.5%	2,200	10.5%	1,100	6.1%
Full and Part-Time Status						
Looking for Full-time Work	28,000	71.8%	17,000	81.0%	11,000	61.1%
Looking for Part-time Work	11,000	28.2%	4,000	19.0%	7,000	38.9%

Note: Numbers may not add due to rounding.
Source: U.S. Bureau of Labor Statistics.

Table 13
Duration of Unemployment in Utah
As a Percent of Total Unemployed

	Less Than 5 Weeks	5-14 Weeks	15 Weeks +	27 Weeks +
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 14
Reasons for Unemployment in Utah
As a Percent of Total Unemployed

	Job Losers	Job Leavers	New and Re-entrants
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

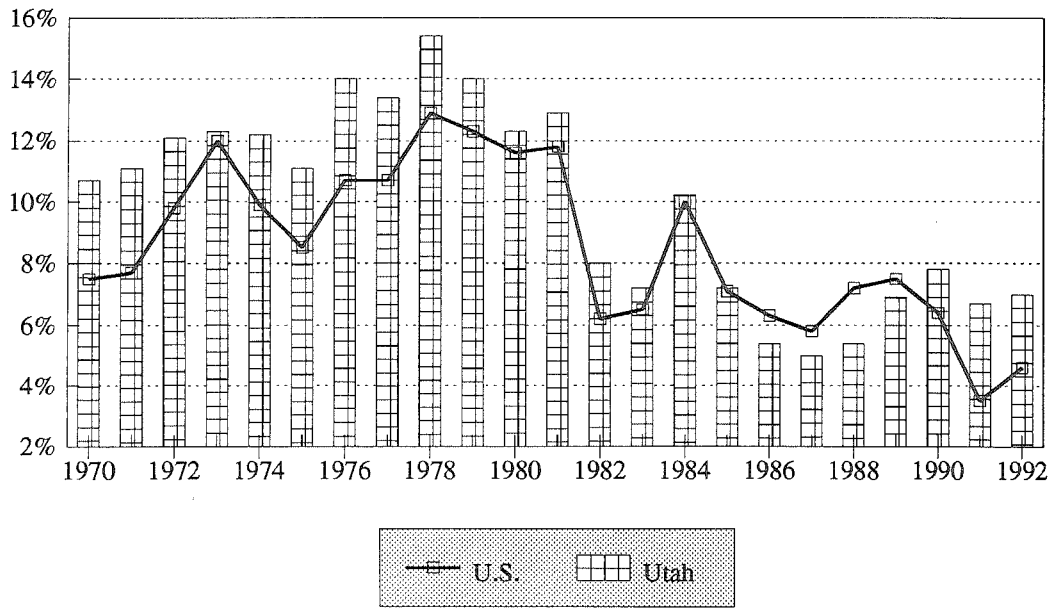
Source: U.S. Department of Labor, Bureau of Labor Statistics.

PERSONAL INCOME

Total personal income is defined as all income received by residents of an area. The statistical series comprising the components of total personal income, by area and by year, constitute 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 1992 total personal income (TPI) is forecast to be $27.7 billion, up 7.0 percent from the 1991 total. This reflects a modest increase from 1991's growth of 6.7 percent. Utah's 1991 TPI grew at almost twice the rate of the U.S. TPI (3.5 percent). Thus, the relative strength of Utah's present economic expansion is clearly reflected in these TPI growth comparisons. Comparison of Utah and U.S. TPI growth rates for previous years from Table 18 and Figure 20 show that Utah has also weathered previous economic "hard times" relatively well.

Figure 20
Utah and United States
Personal Income Growth Rates: 1970-92



Source: U.S. Bureau of Economic Analysis
and Utah Economic Coordinating Committee

Components of Personal Income

The largest single component of total personal income is "Earnings by Place of Work." As depicted in Table 16, this portion consists of the total earnings from both farm and nonfarm industries, including contributions for social insurance. It may also be viewed as the combined total of wages and salaries, other labor income, and proprietors' income — both farm and nonfarm.

In 1992, earnings by place of work was $21.2 billion, representing 76 percent of TPI. Approximately 10 percent of this figure was proprietors' income, while 90 percent was wages, salaries, and other labor income. Nonfarm earnings was 99 percent of total earnings; farm income comprised only 1 percent. Private sector nonfarm industries accounted for 80 percent of nonfarm earnings, while earnings from public (government) industries made up 20 percent.

The other components of TPI are (1) dividends, interest, and rent (DIR), and (2) transfer payments. In 1992, DIR amounted to $3.3 billion, and transfer payments were $4.4 billion. These two components, plus "Earnings by Place of Residence," constitute TPI.

Some of the major differences between the economic compositions of Utah and the United States can be observed in Table 16. Perhaps the most significant is that Utah DIR comprise a somewhat smaller (11.9 vs. 17.2 percent) share of TPI than the national figure. Thus, Utahns must rely to a greater extent on earnings. The problem with this is that Utah's average wage is only 85 percent of the U.S. average. Due to these two factors, Utah's TPI is relatively lower than that of the U.S.

The industrial composition of Utah's TPI has changed in recent years. In 1980, prior to the recession periods, goods-producing industries (mining, construction, manufacturing) generated over 31 percent of Utah's total earnings. By 1992 that share had dropped to 24 percent. This means that service-producing industries (including government) correspondingly increased their importance — from 67 percent of total earnings in 1980 to 75 percent in 1991. These comparisons reflect the continuing historical shift from goods- to service-producing jobs in the state's economy. Similar shifts have been experienced nationally.

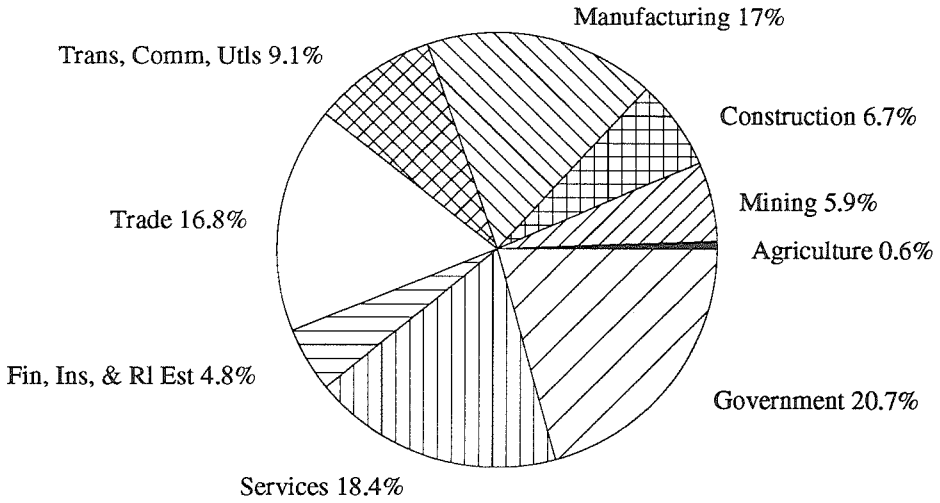
Four major industry sectors generate over three-fourths of Utah's total earnings. Services is the leader, providing 27 percent of earnings; government (including military) pays 20 percent. Both manufacturing and trade account for 16 percent of Utah's total earnings. Following these are transportation, communication, and utilities at 8 percent; construction, and finance, insurance, and real estate (FIRE) at 6 percent each; and mining at 2 percent of earnings. Agriculture and agricultural services make up the remaining 1 percent. Figure 21 illustrates these industrial shares of earnings for Utah for 1982 and 1992.

Per Capita Personal Income

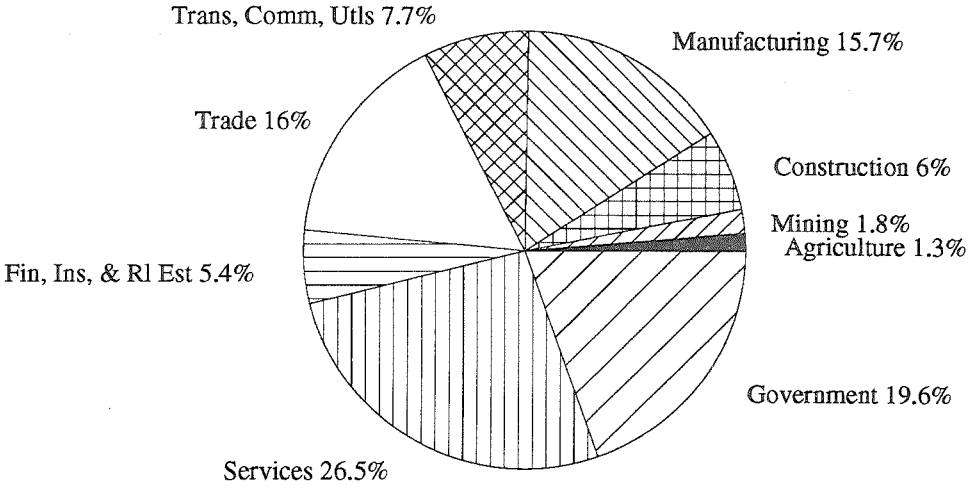
Per capita personal income is an area's annual total personal income divided by the total population as of July 1 of that year. Utah's 1992 per capita personal income (PCI) is estimated at approximately $15,221. From 1980 to 1991, Utah's real (inflation-adjusted) PCI (in 1992 dollars) increased only $2,000, compared to the $3,150 increase in the United States' real PCI.

Utah's 1991 per capita personal income of $14,568 was only 76 percent of the national PCI and ranked 48th 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, adult per capita income based on 1990 census adult population figures improves Utah's picture considerably: Utah's per capita income by this measure is 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 1991 in Utah was $46,900, which is 89 percent of the nation's $51,600 and ranks 28th in the nation.

Figure 21
Utah's Distribution of Earnings Income by Industry for 1982 and 1992



1982

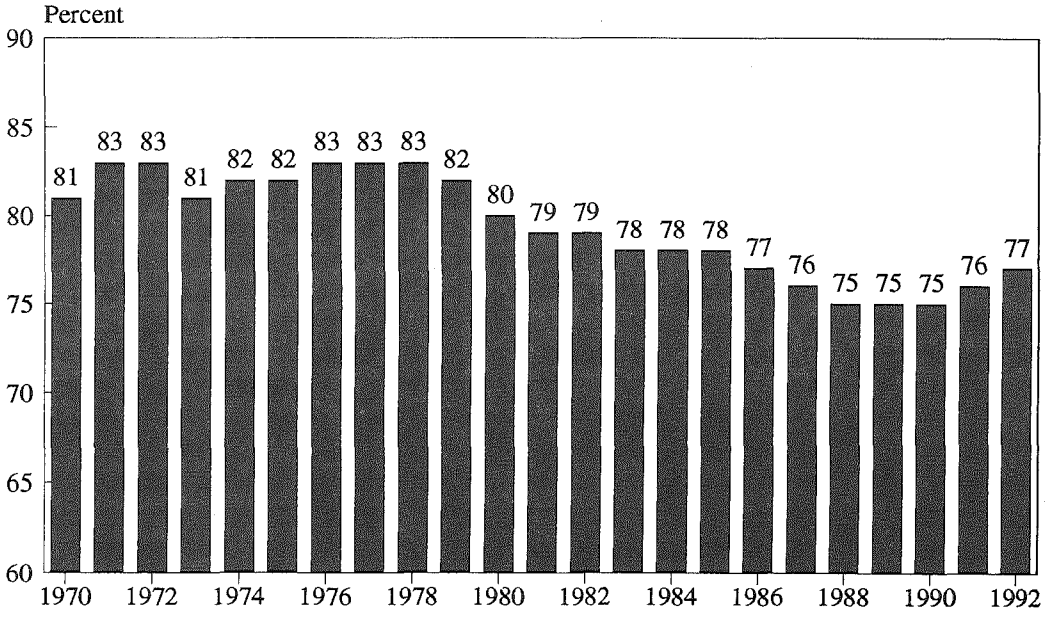


1992

Source: U.S. Bureau of Economic Analysis
and Ut. Dept. of Employment Security

During the 1970's, Utah's PCI ranged between 81 and 83 percent of the United States PCI. However, as shown in Figure 22, from 1978 to 1988 this parameter dropped 8 percentage points — from 83 to 75 percent. But 1990, 1991, and 1992 saw improvements in this comparison — the 1992 figure stands at 77 percent, which is the highest level since 1987. Utah's PCI for 1989-92 is in Table 16.

Figure 22
Utah Per Capita Personal Income
as a Percent of U.S.: 1970-1992



Source: U.S. Bureau of Economic Analysis

County Personal Income

Eleven of Utah's counties posted double-digit 1990-91 growth in total personal income, up from six counties the previous year. Because these counties all had large nonfarm employment increases which led to large wage increases, their total personal income increased rapidly too. On the other end of the scale, Emery County's TPI declined by 4 percent, San Juan's lost 2 percent, and Sevier and Garfield's were virtually unchanged.

With few exception, the per capita income estimates in northern Utah's counties are considerably higher than those of the rest of the state. Summit County's $21,800 leads Utah; San Juan County's $8,000 is lowest. Interestingly, Carbon and Daggett are the only counties outside the northern Utah group with PCI's greater than the state figure. The 1991 per capita income of the United States, at $19,092, is higher than that of all of Utah's counties except Summit and Daggett. Table 17 presents county and planning district TPI and PCI estimates for 1989 through 1991.

Table 15
Total Personal Income
Utah and U.S.

	Total Personal Income (millions)		Personal Income Growth Rates		Per Capita Personal Income		Utah as a Percent of U.S.
	Utah	U.S.	Utah	U.S.	Utah	U.S.	
1969	$3,167	$767,608	--	--	$3,024	$3,808	79.4
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	$974,980	12.1%	9.8%	$3,851	$4,659	82.7
1973	$4,908	$1,092,270	12.3%	12.0%	$4,199	$5,168	81.3
1974	$5,509	$1,200,646	12.2%	9.9%	$4,596	$5,628	81.7
1975	$6,123	$1,302,609	11.1%	8.5%	$4,962	$6,046	82.1
1976	$6,981	$1,442,315	14.0%	10.7%	$5,487	$6,630	82.8
1977	$7,918	$1,597,059	13.4%	10.7%	$6,015	$7,267	82.8
1978	$9,140	$1,802,908	15.4%	12.9%	$6,700	$8,118	82.5
1979	$10,417	$2,025,153	14.0%	12.3%	$7,356	$9,018	81.6
1980	$11,695	$2,259,383	12.3%	11.6%	$7,942	$9,942	79.9
1981	$13,202	$2,526,424	12.9%	11.8%	$8,712	$11,010	79.1
1982	$14,255	$2,684,308	8.0%	6.2%	$9,148	$11,587	79.0
1983	$15,277	$2,858,617	7.2%	6.5%	$9,578	$12,226	78.3
1984	$16,836	$3,145,329	10.2%	10.0%	$10,377	$13,336	77.8
1985	$18,042	$3,369,099	7.2%	7.1%	$10,980	$14,159	77.5
1986	$19,020	$3,580,700	5.4%	6.3%	$11,437	$14,910	76.7
1987	$19,978	$3,790,116	5.0%	5.8%	$11,903	$15,641	76.1
1988	$21,052	$4,063,785	5.4%	7.2%	$12,460	$16,618	75.0
1989	$22,503	$4,368,495	6.9%	7.5%	$13,192	$17,699	74.5
1990	$24,269	$4,649,706	7.8%	6.4%	$14,034	$18,639	75.3
1991	$25,890	$4,814,495	6.7%	3.5%	$14,586	$19,092	76.4
1992	$27,702	$5,036,000	7.0%	4.6%	$15,221	$19,718	77.2

Source: U.S. Bureau of Economic Analysis and
Utah Department of Employment Security,
Labor Market Information Services.

Table 16
Components of Utah's Total Personal Income
(Millions of Dollars, Except Percentages, Population, and Per Capita Personal Income)

	1989	1990	1991	1992 (p)	89-90 Change	90-91 Change	91-92 Change	1991 Percentage Distribution Utah	1991 Percentage Distribution U.S.	1992 Utah Distribution
Total Personal Income	22,503	24,269	25,890	27,702	7.8%	6.7%	7.0%	100.0%	100.0%	100.0%
Total Earnings - Place/Work	17,144	18,549	19,785	21,180	8.2%	6.7%	7.1%	76.5%	71.7	76.5%
Personal Cont. for Soc. Ins.	1,041	1,124	1,231	1,307	7.9%	9.6%	6.1%	4.7%	4.9%	4.7%
Plus: Resid. Adjustment	90	106	111	113	17.7%	5.0%	2.0%	0.4%	0.0%	0.4%
Equals: Earnings by Residence	16,192	17,531	18,664	19,986	8.3%	6.5%	7.1%	72.1%	66.8%	72.1%
Dividends, Interest, & Rent	3,079	3,209	3,288	3,294	4.2%	2.5%	0.2%	11.9%	17.2%	11.9%
Transfer Payments	3,232	3,530	3,938	4,422	9.2%	11.6%	12.3%	16.0%	16.0%	16.0%
Components of Earnings	17,144	18,549	19,785	21,180	8.2%	6.7%	7.1%	76.5%	71.7%	76.5%
Wages & Salaries	14,069	15,240	16,310	17,453	8.3%	7.0%	7.0%	63.0%	58.1%	63.0%
Other Labor Income	1,335	1,481	1,629	1,730	10.9%	10.0%	6.2%	6.2%	6.0%	6.2%
Proprietors' Income	1,740	1,828	1,845	1,997	5.1%	0.9%	8.2%	7.2%	7.6%	7.2%
Farm	172	190	153	171	10.4%	-19.3%	11.9%	0.6%	0.7%	0.6%
Nonfarm	1,568	1,639	1,692	1,828	4.5%	3.3%	8.0%	6.6%	6.9%	6.6%
Earnings by Industry	17,144	18,549	19,785	21,180	8.2%	6.7%	7.1%	76.4%	71.7%	100.0%
Farm	219	241	203	220	10.4%	-15.8%	8.2%	0.8%	0.9%	1.0%
Nonfarm	16,925	18,308	19,581	20,960	8.2%	7.0%	7.0%	75.7%	70.8%	99.0%
Private Sector	13,483	14,604	15,622	16,800	8.3%	7.0%	7.5%	60.6%	58.9%	79.3%
Ag Services, Etc.	47	54	59	67	13.7%	9.8%	13.1%	0.2%	0.4%	0.3%
Mining	335	360	365	373	7.6%	1.2%	2.3%	1.3%	0.7%	1.8%
Construction	900	965	1,084	1,263	7.2%	12.3%	16.5%	4.6%	3.9%	6.0%
Manufacturing	2,909	3,097	3,213	3,322	6.5%	3.7%	3.4%	12.0%	13.6%	15.7%
Trans., Commun., Utilities	1,420	1,512	1,589	1,625	6.5%	5.1%	2.3%	5.9%	4.8%	7.7%
Wholesale Trade	1,086	1,144	1,244	1,229	5.4%	8.7%	-1.2%	4.4%	4.6%	5.8%
Retail Trade	1,700	1,837	1,932	2,155	8.0%	5.2%	11.6%	7.8%	6.9%	10.2%
Fin., Ins., Real Estate	899	958	1,067	1,134	6.5%	11.3%	6.3%	4.1%	4.8%	5.4%
Services	4,186	4,676	5,069	5,632	11.7%	8.4%	11.1%	20.3%	19.1%	26.6%
Government (Incl Military)	3,442	3,704	3,959	4,160	7.6%	6.9%	5.1%	15.0%	11.9%	19.6%
Federal, Cilivian	1,177	1,227	1,280	1,330	4.2%	4.4%	3.9%	4.8%	2.4%	6.3%
Military	204	217	236	230	6.4%	8.8%	-2.3%	0.8%	1.0%	1.1%
State and Local	2,062	2,260	2,444	2,600	9.6%	8.1%	6.4%	9.4%	8.5%	12.3%
Per Capita Personal Income	13,192	14,034	14,586	15,221	6.4%	3.9%	4.4%			
Population (thousands)	1,706	1,729	1,775	1,820	1.3%	2.7%	2.5%			

(p) = preliminary
Source: U.S. Department of Commerce, Bureau of Economic Analysis, September 1992.
Utah Department of Employment Security, Labor Market Information Services, November 1992.

Table 17
Total and Per Capita Income
By County and Multi-County District

	Total Personal Income (Millions)					Per Capita Personal Income				
	1989	1990	1991	Percent Change 89-90	Percent Change 90-91	1989	1990	1991	Percent Change 89-90	Percent Change 90-91
State Total	$22,503.0	$24,269.0	$25,890.0	7.8	6.7	$13,192	$14,034	$14,586	6.4	3.9
Bear River	1,362.5	1,468.3	1,547.6	7.8	5.4	12,698	13,495	14,000	6.3	3.7
Box Elder	536.4	575.5	583.6	7.3	1.4	14,829	15,721	15,800	6.0	0.5
Cache	802.4	866.7	935.0	8.0	7.9	11,582	12,290	13,000	6.1	5.8
Rich	23.7	26.1	29.1	10.1	11.3	13,337	15,290	17,100	14.6	11.8
Wasatch Front	15,413.2	16,662.0	17,698.8	8.1	6.2	14,098	15,028	15,600	6.6	3.8
North	4,648.2	5,039.8	5,319.8	8.4	5.6	13,342	14,269	14,700	7.0	3.0
Davis	2,323.4	2,530.0	2,613.7	8.9	3.3	12,533	13,394	13,400	6.9	0.0
Morgan	76.7	81.9	92.0	6.8	12.4	14,046	14,743	16,300	5.0	10.6
Weber	2,248.1	2,427.9	2,614.0	8.0	7.7	14,275	15,301	16,200	7.2	5.9
South	10,765.0	11,622.2	12,379.0	8.0	6.5	14,452	15,383	16,000	6.4	4.0
Salt Lake	10,390.1	11,224.4	11,975.8	8.0	6.7	14,467	15,399	16,100	6.4	4.6
Tooele	374.9	397.8	403.2	6.1	1.4	14,043	14,967	14,900	6.6	-0.4
Mountainland	3,132.6	3,482.3	3,878.9	11.2	11.4	10,976	11,983	13,000	9.2	8.5
Summit	291.4	318.1	360.2	9.2	13.2	19,330	20,285	21,800	4.9	7.5
Utah	2,729.6	3,036.6	3,390.1	11.2	11.6	10,487	11,467	12,500	9.3	9.0
Wasatch	111.6	127.6	128.7	14.3	0.8	11,165	12,603	12,100	12.9	-4.0
Central	557.7	597.8	659.5	7.2	10.3	10,643	11,430	12,300	7.4	7.6
Juab	57.1	62.3	79.2	9.1	27.1	9,798	10,710	13,200	9.3	23.2
Millard	129.3	140.8	158.3	8.9	12.4	11,197	12,491	13,700	11.6	9.7
Piute	12.9	14.1	15.7	9.3	11.4	9,964	11,097	11,700	11.4	5.4
Sanpete	161.4	174.7	198.8	8.2	13.8	9,939	10,733	11,800	8.0	9.9
Sevier	176.7	183.7	183.4	4.0	-0.1	11,451	11,900	11,700	3.9	-1.7
Wayne	20.3	22.2	24.2	9.4	8.8	9,373	10,185	11,000	8.7	8.0
Southwestern	858.2	956.7	1,048.4	11.5	9.6	10,556	11,389	12,000	7.9	5.4
Beaver	55.1	59.6	68.6	8.2	15.1	11,494	12,535	14,200	9.1	13.3
Garfield	47.9	51.2	51.1	6.9	-0.1	12,078	12,840	12,500	6.3	-2.6
Iron	203.8	228.4	233.3	12.1	2.1	9,854	10,964	10,900	11.3	-0.6
Kane	56.1	60.0	62.3	7.0	3.8	11,037	11,542	11,900	4.6	3.1
Washington	495.3	557.5	633.1	12.6	13.6	10,601	11,321	12,200	6.8	7.8
Uintah Basin	377.7	410.3	446.5	8.6	8.8	10,492	11,558	12,200	10.2	5.6
Daggett	10.2	11.5	14.1	12.7	22.8	14,659	16,701	20,200	13.9	21.0
Duchesne	142.7	153.9	169.8	7.8	10.3	11,053	12,245	13,300	10.8	8.6
Uintah	224.8	244.9	262.6	8.9	7.2	10,026	11,053	11,400	10.2	3.1
Southeastern	570.0	607.9	610.3	6.6	0.4	11,332	12,207	12,200	7.7	-0.1
Carbon	285.3	302.3	303.8	6.0	0.5	13,928	15,002	14,800	7.7	-1.3
Emery	108.7	114.4	109.3	5.2	-4.4	10,322	11,135	10,700	7.9	-3.9
Grand	80.8	88.0	96.1	8.9	9.2	11,949	13,378	14,200	12.0	6.1
San Juan	95.2	103.2	101.0	8.4	-2.1	7,611	8,145	8,000	7.0	-1.8

Sources: 1989-1990: U.S. Department of Commerce, Bureau of Economic Analysis, May 1992.
1991: Utah Department of Employment Security.

Table 18
Personal Income Trends
Utah and U.S.

				Average Annual Change			Percent of U.S. Total		
	1981	1986	1992	1981-86	1986-92	1981-92	1981	1986	1992
Population (Thousands)									
U.S.	229,457	240,162	255,400	0.9%	1.2%	1.1%	100.00%	100.00%	100.00%
Utah	1,515	1,663	1,820	1.9%	1.8%	1.9%	0.66%	0.69%	0.71%
Total Personal Income (Billions)									
U.S.	$2,526.4	$3,580.7	$5,036.0	7.2%	7.1%	7.1%	100.00%	100.00%	100.00%
Utah	$13.2	$19.0	$27.7	7.6%	7.8%	7.7%	0.52%	0.53%	0.55%
Per Capita Personal Income									
U.S.	$11,010	$14,910	$19,718	6.3%	5.7%	6.0%	100.00%	100.00%	100.00%
Utah	$8,712	$11,437	$15,221	5.6%	5.9%	5.7%	79.1%	76.7%	77.2%

Sources: U.S. Department of Commerce: Bureau of Economic Analysis and Bureau of the Census.
Utah Department of Employment Security, Labor Market Information Services.

GROSS STATE PRODUCT

Gross State Product (GSP) is the most complete, aggregate measure of a state's economic activity. GSP is the state counterpart of the nation's gross domestic product, which has now replaced gross national product as the primary measure of national output. The U.S. Department of Commerce, Bureau of Economic Analysis (BEA) defines GSP as the gross market value of all final goods and services produced by the labor and property located within a state. The measure is gross because it does not account for capital depreciation. Because GSP includes only the value of final goods and services and not intermediate goods and services, it measures what is commonly referred to as the total value added in a state's economy.

Although GSP is a valuable measure of economic activity, BEA does not currently recognize it as an administrative series and publishes GSP estimates irregularly. In November of this year, however, BEA established a formal Gross State Product Branch within the Regional Economics Division. As the demand for GSP data increases and the methodological obstacles are overcome, GSP estimates will be released more frequently and regularly.

The most recent GSP data available are for 1989, the same data that were published in last year's *Economic Report to the Governor*. In order to keep the most recent GSP data available in this report, last year's data have been included again. The BEA plans to release 1990 and 1991 estimates, along with revision for 1977-89, in July 1993.

GSP Concepts

The BEA prepares GSP estimates for 61 industries. For each industry, four main elements comprise GSP: compensation of employees; proprietors' income; indirect business taxes; and capital charges. Table 19 provides Utah GSP by major component from 1977 to 1989.

Because GSP measures output at market prices and prices change over time, a distinction is made between a change in the quantity of goods and services produced and a change in the prices paid for those products. Constant GSP is a better measure of output because it adjusts for inflation and measures the quantity of goods and services produced. GSP estimates are published in both current and constant 1982 dollars.

A significant limitation of constant dollar GSP estimates is that they are based on national price deflators by industry and do not reflect the variations in regional prices. Applying national price deflators can distort the true change in state-level output because inflation varies by geographic area. Particularly affected are the energy, construction, real estate, and state and local government sectors.

1989 GSP

In 1989 Utah's GSP measured $28.1 billion, which is approximately 1/2 of 1 percent of total U.S. gross domestic product. Utah's total output in 1989 ranked 35th in the nation, the same ranking as Utah's population. Utah ranked 44th among the states in per capita GSP largely because of Utah's young population. Utah's per capita GSP was $16,492 while the U.S. average was $20,925. Table 20 provides GSP estimates by state from 1977 to 1989 and Table 21 provides GSP rankings.

GSP Growth

Utah's GSP growth rate was above the U.S. average between 1977 and 1989, ranking 17th among the 50 states. The state's average annual rate of growth over this time period was 8.9 percent, while the national average was 8.4 percent. In the Rocky Mountain Region, Utah's 8.9 percent rate of growth exceeded Colorado's 8.6 percent, Idaho's 7.4 percent, Montana's 6.2 percent, and Wyoming's 6.0 percent (Table 22).

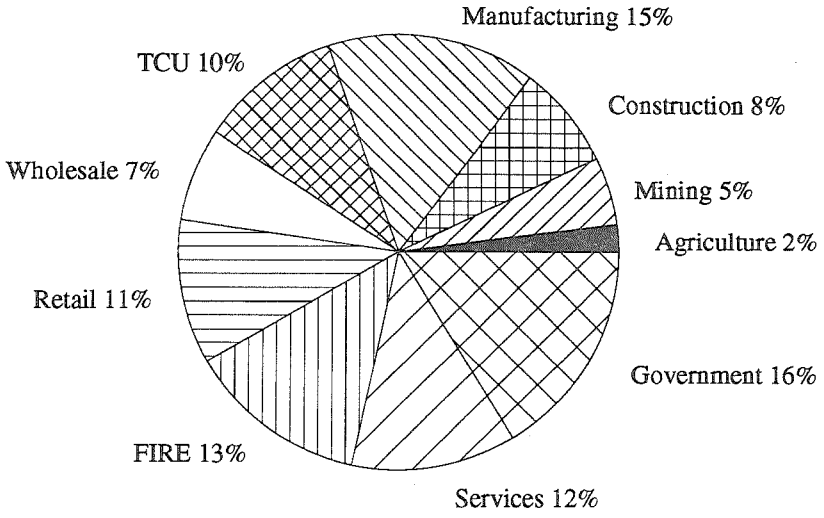
Between 1977 and 1984, Utah's annual rate of growth exceeded the nation's average. In 1984, however, the state began to experience economic slowdown and out-migration, and in 1985 its 7.0 percent annual rate of growth matched the U.S. average. Between 1985 and 1988, Utah's rate lagged behind the nation in GSP growth. In 1989, as the state's economy began to rebound, the two annual rates of growth were equal at 6.4 percent. Analysts expect Utah's 1990 and 1991 rates to be higher than the nation's because of Utah's strong economic performance, relative to the nation, over the past few years.

In real terms, Utah's GSP declined twice during the 12 year period: in 1982 during the national recession and in 1987 when the state experienced its own economic downturn. Overall, Utah's real average annual growth rate was 3.4 percent, while the national average was 2.9 percent. Table 23 shows Utah's GSP by industry from 1977 to 1989 in both current and constant dollars.

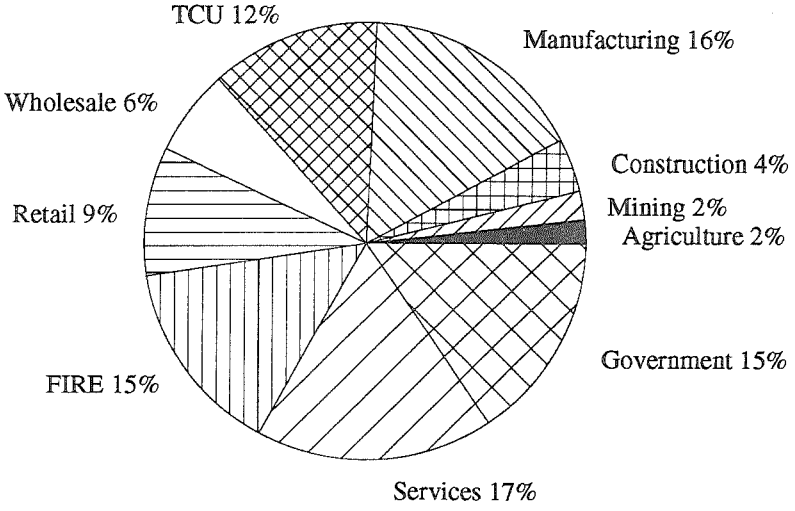
Industry Composition

In 1989, the services category was the state's largest industry in terms of GSP value. Of total GSP, Services contributed 17.5 percent. Following Services, Utah's 1989 GSP was comprised of: manufacturing, 16.5 percent; government, 15.5 percent; FIRE (finance, insurance and real estate), 14.6 percent; transportation, communications and utilities (TCU), 12.4 percent; retail trade, 9.5 percent; wholesale trade, 6.3 percent; construction, 3.9 percent; mining, 2.1 percent; and finally, agriculture, forestry and fisheries, 1.8 percent. GSP by industry and each industry's share of GSP are shown in Table 24 and Figure 23. For reference purposes GSP by detailed industry from 1977 to 1989 are provided in Table 25.

Figure 23
% Share of Gross State Product: Utah



1977



1989

Source: U.S. Dept. of Commerce:
Bureau of Economic Analysis

Table 19
Utah Gross State Product by Major Component
(Millions of Dollars)

	Gross State Product	Percent of Total	Employee Compensation	Percent of Total	Proprietors' Income	Percent of Total	Indirect Business Taxes	Percent of Total
1977	10,116	100.0%	6,138	60.7%	1,227	12.1%	785	7.8%
1978	11,839	100.0%	7,119	60.1%	1,354	11.4%	899	7.6%
1979	13,493	100.0%	8,129	60.2%	1,486	11.0%	1,023	7.6%
1980	15,003	100.0%	9,059	60.4%	1,514	10.1%	1,190	7.9%
1981	17,185	100.0%	10,267	59.7%	1,527	8.9%	1,457	8.5%
1982	18,018	100.0%	10,961	60.8%	1,438	8.0%	1,522	8.4%
1983	19,499	100.0%	11,584	59.4%	1,553	8.0%	1,655	8.5%
1984	21,988	100.0%	12,773	58.1%	1,786	8.1%	1,933	8.8%
1985	23,525	100.0%	13,573	57.7%	1,867	7.9%	2,168	9.2%
1986	23,985	100.0%	14,012	58.4%	2,074	8.6%	2,267	9.5%
1987	24,622	100.0%	14,486	58.8%	2,249	9.1%	2,041	8.3%
1988	26,450	100.0%	15,464	58.5%	2,452	9.3%	2,297	8.7%
1989	28,135	100.0%	16,611	59.0%	2,584	9.2%	2,433	8.6%

Source: United States Department of Commerce, Bureau of Economic Analysis, November 1991.

Table 20
Gross State Product by Region and State
(Millions of Dollars)

Region/State	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
New England	$103,310	$115,312	$127,430	$139,362	$154,204	$163,800	$181,746	$205,160	$224,466	$247,849	$274,642	$301,104	$311,942
Connecticut	29,822	33,219	36,695	39,928	44,233	46,872	52,286	59,084	64,160	70,577	78,420	85,651	88,863
Maine	7,648	8,590	9,554	10,337	11,280	12,052	13,271	14,758	16,008	17,660	19,898	22,129	23,474
Massachusetts	49,004	54,301	59,647	65,552	72,464	76,870	85,123	96,515	105,883	116,364	128,115	140,793	144,791
New Hampshire	6,285	7,368	8,440	9,336	10,521	11,530	13,135	14,855	16,698	19,209	21,831	23,812	24,504
Rhode Island	7,112	7,814	8,597	9,282	10,187	10,611	11,479	12,775	13,816	15,252	16,532	17,897	18,807
Vermont	3,440	4,019	4,498	4,926	5,520	5,864	6,453	7,173	7,901	8,786	9,846	10,821	11,502
Mideast	388,887	427,766	464,836	500,342	551,617	584,056	636,663	703,472	761,233	820,984	889,160	971,895	1,026,195
Delaware	5,623	6,097	6,544	7,040	7,710	8,297	9,098	9,963	10,756	11,449	12,823	14,275	15,418
DC	14,818	16,646	17,778	18,857	20,182	21,393	23,426	26,122	29,307	30,665	33,486	36,759	39,363
Maryland	34,144	37,918	41,300	44,352	49,364	52,225	57,889	64,461	70,855	77,385	84,623	92,707	99,074
New Jersey	66,396	73,756	81,051	88,594	98,239	106,422	118,658	132,825	144,978	158,745	174,714	193,034	203,375
New York	169,215	184,528	199,492	215,239	238,885	254,991	277,996	306,928	332,461	358,767	384,983	419,903	441,068
Pennsylvania	98,690	108,821	118,671	126,259	137,237	140,728	149,597	163,173	172,876	183,973	198,531	215,218	227,898
Great Lakes	389,173	433,274	468,697	481,752	521,929	525,453	559,353	622,684	660,968	700,746	742,568	802,069	849,141
Illinois	114,966	127,181	137,616	143,523	156,170	159,460	167,222	187,006	197,379	208,310	222,079	241,135	256,478
Indiana	48,176	53,879	58,404	59,633	64,706	64,455	68,086	76,455	80,359	85,223	91,231	98,243	105,314
Michigan	88,577	98,489	104,587	103,968	110,963	108,267	117,829	131,389	143,285	153,217	160,930	172,653	181,827
Ohio	97,331	108,574	117,863	121,552	132,747	133,893	143,468	158,529	167,648	177,159	186,385	201,478	211,545
Wisconsin	40,123	45,150	50,228	53,075	57,343	59,377	62,748	69,306	72,296	76,836	81,943	88,559	93,978
Plains	148,907	168,914	189,076	199,337	222,457	228,339	237,253	265,905	278,318	289,715	305,244	325,025	348,523
Iowa	26,598	30,335	33,423	35,023	39,007	37,805	36,752	41,184	41,680	42,924	44,659	47,558	52,574
Kansas	20,593	23,210	26,694	28,297	31,742	33,549	35,186	38,642	40,716	41,777	43,956	46,615	48,829
Minnesota	35,862	40,543	45,555	48,990	53,887	56,013	59,374	67,600	71,289	75,651	80,881	87,238	93,559
Missouri	41,476	46,742	51,416	53,325	58,825	61,358	66,342	74,272	79,461	84,335	89,168	94,932	100,081
Nebraska	13,760	15,514	17,366	18,325	20,935	21,373	21,554	24,316	25,341	25,705	26,611	28,518	31,115
North Dakota	5,418	6,601	7,715	8,333	10,357	10,369	10,133	10,972	10,762	10,001	10,193	10,042	11,231
South Dakota	5,200	5,970	6,907	7,045	7,703	7,873	7,911	8,920	9,070	9,323	9,777	10,123	11,135
Southeast	384,195	438,653	490,687	539,289	610,794	639,010	693,183	773,881	828,897	879,010	946,378	1,025,196	1,091,847
Alabama	25,978	29,731	33,004	35,179	39,607	40,602	44,105	49,060	52,712	55,778	59,547	64,059	67,886
Arkansas	14,795	17,285	19,075	20,334	23,031	23,712	25,190	28,666	29,792	31,015	32,708	35,130	37,169
Florida	64,140	74,590	85,142	95,727	109,668	117,197	131,150	146,957	161,750	176,588	194,884	212,761	226,964
Georgia	40,504	46,040	51,211	55,616	62,847	66,793	74,793	86,430	95,287	104,810	113,098	122,717	129,776
Kentucky	28,584	32,147	35,399	37,228	40,977	42,380	44,545	49,574	51,507	53,986	57,426	61,631	65,858
Louisiana	39,478	45,165	52,713	64,297	77,309	77,986	76,803	81,350	81,962	72,300	72,125	76,540	79,138
Mississippi	16,027	18,161	20,401	21,606	24,409	25,501	26,890	29,595	31,125	31,734	33,281	36,255	38,135
North Carolina	44,148	50,103	54,890	59,110	65,980	69,182	77,876	88,275	94,622	104,054	112,288	121,489	130,085
South Carolina	19,878	22,546	25,232	27,330	30,775	32,030	35,349	39,729	42,195	45,804	49,608	54,338	60,150
Tennessee	33,249	38,270	42,252	45,031	49,845	51,879	56,065	63,173	67,967	73,213	80,507	86,949	92,267
Virginia	42,781	48,295	53,390	58,401	65,590	70,245	78,633	87,900	96,008	105,511	115,881	126,668	136,497
West Virginia	14,633	16,322	17,978	19,430	20,755	21,503	21,783	23,173	23,970	24,217	25,025	26,660	27,922
Southwest	184,596	213,674	248,929	288,876	342,250	356,400	374,025	407,274	430,828	418,807	431,753	458,666	483,119
Arizona	18,918	22,558	26,868	29,676	32,895	33,548	37,691	43,845	49,312	54,269	58,480	62,375	65,306
New Mexico	10,196	11,901	14,101	16,670	19,598	19,835	20,523	23,005	23,516	22,273	23,039	24,263	25,414
Oklahoma	23,647	27,319	32,145	37,811	45,185	48,560	47,622	49,862	50,171	47,191	47,371	49,903	52,342
Texas	131,835	151,896	175,815	204,720	244,572	254,457	268,190	290,562	307,828	295,074	302,862	322,125	340,057
Rocky Mountain	53,508	63,122	72,692	82,223	93,551	97,998	103,341	112,139	116,822	116,887	120,178	126,730	134,873
Colorado	24,535	28,630	33,212	37,156	42,155	45,314	48,912	53,705	56,445	57,506	59,630	62,490	66,180
Idaho	6,929	8,213	8,954	9,666	10,390	10,376	11,243	12,077	12,547	12,664	13,599	14,830	16,339
Montana	6,383	7,610	8,554	9,466	10,601	11,061	11,379	11,753	11,460	11,497	11,771	12,178	13,104
Utah	10,116	11,839	13,493	15,033	17,185	18,018	19,499	21,988	23,525	23,985	24,622	26,450	28,135
Wyoming	5,545	6,830	8,480	10,903	13,219	13,228	12,307	12,617	12,846	11,235	10,557	10,782	11,115
Far West	288,490	334,603	375,278	412,573	456,580	476,094	519,993	580,321	626,595	675,070	735,855	802,711	873,693
California	224,134	258,181	288,244	319,321	356,864	374,086	409,384	459,905	500,538	539,307	589,311	642,309	697,381
Nevada	7,142	8,851	10,405	11,866	13,358	13,833	14,940	16,489	17,995	19,355	21,478	24,657	27,960
Oregon	21,885	25,485	28,696	30,205	31,430	31,141	33,403	36,434	38,205	40,438	43,563	47,881	52,118
Washington	35,329	42,086	47,933	51,180	54,928	57,035	62,267	67,493	69,857	75,970	81,503	87,864	96,233
Alaska	7,597	8,006	9,201	13,955	20,004	18,619	18,932	19,695	20,511	17,877	16,994	17,681	19,582
Hawaii	8,946	10,006	11,257	12,621	13,507	14,412	15,477	16,500	17,642	19,088	20,738	23,183	25,755
United States	1,957,608	2,213,331	2,458,084	2,670,330	2,986,892	3,104,181	3,339,966	3,707,032	3,966,280	4,186,032	4,483,510	4,854,260	5,164,671

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

Table 21
Gross State Product Rankings by State

	1977 GSP (millions)	1989 GSP (millions)	Annual Rate of Change	Growth Rank	Percent of U.S. GSP	1989 GSP Size Rank	1989 Population (thousands)	Pop Rank	GSP Per Capita	Per Capita Rank
Alabama	$25,978	$67,886	8.3%	23	1.3%	23	4,030	22	$16,845	42
Alaska	7,597	19,582	8.2%	27	0.4%	42	547	49	35,799	1
Arizona	18,918	65,306	10.9%	4	1.3%	26	3,622	24	18,030	36
Arkansas	14,795	37,169	8.0%	28	0.7%	33	2,346	33	15,844	48
California	224,134	697,381	9.9%	8	13.5%	1	29,218	1	23,868	8
Colorado	24,535	66,180	8.6%	21	1.3%	24	3,276	27	20,201	20
Connecticut	29,822	88,863	9.5%	12	1.7%	21	3,283	26	27,068	2
Delaware	5,623	15,418	8.8%	19	0.3%	45	658	46	23,432	10
Florida	64,140	226,964	11.1%	3	4.4%	6	12,638	4	17,959	37
Georgia	40,504	129,776	10.2%	6	2.5%	13	6,411	11	20,243	18
Hawaii	8,946	25,755	9.2%	16	0.5%	38	1,095	41	23,521	9
Idaho	6,929	16,339	7.4%	34	0.3%	44	994	43	16,438	45
Illinois	114,966	256,478	6.9%	39	5.0%	4	11,410	6	22,478	11
Indiana	48,176	105,314	6.7%	41	2.0%	14	5,524	14	19,065	30
Iowa	26,598	52,574	5.8%	49	1.0%	28	2,771	30	18,973	32
Kansas	20,593	48,829	7.5%	33	0.9%	31	2,473	32	19,745	23
Kentucky	28,584	65,858	7.2%	37	1.3%	25	3,677	23	17,911	38
Louisiana	39,478	79,138	6.0%	47	1.5%	22	4,253	21	18,608	35
Maine	7,648	23,474	9.8%	9	0.5%	41	1,220	38	19,241	28
Maryland	34,144	99,074	9.3%	15	1.9%	16	4,727	19	20,959	15
Massachusetts	49,004	144,791	9.4%	13	2.8%	10	6,016	13	24,068	7
Michigan	88,577	181,827	6.2%	46	3.5%	9	9,253	8	19,651	24
Minnesota	35,862	93,559	8.3%	24	1.8%	19	4,338	20	21,567	14
Mississippi	16,027	38,135	7.5%	32	0.7%	32	2,574	31	14,815	50
Missouri	41,476	100,081	7.6%	30	1.9%	15	5,096	15	19,639	25
Montana	6,383	13,104	6.2%	45	0.3%	46	800	44	16,380	46
Nebraska	13,760	31,115	7.0%	38	0.6%	34	1,575	36	19,756	22
Nevada	7,142	27,960	12.0%	1	0.5%	36	1,137	39	24,591	4
New Hampshire	6,285	24,504	12.0%	2	0.5%	40	1,105	40	22,176	13
New Jersey	66,396	203,375	9.8%	10	3.9%	8	7,726	9	26,323	3
New Mexico	10,196	25,414	7.9%	29	0.5%	39	1,504	37	16,898	41
New York	169,215	441,068	8.3%	25	8.5%	2	17,983	2	24,527	5
North Carolina	44,148	130,085	9.4%	14	2.5%	12	6,565	10	19,815	21
North Dakota	5,418	11,231	6.3%	44	0.2%	48	646	47	17,385	40
Ohio	97,331	211,545	6.7%	42	4.1%	7	10,829	7	19,535	26
Oklahoma	23,647	52,342	6.8%	40	1.0%	29	3,150	28	16,617	43
Oregon	21,885	52,118	7.5%	31	1.0%	30	2,791	29	18,674	34
Pennsylvania	98,690	227,898	7.2%	36	4.4%	5	11,866	5	19,206	29
Rhode Island	7,112	18,807	8.4%	22	0.4%	43	1,001	42	18,788	33
South Carolina	19,878	60,150	9.7%	11	1.2%	27	3,457	25	17,399	39
South Dakota	5,200	11,135	6.6%	43	0.2%	49	697	45	15,976	47
Tennessee	33,249	92,267	8.9%	18	1.8%	20	4,854	17	19,008	31
Texas	131,835	340,057	8.2%	26	6.6%	3	16,807	3	20,233	19
Utah	10,116	28,135	8.9%	17	0.5%	35	1,706	35	16,492	44
Vermont	3,440	11,502	10.6%	5	0.2%	47	558	48	20,613	16
Virginia	42,781	136,497	10.2%	7	2.6%	11	6,120	12	22,303	12
Washington	35,329	96,233	8.7%	20	1.9%	17	4,746	18	20,277	17
West Virginia	14,633	27,922	5.5%	50	0.5%	37	1,807	34	15,452	49
Wisconsin	40,123	93,978	7.4%	35	1.8%	18	4,857	16	19,349	27
Wyoming	5,545	11,115	6.0%	48	0.2%	50	458	50	24,269	6
United States	$1,957,608	$5,164,671	8.4%	—	100.0%	—	246,820	—	$20,925	—

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

Table 22
Rocky Mountain Region Gross State Product

Millions of Current Dollars	1977	1978	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average Annual Growth Rate
Rocky Mountain	$53,508	$63,122	$72,692	$82,223	$93,551	$97,998	$103,341	$112,139	$116,822	$116,887	$120,178	$126,730	$134,873	8.0%
Colorado	24,535	28,630	33,212	37,156	42,155	45,314	48,912	53,705	56,445	57,506	59,630	62,490	66,180	8.6%
Idaho	6,929	8,213	8,954	9,666	10,390	10,376	11,243	12,077	12,547	12,664	13,599	14,830	16,339	7.4%
Montana	6,383	7,610	8,554	9,466	10,601	11,061	11,379	11,753	11,460	11,497	11,771	12,178	13,104	6.2%
Utah	10,116	11,839	13,493	15,033	17,185	18,018	19,499	21,988	23,525	23,985	24,622	26,450	28,135	8.9%
Wyoming	5,545	6,830	8,480	10,903	13,219	13,228	12,307	12,617	12,846	11,235	10,557	10,782	11,115	6.0%
United States	1,957,608	2,213,331	2,458,084	2,670,330	2,986,892	3,104,181	3,339,966	3,707,032	3,966,280	4,186,032	4,483,510	4,854,260	5,164,671	8.4%

Millions of Constant 1982 Dollars	1977	1978	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Real Average Annual Growth Rate
Rocky Mountain	$82,068	$89,101	$93,455	$95,434	$98,725	$97,998	$100,028	$105,082	$106,899	$105,854	$105,481	$107,769	$110,622	2.5%
Colorado	36,925	39,880	42,355	42,978	44,662	45,314	47,063	49,805	50,869	51,058	51,249	52,117	53,340	3.1%
Idaho	9,867	10,742	10,869	10,963	10,856	10,376	10,844	11,167	11,493	11,385	11,833	12,432	13,276	2.5%
Montana	9,692	10,530	10,832	10,956	11,131	11,061	11,038	11,047	10,516	10,547	10,474	10,336	10,728	0.8%
Utah	15,186	16,450	17,136	17,405	18,249	18,018	18,771	20,544	21,434	21,487	21,414	22,374	22,776	3.4%
Wyoming	10,397	11,499	12,262	13,131	13,827	13,228	12,313	12,519	12,588	11,377	10,511	10,511	10,502	0.1%
United States	2,914,780	3,058,700	3,143,172	3,114,741	3,169,057	3,104,181	3,215,001	3,448,947	3,589,594	3,712,234	3,846,822	4,032,452	4,129,598	2.9%

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

Table 23
Utah Gross State Product By Major Industry
Current and Constant Dollars

Millions of Current Dollars

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Average Annual Rate of Change
Total	$10,116	$11,839	$13,493	$15,033	$17,185	$18,018	$19,499	$21,988	$23,525	$23,985	$24,622	$26,450	$28,135	8.9%
Private Industries	8,479	10,015	11,522	12,837	14,735	15,340	16,576	18,681	19,760	20,286	20,683	22,239	23,767	9.0%
Ag., Forestry, Fisheries	217	258	346	356	362	380	350	392	375	395	479	516	509	7.4%
Mining	520	587	780	1,031	1,278	1,058	901	873	722	539	537	571	596	1.1%
Construction	773	875	989	965	921	942	1,048	1,316	1,340	1,224	1,043	1,022	1,092	2.9%
Manufacturing	1,550	1,831	2,106	2,354	2,771	2,840	3,085	3,672	3,806	3,980	4,038	4,476	4,633	9.6%
Durable Goods	1,056	1,270	1,487	1,671	1,960	1,937	2,096	2,564	2,623	2,708	2,716	2,930	3,043	9.2%
Nondurable Goods	494	561	619	683	811	903	990	1,108	1,183	1,271	1,322	1,546	1,590	10.2%
TCU*	1,055	1,264	1,421	1,699	2,053	2,261	2,605	2,865	2,982	3,081	3,087	3,307	3,499	10.5%
Wholesale Trade	711	837	982	1,079	1,200	1,226	1,272	1,414	1,532	1,554	1,488	1,616	1,766	7.9%
Retail Trade	1,082	1,238	1,351	1,387	1,539	1,650	1,792	2,012	2,170	2,336	2,285	2,502	2,665	7.8%
FIRE*	1,348	1,690	1,933	2,118	2,456	2,638	2,953	3,199	3,547	3,550	3,668	3,764	4,096	9.7%
Services	1,222	1,435	1,614	1,847	2,153	2,344	2,570	2,937	3,287	3,626	4,058	4,465	4,910	12.3%
Government	1,637	1,825	1,971	2,196	2,451	2,678	2,923	3,307	3,764	3,699	3,938	4,212	4,368	8.5%
Federal Civilian	612	667	696	769	864	917	998	1,064	1,192	1,228	1,252	1,308	1,418	7.3%
Federal Military	111	124	141	167	190	207	231	247	270	286	298	309	323	9.3%
State and Local	914	1,034	1,134	1,260	1,396	1,554	1,693	1,995	2,302	2,185	2,388	2,595	2,627	9.2%

Millions of 1982 Dollars

Industry	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Real Avg. Annual Rate of Change
Total	$15,186	$16,450	$17,136	$17,405	$18,249	$18,018	$18,771	$20,544	$21,434	$21,487	$21,414	$22,374	$22,776	3.4%
Private Industries	12,778	13,934	14,595	14,787	15,588	15,340	16,008	17,619	18,278	18,481	18,342	19,244	19,735	3.7%
Ag., Forestry, Fisheries	269	267	317	351	345	380	362	353	391	438	504	480	451	4.4%
Mining	1,121	1,157	1,058	1,095	1,224	1,058	945	996	876	795	747	792	841	-2.4%
Construction	1,241	1,265	1,260	1,074	1,001	942	1,024	1,223	1,194	1,049	845	766	789	-3.7%
Manufacturing	2,233	2,452	2,679	2,744	2,930	2,840	3,091	3,690	3,963	4,104	4,242	4,693	4,613	6.2%
Durable Goods	1,539	1,687	1,850	1,931	2,073	1,937	2,109	2,594	2,806	2,900	2,960	3,297	3,197	6.3%
Nondurable Goods	694	765	830	813	857	903	982	1,096	1,157	1,204	1,282	1,396	1,416	6.1%
TCU*	1,627	1,811	1,944	2,109	2,295	2,261	2,476	2,645	2,686	2,714	2,837	3,031	3,148	5.7%
Wholesale Trade	830	964	1,076	1,114	1,192	1,226	1,248	1,370	1,457	1,569	1,435	1,480	1,585	5.5%
Retail Trade	1,516	1,635	1,666	1,595	1,638	1,650	1,743	1,916	2,037	2,202	1,992	2,171	2,259	3.4%
FIRE*	2,011	2,299	2,457	2,483	2,610	2,638	2,719	2,839	2,930	2,743	2,705	2,679	2,740	2.6%
Services	1,929	2,085	2,139	2,220	2,354	2,344	2,400	2,587	2,743	2,867	3,035	3,152	3,308	4.6%
Government	2,408	2,516	2,540	2,619	2,661	2,678	2,762	2,924	3,156	3,007	3,072	3,130	3,042	2.0%
Federal Civilian	916	937	905	934	933	917	956	947	1,005	1,036	1,024	1,032	1,022	0.9%
Federal Military	166	173	184	199	205	207	221	225	236	244	245	244	242	3.2%
State and Local	1,326	1,406	1,451	1,486	1,523	1,554	1,586	1,752	1,915	1,727	1,802	1,854	1,777	2.5%

* TCU = Transportation, communications, and utilities. FIRE = Finance, Insurance, and real estate.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 24
Utah Gross State Product by Major Industry
Share of Total

Industry	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Millions of Current Dollars													
Total	$10,116	$11,839	$13,493	$15,033	$17,185	$18,018	$19,499	$21,988	$23,525	$23,985	$24,622	$26,450	$28,135
Private Industries	8,479	10,015	11,522	12,837	14,735	15,340	16,576	18,681	19,760	20,286	20,683	22,239	23,767
Ag., Forestry, Fisheries	217	258	346	356	362	380	350	392	375	395	479	516	509
Mining	520	587	780	1,031	1,278	1,058	901	873	722	539	537	571	596
Construction	773	875	989	965	921	942	1,048	1,316	1,340	1,224	1,043	1,022	1,092
Manufacturing	1,550	1,831	2,106	2,354	2,771	2,840	3,085	3,672	3,806	3,980	4,038	4,476	4,633
Durable Goods	1,056	1,270	1,487	1,671	1,960	1,937	2,096	2,564	2,623	2,708	2,716	2,930	3,043
Nondurable Goods	494	561	619	683	811	903	990	1,108	1,183	1,271	1,322	1,546	1,590
TCU*	1,055	1,264	1,421	1,699	2,053	2,261	2,605	2,865	2,982	3,081	3,087	3,307	3,499
Wholesale Trade	711	837	982	1,079	1,200	1,226	1,272	1,414	1,532	1,554	1,488	1,616	1,766
Retail Trade	1,082	1,238	1,351	1,387	1,539	1,650	1,792	2,012	2,170	2,336	2,285	2,502	2,665
FIRE*	1,348	1,690	1,933	2,118	2,456	2,638	2,953	3,199	3,547	3,550	3,668	3,764	4,096
Services	1,222	1,435	1,614	1,847	2,153	2,344	2,570	2,937	3,287	3,626	4,058	4,465	4,910
Government	1,637	1,825	1,971	2,196	2,451	2,678	2,923	3,307	3,764	3,699	3,938	4,212	4,368
Federal Civilian	612	667	696	769	864	917	998	1,064	1,192	1,228	1,252	1,308	1,418
Federal Military	111	124	141	167	190	207	231	247	270	286	298	309	323
State and Local	914	1,034	1,134	1,260	1,396	1,554	1,693	1,995	2,302	2,185	2,388	2,595	2,627
Share of GSP													
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Private Industries	83.8%	84.6%	85.4%	85.4%	85.7%	85.1%	85.0%	85.0%	84.0%	84.6%	84.0%	84.1%	84.5%
Ag., Forestry, Fisheries	2.1%	2.2%	2.6%	2.4%	2.1%	2.1%	1.8%	1.8%	1.6%	1.6%	1.9%	2.0%	1.8%
Mining	5.1%	5.0%	5.8%	6.9%	7.4%	5.9%	4.6%	4.0%	3.1%	2.2%	2.2%	2.2%	2.1%
Construction	7.6%	7.4%	7.3%	6.4%	5.4%	5.2%	5.4%	6.0%	5.7%	5.1%	4.2%	3.9%	3.9%
Manufacturing	15.3%	15.5%	15.6%	15.7%	16.1%	15.8%	15.8%	16.7%	16.2%	16.6%	16.4%	16.9%	16.5%
Durable Goods	10.4%	10.7%	11.0%	11.1%	11.4%	10.8%	10.7%	11.7%	11.1%	11.3%	11.0%	11.1%	10.8%
Nondurable Goods	4.9%	4.7%	4.6%	4.5%	4.7%	5.0%	5.1%	5.0%	5.0%	5.3%	5.4%	5.8%	5.7%
TCU*	10.4%	10.7%	10.5%	11.3%	11.9%	12.5%	13.4%	13.0%	12.7%	12.8%	12.5%	12.5%	12.4%
Wholesale Trade	7.0%	7.1%	7.3%	7.2%	7.0%	6.8%	6.5%	6.4%	6.5%	6.5%	6.0%	6.1%	6.3%
Retail Trade	10.7%	10.5%	10.0%	9.2%	9.0%	9.2%	9.2%	9.2%	9.2%	9.7%	9.3%	9.5%	9.5%
FIRE*	13.3%	14.3%	14.3%	14.1%	14.3%	14.6%	15.1%	14.5%	15.1%	14.8%	14.9%	14.2%	14.6%
Services	12.1%	12.1%	12.0%	12.3%	12.5%	13.0%	13.2%	13.4%	14.0%	15.1%	16.5%	16.9%	17.5%
Government	16.2%	15.4%	14.6%	14.6%	14.3%	14.9%	15.0%	15.0%	16.0%	15.4%	16.0%	15.9%	15.5%
Federal Civilian	6.0%	5.6%	5.2%	5.1%	5.0%	5.1%	5.1%	4.8%	5.1%	5.1%	5.1%	4.9%	5.0%
Federal Military	1.1%	1.0%	1.0%	1.1%	1.1%	1.1%	1.2%	1.1%	1.1%	1.2%	1.2%	1.2%	1.1%
State and Local	9.0%	8.7%	8.4%	8.4%	8.1%	8.6%	8.7%	9.1%	9.8%	9.1%	9.7%	9.8%	9.3%

* TCU = Transportation, communications, and utilities. FIRE = Finance, insurance and real estate.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 25
Utah Gross State Product by Industry

Industry	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total Gross State Product	$10,116	$11,839	$13,493	$15,033	$17,185	$18,018	$19,499	$21,988	$23,525	$23,985	$24,622	$26,450	$28,135
Private Industries	8,479	10,015	11,522	12,837	14,735	15,340	16,576	18,681	19,760	20,286	20,683	22,239	23,767
Agriculture, Forestry, Fisheries	217	258	346	356	362	380	350	392	375	395	479	516	509
Farms	191	229	313	321	323	340	302	338	316	345	418	454	444
Ag. Services, Forestry, Fisheries	26	29	33	35	39	40	49	54	59	50	62	62	65
Mining	520	587	780	1,031	1,278	1,058	901	873	722	539	537	571	596
Metal Mining	141	167	271	309	313	170	195	149	74	70	109	116	129
Coal Mining	148	158	203	246	283	350	253	224	234	240	236	249	266
Oil & Gas Extraction	199	227	267	428	631	491	405	449	360	166	137	148	147
Nonmetallic Minerals, except fuels	32	34	39	49	51	47	47	50	54	63	55	59	55
Construction	773	875	989	965	921	942	1,048	1,316	1,340	1,224	1,043	1,022	1,092
Manufacturing	1,550	1,831	2,106	2,354	2,771	2,840	3,085	3,672	3,806	3,980	4,038	4,476	4,633
Durable Goods	1,056	1,270	1,487	1,671	1,960	1,937	2,096	2,564	2,623	2,708	2,716	2,930	3,043
Lumber and Wood Products	66	81	84	74	67	59	74	86	85	84	84	82	90
Furniture and Fixtures	16	23	27	30	33	36	49	59	70	69	70	63	72
Stone, Clay, and Glass Products	101	122	140	126	120	114	131	173	190	204	166	156	165
Primary Metal Industries	220	258	294	318	403	295	234	279	254	216	150	298	331
Fabricated Metal Products	129	148	161	177	195	183	174	211	205	195	191	213	240
Machinery, Except Electrical	244	280	336	411	532	578	603	696	696	719	720	672	391
Electric & Electronic Equipment	67	91	119	167	192	206	217	275	253	259	266	281	502
Motor Vehicles & Equipment	36	55	58	41	52	57	65	96	98	100	104	107	140
Transportation Equip. excl. Motor	110	133	172	216	246	294	427	546	632	708	802	820	861
Instruments and Related Products	44	51	65	75	76	77	85	92	86	95	97	127	137
Misc. Manufacturing Ind.	22	27	32	36	41	39	36	51	56	60	67	110	116
Nondurable Goods	494	561	619	683	811	903	990	1,108	1,183	1,271	1,322	1,546	1,590
Food and Kindred Products	147	156	168	180	206	223	229	242	266	282	322	349	367
Tobacco Manufactures	0	0	0	0	0	0	0	0	0	0	0	0	0
Textile Mill Products	2	2	2	1	1	2	2	3	2	2	5	8	8
Apparel & Other Textiles	52	63	66	67	74	78	88	89	87	91	87	88	91
Paper & Allied Products	11	14	16	17	20	21	22	28	47	57	63	74	84
Printing & Publishing	83	101	117	134	154	174	197	221	246	270	285	312	336
Chemicals & Allied Products	62	80	99	117	157	174	181	208	214	227	245	339	329
Petroleum & Coal Products	105	114	116	128	157	197	239	281	279	295	254	294	305
Rubber & Misc. Plastic Products	30	30	34	37	38	32	30	35	41	46	61	81	67
Leather & Leather Products	2	2	2	1	3	2	1	1	1	1	1	1	1

(continued next page)

Table 25
Utah Gross State Product by Industry (Continued)

Industry	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Transportation, Communications & Utilities	$1,055	$1,264	$1,421	$1,699	$2,053	$2,261	$2,605	$2,865	$2,982	$3,081	$3,087	$3,307	$3,499
Transportation	460	554	641	721	781	806	908	1,001	1,016	985	1,089	1,262	1,359
Railroad Transportation	111	132	164	189	214	212	237	277	279	240	217	229	238
Local & Interurban Passenger Transit	25	28	33	38	38	20	22	22	21	24	22	22	24
Trucking & Warehousing	243	276	309	329	338	331	331	372	384	400	433	484	524
Water Transportation	1	2	2	3	3	3	4	0	0	0	0	1	1
Transportation by Air	52	67	62	73	79	116	201	219	206	230	313	411	448
Pipelines, Except Natural Gas	12	31	54	73	88	99	87	78	86	47	61	67	61
Transportation Services	16	18	18	16	22	26	27	33	38	43	43	47	63
Communication	256	293	325	367	433	477	546	570	622	621	620	612	638
Electric, Gas & Sanitary Services	339	417	455	611	839	977	1,152	1,294	1,345	1,475	1,377	1,434	1,502
Wholesale Trade	711	837	982	1,079	1,200	1,226	1,272	1,414	1,532	1,554	1,488	1,616	1,766
Retail Trade	1,082	1,238	1,351	1,387	1,539	1,650	1,792	2,012	2,170	2,336	2,285	2,502	2,665
Finance, Insurance & Real Estate	1,348	1,690	1,933	2,118	2,456	2,638	2,953	3,199	3,547	3,550	3,668	3,764	4,096
Banking	123	161	201	225	241	281	340	375	393	395	418	447	519
Credit Agencies Other Than Banks	19	44	43	23	33	22	66	54	64	91	96	71	106
Holding Cos. & Investment Services	15	20	18	30	61	60	84	76	110	133	132	130	139
Insurance Carriers	96	118	122	133	126	108	133	129	147	183	201	209	224
Insurance Agents, Brokers & Services	53	52	60	65	68	74	76	84	90	109	136	154	171
Real Estate	1,043	1,296	1,489	1,641	1,928	2,094	2,255	2,481	2,742	2,640	2,684	2,753	2,937
Services	1,222	1,435	1,614	1,847	2,153	2,344	2,570	2,937	3,287	3,626	4,058	4,465	4,910
Hotels & Other Lodging Places	74	94	109	121	124	136	165	171	183	184	212	228	237
Personal Services	70	80	87	96	96	108	115	131	155	167	173	201	228
Business Services	164	193	234	280	326	357	417	519	610	684	784	904	1,043
Auto Repair, Services & Garages	96	113	131	145	157	162	176	202	224	243	242	253	274
Misc. Repair Services	45	54	60	72	71	80	81	92	93	100	95	109	117
Motion Pictures	28	54	33	26	24	28	28	44	52	71	81	71	82
Amusement & Recreation Services	42	47	54	57	66	71	77	92	109	117	127	138	152
Health Services	339	375	434	525	616	703	743	801	893	994	1,160	1,260	1,356
Legal Services	63	66	73	83	102	125	141	163	175	200	228	246	271
Educational Services	83	88	99	108	137	139	159	180	203	232	243	258	281
Social Services & Membership Organiz.	88	121	126	137	199	218	238	268	289	310	353	409	446
Misc. Professional Agencies	117	139	162	184	220	203	212	254	283	303	341	370	401
Private Households	12	12	13	13	15	16	17	19	19	20	20	21	22
Government	1,637	1,825	1,971	2,196	2,451	2,678	2,923	3,307	3,764	3,699	3,938	4,212	4,368
Federal Civilian	612	667	696	769	864	917	998	1,064	1,192	1,228	1,252	1,308	1,418
Federal Military	111	124	141	167	190	207	231	247	270	286	298	309	323
State & Local	914	1,034	1,134	1,260	1,396	1,554	1,693	1,995	2,302	2,185	2,388	2,595	2,627

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

DEMOGRAPHICS

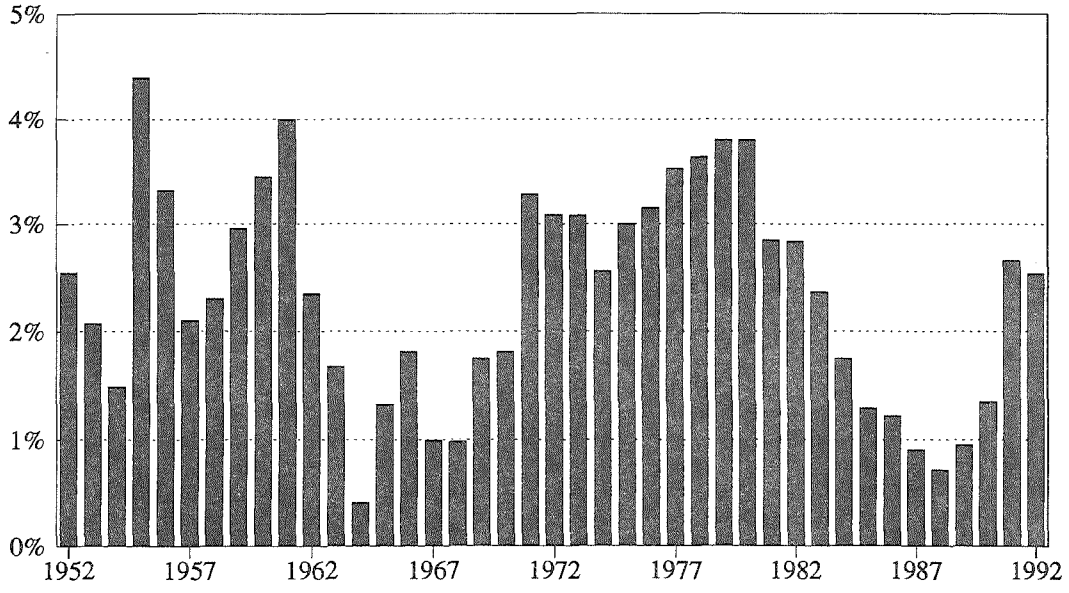
Demographic characteristics play an important role in the analysis of a state's economy. Population growth, for instance, can indicate a robust economy. Population change, natural increase, migration and geographic distribution of population are all important economic and demographic occurrences. Each of these factors provides insight into the economic health of Utah.

Population estimates for Utah by county are prepared annually by both the U.S. Bureau of the Census and Utah Population Estimates Committee. Because the Estimates Committee utilizes more recent data and has the input of local population analysts, their estimates are generally preferable to Census estimates for planning and analysis purposes. However, it should be noted that Census population estimates are generally used for allocating revenues, including transportation funds and local option sales taxes. At the state level the estimates are consistent except for the most recent years. At the county level more significant differences exist. This section focuses on the estimates generated by the Utah Population Estimates Committee and concludes with Census age estimates.

State Population Change

Between July 1, 1991 and July 1, 1992, Utah's population grew by approximately 45,000 people — from 1,775,000 to 1,820,000. This preliminary estimate was produced by the Utah Population Estimates Committee, and implies a net in-migration of almost 19,000 persons. As shown in Figure 24, the level of change indicates an increase in the annual rate of growth almost as dramatic as last year's. The growth rate of 2.5 percent is the second fastest since 1982. Table 26 presents revised population estimates, along with the components of population change — migration and natural increase — for the past 40 years.

Figure 24
Utah Population: 1952 to 1992
Annual Percent Change



Source: U.S. Bureau of the Census and
Utah Population Estimates Committee

Migration

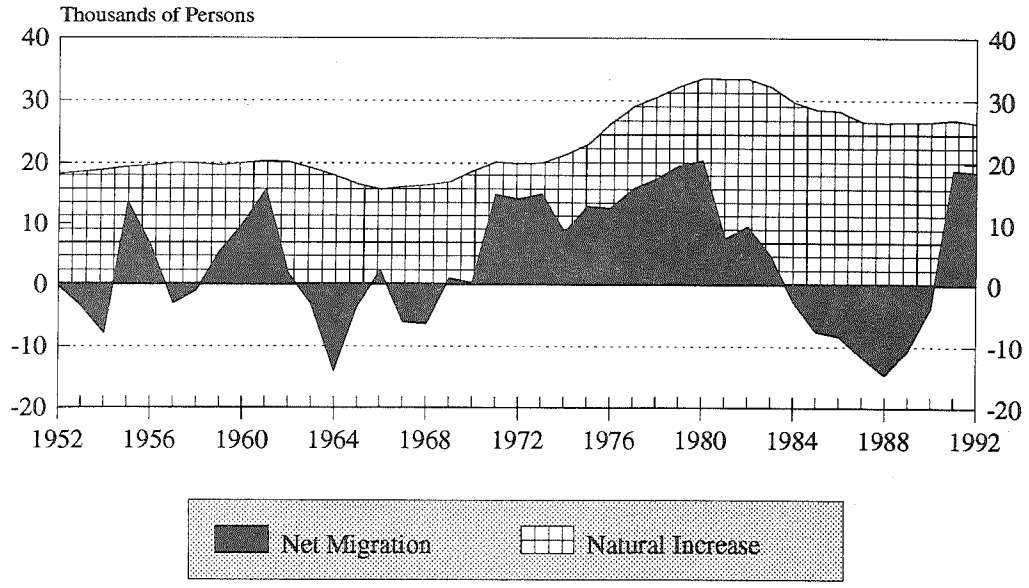
For the second year in a row, Utah has experienced annual net in-migration of approximately 19,000 (Figure 25). This year and last year account for the only two years of net in-migration since 1983. Utah in 1992, as in 1991, experienced robust employment growth. During Utah's period of economic downturn, net out-migration reached a record high of over 14,000 in 1988. However, due primarily to Utah's strong economic performance in 1989 and 1990, net out-migration was substantially reduced. Out-migration was estimated to be approximately 10,600 in 1989 and 3,600 in 1990. Fiscal 1991 experienced a turnaround, with net in-migration of almost 19,000. This was the first net in-migration since 1983, the largest since 1980, and the third largest in the last 40 years.

While Utah has again experienced robust employment growth, it is assumed that a large number of the people moving to, or back to Utah are doing so as a result of continuing poor economic conditions in the area they were living in, rather than solely due to economic opportunities in Utah. For example, the largest migration flow has historically been with California and in 1992 California's economy was particularly hard hit.

Natural Increase

Natural increase is the number of births minus the number of deaths over a period of time, generally one year. 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, when there was a 2.1 percent increase. The preliminary indication for 1992 is that births have declined slightly. Fiscal year 1992 birth and death data were not available in time to keep the population estimates production schedule, so Calendar Year 1991 births and deaths were used.

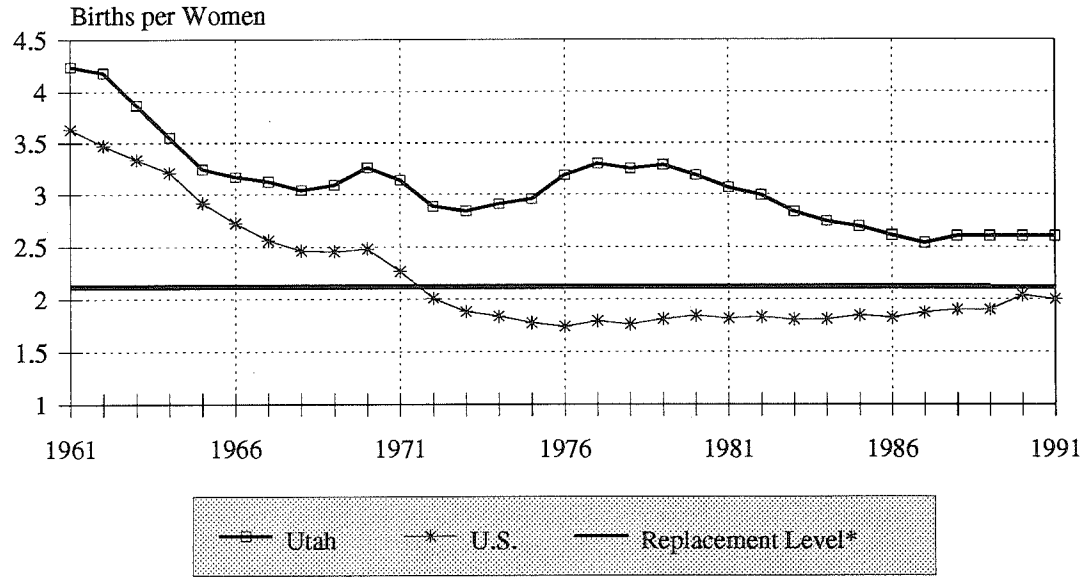
Figure 25
Components of Population Change
Net Migration and Natural Increase



Source: U.S. Census Bureau,
Utah Population Estimates Committee, and
Utah Bureau of Health Statistics

The total fertility rate is the number of births that a woman would have during her lifetime if, at each year of age, she experiences the birth rate occurring for that specific year. Fertility rates declined in Utah from 3.3 births per woman in 1979 to 2.6 in 1990. The national rate held constant at approximately 1.8 births per woman from 1977 through 1986. The Utah rate now appears to have stabilized at about 2.6, while the national rate has increased to 2.04. Despite the decline in Utah's fertility rate, it nevertheless remains the nation's highest. Historical fertility rates for Utah and the nation are illustrated in Figure 26 and listed in Table 28.

Figure 26
Total Fertility: 1961-1991
for Utah and the U.S.



*rate (2.1) needed to maintain population without immigration.
Source: E.Brown-Fertility in Ut; Ut OPB

County Population

There were population increases in almost every county in Utah, although the growth was not quite as extensive as last year. Salt Lake County experienced the largest net in-migration with almost 7,600 persons. Another four counties — Davis, Washington, Weber and Utah — also experienced net in-migration of at least 1,000 persons. Fifteen of Utah's 29 counties experienced net in-migration in 1992, compared to 20 in 1991.

In terms of growth rates, Washington County led the state with 6.1 percent growth rate, Summit County was the second fastest growth with 5.0 percent, followed by Iron (4.0 percent), Sanpete (3.8 percent), and Morgan (3.3 percent). Fifteen of Utah's counties experienced growth of 2 percent or more, compared to 18 in 1991, and only five counties in 1990.

Table 27 presents the preliminary 1992 county population estimates along with the revised intercensal county estimates for Utah in the 1980s. The state total for each year in the 1980s is consistent with the U.S. Bureau of the Census state estimates.

Age Composition

The U.S. Bureau of the Census produces annual estimates of state population by age group. The most recent data available are for 1991 and are shown in Table 29. These data demonstrate that Utah continues to have a very young population relative to the nation. Utah ranks second in the percent of the population under five years of age and first in the percent of the population aged 5 to 17. In contrast, Utah ranks 49th 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 17 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 82 compared to the national average of 62. This means that for every 100 persons of working age in Utah, 20 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 30 provides dependency ratios for every state and the District of Columbia.

Table 26
Utah Population Estimates, Net Migration, Births and Deaths

Year	July First Population	Percent Change	Increase	Net Migration*	Natural Increase	Fiscal Year Births**	Fiscal Year Deaths**
1952	724,000	2.55	18,000	(209)	18,209	23,251	5,042
1953	739,000	2.07	15,000	(3,522)	18,522	23,658	5,136
1954	750,000	1.49	11,000	(7,906)	18,906	23,944	5,038
1955	783,000	4.40	33,000	13,589	19,412	24,454	5,042
1956	809,000	3.32	26,000	6,372	19,629	24,787	5,158
1957	826,000	2.10	17,000	(3,058)	20,058	25,518	5,460
1958	845,000	2.30	19,000	(972)	19,972	25,724	5,753
1959	870,000	2.96	25,000	5,330	19,671	25,515	5,844
1960	900,000	3.45	30,000	9,980	20,021	25,959	5,938
1961	936,000	4.00	36,000	15,608	20,392	26,431	6,039
1962	958,000	2.35	22,000	1,802	20,199	26,402	6,203
1963	974,000	1.67	16,000	(3,148)	19,148	25,583	6,435
1964	978,000	0.41	4,000	(13,924)	17,924	24,398	6,474
1965	991,000	1.33	13,000	(3,515)	16,515	23,053	6,538
1966	1,009,000	1.82	18,000	2,330	15,670	22,431	6,761
1967	1,019,000	0.99	10,000	(6,092)	16,092	22,775	6,683
1968	1,029,000	0.98	10,000	(6,372)	16,372	23,071	6,699
1969	1,047,000	1.75	18,000	1,124	16,876	23,713	6,837
1970	1,066,000	1.81	19,000	327	18,674	25,601	6,927
1971	1,101,000	3.28	35,000	14,800	20,200	27,407	7,207
1972	1,135,000	3.09	34,000	14,090	19,910	27,146	7,236
1973	1,170,000	3.08	35,000	14,955	20,045	27,562	7,517
1974	1,200,000	2.56	30,000	8,620	21,380	28,876	7,496
1975	1,236,000	3.00	36,000	12,949	23,051	30,566	7,515
1976	1,275,000	3.16	39,000	12,605	26,395	33,773	7,378
1977	1,320,000	3.53	45,000	15,886	29,114	36,709	7,595
1978	1,368,000	3.64	48,000	17,422	30,578	38,265	7,687
1979	1,420,000	3.80	52,000	19,712	32,288	40,134	7,846
1980	1,474,000	3.80	54,000	20,517	33,483	41,591	8,108
1981	1,515,000	2.78	42,000	7,601	33,399	41,511	8,112
1982	1,558,000	2.84	43,000	9,630	33,370	41,774	8,404
1983	1,595,000	2.37	37,000	4,789	32,211	40,557	8,346
1984	1,622,000	1.69	28,000	(2,757)	29,757	38,643	8,886
1985	1,643,000	1.29	21,000	(7,585)	28,585	37,508	8,923
1986	1,663,000	1.22	20,000	(8,355)	28,355	37,145	8,790
1987	1,678,000	0.90	15,000	(11,656)	26,656	35,469	8,813
1988	1,690,000	0.72	15,000	(14,526)	26,526	35,648	9,122
1989	1,706,000	0.95	16,000	(10,633)	26,633	35,549	8,916
1990	1,729,000	1.35	23,000	(3,619)	26,619	35,569	8,950
1991	1,775,000	2.66	46,000	18,961	27,039	36,312	9,273
1992 (p)	1,820,000	2.54	45,000	18,560	26,440	36,016	9,576

* Net migration figures are based on rounded population estimates to maintain consistency with the historic database. These 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 deat in the two years that are partially covered by each fiscal year. From 1970-91, actual fiscal year births an deaths are shown.

(p) = preliminary

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

Table 27
Utah Population Estimates by 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*	Avg. Ann. Percent Chg. 1980-92	Percent Change 1991-92	1992 Percent of Total Pop.
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	0.9%	1.0%	0.3%
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	37,600	1.0%	1.3%	2.1%
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	2.1%	2.9%	4.1%
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	-0.7%	0.0%	1.1%
Daggett	750	850	850	750	750	700	700	700	700	650	700	700	700	-0.6%	0.0%	0.0%
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	2.6%	3.1%	11.0%
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	0.1%	0.8%	0.7%
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	-1.1%	0.0%	0.6%
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	0.9%	0.0%	0.2%
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	6,900	-1.5%	1.5%	0.4%
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	2.1%	4.2%	1.2%
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	0.9%	2.5%	0.3%
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	2.3%	1.9%	0.3%
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	2.2%	0.9%	0.6%
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	1.4%	3.5%	0.3%
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	0.0%	0.0%	0.1%
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	-1.7%	2.9%	0.1%
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	1.7%	2.4%	42.0%
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	0.5%	3.1%	0.7%
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	1.4%	3.6%	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	0.6%	1.9%	0.9%
Summit	10,400	11,100	11,600	12,200	12,800	13,000	13,400	14,200	14,300	15,100	15,700	16,600	17,500	4.4%	5.4%	1.0%
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	0.5%	2.2%	1.5%
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	23,700	1.1%	2.6%	1.3%
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	278,000	2.0%	2.2%	15.3%
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	1.9%	0.9%	0.6%
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	6.3%	6.0%	3.0%
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	0.8%	-2.3%	0.1%
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	1.1%	2.5%	9.1%
State	1,474,000	1,515,000	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	1,820,000	1.7%	2.5%	100.0%

* Preliminary
Note: Totals may not add due to rounding.
Source: Utah Population Estimates Committee.

Table 28
Total Fertility Rates
Utah and U.S.

	Utah	U.S.		Utah	U.S.
1960	4.3	3.7	1976	3.2	1.7
1961	4.2	3.6	1977	3.3	1.8
1962	4.2	3.5	1978	3.3	1.8
1963	3.9	3.3	1979	3.3	1.8
1964	3.6	3.2	1980	3.2	1.8
1965	3.2	2.9	1981	3.1	1.8
1966	3.2	2.7	1982	3.0	1.8
1967	3.1	2.6	1983	2.8	1.8
1968	3.0	2.5	1984	2.7	1.8
1969	3.1	2.5	1985	2.7	1.8
1970	3.3	2.5	1986	2.6	1.8
1971	3.1	2.3	1987	2.5	1.9
1972	2.9	2.0	1988	2.6	1.9
1973	2.8	1.9	1989	2.6	1.9
1974	2.9	1.8	1990	2.6	2.0
1975	3.0	1.8	1991	2.6	2.0

Sources: Eileen Brown, "Fertility in Utah: 1960-1985;" U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1023 and the Utah Department of Health.

Table 29
1991 Rankings of States by Selected Age Groups

Ranking by Percent of Total		Population Under 5 (000)	Percent of Total		Population 5-17 (000)	Percent of Total		Population 18-64 (000)	Percent of Total		Population Over 64 (000)	Percent of Total
	United States	19,222	7.6%	United States	45,923	18.2%	United States	155,278	61.6%	United States	31,754	12.6%
1	Alaska	57	10.0%	Utah	468	26.4%	District of Columbia	400	66.9%	Florida	2,432	18.3%
2	Utah	174	9.8%	Idaho	236	22.7%	Virginia	4,065	64.7%	Pennsylvania	1,858	15.5%
3	California	2,651	8.7%	Wyoming	102	22.2%	Maryland	3,130	64.4%	Iowa	431	15.4%
4	Texas	1,457	8.4%	Alaska	123	21.6%	Alaska	366	64.2%	Rhode Island	152	15.1%
5	New Mexico	130	8.4%	New Mexico	328	21.2%	Nevada	824	64.2%	West Virginia	271	15.0%
6	Arizona	310	8.3%	Mississippi	549	21.2%	Colorado	2,153	63.8%	Arkansas	353	14.9%
7	Louisiana	339	8.0%	Louisiana	894	21.0%	North Carolina	4,268	63.4%	South Dakota	104	14.8%
8	Georgia	523	7.9%	South Dakota	146	20.8%	Massachussetts	3,798	63.3%	North Dakota	92	14.5%
9	Idaho	82	7.9%	Montana	165	20.4%	Hawaii	717	63.2%	Nebraska	225	14.1%
10	Nevada	101	7.9%	Texas	3,512	20.2%	Georgia	4,180	63.1%	Missouri	726	14.1%
11	Hawaii	89	7.8%	North Dakota	127	20.0%	Delaware	429	63.1%	Kansas	346	13.9%
12	Mississippi	202	7.8%	Nebraska	315	19.8%	New Hampshire	697	63.1%	Massachussetts	824	13.7%
13	Maryland	377	7.8%	Oklahoma	615	19.4%	Connecticut	2,075	63.1%	Oregon	401	13.7%
14	New Hampshire	85	7.7%	Kansas	482	19.3%	New Jersey	4,877	62.8%	Connecticut	451	13.7%
15	Illinois	887	7.7%	Arkansas	456	19.2%	New York	11,335	62.8%	Oklahoma	430	13.5%
16	South Dakota	54	7.7%	Minnesota	851	19.2%	California	19,030	62.6%	Maine	166	13.4%
17	Michigan	717	7.7%	Wisconsin	949	19.2%	Tennessee	3,093	62.4%	New Jersey	1,041	13.4%
18	Colorado	258	7.6%	Iowa	532	19.0%	Vermont	354	62.4%	Montana	108	13.4%
19	Washington	383	7.6%	Alabama	776	19.0%	South Carolina	2,214	62.2%	Wisconsin	661	13.3%
20	Minnesota	338	7.6%	Kentucky	703	18.9%	Washington	3,114	62.1%	Arizona	497	13.3%
21	Kansas	190	7.6%	Georgia	1,252	18.9%	Rhode Island	623	62.1%	Ohio	1,432	13.1%
22	South Carolina	270	7.6%	Indiana	1,059	18.9%	Illinois	7,098	61.5%	New York	2,357	13.1%
23	Nebraska	120	7.5%	Michigan	1,767	18.9%	Kentucky	2,283	61.5%	Alabama	529	12.9%
24	Delaware	51	7.5%	South Carolina	668	18.8%	Michigan	5,754	61.4%	District of Columbia	77	12.9%
25	New York	1,340	7.4%	Arizona	700	18.7%	Maine	758	61.4%	Kentucky	472	12.7%
26	Vermont	42	7.4%	Missouri	962	18.7%	Indiana	3,437	61.3%	Tennessee	629	12.7%
27	Wyoming	34	7.4%	Washington	932	18.6%	Texas	10,624	61.2%	Indiana	708	12.6%
28	Virginia	461	7.3%	Colorado	625	18.5%	Ohio	6,687	61.1%	Illinois	1,448	12.5%
29	Missouri	378	7.3%	Ohio	2,023	18.5%	Alabama	2,489	60.9%	Minnesota	555	12.5%
30	Wisconsin	362	7.3%	Oregon	539	18.4%	Pennsylvania	7,274	60.8%	Mississippi	323	12.5%
31	Montana	59	7.3%	West Virginia	331	18.4%	Oregon	1,773	60.7%	North Carolina	826	12.3%
32	New Jersey	565	7.3%	Illinois	2,111	18.3%	West Virginia	1,092	60.6%	Delaware	83	12.2%
33	Ohio	796	7.3%	Vermont	103	18.2%	Minnesota	2,687	60.6%	Michigan	1,130	12.1%
34	North Dakota	46	7.2%	California	5,512	18.1%	Wisconsin	2,983	60.2%	Idaho	124	11.9%
35	Oklahoma	230	7.2%	Maine	224	18.1%	Wyoming	276	60.0%	Vermont	67	11.8%
36	Indiana	406	7.2%	Tennessee	884	17.8%	Missouri	3,092	59.9%	Washington	590	11.8%
37	Alabama	295	7.2%	New Hampshire	195	17.6%	Oklahoma	1,900	59.8%	New Hampshire	128	11.6%
38	Connecticut	237	7.2%	Hawaii	199	17.5%	Arizona	2,244	59.8%	South Carolina	407	11.4%
39	North Carolina	485	7.2%	Delaware	117	17.2%	Louisiana	2,544	59.8%	Hawaii	129	11.4%
40	District of Columbia	43	7.2%	North Carolina	1,158	17.2%	New Mexico	921	59.5%	Louisiana	474	11.1%
41	Massachussetts	431	7.2%	Virginia	1,078	17.1%	Kansas	1,476	59.2%	Maryland	530	10.9%
42	Arkansas	170	7.2%	Nevada	220	17.1%	Florida	7,847	59.1%	New Mexico	168	10.9%
43	Oregon	209	7.2%	Maryland	824	17.0%	Montana	476	58.9%	Virginia	682	10.8%
44	Tennessee	346	7.0%	Pennsylvania	2,014	16.8%	Arkansas	1,393	58.7%	Nevada	138	10.7%
45	Rhode Island	70	7.0%	New York	3,026	16.8%	Iowa	1,639	58.6%	Wyoming	49	10.7%
46	Maine	86	7.0%	New Jersey	1,277	16.5%	Mississippi	1,519	58.6%	California	3,187	10.5%
47	Iowa	193	6.9%	Connecticut	527	16.0%	Nebraska	932	58.5%	Texas	1,756	10.1%
48	Kentucky	256	6.9%	Rhode Island	160	15.9%	North Dakota	369	58.1%	Georgia	668	10.1%
49	Florida	915	6.9%	Massachussetts	943	15.7%	Idaho	595	57.3%	Colorado	340	10.1%
50	Pennsylvania	816	6.8%	Florida	2,083	15.7%	South Dakota	400	56.9%	Utah	155	8.8%
51	West Virginia	106	5.9%	District of Columbia	78	13.0%	Utah	972	54.9%	Alaska	24	4.2%

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

Table 30
1991 Dependency Ratios for States

Rank	Dependents Per 100 of Working Age	Rank	Pre-School Per 100 of Working Age	Rank	School Age Per 100 of Working Age	Rank	Retirement Age Per 100 of Working Age
U.S. Average	62	U.S. Average	12	U.S. Average	30	U.S. Average	20
1 Utah	82	1 Utah	18	1 Utah	48	1 Florida	31
2 South Dakota	76	2 Alaska	16	2 Idaho	40	2 Iowa	26
3 Idaho	74	3 New Mexico	14	3 Wyoming	37	3 South Dakota	26
4 North Dakota	72	4 California	14	4 South Dakota	37	4 Pennsylvania	26
5 Nebraska	71	5 Arizona	14	5 Mississippi	36	5 Arkansas	25
6 Mississippi	71	6 Idaho	14	6 New Mexico	36	6 North Dakota	25
7 Iowa	71	7 Texas	14	7 Louisiana	35	7 West Virginia	25
8 Arkansas	70	8 South Dakota	14	8 Montana	35	8 Rhode Island	24
9 Montana	70	9 Louisiana	13	9 North Dakota	34	9 Nebraska	24
10 Florida	69	10 Mississippi	13	10 Nebraska	34	10 Missouri	23
11 Kansas	69	11 Nebraska	13	11 Alaska	34	11 Kansas	23
12 New Mexico	68	12 Kansas	13	12 Texas	33	12 Montana	23
13 Arizona	67	13 Minnesota	13	13 Arkansas	33	13 Oklahoma	23
14 Oklahoma	67	14 Georgia	13	14 Kansas	33	14 Oregon	23
15 Louisiana	67	15 Illinois	12	15 Iowa	32	15 Wisconsin	22
16 Wyoming	67	16 North Dakota	12	16 Oklahoma	32	16 Arizona	22
17 Missouri	67	17 Michigan	12	17 Wisconsin	32	17 Maine	22
18 Wisconsin	66	18 Hawaii	12	18 Minnesota	32	18 Connecticut	22
19 Minnesota	65	19 Montana	12	19 Arizona	31	19 Massachussetts	22
20 West Virginia	65	20 Wyoming	12	20 Alabama	31	20 Ohio	21
21 Oregon	65	21 Washington	12	21 Missouri	31	21 New Jersey	21
22 Pennsylvania	64	22 Nevada	12	22 Indiana	31	22 Mississippi	21
23 Alabama	64	23 Missouri	12	23 Kentucky	31	23 Alabama	21
24 Ohio	64	24 Arkansas	12	24 Michigan	31	24 Idaho	21
25 Texas	63	25 New Hampshire	12	25 Oregon	30	25 New York	21
26 Indiana	63	26 South Carolina	12	26 West Virginia	30	26 Kentucky	21
27 Michigan	63	27 Wisconsin	12	27 Ohio	30	27 Minnesota	21
28 Maine	63	28 Oklahoma	12	28 South Carolina	30	28 Indiana	21
29 Kentucky	63	29 Maryland	12	29 Georgia	30	29 Illinois	20
30 Illinois	63	30 Colorado	12	30 Washington	30	30 Tennessee	20
31 Rhode Island	61	31 Ohio	12	31 Illinois	30	31 Michigan	20
32 Washington	61	32 Delaware	12	32 Maine	30	32 North Carolina	19
33 South Carolina	61	33 Vermont	12	33 Vermont	29	33 Delaware	19
34 Tennessee	60	34 Alabama	12	34 Colorado	29	34 District of Columbia	19
35 Vermont	60	35 New York	12	35 California	29	35 Washington	19
36 California	60	36 Indiana	12	36 Tennessee	29	36 Vermont	19
37 New York	59	37 Oregon	12	37 New Hampshire	28	37 Louisiana	19
38 New Jersey	59	38 Iowa	12	38 Hawaii	28	38 South Carolina	18
39 Connecticut	59	39 Florida	12	39 Pennsylvania	28	39 New Hampshire	18
40 New Hampshire	59	40 New Jersey	12	40 Delaware	27	40 New Mexico	18
41 Delaware	59	41 Connecticut	11	41 North Carolina	27	41 Hawaii	18
42 Georgia	58	42 North Carolina	11	42 Nevada	27	42 Wyoming	18
43 Hawaii	58	43 Massachussetts	11	43 New York	27	43 Maryland	17
44 Massachussetts	58	44 Maine	11	44 Florida	27	44 Virginia	17
45 North Carolina	58	45 Virginia	11	45 Virginia	27	45 Nevada	17
46 Colorado	57	46 Rhode Island	11	46 Maryland	26	46 California	17
47 Alaska	56	47 Pennsylvania	11	47 New Jersey	26	47 Texas	17
48 Nevada	56	48 Kentucky	11	48 Rhode Island	26	48 Georgia	16
49 Maryland	55	49 Tennessee	11	49 Connecticut	25	49 Utah	16
50 Virginia	55	50 District of Columbia	11	50 Massachussetts	25	50 Colorado	16
51 District of Columbia	50	51 West Virginia	10	51 District of Columbia	20	51 Alaska	7

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

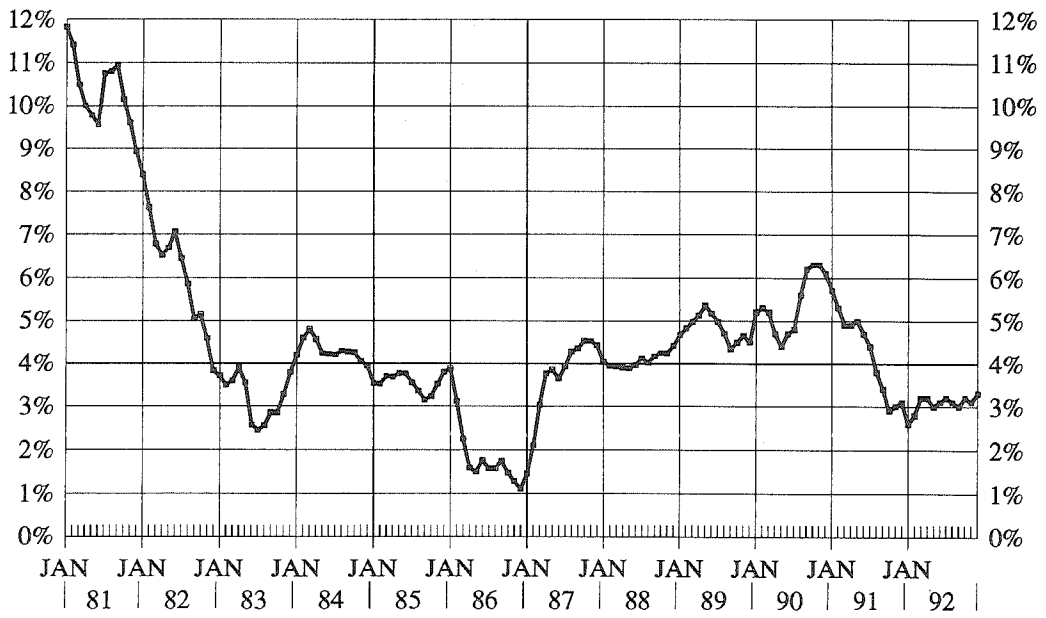
PRICES, INFLATION AND COST OF LIVING

Consumer Price Index

The pace of inflation, as measured by the Consumer Price Index for all urban consumers, decelerated significantly throughout 1992, and the expected 1993 change is approximately 3.0 percent. Throughout 1992, the year-to-year Consumer Price Index increase was consistently between 2.75 to 3.25 percent (Figure 27). The 1992 annual average increase is estimated at 3.1 percent (Table 31).

Several factors contribute to the benign outlook for inflation in 1993. A modestly improved national economic environment will continue to limit the extent of the price gains that can be absorbed in most markets. Wage gains decelerated in 1992 and will likely remain in the 2.5 to 3.0 percent range in 1993. Furthermore, gold and raw-material commodity prices (including real estate in many parts of the nation) are flat to lower, and the U.S. dollar has recently firmed in exchange markets. Growth in the nation's money supply, while admittedly hard to interpret, has been below target ranges. Despite this litany of deflationary factors, the nation's bond market remains uneasy about an economic-policy overshoot that could reignite future inflation.

Figure 27
Increase in Prices Over the Previous 12 Months Measured by CPI: Jan 81 to Dec 9



Source: U.S. Department of Labor

Gross Domestic Product Deflators

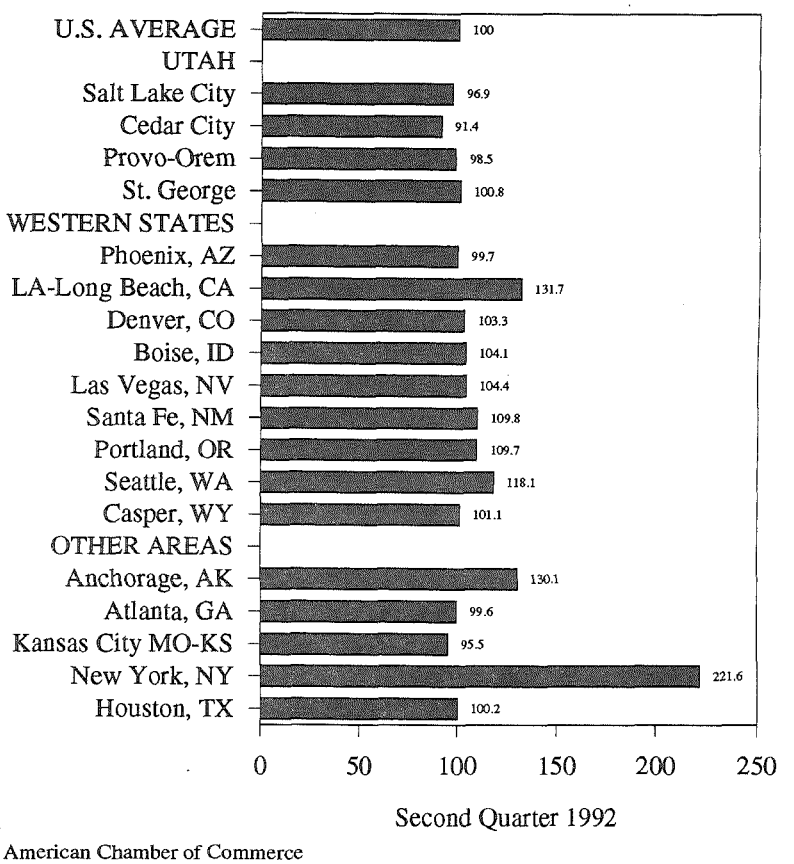
In the third quarter of 1992, the Gross Domestic Product (GDP) fixed-weight deflator was 2.8 percent above last year, but was down from 3.1 percent in the second quarter and 4.1 percent in 1991. The GDP personal consumption deflator in the third quarter was 3.2 percent above last year, down from 1991's 4.4 percent annual gain. For 1992 the GDP Implicit Price Deflator is estimated at 120.9, a 2.6 percent increase (Table 32).

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 28). The index consists of price comparisons for a single point in time, but it does not measure inflation or price changes over time. The index does measure the differences between areas in the cost of consumer goods and services, as compared with a national average of 100. The composite index is based on six components, including grocery items, housing, utilities, transportation, health care, and miscellaneous goods and services. The Salt Lake Area Chamber of Commerce is a member of ACCRA and submits quarterly data for the local area.

The second-quarter 1992 composite index for Salt Lake City was 96.9, or 3.1 percent below the national average for the quarter. Other Utah cities included in the second-quarter survey were Cedar City (91.4), Provo-Orem (98.5), and St. George (100.8) as found in Table 33. Historical figures by component for the Salt Lake City may be found in Table 34.

Figure 28
Cost of Living Comparisons
for Selected Metropolitan Areas



Source: American Chamber of Commerce Researchers Association (ACCRA)

Table 31
U.S. Consumer Price Index
All Urban Consumers (CPI-U)
1982-1984 = 100

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual Avg.	Percent Change Dec-Dec	Percent Change Ann. 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	136.2	3.1	4.2
1992	138.1	138.6	139.3	139.5	139.7	140.2	140.5	140.9	141.3	141.8	142.1	142.3 (e)	140.4 (e)	3.2 (e)	3.1 (e)

(e) = estimate

Source: U.S. Bureau of Labor Statistics and Utah Office of Planning and Budget.

Table 32
Gross Domestic Product
Implicit Price Deflators
1987 = 100

	Gross Domestic Product Deflator	Change from Previous Year	Personal Consumption Expenditures Deflator	Change from Previous Year
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%
1982	83.8	6.2%	82.2	5.7%
1983	87.2	4.1%	86.2	4.9%
1984	91	4.4%	89.6	3.9%
1985	94.4	3.7%	93.1	3.9%
1986	96.9	2.6%	96	3.1%
1987	100	3.2%	100	4.2%
1988	103.9	3.9%	104.2	4.2%
1989	108.5	4.4%	109.3	4.9%
1990	113.2	4.3%	115	5.2%
1991	117.8	4.1%	120	4.3%
1992	120.9 (e)	2.6%	123.6	3.0%

Source: U.S. Department of Commerce, Bureau of Economic Analysis, 1992, and Utah Office of Planning and Budget.

Table 33
American Chamber of Commerce Researcher's Association
Composite Cost of Living Comparisons
Selected Metropolitan Areas
Second Quarter 1992

COMPONENT INDEX WEIGHTS:	100% All Items	13% Groceries	28% Housing	9% Utilities	10% Transportation	5% Health Care	35% Misc-Goods-Services
US AVERAGE	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Salt Lake City	96.9	105.3	84.8	92.8	104.6	101.1	101.6
Cedar City (Nonmetro)	91.4	104.0	79.6	83.3	96.7	89.3	97.1
Provo-Orem	98.5	98.7	96.6	90.5	103.3	96.4	100.8
St George (Nonmetro)	100.8	103.8	104.3	82.5	101.9	102.6	101.1
WESTERN STATES							
Phoenix AZ	99.7	97.5	92.2	102.1	113.1	112.7	100.3
Los Angeles-Long Beach CA	131.7	107.8	187.9	82.9	118.0	135.2	111.6
Denver CO	103.3	96.1	109.9	93.9	111.0	120.3	98.4
Boise ID	104.1	94.8	116.2	74.7	91.8	111.3	107.9
Las Vegas NV	104.4	94.9	113.5	83.5	115.3	113.3	101.7
Santa Fe NM	109.8	96.8	135.9	86.9	106.8	106.1	101.1
Portland OR	109.7	98.1	132.0	72.0	112.1	124.3	103.2
Seattle WA	118.1	115.7	147.8	62.7	111.3	141.2	108.0
Casper WY	101.1	101.8	104.1	73.4	93.9	97.2	108.3
OTHER AREAS							
Anchorage AK	130.1	131.9	140.1	101.1	116.8	178.4	125.7
Atlanta GA	99.6	97.4	99.0	113.9	99.1	117.5	94.9
Kansas City MO-KS	95.5	91.9	94.8	94.1	98.4	99.3	96.5
New York NY	221.6	147.2	397.8	169.9	126.7	208.8	150.4
Houston TX	100.2	106.2	91.3	101.1	119.0	104.3	98.8

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

Table 34
American Chamber of Commerce Researcher's Association
Cost of Living Comparisons
Salt Lake City Metropolitan Area
Second Quarter

COMPONENT INDEX WEIGHTS:	100% All Items	13% Groceries	28% Housing	9% Utilities	10% Transportation	5% Health Care	35% Misc-Goods
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

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

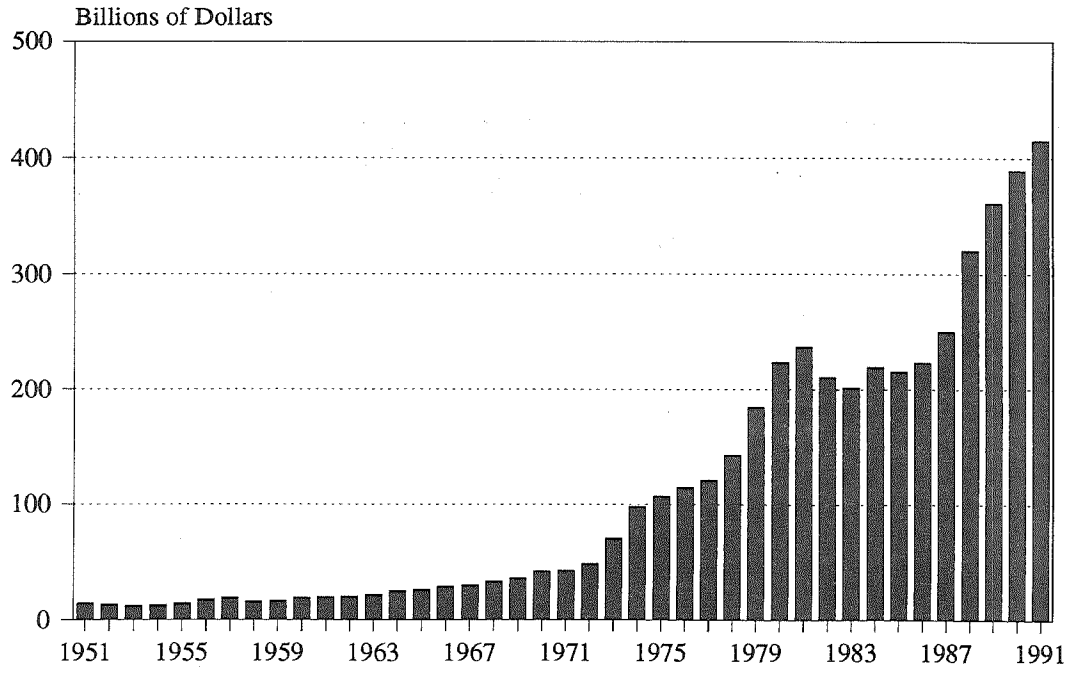
EXPORT ACTIVITY

Economists have long recognized the importance of export activity in providing jobs, income and wealth to local, regional and national economies. Never has the importance of free and fair trade been as important as in today's global economy where countries from all around the world exchange products and services. Through free trade the world's resources are directed to their most efficient uses because countries can capitalize on comparative advantages, specializations and economies of scale. The result is an increase in standards of living around the globe.

Global and National Trade

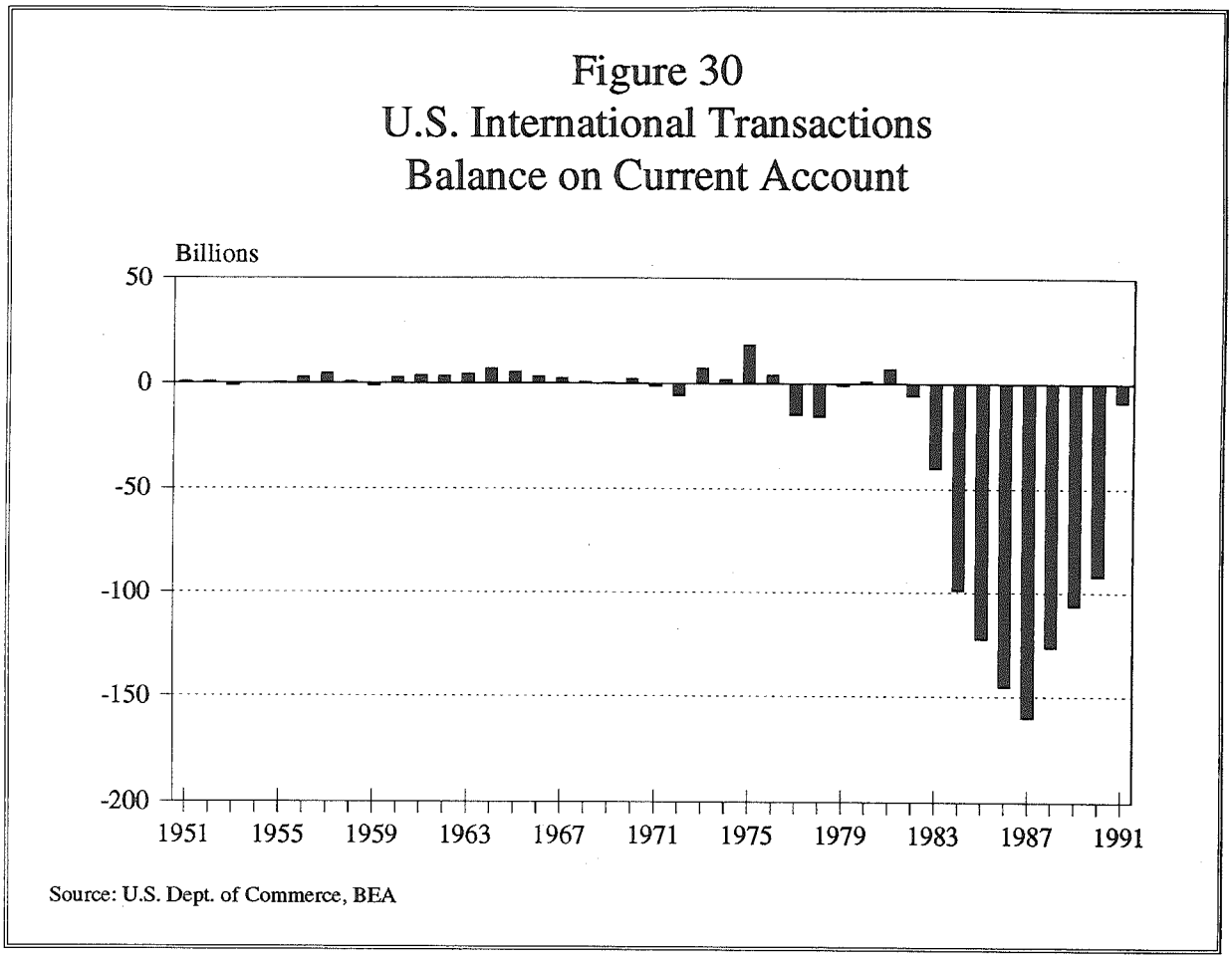
Export and import activity in the United States reflects the general trend of increased trade. As shown in Figure 29, U.S. merchandise exports, which include trade of agricultural, mining and manufactured products, grew substantially over the past two decades. Trade transactions are often more broadly categorized to include not only merchandise exports and imports, but also the exchange of services and investment. The balance of all of these transactions is referred to as the "balance on current account". Until 1983 the balance on current account fluctuated around zero, showing that exports of merchandise, services and investment were roughly offset by imports. In 1983, however, the United States started importing far more than it exported. These data are shown in Figure 30.

Figure 29
U.S. Merchandise Exports



Source: U.S. Dept. of Commerce, BEA

* 1991 = Estimate



Several current events related to trade have the potential to profoundly impact trade activity in the United States, and to a lesser extent, Utah. The General Agreement on Tariffs and Trade (GATT) was initiated in 1947 and is currently in the eighth round of negotiations. The current negotiations include more than 100 countries and address a wide variety of issues including the reduction of tariffs and the safeguarding of intellectual property rights. Since GATT's inception, world tariffs have fallen from an average of 40 percent in 1947 to 4 percent today. The latest round of negotiations include a number of extremely difficult problems. Of particular concern are disputes over government subsidies for agriculture. Most recently the United States has threatened to levy 200 percent tariffs on European Community white wines, canola oil and wheat gluten unless the two sides can resolve an ongoing dispute over soybean and other oilseed products. If the GATT negotiations retreat from a focus on open international markets and a trade war results, the entire world economy will be impacted.

The North American Free-Trade Agreement (NAFTA) has recently been signed. This agreement, which includes the United States, Mexico and Canada, has the potential to create a market of 360 million consumers and a total annual output of more than $6 trillion. Important objectives of the agreement include market access, services, investment, intellectual property rights, trade rules, labor and the environment. President George Bush signed the agreement in December 1992, but the agreement still needs to pass congress. President-elect Bill Clinton has expressed an interest in altering NAFTA to include more environmental controls and worker retraining provisions. Since Utah's merchandise trade with Canada and Mexico already amounts to $343 million and in volume is second only to the United Kingdom, the success or failure of NAFTA has the potential to significantly impact export activity in Utah.

The last major current event related to world trade is European economic and monetary union, commonly referred to as EC 92. In 1985 the 12-member states of the European Community proposed to abolish, by the end of 1992, nearly all internal barriers to the free movement of goods, capital, services and people. The resulting integration of the European marketplace should help countries overcome the historical political and cultural obstacles that have

separated Europe for centuries. The 1992 reforms increase the importance of Europe in the world marketplace and should increase investment and export activities worldwide. For U.S. and Utah investors and exporters, EC 92 offers the benefit of an integrated market and economic growth. Europe should also have a single currency by the end of the decade. Since the United Kingdom, Germany, and France are among Utah's largest merchandise trade partners, the success or failure of EC 92 will impact Utah trade activity. Utah trade with the European Community will also be impacted by how well Utah companies adhere to the quality requirements of the International Standards Organization (ISO). The European Community will adopt these standards in January 1993.

Utah's International Business Development Program

The Utah Department of Community and Economic Development has recognized the importance of trade activity by initiating and supporting an International Business Development Program. The purpose of the program is to offer practical export assistance and information to Utah companies, promote Utah products in foreign markets, market the state as a competitive site for direct foreign investment, and host foreign country government diplomats, ambassadors, and corporate CEOs for the purpose of introducing them to the opportunities available in Utah.

As part of this program the state has established foreign trade offices in Japan, Korea, Taiwan, Belgium and Mexico. These offices help attract foreign investment into Utah and assist Utah products enter and expand in foreign markets.

Utah International Exports

The Department of Commerce, in collaboration with the U.S. Customs Service, collects merchandise trade data. Merchandise trade data include international exports of agricultural, mining and manufactured products and are based on information provided on the Shipper's Export Declaration (SED) that accompanies each commodity shipment of $2,501 or more that leaves the United States. These data are informative because they provide the only indication of Utah's foreign exports by both industry and country of destination.

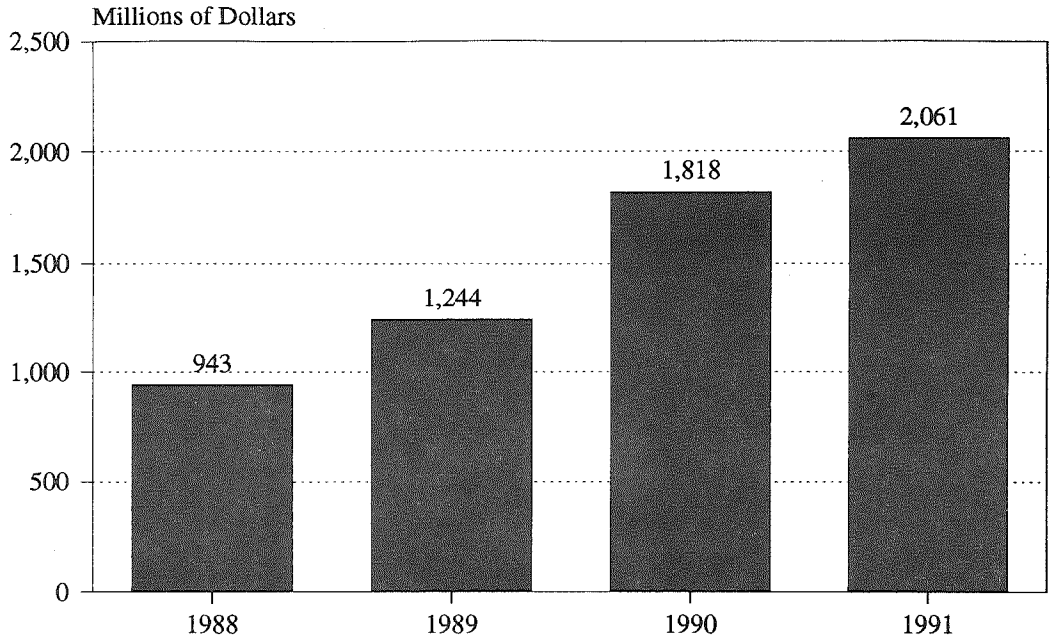
Merchandise trade data do, however, have significant limitations. The data exclude exports of services, most notably the prepackaged computer software of WordPerfect Corp. and Novell, Inc.; the data do not include interstate exports; the data are often reported by port rather than actual state of origin; and many SEDs have missing information about either state of origin, type of commodity or both. The Foreign Trade Division of the Census Bureau recognizes the problems with the data and is actively working to improve the accuracy.

In 1991, Utah's merchandise exports totaled over $2.06 billion (Figure 31). In just four years Utah's merchandise exports have more than doubled, rising from $943.32 million in 1988 to $2.06 billion in 1991. This rate of increase is illustrative of the increased volume and importance of export activity globally.

Utah merchandise exports by industry are shown in Table 35. In 1991 Utah's largest export industry was primary metal products, followed by electrical machinery, metallic ores, industrial machinery, transportation equipment, and scientific instruments (Figure 32). Table 36 provides examples of Utah firms within each of the largest merchandise trade industries. Many of Utah's largest employers, such as Thiokol Corporation, Hercules, Geneva Steel, Kennecott Minerals, and Morton International, are all large export companies.

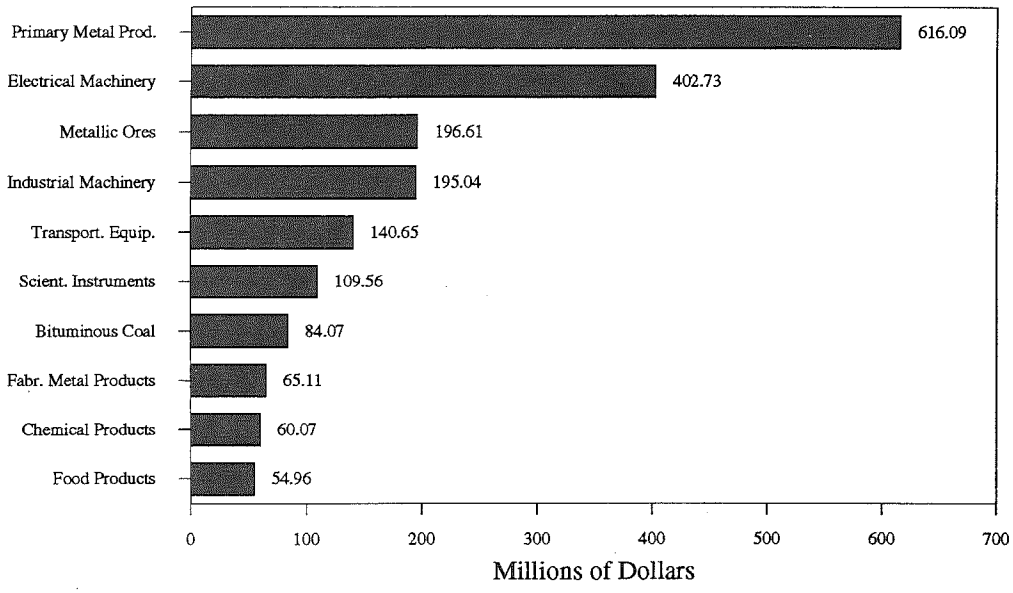
The largest share of Utah's merchandise exports flow to the United Kingdom where an estimated $366 million worth of exports arrived in 1991. Canada is Utah's second largest trading partner, followed by Japan, Thailand, Hong Kong and Germany. Figure 33 shows Utah merchandise exports by country of destination.

Figure 31
Utah Merchandise Exports



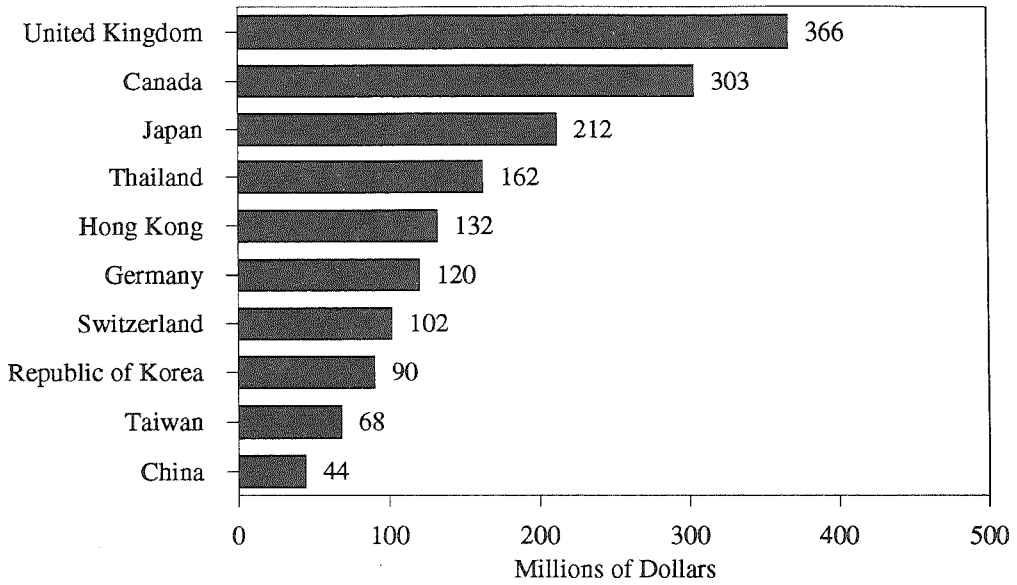
Source: U.S. Bureau of Census,
Foreign Trade Div.

Figure 32
Utah's Top Ten Merchandise Export Industries: 1991



Source: U.S. Bureau of Census,
Foreign Trade Div.

Figure 33
1991 Utah Merchandise Exports By Country of Destination



Source: U.S. Bureau of Census, Foreign Trade Div.

Table 35
Utah Merchandise Exports by Industry
(Thousands of Dollars)

SIC Code	Industry Description	1988	1989	1990	1991	Percent of Total
01	Agricultural Products	$278.6	$1,687.1	$1,864.1	$1,477.2	0.1%
02	Livestock and Livestock Products	$501.8	$562.0	$153.6	$98.4	0.0%
08	Forestry Products	$189.0	$32.2	$52.5	$5.0	0.0%
09	Fishing, Hunting, and Trapping	$3,521.2	$213.2	$572.0	$732.4	0.0%
10	Metallic Ores and Concentrates	$15,668.7	$213,167.4	$209,220.6	$196,613.3	9.5%
12	Bituminous Coal and Lignite	$32,775.4	$80,003.3	$64,021.2	$84,073.2	4.1%
13	Crude Petroleum and Natural Gas				$2.6	0.0%
14	Nonmetallic Minerals, Except Fuels	$1,842.7	$10,265.9	$5,166.0	$7,833.0	0.4%
20	Food and Kindred Products	$33,230.1	$53,931.7	$57,903.5	$54,963.2	2.7%
21	Tobacco Manufacturers			$569.5		0.0%
22	Textile Mill Products	$1,577.8	$2,240.1	$2,162.2	$1,644.9	0.1%
23	Apparel and Related Products	$10,967.0	$3,077.6	$3,368.5	$4,969.3	0.2%
24	Lumber and Wood Products, Except Furniture	$572.9	$594.7	$1,687.3	$947.0	0.0%
25	Furniture and Fixtures	$1,364.5	$2,093.4	$1,806.4	$2,964.6	0.1%
26	Paper and Allied Products	$10,495.0	$10,691.9	$12,563.5	$6,650.0	0.3%
27	Printing, Publishing, and Allied Products	$9,053.1	$24,885.4	$34,539.9	$19,731.5	1.0%
28	Chemicals and Allied Products	$22,224.5	$40,406.4	$66,567.4	$60,072.8	2.9%
29	Petroleum Refining and Related Products	$2,124.7	$530.6	$3,925.5	$758.8	0.0%
30	Rubber and Misc. Plastic Products	$27,050.7	$11,242.0	$9,675.8	$23,318.5	1.1%
31	Leather and Leather Products	$584.2	$395.2	$1,404.0	$2,413.5	0.1%
32	Stone, Clay, Glass, and Concrete Products	$7,366.1	$3,366.5	$3,676.3	$3,552.2	0.2%
33	Primary Metal Products	$200,209.8	$95,443.0	$322,645.9	$616,094.1	29.9%
34	Fabricated Metal Products, Except Mach./Tran.	$21,653.2	$33,571.1	$36,721.2	$65,105.2	3.2%
35	Industrial Machinery, Except Electrical	$117,563.4	$146,628.1	$202,848.0	$195,040.1	9.5%
36	Electrical/Electronic Machinery, Equip., and Supplies	$281,318.0	$287,844.1	$446,497.0	$402,726.3	19.5%
37	Transportation Equipment	$25,825.0	$68,319.4	$144,321.3	$140,653.5	6.8%
38	Scientific Instruments	$85,323.9	$116,766.7	$128,715.6	$109,561.9	5.3%
39	Misc. Manufactured Commodities	$18,348.1	$19,649.8	$22,642.4	$31,033.1	1.5%
	Scrap and Waste	$8,633.2	$7,482.0	$20,099.5	$14,665.8	0.7%
	Used or Second-Hand Merchandise	$451.1	$66.1	$4,653.4	$2,871.5	0.1%
	GDS Imported From Canada and Returned UN			$3,101.8	$5,433.7	0.3%
	Special Classification Provisions	$2,606.4	$8,843.5	$5,299.5	$5,234.5	0.3%
	TOTAL	$943,320.1	$1,244,000.4	$1,818,445.4	$2,061,241.1	

Source: Bureau of Census, Foreign Trade Division.

Table 36
Examples of Utah Export Firms and Total Export Volume in 1991

Industry	Examples of Utah Firms	Total Utah Export Volume (millions)
Primary Metal Products	Geneva Steel, Nucor Steel, Kennecott Minerals, Westinghouse, Westinghouse Electric, Magnesium Corporation of America	$616.09
Electrical Machinery	Unisys, National Semiconductor, Signetics, Varian Associates	$402.73
Metallic Ores	Kennecott Minerals	$196.61
Industrial Machinery	Eaton-Kenway, Evans and Sutherland, Unisys Defense Systems, Iomega	$195.04
Transportation Equipment	Morton International, Hercules McDonnell Douglas, Thiokol, E Systems	$140.65
Scientific Instruments	Litton Systems, Deseret Medical, Sorenson Reserch, Fresenius USA, Utah Medical Products, Ballard Medical Products	$109.56
Bituminous Coal	Utah Power and Light--Mining Division, Utah Fuel, Andalex Resource	$84.07
Fabricated Metal Products	Valtec, Vulcraft, Stott	$65.11
Chemical Products	Great Salt Lake Minerals and Chemicals, Huish Chemical	$60.07
Food and Kindred Products	E.A. Miller, Moroni Feed, Tri-Miller Packing, Stouffer Foods	$54.96

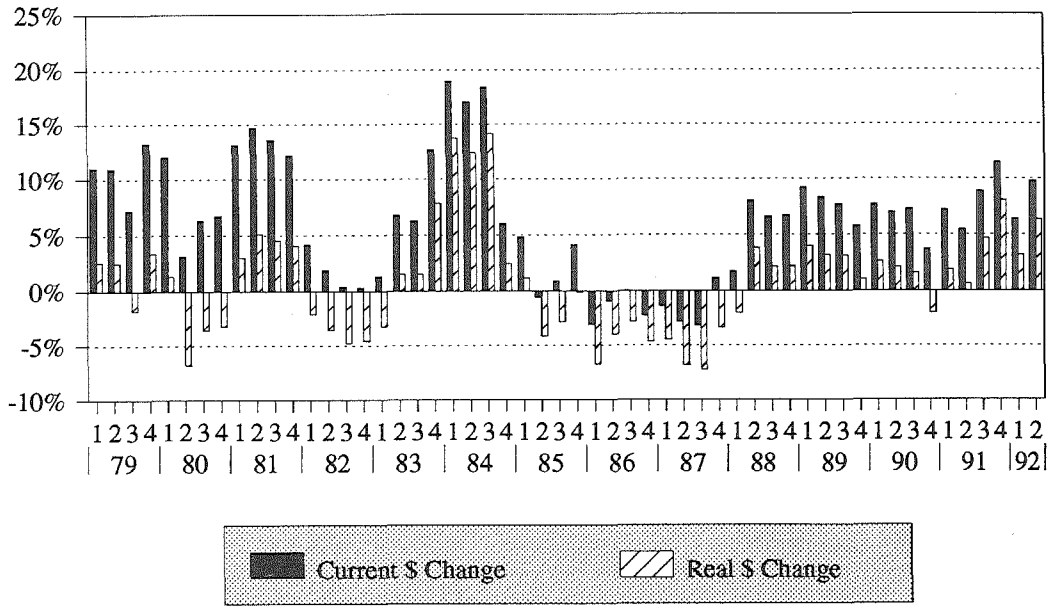
Sources: U.S. Bureau of the Census, Foreign Trade Division, and the Utah Division of International Development.

GROSS TAXABLE SALES

Gross taxable sales consist of all final sales of tangible personal property in the state, except for various exempted items. Also taxable are selected services such as: hotel and lodging; leases, rents and repairs to tangible property; and admissions to most amusement and recreation services (skiing, motion pictures, amusement parks, professional and college sports). In 1989, taxable sales of $13.9 billion comprised almost half of Utah's gross state product of $28.1 billion. Besides the 35 specific exempted items in the law, major exclusions from the tax base are: medical, personal and professional services; primary and intermediate goods production; and sales of real estate and intangible property (stocks and bonds). Utah's state and local sales and use taxes brought in over $1 billion in revenue during the past fiscal year and is the largest revenue source for state and local governments.

Since the second calendar quarter of 1988, gross taxable sales and purchases have expanded 17 quarters in a row (Figure 34). Table 38 gives data on gross taxable sales for the state and counties from 1988 to 1991. In this expansion, growth rates have ranged from 4.4 to over 11.5 percent. In all but one of those quarters, taxable sales have also increased in real (inflation-adjusted) dollars. The only quarter in which real taxable sales did not grow was during the last quarter of 1990, a period in which the threat of the coming Persian Gulf War and rising gasoline prices sapped consumer confidence.

Figure 34
Change in Gross Taxable Sales
Percent Change from Prior Year



* All data includes prior-period adj.
Source: Utah State Tax Commission

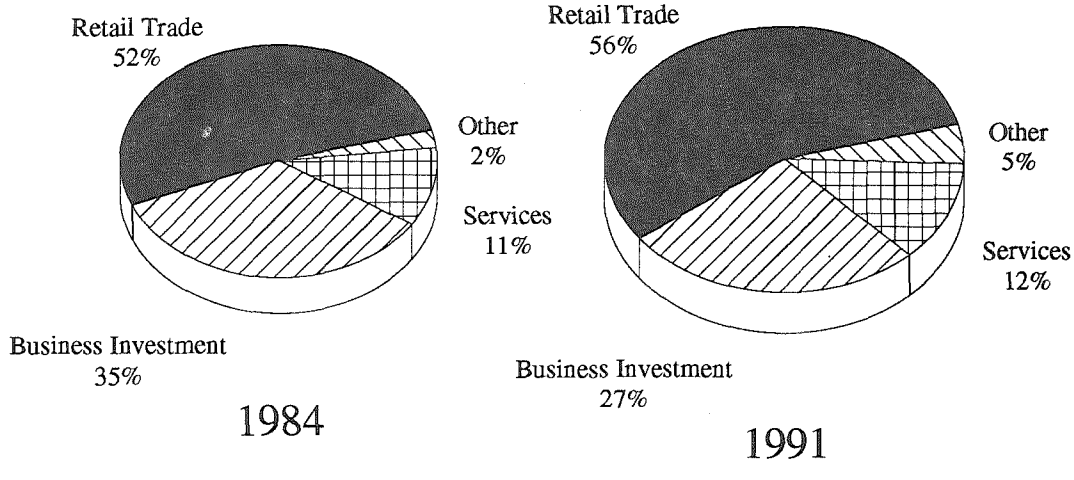
During the first three quarters of 1992, gross taxable sales have risen almost 8 percent, 3 percent better than the state's 5 percent forecast last year for 1992. Taxable sales are divided into three major categories (Figure 35 and Table 37 show shares of the three categories from 1991 and 1984):

- Retail trade sales
- Taxable business equipment investment and utility sales
- Taxable services

During the first half of 1992, retail trade grew twice as fast as the 6 percent growth estimated last year. For the year, retail sales should increase almost 9 percent over 1991 levels. Since retail trade comprises about 56 percent of total taxable sales, they account for all of the increase in actual sales above forecasted levels. Taxable services, which were forecasted to grow 10 percent in 1992, rose 7.2 percent in the first half of 1992. Business investment and utility sales and purchases, which were expected to rise only 0.6 percent in 1992, have so far decreased 2.4 percent from 1991 levels. Because of the 1991 completion of a major pipeline, which spanned the state, this sector was expected to see little, if any, growth this year.

For 1993, retail trade will advance a bit more modestly at a 6.5 percent rate. Taxable services should grow faster than the long term trend of 8 percent by growing 10 percent. Taxable business equipment and utility purchases will increase almost 8 percent due to corporate attempts to streamline equipment and productivity, as opposed to hiring more people.

Figure 35
Shares of Utah's Sales Tax Base
Four Major Sectors (In Million $)



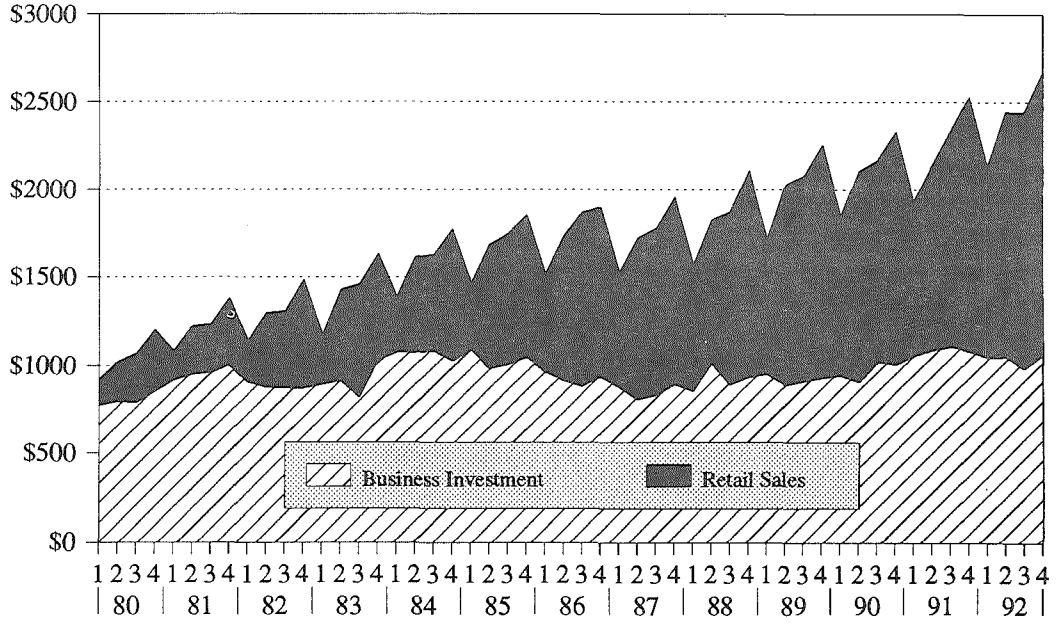
Retail Trade Sales

Retail sales growth of 12.2 percent during the first half of 1992 was very strong, partially because it followed the 3 percent first-half 1991 growth (which occurred during the Persian Gulf War). Figure 36 show retail sales and business investment from 1980 to 1992. During the second half of 1992, retail trade sales are expected to gain 6.5 percent, pushing overall 1992 retail sales more than 8 percent ahead of 1991 sales. In 1993, retail trade is expected to improve to a 6.5 percent growth rate. Retail sales can be dissected into two distinct groups, durable and nondurable goods sales.

Nondurable retail sales, consisting of goods lasting less than three years, and including general merchandise, apparel, food, shopping goods stores and restaurant sales, comprise almost 40 percent of gross taxable sales. Nondurables, which jumped almost 10 percent in the first half of 1992, are expected to rise about 8 percent for the entire year. During the second quarter of 1992, sales in each of the four sectors — general merchandise and apparel stores, food stores, eating and drinking places, and miscellaneous shopping goods stores — increased in double-digits. In fact, general merchandise and apparel store sales rose 13 percent in the first half of 1992, while restaurant and fast food sales saw an 11.7 percent gain. Even food store sales, which increased only 3 percent in 1991, jumped almost 12 percent in the second quarter of 1992. Continued nonfarm wage and salary growth along the Wasatch Front contributed to strong first-half nondurable retail sales.

Utah durable goods (goods generally lasting three years or more) jumped almost 18 percent during the first half of 1992. Durable sales include two subsectors — motor vehicle dealers and building, garden and furniture stores. Real motor vehicle dealer sales, which fell from early in 1989 through the first half of 1991, began to rebound in the second half of 1991 and jumped almost 15 percent in the first half of 1992. Improved consumer confidence due to steady wage and salary gains and lower gasoline prices probably contributed to upbeat new car and truck sales. Unit sales have increased about 12 percent during the first three quarters of 1992. These figures show a substantial improvement from the 9 percent decline in 1991.

Figure 36
Retail Sales & Business Investment
(In Millions of Dollars)



Source: Utah State Tax Commission

The 50 percent gain in total construction values in Utah during the first half of 1992, due in part to the lowest mortgage rates in over 20 years, have spurred building, garden and furniture store sales. These sales rose over 22 percent in the first half and should see a gain of between 12 and 16 percent by the end of 1992. Sales for 1993 may grow between 10 and 20 percent since residential values are expected to increase almost 18 percent in 1992. This sector is expected to continue to improve into 1994 as mortgage rates hover between 8 and 9 percent and as Utah in-migration along with continued wage and salary gains keep pressure on housing demand. In addition, as Utah's (post-World War II) baby-boomers age, they will also attempt to upgrade furnishings and move into more expensive housing. Substantial increases in the average value of new residential construction, up 10 percent this year from $84,200 per unit last year to $92,900 this year, is evidence of this trend.

Business Equipment Investment and Utility Purchases

An almost 8 percent gain in business investment and utility sales during 1993 should occur for the following reasons:

- U.S. producers durable equipment sales will expand over 7 percent in 1993, as corporations update computer equipment and tend to favor capital instead of labor to improve productivity.
- Firming oil prices also will stimulate supply and equipment purchases and leasing.
- Relatively low real interest rates.
- Strong construction industry purchases.

Offsetting these gains somewhat will be lackluster purchases by defense contractors and others hit harder by the national recession.

Over 8 percent growth is expected in the manufacturing and construction sectors during 1993. Almost 9 percent growth is forecast for the transportation, communication and utilities sector in 1993. Figure 36 show retail sales and business investment from 1980 to 1992. Salt Lake International Airport's measure of heating degree days decreased almost 18 percent in the 1991-92 winter season. This winter, the index should be about 6 percent colder than last year.

According to the state's largest taxpayers, capital investment plans during October 1992 were up about 3 percent compared to last year's levels. Lower interest rates and favorable equipment prices will continue to boost Utah business investment spending.

Taxable Services

Utah taxes amusement and recreation sales, hotel sales and repairs and leases of tangible property. The state's taxable sales base, while only one-third of its potential by omitting professional and medical services, is still somewhat broader than most states. Since 1980 Utah's taxable services grew at compounded growth rates of 8.2 percent per year, in contrast to 6.8 percent growth rates for retail sales and 2.2 percent compounded growth rates for business investment and utility sales.

During the first half of 1992, taxable services rose 7.2 percent, somewhat less than the 10 percent forecast. Only a 5 percent gain was recorded during the first quarter as the warm weather prematurely closed several ski resorts. This negatively affected first-quarter hotel sales and ski pass sales. Second quarter service growth increased over 9 percent. Especially strong were amusement and recreation sales (up 22 percent) and business services (up 15.2 percent). Health sector purchases also jumped 19 percent in the second quarter.

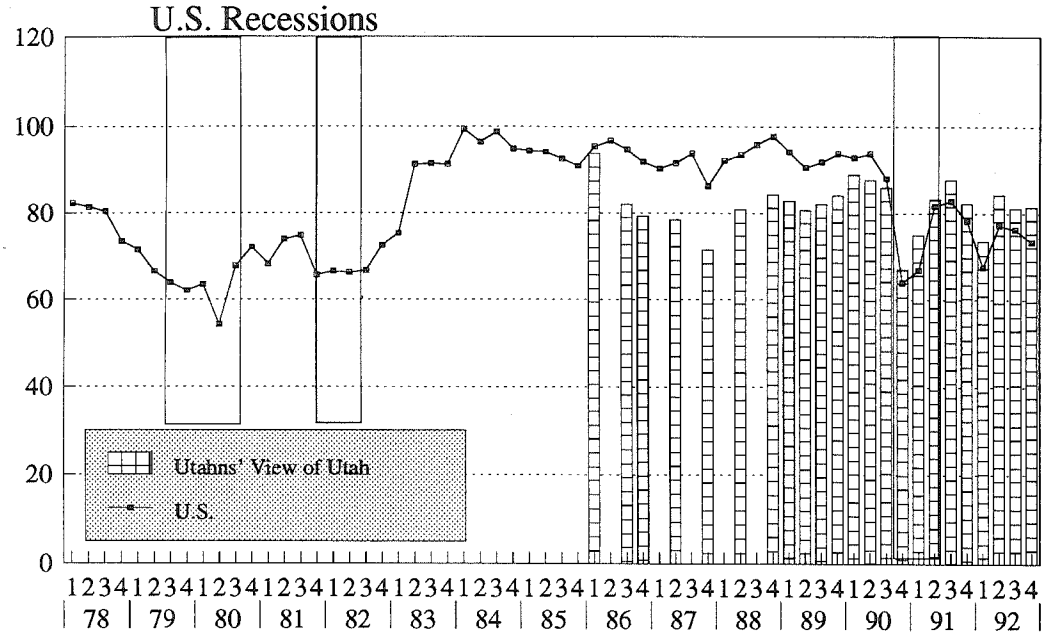
Taxable services appear to grow as permanent nonfarm wages and salaries increase. But almost half of service sector sales come from businesses: computer sales and leases, other equipment sales and leases, automobile rentals, and hotel and lodging sales. A strong tourism outlook, increased business activity, and a 7 percent gain in nonfarm wages and salaries should combine to forge a 10 percent increase in taxable services for 1993.

Consumer Sentiment

The Utah Survey Research Center conducts a Utah Consumer Survey during the first month of each calendar year quarter. The survey is sponsored by members of a partnership between the University of Utah, Utah state government, and private industry. The survey helps facilitate economic development in Utah by helping Utah businesses, economists, and financial analysts better understand consumer sentiment, perceptions, and the financial condition of Utah households. One component of the Consumer Survey is the Index of Consumer Sentiment.

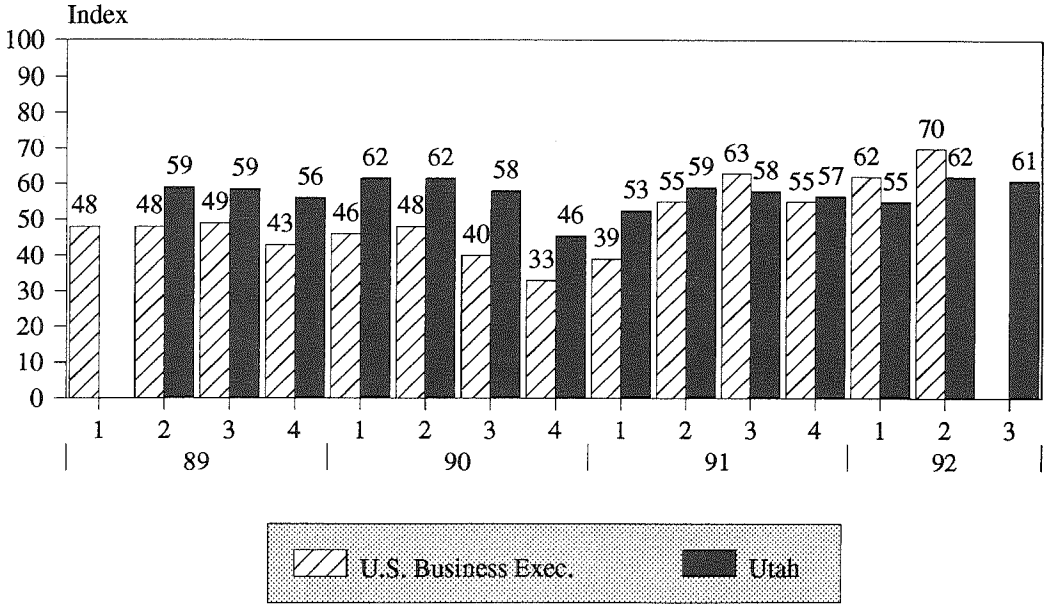
The Index of Consumer Sentiment provides a general measure of consumer's opinions about the economy. Utah's index reflects Utah's strong economy and has exceeded the national index for the past nine quarters. Utah's 1992 index is estimated at 80.2, 5.2 points higher than the national index of 75.0. Figure 36 provides the U.S. and Utah consumer sentiment indices.

Figure 37
U.S. & Utah Consumer Sentiment Indices



U.S. - University of Michigan
Utah - University of Utah Survey Research Center

Figure 38
Utah Business Executive Confidence Survey



[25=moderately worse, 50=same, 75=moderately better]

Table 37
Utah Gross Taxable Sales
(Millions of Dollars)

Calendar Year	Retail Sales	Business Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1981	4,911	3,545	873	528	9,857
1982	5,225	3,271	1,018	505	10,019
1983	5,655	3,423	1,088	519	10,685
1984	6,399	4,254	1,337	304	12,294
1985	6,749	4,122	1,379	324	12,574
1986	7,022	3,689	1,342	325	12,378
1987	6,982	3,398	1,520	289	12,189
1988	7,376	3,684	1,649	309	13,018
1989	8,080	3,676	1,753	384	13,893
1990r	8,424	3,864	1,749	737	14,774
1991r	8,939	4,344	1,946	769	15,998
1992e	9,710	4,271	2,085	884	16,950
1993f	10,345	4,609	2,311	845	18,110
Percent Change					
1982	6.4%	-7.7%	16.6%	-4.4%	1.6%
1983	8.2%	4.6%	6.9%	2.8%	6.6%
1984	13.2%	24.3%	22.9%	-41.4%	15.1%
1985	5.5%	-3.1%	3.1%	6.6%	2.3%
1986	4.0%	-10.5%	-2.7%	0.3%	-1.6%
1987	-0.6%	-7.9%	13.3%	-11.1%	-1.5%
1988	5.6%	8.4%	8.5%	6.9%	6.8%
1989	9.5%	-0.2%	6.3%	24.3%	6.7%
1990r	4.3%	5.1%	-0.2%	91.9%	6.3%
1991r	6.1%	12.4%	11.3%	4.3%	8.3%
1992e	8.6%	-1.7%	7.1%	15.0%	6.0%
1993f	6.5%	7.9%	10.8%	-4.4%	6.8%

r = Revised
e = Estimate
f = Forecast

Source: Utah State Tax Commission.

Table 38
Gross Taxable Sales
By County
(Millions of Dollars)

County	1986	85-86 change	1987	86-87 change	1988	87-88 change	1989	88-89 change	1990 (r)	89-90 change	1991	90-91 change
Beaver	22.0	31.21%	20.8	-5.54%	24.8	19.33%	24.5	-1.12%	22.2	-9.53%	36.4	63.96%
Box Elder	193.6	-2.05%	203.6	5.17%	202.2	-0.67%	212.8	5.21%	218.6	2.74%	224.7	2.79%
Cache	336.4	0.53%	337.4	0.31%	364.0	7.88%	396.5	8.92%	414.7	4.59%	435.4	4.99%
Carbon	178.3	-4.34%	170.4	-4.43%	173.1	1.55%	193.7	11.94%	188.9	-2.49%	196.0	3.75%
Daggett	5.1	26.22%	3.7	-27.49%	5.3	42.56%	7.1	34.04%	8.0	12.07%	6.2	-22.04%
Davis	919.7	6.48%	868.4	-5.58%	912.8	5.12%	1,002.3	9.80%	1,057.4	5.49%	1,170.9	10.74%
Duchesne	99.9	-25.10%	77.5	-22.45%	71.5	-7.79%	77.1	7.89%	81.4	5.57%	79.3	-2.58%
Emery	60.4	13.53%	42.3	-29.98%	50.2	18.75%	53.9	7.43%	61.1	13.21%	51.1	-16.34%
Garfield	24.1	7.32%	27.4	13.75%	30.5	11.24%	33.1	8.49%	34.7	4.98%	36.6	5.48%
Grand	51.9	-9.41%	50.2	-3.35%	60.5	20.67%	65.6	8.35%	69.2	5.50%	75.8	9.54%
Iron	136.8	-17.38%	139.3	1.87%	149.5	7.33%	164.8	10.21%	167.4	1.59%	201.2	20.19%
Juab	33.2	-10.88%	33.8	1.95%	28.3	-16.23%	31.3	10.61%	30.6	-2.28%	34.7	13.40%
Kane	33.1	4.89%	35.9	8.54%	40.7	13.25%	46.4	14.11%	43.7	-5.89%	47.6	8.92%
Millard	159.5	-13.12%	38.2	-76.02%	180.5	372.05%	70.0	-61.20%	68.5	-2.20%	124.1	81.17%
Morgan	21.4	-10.35%	19.6	-8.33%	18.8	-4.05%	23.4	24.19%	19.4	-16.96%	32.2	65.98%
Piute	2.6	0.80%	2.6	0.88%	2.5	-6.87%	3.3	36.29%	2.8	-16.35%	2.8	0.00%
Rich	8.2	-2.24%	6.8	-16.99%	6.0	-11.79%	9.8	63.30%	8.3	-15.65%	7.2	-13.25%
Salt Lake	6,243.9	1.05%	6,141.7	-1.64%	6,493.0	5.72%	6,859.7	5.65%	7,305.5	6.50%	7,835.3	7.25%
San Juan	42.9	-18.34%	48.2	12.53%	44.5	-7.71%	57.7	29.56%	61.9	7.31%	52.0	-15.99%
Sanpete	51.1	-1.53%	54.3	6.25%	53.8	-1.04%	57.7	7.40%	63.0	9.10%	60.5	-3.97%
Sevier	102.4	-7.79%	101.7	-0.62%	101.7	0.01%	124.6	22.45%	125.5	0.73%	115.8	-7.73%
Summit	173.0	0.52%	185.1	6.99%	200.9	8.55%	228.8	13.92%	242.6	6.01%	292.4	20.53%
Tooele	113.4	-2.42%	112.6	-0.63%	120.3	6.76%	120.7	0.40%	154.7	28.12%	164.5	6.33%
Uintah	161.6	-34.83%	146.0	-9.68%	155.7	6.71%	156.1	0.24%	176.8	13.24%	200.8	13.57%
Utah	1,233.7	-1.58%	1,255.9	1.80%	1,366.2	8.78%	1,530.4	12.01%	1,653.9	8.07%	1,785.0	7.93%
Wasatch	41.6	-6.09%	41.2	-0.90%	45.3	10.11%	50.8	12.06%	55.8	9.83%	54.9	-1.61%
Washington	300.2	12.61%	290.5	-3.23%	316.2	8.84%	365.0	15.46%	408.1	11.79%	484.1	18.62%
Wayne	7.1	5.88%	7.9	10.54%	8.8	11.88%	11.9	35.71%	10.5	-12.01%	9.1	-13.33%
Weber	1,145.3	2.80%	1,144.2	-0.10%	1,175.4	2.72%	1,228.7	4.53%	1,268.0	3.20%	1,303.5	2.80%
Out of State Use Tax	476.2	-24.75%	581.1	22.01%	613.3	5.55%	684.2	11.55%	750.5	9.69%	878.1	17.00%
Total	12,378.4	-1.55%	12,188.4	-1.53%	13,016.5	6.79%	13,892.2	6.73%	14,773.6	6.34%	15,998.2	8.29%

(r) = revised

Source: Utah State Tax Commission.

TAX COLLECTIONS

Estimated and historic tax collections and trends are presented in Tables 39 and 40 for fiscal years 1978 to 1993. The revenue trends and cycles illustrated in these tables result from tax rate and base changes, the elimination or addition of revenue categories, and swings in national and local economic activity. Table 39 shows the annual and average annual percent changes in unrestricted revenues. Table 40 gives the distribution of these revenue sources as a percent of total revenues and as a percent of personal income.

These tables indicate that the General Fund, Transportation Fund, and Mineral Lease payments have generally declined as a percent of total revenues and of personal income over this time period while the Uniform School Fund has increased. Explanations for these trends include income tax bracket creep; tobacco and alcohol health warnings; increased fuel efficiency of vehicles; new sales tax exemptions; stronger growth in sales tax-exempt services industries than in taxable goods industries; general fund monies transferred to restricted accounts; increased circuit breaker credits; severance tax credits; and lower oil prices, production and severance tax rates.

Fiscal Year 1978 to 1982

Revenue collections for fiscal year 1978 through fiscal year 1982 grew at an average annual rate of 12.4 percent. This was a period of in-migration and relatively high growth in employment and wages. Major tax changes during this period included increases in motor and special fuel taxes of 2 cents per gallon effective July 1978 and another 2 cents effective July 1981. Beer taxes were increased from $3.10 to $4.12 per barrel effective July 1981. Cigarette taxes were increased 2 cents per package in July 1979 and another 2 cents in July 1982. And, the mineral production withholding tax was enacted in July 1982.

Fiscal Year 1983 to 1985

Revenue collections grew only 2.3 percent in fiscal year 1983 due to a national recession. Receipts rebounded sharply by 22.7 percent in fiscal year 1984 due to economic recovery, windfall payments, and numerous tax increases. Fiscal year 1985 produced moderate growth of 10.1 percent in revenues as the recovery continued and taxes were again increased.

Significant tax changes occurred during this time period. These changes included $67.8 million in sales and severance tax windfalls in fiscal year 1984; sales tax increases of 1/8 cent in July 1983 and 1/2 cent in October 1983; corporate franchise tax increases from 4.0 to 4.65 percent effective January 1983 and from 4.65 to 5.0 percent effective January 1984; and oil and gas severance tax increase from 2.0 to 4.0 percent as of January 1984; and, motor and special fuels tax increases of 3 cents per gallon effective July 1984.

Fiscal Year 1986 to 1987

Collections growth declined rapidly in fiscal year 1986 to 2.6 percent, and remained flat at only 2.4 percent in fiscal year 1987. Accelerated corporate payments, an income tax surcharge, and windfalls from the federal Tax Reform Act of 1986 kept collections from falling during fiscal year 1987. Revenue receipts would have declined without these changes due to the closures of Kennecott Copper (September 1985) and Geneva Steel (August 1986), the completion of the Intermountain Power Project (May 1987), out-migration, new sales tax exemptions, and lower oil prices.

Fiscal Year 1988

Fiscal year 1988 collections increased to 11.2 percent as a result of income tax windfalls, state income tax reform, increased oil prices, the reopening of Geneva (September 1987) and Kennecott (June 1987), and multiple tax increases. Major tax changes during this period included repealing the deductibility of federal income tax payments effective January 1987; a 1/2 cent increase in sales taxes as of March 1987; an 11 cents per pack increase in cigarette taxes effective April 1987; and, a 5 cents per gallon increase in motor and special fuels taxes as of April 1987.

Because state and federal income tax reforms resulted in larger than anticipated tax windfalls, a special session of the Legislature met in July 1988 to reduce income taxes by 11.5 percent. Tax rates were cut by 5.0 percent and 1/3 of federal income taxes paid were allowed to be deducted against state income taxes owed. A one-time income tax rebate of $71 million was also approved during the special session.

Fiscal Year 1989

Economic activity continued to improve during fiscal year 1989. Receipts increased 9.4 percent due to strong growth in manufacturing, trade and service sectors, and expansions of new and existing firms in prominent areas such as telecommunications, aerospace, computer technologies, and bio-medical technologies. The strength in receipts prompted another special session of the Legislature in September 1989 to reduce the income tax an additional 5.7 percent. Rates were reduced 2.0 percent and the deductibility of federal taxes allowed against state taxes was increased from 33.3 percent to 50 percent.

Fiscal Year 1990

The economy continued to prosper into fiscal year 1990, but the growth in revenue receipts dropped off to 4.0 percent due to previous income tax reductions, new severance tax workover credits, and a decrease in the sales tax rate from 5.09375 percent to 4.984375 percent as of January 1990. The overall state sales tax rate dropped to 5.0 percent, but 1/64th was designated to fund construction of sports facilities for the Winter Olympics.

Fiscal Year 1991

Fiscal year 1991 was another year of solid economic growth, and revenue collections improved to 4.7 percent. Receipts would have increased more were it not for lower corporate tax collections due to a refund to a major corporation; new Department of Interior administrative charges for collecting and distributing mineral leases and bonuses; and, lower motor fuels taxes due to higher gasoline prices caused by the Gulf War in the Middle East.

Fiscal Year 1992

Fiscal year 1992 saw further increases of 5.7 percent in overall tax collections due to moderate economic growth. Income and employment growth remained significantly above national averages. Beer, cigarette and tobacco taxes increased in fiscal year 1992 due to cigarette taxes being raised 3.5 cents per pack. The large decline in the General Fund Other category was due to the transfer of revenues collected by the Department of Commerce into a restricted fund. The decline in severance taxes resulted from the deductibility of workover credits and new sliding scale rates.

Fiscal Year 1993

Fiscal year 1993 receipts are estimated to grow around 5.5 percent. This growth is a little less than in fiscal year 1992 due to the absence of tax increases; the completion of the Kern River pipeline; a one-time $6.7 million Intermountain Power Agency settlement in fiscal year 1992; drop-offs in court fine collections and special fuels tax receipts; $6.9 million in severance tax refunds; and, lower oil prices and production. Still, fiscal year 1993 should show solid growth in collections as the Utah economy continues to outperform the rest of the nation.

Table 39
Fiscal Year Cash Collection Unrestricted Revenues
General Fund, Uniform School Fund, Transportation Fund, and Mineral Lease Funds
(Thousands of Dollars)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992*	1993**
GENERAL FUND:																
SALES & USE TAX	257,988	288,603	320,454	347,382	385,260	388,771	526,158	555,415	558,581	558,998	617,624	667,403	707,443	739,633	802,438	860,000
LIQUOR PROFITS	12,492	12,991	15,054	17,604	17,851	17,266	19,159	18,413	19,008	17,111	15,918	15,984	16,602	17,571	16,711	16,400
INSURANCE PREMIUMS	11,917	13,452	14,718	15,778	21,494	18,013	19,890	22,262	26,077	27,762	28,223	26,406	30,020	27,797	30,175	32,000
BEER CIG. & TOBACCO	9,989	10,156	12,445	13,521	14,108	16,241	19,998	21,314	21,053	24,000	29,190	30,733	30,183	31,042	34,648	34,500
SEVERANCE TAXES	8,446	8,423	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	14,400
INHERITANCE TAX	4,055	1,423	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	8,000
INVESTMENT INCOME	6,827	10,884	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	6,000
OTHER FINES AND FEES	7,315	8,052	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	22,300
CIRCUIT BREAKER	(820)	(1,217)	(2,884)	(2,373)	(2,506)	(2,337)	(1,824)	(2,213)	(1,485)	(1,242)	(1,152)	(1,396)	(3,363)	(3,513)	(4,059)	(4,400)
GF SUBTOTAL	318,209	352,767	403,410	437,169	497,916	484,540	656,983	704,634	706,013	679,010	759,555	823,703	869,060	893,262	932,523	989,200
UNIFORM SCHOOL FUND:																
INDIVIDUAL INCOME	183,894	225,956	265,328	294,947	331,139	347,977	390,913	435,510	454,290	533,288	569,853	615,604	647,593	716,665	784,941	840,000
CORPORATE FRANCHISE	29,448	32,874	40,377	40,667	40,894	33,763	53,226	65,918	84,048	68,898	78,806	92,982	99,693	87,764	80,949	88,000
SCHOOL LAND INCOME	7,403	8,860	10,728	14,443	18,857	30,428	18,985	18,409	11,227	7,940	0	0	0	0	0	0
PERM. FUND INTEREST	0	0	0	0	0	0	0	0	0	0	2,075	3,110	4,533	4,593	4,721	5,200
GROSS RECEIPTS TAX	0	0	0	0	0	0	0	0	0	510	4,498	2,814	4,172	3,685	3,577	3,600
FEDERAL REV. SHARING	11,993	13,443	14,045	6,999	0	0	0	0	0	0	0	0	0	0	0	0
USF OTHER	3,118	1,343	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	9,200
USF SUBTOTAL	235,856	282,476	333,179	359,518	392,979	409,909	468,734	529,594	560,809	622,973	665,082	728,259	767,181	825,587	890,563	946,000
TRANSPORTATION FUND:																
MOTOR FUEL TAX	48,808	61,372	60,451	56,508	67,734	68,697	68,979	89,337	92,164	99,985	129,370	131,220	132,475	131,057	136,352	138,500
SPECIAL FUEL TAX	7,391	9,852	10,470	10,107	12,672	12,637	14,449	17,791	19,369	20,626	27,555	29,305	29,092	36,778	33,405	33,500
TF OTHER	18,901	20,459	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	45,200
TF SUBTOTAL	75,100	91,682	89,794	86,750	101,490	112,177	116,508	140,921	146,195	155,449	192,449	197,416	200,252	207,405	214,336	217,200
MINERAL LEASE PAY.	9,639	12,325	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	31,100
TOTAL	638,805	739,250	841,315	901,590	1,019,275	1,042,788	1,279,693	1,409,339	1,445,595	1,479,818	1,645,922	1,800,178	1,871,433	1,958,632	2,069,948	2,183,500
ANN. PERCENT CHANGE	NA	15.7	13.8	7.2	13.1	2.3	22.7	10.1	2.6	2.4	11.2	9.4	4.0	4.7	5.7	5.5
AVG. ANN. GTH. RATES	NA	15.7	14.8	12.2	12.4	10.3	12.3	12.0	10.7	9.8	9.9	9.9	9.4	9.0	8.8	8.5

*FY92 REVENUES ARE PRELIMINARY TC-23 COLLECTIONS. **FY93 VALUES ARE ESTIMATES.

NOTE: THESE REVENUES INCLUDE TAX RATE AND BASE CHANGES. THESE MONIES PRIMARILY REFLECT TAX COMMISSION CASH COLLECTION ANNUAL REPORTS. THE DEPARTMENT OF FINANCE'S ACCRUAL REPORTS ARE USED FOR BUDGETING. CASH COLLECTIONS ARE USED FOR TREND ANALYSIS; WHEREAS, ACCRUALS ARE USED FOR BUDGETING.

Table 40
Distribution of Unrestricted Revenue Funds as a Percentage of Total Revenues and of Personal Income

FISCAL YEAR	TOTAL UNRESTRICTE REVENUES ($000)	FISCAL YEAR PERS INC ($000000)	GENERAL FUND ($000)	PERCENT OF TOTAL REVENUES	PERCENT OF PERS INC	UNIFORM SCHOOL FUND ($000)	PERCENT OF TOTAL REVENUES	PERCENT OF PERS INC	TRANSPOR-TATION FUND ($000)	PERCENT OF TOTAL REVENUES	PERCENT OF PERS INC	MINERAL LEASE PAYMENTS ($000)	PERCENT OF TOTAL REVENUES	PERCENT OF PERS INC
1978	638,805	8,578	318,209	50%	3.7%	235,856	37%	2.7%	75,100	12%	0.9%	9,639	2%	0.1%
1979	739,250	9,847	352,767	48%	3.6%	282,476	38%	2.9%	91,682	12%	0.9%	12,325	2%	0.1%
1980	841,315	11,127	403,410	48%	3.6%	333,179	40%	3.0%	89,794	11%	0.8%	14,933	2%	0.1%
1981	901,590	12,388	437,169	48%	3.5%	359,518	40%	2.9%	86,750	10%	0.7%	18,153	2%	0.1%
1982	1,019,275	13,685	497,916	49%	3.6%	392,979	39%	2.9%	101,490	10%	0.7%	26,891	3%	0.2%
1983	1,042,788	14,456	484,540	46%	3.4%	409,909	39%	2.8%	112,177	11%	0.8%	36,162	3%	0.3%
1984	1,279,693	15,738	656,983	51%	4.2%	468,734	37%	3.0%	116,508	9%	0.7%	37,468	3%	0.2%
1985	1,409,339	17,050	704,634	50%	4.1%	529,594	38%	3.1%	140,921	10%	0.8%	34,190	2%	0.2%
1986	1,445,595	18,314	706,013	49%	3.9%	560,809	39%	3.1%	146,195	10%	0.8%	32,578	2%	0.2%
1987	1,479,818	19,405	679,010	46%	3.5%	622,973	42%	3.2%	155,449	11%	0.8%	22,385	2%	0.1%
1988	1,645,922	20,486	759,555	46%	3.7%	665,082	40%	3.2%	192,449	12%	0.9%	28,836	2%	0.1%
1989	1,800,178	21,768	823,703	46%	3.8%	728,259	40%	3.3%	197,416	11%	0.9%	50,800	3%	0.2%
1990	1,871,433	23,304	869,060	46%	3.7%	767,181	41%	3.3%	200,252	11%	0.9%	34,941	2%	0.1%
1991	1,958,632	25,148	893,262	46%	3.6%	825,587	42%	3.3%	207,405	11%	0.8%	32,378	2%	0.1%
1992*	2,069,948	26,817	932,523	45%	3.5%	890,563	43%	3.3%	214,336	10%	0.8%	32,526	2%	0.1%
1993*	2,183,500	28,700	989,200	45%	3.4%	946,000	43%	3.3%	217,200	10%	0.8%	31,100	1%	0.1%

*FY92 AND FY93 PERSONAL INCOMES ARE ESTIMATES. FY93 REVENUES ARE ESTIMATES.
NOTE: THESE REVENUES INCLUDE TAX RATE AND BASE CHANGES. THESE MONIES PRIMARILY REFLECT TAX COMMISSION CASH COLLECTION ANNUAL REPORTS. THE DEPARTMENT OF FINANCE'S ACCRUAL REPORTS ARE USED FOR BUDGETING.
CASH COLLECTIONS ARE USED FOR TREND ANALYSIS; WHEREAS, ACCRUALS ARE USED FOR BUDGETING.

REGIONAL / NATIONAL COMPARISONS

In this chapter, comparisons will be made between Utah and other states of the mountain division. The mountain division (as defined by the Bureau of the Census) includes the states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. Table 41 gives extensive data on the demographic and economic performances of the states of the mountain division, as well as other states and the nation.

During the past several years economic conditions in the mountain division have undergone a transformation from one of the weakest economic regions in the country to the strongest. This energy-rich region suffered from the collapse in energy prices in 1985. Agricultural and other natural resource-based industries such as timber and metal mining fell on hard times. Weakness in natural resource-based industries spread to related industries such as construction and financial services. As a result, many states in the mountain region experienced serious economic difficulties during 1986 and 1987. Nevada, in contrast, was a leading growth state throughout this entire period, based upon its strong gaming and tourism industries, the nation, meanwhile, had sustained growth.

In 1988, there were signs that economic conditions for the mountain states were improving. Significant job growth was occurring in various service industries, agriculture rebounded, and commodity prices strengthened. During 1989, while the national economy began to show weakness, the economies of most mountain states had restructured and were growing at a healthy pace. Nationally the economy slowed from a crawl into recession in 1990. By the end of 1991 and through 1992, while no longer technically in recession, the national economic picture remained very weak, with job losses in many industries and depressed consumer confidence. Economic growth in the mountain states was relatively strong in 1990, slowed a little in 1991, and sustained a comparatively healthy, broad-based growth in 1992.

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 when it was 1.2 percent over the previous year. In 1991 population growth was 2.3 percent. The favorable economic conditions in the mountain west, combined with the considerable employment losses found in other parts of the country (particularly in California), will support continued, above-average population growth. In-migrants from California appear to be moving into the intermountain area. From 1990 to 1991, the population in mountain division states increased by 316,000 to a total of 14,035,000 inhabitants or a growth rate of 2.3 percent compared to a 1.1 percent increase nationally (Figure 39). Montana and Wyoming grew in population during 1991 for the first time in six years at 1.1 and 1.8 percent respectively.

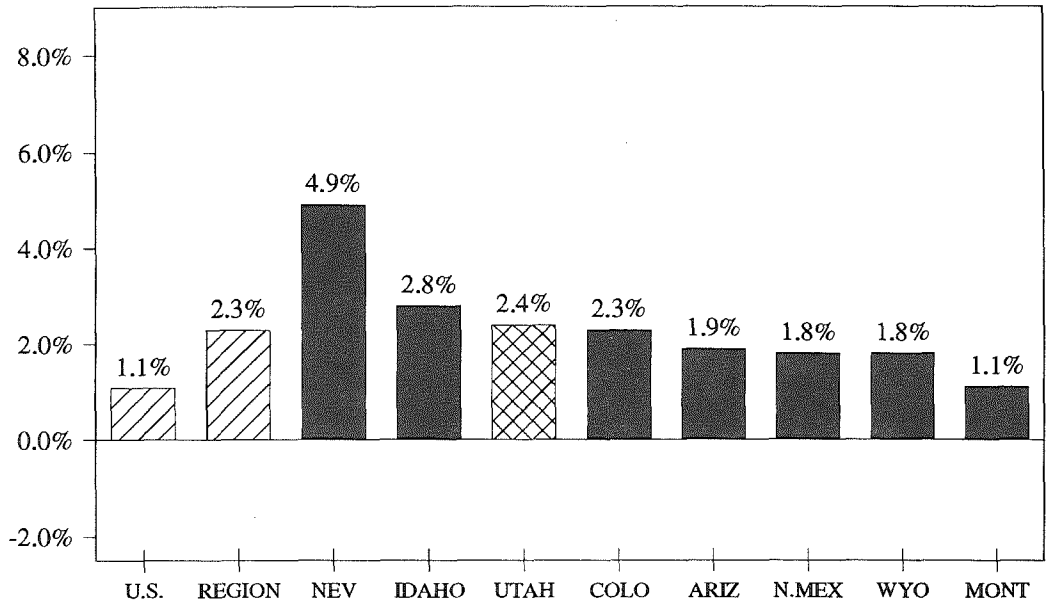
Early indications are that in 1992 Utah has experienced about a 2.5 percent gain in population. While estimates for the rest of the region are not available for 1992, favorable economic conditions in the mountain west will likely continue to attract in-migrants to the area.

Personal Income Growth

Total personal income for the region grew at an average annual rate of 6.2 percent from 1986 to 1991, as compared to the national rate of 6.1 percent. Utah's average annual growth of personal income was 6.4 percent during this period. Since 1986, the eight states in the mountain region, four states — Nevada, Idaho, Utah and Arizona — had personal income growth rates above the national average.

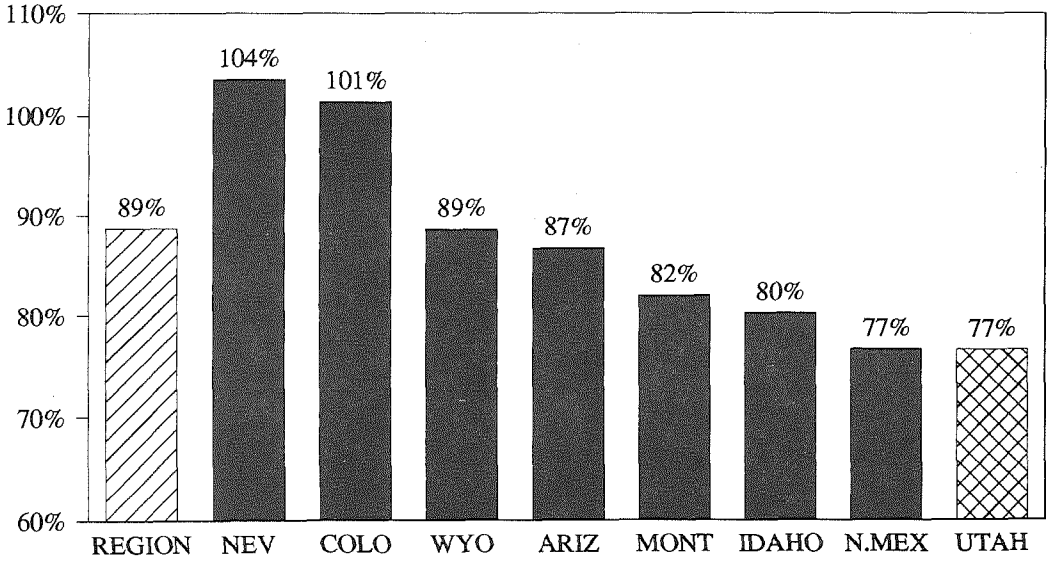
From 1990 to 1991, income grew by 5.5 percent in the mountain states compared to 3.5 percent in the U.S. This growth confirms the continued economic vitality of the mountain states. The most recent data show that income growth is quite strong in this region relative to the nation. Personal income grew by 5.9 percent and by 4.7 percent in the mountain states and the U.S. respectively from the second quarter of 1991 to the second quarter of 1992.

Figure 39
Population Growth: 1990 to 1991



Source: U.S. Bureau of the Census

Figure 40
Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income: 1991



Source: U.S. Bureau of Economic Analysis

During this same time, personal income grew 8.4 percent in Montana, 7.2 percent in Utah, and 6.8 percent in Utah. These were the three largest percent increases of all 50 states.

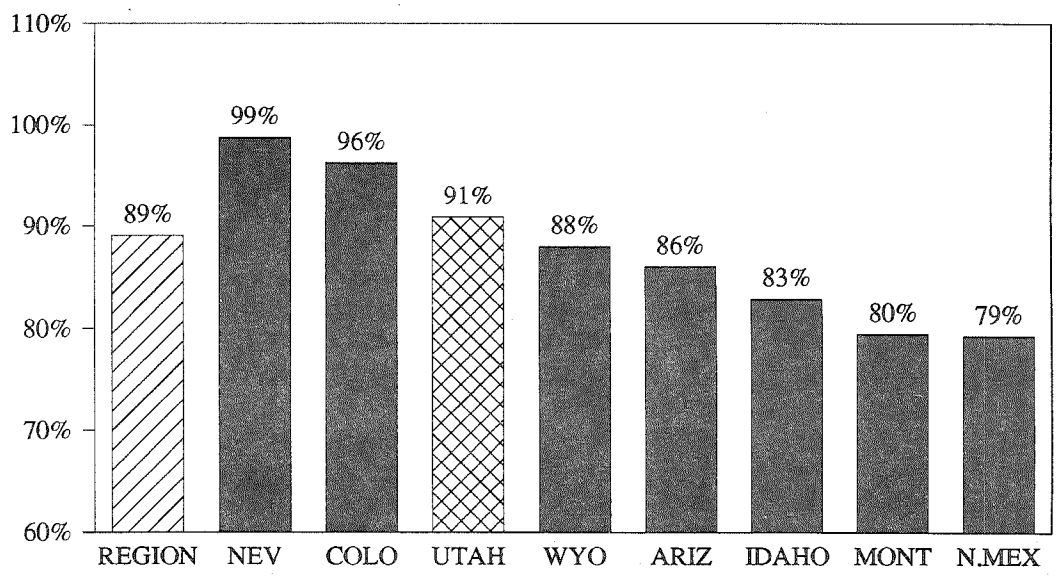
Per capita personal income for a region can change relative to the U.S. average because the region's total personal income, its population, or both, grow at a faster or slower rate than the U.S. average. From 1986 to 1991, income in the mountain region grew at about the same rate as the national rate (Figure 40), while population grew more than twice the U.S. rate. The obvious result is that per capita income for the mountain states has deteriorated relative to national per capita income. In 1986, per capita income in the mountain region was $13,590 or 91 percent of the national figure of $14,910. By 1991, per capita income for the mountain states was 89 percent of the national figure — $16,948 compared to $19,092.

Six of the eight mountain states experienced a decrease in per capita personal income relative to the U.S. average from 1986 to 1991. In contrast, Idaho and Montana were respectively 78 percent and 81 percent of the U.S. average in 1986. They both increased to 80 and 82 percent respectively in 1991.

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 36.4 percent of Utah's population under the age of 18 compared to 25.6 percent nationally, Utah's per capita income is just 77 percent of the national figure of $19,092 for 1991. This rate of 77 percent is the lowest of any state in the region.

Another measure of relative economic prosperity, total personal income per household, recognizes that most people live in households and not as individuals. In 1991, Utah's per household income was third out of the eight mountain states and was 91 percent of the national figure of $51,600. Total personal income per household in the mountain region at $46,000 was 89 percent of the average for the U.S (Figure 41).

Figure 41
Personal Income per Household (PIH)
as a Percent of U.S. PIH: 1991

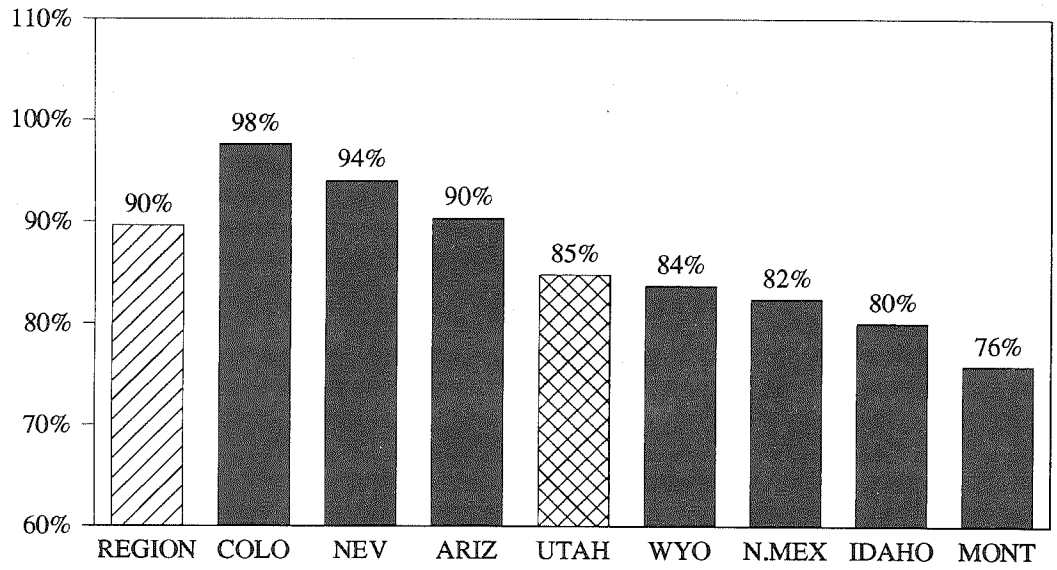


Source: U.S. Bureau of Econ. Analysis,
U.S. Bureau of the Census, and
The Utah Foundation

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 3.3 percent per year from 1986 to 1991 compared to the national growth rate of 4.2 percent (Figure 42). With a slower growth rate in wages for the mountain states, wages dropped from 95 percent of the U.S. average in 1986 to 90 percent by 1991. As a percent of the national average, wages dropped in seven of the eight mountain states over this five year period. Nevada held constant at about 94 percent of the U.S. average. In 1986, only Colorado had pay greater than the national average, since then dropping to 98 percent. In 1991 average pay in Utah was 85 percent of the U.S. average, ranking fourth among the eight mountain states.

Figure 42
Average Annual Pay* as a Percent of
U.S. Average Annual Pay*: 1991



*For workers covered by unemployment insurance.
Source: U.S. Bureau of Labor Statistics

Labor Market Activity

From 1986 to 1991, the mountain region's employment growth rate was significantly faster than that of the nation. Nonagricultural job growth in the region averaged 2.7 percent per year, while the national rate was 1.7 percent. However, Figure 43 shows that among the eight states of the region job growth varied from a high of 6.2 percent per year in Nevada (highest of all 50 states) to 0.6 percent per year in Wyoming. Over this five year period, every mountain state except Wyoming increased in employment at a faster rate than the national growth rate. Utah jobs grew an average of 3.3 percent per year, seventh fastest of all 50 states.

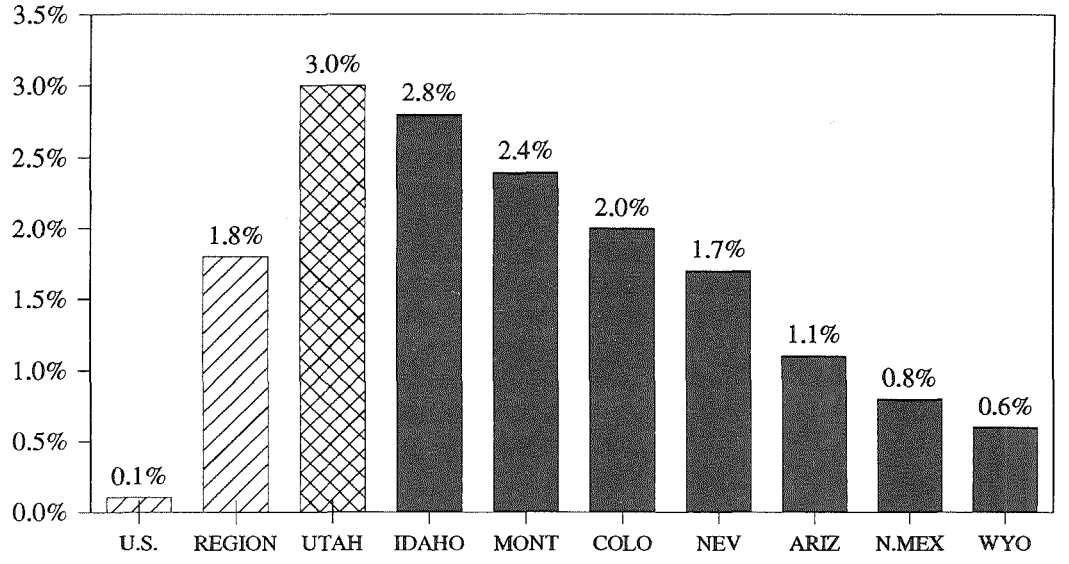
The most recent complete year for which data are available is 1990 to 1991. During this time, nonagricultural employment growth in the mountain region slowed to 1.6 percent, but compared favorably to the national rate of

-1.3 percent. Idaho and Utah led the way with increases of 3.4 and 3.0 percent respectively, the two fastest job growth states in the U.S. from 1990 to 1991.

Latest available information for all states, September 1991 to September 1992, indicates that the job picture in the mountain region remained strong relative to the national economy. Nonagricultural job growth averaged 1.8 percent, while nationally it was 0.1 percent. Utah and Idaho once again lead the region (first and third of all 50 states) with nonagricultural employment growth of 3.0 and 2.8 percent respectively. All of the mountain states show positive employment growth while nationally there are job losses from September 1991 to September 1992.

Unemployment rates among mountain states have been similar to the national average until the recession in 1990. The latest data indicate that unemployment in this region is about 1.6 percent below the national rate. This relatively favorable unemployment situation for the mountain states is indicative of the economic strength this region has maintained during the current national difficulties.

Figure 43
Nonagricultural Employment Growth from September 1991 to September 1992



Source: U.S. Bureau of Labor Statistics

Broad-Based Strength

The collapse of oil prices and weakness in natural resource-based industries after 1985 caused a significant amount of economic difficulties and restructuring among the intermountain states. By 1989, the economic fortunes of the mountain west had improved. From 1990 to 1992 the mountain region has maintained moderate economic growth in the face of serious economic problems elsewhere in the country. In the past two years Wyoming and Montana, the two mountain states hardest hit in the late 1980s, are showing very positive growth signs with six of eight major nonfarm industrial sectors showing job growth. Regional employment growth is broad-based across most of the mountain states and across most of the major industries. Construction employment is particularly strong in Colorado, Utah, Wyoming, and Idaho. The trade, services and government sectors are growing in all eight mountain states.

Two industries have job losses for most states in the region — mining and manufacturing. Mining employment declines are due to significant productivity increases thus requiring fewer workers, and because of reduced oil and gas exploration. Manufacturing jobs have been adversely affected, in this region and even more so nationally, because of cuts in defense, productivity gains, and foreign competition.

Strong growth in construction, services, trade, and government industries have enabled the economies of the mountain states to maintain healthy economic growth during 1992 while the nation is struggling. This region is economically stronger than any other region in the nation. Idaho, Utah, Nevada, Montana, and Colorado are all among the ten fastest employment growth states in the country. Arizona is the only mountain state that may have net job losses in the near term. These losses may occur because of Arizona's close economic ties with California.

The national economy is gaining strength as 1993 begins. Most economists are projecting slow improvement through the coming year. The mountain region continues to show substantial economic resilience. The economies of the mountain states are more diverse than ever. There is every reason to expect that the economic fortunes of the states in the mountain division will continue to outperform the nation as a whole during 1993.

Table 41
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Population Estimate as of July 1st (in thousands)								Census Count as of April 1, 1990		
	Number 1986	Number 1990	Number 1991	Rank	Avg. Ann. Growth Rate 1986-91	Rank	Percent Change 1990-91	Rank	Households (in thousands)	Persons Per Household	Rank
UNITED STATES	240,162	249,466	252,177		1.0%		1.1%		91,947	2.63	
MOUNTAIN STATES	12,953	13,719	14,035		1.6%		2.3%		5,033	2.65	
ARIZONA	3,309	3,681	3,750	23	2.5%	3	1.9%	9	1,369	2.62	18
COLORADO	3,238	3,302	3,377	26	0.8%	24	2.3%	5	1,282	2.51	49
IDAHO	990	1,011	1,039	42	1.0%	20	2.8%	3	361	2.73	9
MONTANA	814	799	808	44	-0.1%	45	1.1%	22	306	2.53	44
NEVADA	981	1,224	1,284	38	5.5%	1	4.9%	1	466	2.53	43
NEW MEXICO	1,463	1,520	1,548	37	1.1%	17	1.8%	10	543	2.74	7
UTAH	**1,663**	**1,729**	**1,770**	**35**	**1.3%**	**15**	**2.4%**	**4**	**537**	**3.15**	**1**
WYOMING	496	452	460	51	-1.5%	51	1.8%	14	169	2.63	17
OTHER STATES											
ALABAMA	3,992	4,046	4,089	22	0.5%	31	1.1%	23	1,507	2.62	20
ALASKA	544	551	570	49	0.9%	21	3.4%	2	189	2.80	3
ARKANSAS	2,332	2,353	2,372	33	0.3%	35	0.8%	32	891	2.57	31
CALIFORNIA	27,106	29,956	30,380	1	2.3%	5	1.4%	17	10,381	2.79	4
CONNECTICUT	3,224	3,290	3,291	27	0.4%	32	0.0%	46	1,230	2.59	26
DELAWARE	628	669	680	46	1.6%	9	1.6%	16	247	2.61	21
D.C.	638	601	598	48	-1.3%	50	-0.5%	50	250	2.26	51
FLORIDA	11,669	13,045	13,277	4	2.6%	2	1.8%	12	5,135	2.46	50
GEORGIA	6,085	6,504	6,623	11	1.7%	7	1.8%	11	2,367	2.66	13
HAWAII	1,052	1,113	1,135	40	1.5%	11	2.0%	8	356	3.01	2
ILLINOIS	11,389	11,443	11,543	6	0.3%	38	0.9%	30	4,202	2.65	15
INDIANA	5,455	5,554	5,610	14	0.6%	26	1.0%	24	2,065	2.61	23
IOWA	2,792	2,780	2,795	30	0.0%	43	0.5%	41	1,064	2.52	47
KANSAS	2,433	2,480	2,495	32	0.5%	30	0.6%	37	945	2.53	46
KENTUCKY	3,688	3,690	3,713	24	0.1%	42	0.6%	35	1,380	2.60	25
LOUISIANA	4,407	4,211	4,252	21	-0.7%	47	1.0%	27	1,499	2.74	6
MAINE	1,170	1,231	1,235	39	1.1%	18	0.3%	43	465	2.56	34
MARYLAND	4,488	4,802	4,860	19	1.6%	8	1.2%	20	1,749	2.67	12
MASSACHUSETTS	5,903	6,020	5,996	13	0.3%	36	-0.4%	49	2,247	2.58	29
MICHIGAN	9,129	9,314	9,368	8	0.5%	29	0.6%	39	3,419	2.66	14
MINNESOTA	4,206	4,390	4,432	20	1.1%	19	1.0%	28	1,648	2.58	30
MISSISSIPPI	2,594	2,574	2,592	31	-0.0%	44	0.7%	34	911	2.75	5
MISSOURI	5,024	5,127	5,158	15	0.5%	28	0.6%	38	1,961	2.54	40
NEBRASKA	1,575	1,580	1,593	36	0.2%	40	0.8%	31	602	2.54	39
NEW HAMPSHIRE	1,025	1,111	1,105	41	1.5%	12	-0.5%	51	411	2.62	19
NEW JERSEY	7,623	7,735	7,760	9	0.4%	34	0.3%	44	2,795	2.70	10
NEW YORK	17,836	18,002	18,058	2	0.2%	39	0.3%	45	6,639	2.63	16
NORTH CAROLINA	6,322	6,653	6,737	10	1.3%	13	1.3%	19	2,517	2.54	41
NORTH DAKOTA	670	637	635	47	-1.1%	49	-0.3%	48	241	2.55	37
OHIO	10,732	10,859	10,939	7	0.4%	33	0.7%	33	4,088	2.59	27
OKLAHOMA	3,253	3,146	3,175	28	-0.5%	46	0.9%	29	1,206	2.53	45
OREGON	2,684	2,861	2,922	29	1.7%	6	2.1%	7	1,103	2.52	48
PENNSYLVANIA	11,784	11,893	11,961	5	0.3%	37	0.6%	40	4,496	2.57	33
RHODE ISLAND	977	1,005	1,004	43	0.5%	27	-0.1%	47	378	2.55	38
SOUTH CAROLINA	3,343	3,498	3,560	25	1.3%	14	1.8%	13	1,258	2.68	11
SOUTH DAKOTA	696	696	703	45	0.2%	41	1.0%	25	259	2.59	28
TENNESSEE	4,739	4,887	4,953	18	0.9%	23	1.4%	18	1,854	2.56	35
TEXAS	16,563	17,055	17,349	3	0.9%	22	1.7%	15	6,071	2.73	8
VERMONT	534	565	567	50	1.2%	16	0.4%	42	211	2.57	32
VIRGINIA	5,812	6,213	6,286	12	1.6%	10	1.2%	21	2,292	2.61	24
WASHINGTON	4,453	4,909	5,018	16	2.4%	4	2.2%	6	1,872	2.53	42
WEST VIRGINIA	1,883	1,790	1,801	34	-0.9%	48	0.6%	36	689	2.55	36
WISCONSIN	4,756	4,906	4,955	17	0.8%	25	1.0%	26	1,822	2.61	22

Source: U.S. Bureau of the Census

Table 41 (con't)
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Total Personal Income (millions of dollars)				Avg. Ann. Growth Rate		Percent Change		Total Personal Income (millions of dollars, saar)			
	Amount 1986	Amount 1990	Amount 1991	Rank	1986-91	Rank	1990-91	Rank	2nd Quarter 1991	2nd Quarter 1992	Pct Chg 1991-92	Rank
UNITED STATES	$3,580,700	$4,649,706	$4,814,495		6.1%		3.5%		$4,791,981	$5,019,041	4.7%	
MOUNTAIN STATES	176,029	225,533	237,875		6.2%		5.5%		236,534	250,561	5.9%	
ARIZONA	46,065	59,472	62,166	25	6.2%	25	4.5%	20	61,988	64,934	4.8%	32
COLORADO	50,471	61,942	65,365	22	5.3%	39	5.5%	8	64,944	68,574	5.6%	23
IDAHO	11,480	15,271	15,935	43	6.8%	13	4.4%	21	15,870	16,887	6.4%	7
MONTANA	9,873	11,709	12,673	46	5.1%	43	8.2%	1	12,490	13,540	8.4%	1
NEVADA	15,415	24,083	25,398	37	10.5%	1	5.5%	9	25,205	26,928	6.8%	3
NEW MEXICO	17,107	21,352	22,665	40	5.8%	32	6.1%	5	22,557	23,924	6.1%	13
UTAH	**19,020**	**24,269**	**25,890**	**35**	**6.4%**	**22**	**6.7%**	**2**	**25,732**	**27,593**	**7.2%**	**2**
WYOMING	6,598	7,434	7,783	51	3.4%	51	4.7%	18	7,747	8,182	5.6%	22
OTHER STATES												
ALABAMA	46,210	60,208	63,458	24	6.5%	17	5.4%	10	63,039	66,665	5.8%	18
ALASKA	9,938	11,447	12,015	47	3.9%	48	5.0%	17	11,901	12,610	6.0%	16
ARKANSAS	26,152	32,967	34,698	32	5.8%	30	5.3%	11	34,778	36,942	6.2%	11
CALIFORNIA	463,601	616,668	633,326	1	6.4%	19	2.7%	42	631,547	652,223	3.3%	49
CONNECTICUT	63,065	83,978	85,642	19	6.3%	23	2.0%	50	85,497	88,281	3.3%	50
DELAWARE	9,974	13,727	14,154	45	7.3%	6	3.1%	34	14,077	14,460	2.7%	51
D.C.	11,522	14,044	14,397	44	4.6%	46	2.5%	44	14,337	15,154	5.7%	20
FLORIDA	173,829	243,040	252,146	4	7.7%	3	3.7%	26	251,381	260,641	3.7%	46
GEORGIA	83,415	110,722	115,473	12	6.7%	14	4.3%	22	114,827	121,515	5.8%	17
HAWAII	16,099	22,882	24,045	38	8.4%	2	5.1%	14	23,922	25,155	5.2%	29
ILLINOIS	181,772	232,735	239,293	5	5.7%	36	2.8%	40	238,662	247,313	3.6%	48
INDIANA	73,165	93,259	96,365	16	5.7%	35	3.3%	32	95,803	101,293	5.7%	19
IOWA	37,474	46,942	48,347	30	5.2%	40	3.0%	37	48,221	50,457	4.6%	35
KANSAS	35,281	44,065	45,706	31	5.3%	38	3.7%	29	45,635	47,485	4.1%	41
KENTUCKY	42,587	55,219	58,027	26	6.4%	21	5.1%	13	57,441	61,128	6.4%	6
LOUISIANA	51,383	60,131	63,970	23	4.5%	47	6.4%	3	63,499	66,893	5.3%	24
MAINE	15,453	21,099	21,548	41	6.9%	11	2.1%	49	21,375	22,269	4.2%	39
MARYLAND	77,015	104,762	107,836	14	7.0%	10	2.9%	38	107,432	111,531	3.8%	45
MASSACHUSETTS	104,306	135,566	137,924	10	5.7%	33	1.7%	51	137,446	142,831	3.9%	44
MICHIGAN	137,851	170,385	174,750	9	4.9%	44	2.6%	43	174,268	181,174	4.0%	43
MINNESOTA	63,583	82,039	84,769	20	5.9%	26	3.3%	33	84,391	89,456	6.0%	15
MISSISSIPPI	25,486	32,714	34,545	33	6.3%	24	5.6%	7	34,332	36,495	6.3%	9
MISSOURI	71,709	88,817	92,470	17	5.2%	41	4.1%	24	91,675	96,532	5.3%	25
NEBRASKA	21,383	27,218	28,220	34	5.7%	34	3.7%	30	28,305	29,336	3.6%	47
NEW HAMPSHIRE	17,499	23,337	24,038	39	6.6%	16	3.0%	36	23,860	24,880	4.3%	38
NEW JERSEY	145,779	194,598	199,181	7	6.4%	18	2.4%	45	198,330	207,731	4.7%	33
NEW YORK	304,887	397,006	405,765	2	5.9%	28	2.2%	47	404,063	423,600	4.8%	31
NORTH CAROLINA	80,582	109,094	113,536	13	7.1%	8	4.1%	25	112,471	119,542	6.3%	10
NORTH DAKOTA	8,291	9,625	9,903	50	3.6%	50	2.9%	39	9,893	10,290	4.0%	42
OHIO	151,111	189,139	194,384	8	5.2%	42	2.8%	41	192,488	204,105	6.0%	14
OKLAHOMA	40,820	47,620	49,340	29	3.9%	49	3.6%	31	49,299	51,421	4.3%	37
OREGON	36,279	48,917	51,353	28	7.2%	7	5.0%	16	50,898	54,156	6.4%	8
PENNSYLVANIA	173,404	222,626	230,917	6	5.9%	27	3.7%	28	229,729	241,639	5.2%	28
RHODE ISLAND	14,535	18,878	19,291	42	5.8%	29	2.2%	48	19,124	20,198	5.6%	21
SOUTH CAROLINA	38,765	52,816	55,055	27	7.3%	5	4.2%	23	54,738	57,294	4.7%	34
SOUTH DAKOTA	8,277	10,806	11,303	48	6.4%	20	4.6%	19	11,338	12,086	6.6%	5
TENNESSEE	59,087	77,612	81,651	21	6.7%	15	5.2%	12	81,013	86,002	6.2%	12
TEXAS	229,927	282,777	298,928	3	5.4%	37	5.7%	6	297,308	312,557	5.1%	30
VERMONT	7,275	9,976	10,198	49	7.0%	9	2.2%	46	10,139	10,581	4.4%	36
VIRGINIA	90,927	122,550	126,237	11	6.8%	12	3.0%	35	125,870	131,049	4.1%	40
WASHINGTON	67,450	91,936	97,766	15	7.7%	4	6.3%	4	96,946	103,354	6.6%	4
WEST VIRGINIA	20,513	24,531	25,754	36	4.7%	45	5.0%	15	25,632	26,965	5.2%	27
WISCONSIN	67,009	85,698	88,891	18	5.8%	31	3.7%	27	88,517	93,191	5.3%	26

Source: U.S. Bureau of Economic Analysis

Table 41 (con't)
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Per Capita Personal Income										
	Number 1986	Number 1990	Number 1991	Rank	Avg. Ann. Growth Rate 1986-91	Rank	Percent Change 1990-91	Rank	As a Percent of U.S. Per Capita Personal Income 1986	1990	1991
UNITED STATES	$14,910	$18,639	$19,092		5.1%		2.4%		100.0%	100.0%	100.0%
MOUNTAIN STATES	13,590	16,439	16,948		4.5%		3.1%		91.1%	88.2%	88.8%
ARIZONA	13,922	16,155	16,579	36	3.6%	50	2.6%	28	93.4%	86.7%	86.8%
COLORADO	15,588	18,758	19,358	16	4.4%	45	3.2%	17	104.5%	100.6%	101.4%
IDAHO	11,592	15,099	15,333	45	5.8%	10	1.5%	47	77.7%	81.0%	80.3%
MONTANA	12,132	14,649	15,675	39	5.3%	25	7.0%	1	81.4%	78.6%	82.1%
NEVADA	15,718	19,677	19,783	14	4.7%	42	0.5%	51	105.4%	105.6%	103.6%
NEW MEXICO	11,694	14,052	14,644	47	4.6%	44	4.2%	8	78.4%	75.4%	76.7%
UTAH	**11,437**	**14,034**	**14,625**	**49**	**5.0%**	**32**	**4.2%**	**9**	**76.7%**	**75.3%**	**76.6%**
WYOMING	13,311	16,439	16,937	34	4.9%	36	3.0%	22	89.3%	88.2%	88.7%
OTHER STATES											
ALABAMA	11,575	14,880	15,518	43	6.0%	6	4.3%	7	77.6%	79.8%	81.3%
ALASKA	18,256	20,764	21,067	9	2.9%	51	1.5%	49	122.4%	111.4%	110.3%
ARKANSAS	11,213	14,008	14,629	48	5.5%	19	4.4%	4	75.2%	75.2%	76.6%
CALIFORNIA	17,104	20,586	20,847	10	4.0%	49	1.3%	50	114.7%	110.4%	109.2%
CONNECTICUT	19,560	25,525	26,022	1	5.9%	9	1.9%	39	131.2%	136.9%	136.3%
DELAWARE	15,891	20,514	20,816	11	5.5%	18	1.5%	48	106.6%	110.1%	109.0%
D.C.	18,049	23,351	24,063	3	5.9%	8	3.0%	21	121.1%	125.3%	126.0%
FLORIDA	14,897	18,632	18,992	20	5.0%	33	1.9%	41	99.9%	100.0%	99.5%
GEORGIA	13,707	17,024	17,436	30	4.9%	37	2.4%	31	91.9%	91.3%	91.3%
HAWAII	15,305	20,552	21,190	8	6.7%	1	3.1%	20	102.6%	110.3%	111.0%
ILLINOIS	15,961	20,338	20,731	12	5.4%	23	1.9%	40	107.0%	109.1%	108.6%
INDIANA	13,413	16,792	17,179	33	5.1%	31	2.3%	33	90.0%	90.1%	90.0%
IOWA	13,420	16,884	17,296	31	5.2%	28	2.4%	30	90.0%	90.6%	90.6%
KANSAS	14,502	17,765	18,322	22	4.8%	39	3.1%	19	97.3%	95.3%	96.0%
KENTUCKY	11,547	14,965	15,626	40	6.2%	3	4.4%	5	77.4%	80.3%	81.8%
LOUISIANA	11,658	14,279	15,046	46	5.2%	27	5.4%	2	78.2%	76.6%	78.8%
MAINE	13,205	17,137	17,454	29	5.7%	13	1.8%	44	88.6%	91.9%	91.4%
MARYLAND	17,162	21,816	22,189	6	5.3%	24	1.7%	46	115.1%	117.0%	116.2%
MASSACHUSETTS	17,669	22,520	23,003	4	5.4%	21	2.1%	35	118.5%	120.8%	120.5%
MICHIGAN	15,100	18,293	18,655	21	4.3%	48	2.0%	38	101.3%	98.1%	97.7%
MINNESOTA	15,118	18,689	19,125	19	4.8%	38	2.3%	32	101.4%	100.3%	100.2%
MISSISSIPPI	9,825	12,709	13,328	51	6.3%	2	4.9%	3	65.9%	68.2%	69.8%
MISSOURI	14,274	17,324	17,928	25	4.7%	43	3.5%	15	95.7%	92.9%	93.9%
NEBRASKA	13,581	17,222	17,718	27	5.5%	20	2.9%	23	91.1%	92.4%	92.8%
NEW HAMPSHIRE	17,070	20,998	21,760	7	5.0%	34	3.6%	13	114.5%	112.7%	114.0%
NEW JERSEY	19,123	25,157	25,666	2	6.1%	5	2.0%	36	128.3%	135.0%	134.4%
NEW YORK	17,094	22,053	22,471	5	5.6%	15	1.9%	42	114.6%	118.3%	117.7%
NORTH CAROLINA	12,746	16,398	16,853	35	5.7%	12	2.8%	25	85.5%	88.0%	88.3%
NORTH DAKOTA	12,382	15,118	15,605	41	4.7%	41	3.2%	16	83.0%	81.1%	81.7%
OHIO	14,081	17,418	17,770	26	4.8%	40	2.0%	37	94.4%	93.4%	93.1%
OKLAHOMA	12,548	15,139	15,541	42	4.4%	47	2.7%	27	84.2%	81.2%	81.4%
OREGON	13,518	17,098	17,575	28	5.4%	22	2.8%	24	90.7%	91.7%	92.1%
PENNSYLVANIA	14,715	18,719	19,306	17	5.6%	17	3.1%	18	98.7%	100.4%	101.1%
RHODE ISLAND	14,870	18,786	19,207	18	5.3%	26	2.2%	34	99.7%	100.8%	100.6%
SOUTH CAROLINA	11,595	15,097	15,467	44	5.9%	7	2.5%	29	77.8%	81.0%	81.0%
SOUTH DAKOTA	11,890	15,524	16,071	38	6.2%	4	3.5%	14	79.7%	83.3%	84.2%
TENNESSEE	12,467	15,880	16,486	37	5.7%	11	3.8%	12	83.6%	85.2%	86.4%
TEXAS	13,882	16,580	17,230	32	4.4%	46	3.9%	11	93.1%	89.0%	90.2%
VERMONT	13,621	17,666	17,997	23	5.7%	14	1.9%	43	91.4%	94.8%	94.3%
VIRGINIA	15,644	19,725	20,082	13	5.1%	30	1.8%	45	104.9%	105.8%	105.2%
WASHINGTON	15,146	18,727	19,484	15	5.2%	29	4.0%	10	101.6%	100.5%	102.1%
WEST VIRGINIA	10,896	13,704	14,301	50	5.6%	16	4.4%	6	73.1%	73.5%	74.9%
WISCONSIN	14,089	17,468	17,939	24	5.0%	35	2.7%	26	94.5%	93.7%	94.0%

Source: U.S. Bureau of Economic Analysis

Table 41 (con't)
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Total Personal Income per Household										
	Number 1986	Number 1990	Number 1991	Rank	Avg. Ann. Growth Rate 1986-91	Rank	Percent Change 1990-91	Rank	As a Percent of U.S. Personal Income per Household 1986	1990	1991
UNITED STATES	$40,500	$50,400	$51,600		5.0%		2.4%		100.0%	100.0%	100.0%
MOUNTAIN STATES	$37,600	$44,600	$46,000		4.1%		3.1%		92.8%	88.5%	89.1%
ARIZONA	$38,200	$43,300	$44,400	37	3.1%	50	2.5%	28	94.3%	85.9%	86.0%
COLORADO	$41,100	$48,200	$49,700	20	3.9%	49	3.1%	17	101.5%	95.6%	96.3%
IDAHO	$32,600	$42,100	$42,800	41	5.6%	7	1.7%	47	80.5%	83.5%	82.9%
MONTANA	$32,700	$38,300	$41,000	46	4.6%	38	7.0%	1	80.7%	76.0%	79.5%
NEVADA	$39,700	$50,700	$51,000	16	5.1%	24	0.6%	51	98.0%	100.6%	98.8%
NEW MEXICO	$33,100	$39,200	$40,900	47	4.3%	43	4.3%	4	81.7%	77.8%	79.3%
UTAH	**$37,000**	**$45,000**	**$46,900**	**28**	**4.9%**	**31**	**4.2%**	**8**	**91.4%**	**89.3%**	**90.9%**
WYOMING	$37,100	$44,100	$45,400	33	4.1%	46	2.9%	22	91.6%	87.5%	88.0%
OTHER STATES											
ALABAMA	$32,000	$39,900	$41,600	44	5.4%	12	4.3%	6	79.0%	79.2%	80.6%
ALASKA	$54,500	$60,500	$61,300	5	2.4%	51	1.3%	50	134.6%	120.0%	118.8%
ARKANSAS	$30,000	$37,000	$38,600	49	5.2%	22	4.3%	5	74.1%	73.4%	74.8%
CALIFORNIA	$46,900	$59,000	$59,800	8	5.0%	27	1.4%	49	115.8%	117.1%	115.9%
CONNECTICUT	$53,100	$68,200	$69,500	2	5.5%	9	1.9%	42	131.1%	135.3%	134.7%
DELAWARE	$43,300	$55,300	$56,100	12	5.3%	16	1.4%	48	106.9%	109.7%	108.7%
D.C.	$45,000	$56,700	$58,400	10	5.4%	14	3.0%	20	111.1%	112.5%	113.2%
FLORIDA	$37,500	$46,900	$47,800	25	5.0%	28	1.9%	40	92.6%	93.1%	92.6%
GEORGIA	$38,100	$46,600	$47,700	26	4.6%	39	2.4%	31	94.1%	92.5%	92.4%
HAWAII	$48,400	$64,000	$65,900	3	6.4%	1	3.0%	21	119.5%	127.0%	127.7%
ILLINOIS	$43,500	$55,300	$56,400	11	5.3%	15	2.0%	39	107.4%	109.7%	109.3%
INDIANA	$36,400	$45,100	$46,100	32	4.8%	32	2.2%	33	89.9%	89.5%	89.3%
IOWA	$35,700	$44,100	$45,100	35	4.8%	35	2.3%	32	88.1%	87.5%	87.4%
KANSAS	$38,200	$46,600	$48,000	24	4.7%	37	3.0%	19	94.3%	92.5%	93.0%
KENTUCKY	$31,800	$40,000	$41,700	43	5.6%	8	4.3%	7	78.5%	79.4%	80.8%
LOUISIANA	$33,500	$40,200	$42,400	42	4.8%	33	5.5%	2	82.7%	79.8%	82.2%
MAINE	$35,300	$45,300	$46,100	31	5.5%	10	1.8%	46	87.2%	89.9%	89.3%
MARYLAND	$47,200	$59,600	$60,700	7	5.2%	23	1.8%	44	116.5%	118.3%	117.6%
MASSACHUSETTS	$47,400	$60,300	$61,600	4	5.4%	13	2.2%	36	117.0%	119.6%	119.4%
MICHIGAN	$41,700	$49,700	$50,700	19	4.0%	47	2.0%	37	103.0%	98.6%	98.3%
MINNESOTA	$40,700	$49,600	$50,800	17	4.5%	40	2.4%	30	100.5%	98.4%	98.4%
MISSISSIPPI	$28,600	$35,900	$37,600	50	5.6%	5	4.7%	3	70.6%	71.2%	72.9%
MISSOURI	$37,700	$45,200	$46,800	29	4.4%	42	3.5%	14	93.1%	89.7%	90.7%
NEBRASKA	$35,900	$45,200	$46,400	30	5.3%	18	2.7%	26	88.6%	89.7%	89.9%
NEW HAMPSHIRE	$46,300	$56,700	$58,700	9	4.9%	30	3.5%	15	114.3%	112.5%	113.8%
NEW JERSEY	$52,500	$69,600	$71,000	1	6.2%	2	2.0%	38	129.6%	138.1%	137.6%
NEW YORK	$45,500	$59,800	$60,900	6	6.0%	3	1.8%	45	112.3%	118.7%	118.0%
NORTH CAROLINA	$34,500	$43,200	$44,400	36	5.2%	21	2.8%	23	85.2%	85.7%	86.0%
NORTH DAKOTA	$34,000	$40,000	$41,300	45	4.0%	48	3.3%	16	84.0%	79.4%	80.0%
OHIO	$37,900	$46,200	$47,200	27	4.5%	41	2.2%	35	93.6%	91.7%	91.5%
OKLAHOMA	$33,000	$39,500	$40,500	48	4.2%	45	2.5%	29	81.5%	78.4%	78.5%
OREGON	$34,500	$44,100	$45,300	34	5.6%	6	2.7%	25	85.2%	87.5%	87.8%
PENNSYLVANIA	$39,700	$49,500	$51,000	14	5.1%	25	3.0%	18	98.0%	98.2%	98.8%
RHODE ISLAND	$39,800	$49,900	$51,000	15	5.1%	26	2.2%	34	98.3%	99.0%	98.8%
SOUTH CAROLINA	$33,300	$41,800	$42,900	40	5.2%	20	2.6%	27	82.2%	82.9%	83.1%
SOUTH DAKOTA	$32,300	$41,700	$43,200	39	6.0%	4	3.6%	13	79.8%	82.7%	83.7%
TENNESSEE	$33,600	$41,800	$43,400	38	5.3%	19	3.8%	12	83.0%	82.9%	84.1%
TEXAS	$39,200	$46,400	$48,200	22	4.2%	44	3.9%	11	96.8%	92.1%	93.4%
VERMONT	$36,900	$47,100	$48,000	23	5.4%	11	1.9%	41	91.1%	93.5%	93.0%
VIRGINIA	$42,700	$53,200	$54,200	13	4.9%	29	1.9%	43	105.4%	105.6%	105.0%
WASHINGTON	$39,200	$48,700	$50,700	18	5.3%	17	4.1%	10	96.8%	96.6%	98.3%
WEST VIRGINIA	$29,400	$35,700	$37,200	51	4.8%	34	4.2%	9	72.6%	70.8%	72.1%
WISCONSIN	$38,200	$46,900	$48,200	21	4.8%	36	2.8%	24	94.3%	93.1%	93.4%

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 41 (con't)
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Average Annual Pay for all Workers Covered by Unemployment Insurance										
	Number 1986	Number 1990	Number 1991	Rank	Avg. Ann. Growth Rate 1986-91	Rank	Percent Change 1990-91	Rank	As a Percent of U.S. 1986	1990	1991
UNITED STATES	$19,966	$23,602	$24,575		4.2%		4.1%		100.0%	100.0%	100.0%
MOUNTAIN STATES	18,670	21,153	21,998		3.3%		4.0%		93.5%	89.6%	89.5%
ARIZONA	18,870	21,443	22,207	27	3.3%	39	3.6%	39	94.5%	90.9%	90.4%
COLORADO	20,275	22,908	23,981	14	3.4%	38	4.7%	12	101.5%	97.1%	97.6%
IDAHO	16,623	18,991	19,688	45	3.4%	35	3.7%	37	83.3%	80.5%	80.1%
MONTANA	16,085	17,895	18,648	48	3.0%	46	4.2%	22	80.6%	75.8%	75.9%
NEVADA	18,739	22,358	23,083	22	4.3%	19	3.2%	44	93.9%	94.7%	93.9%
NEW MEXICO	17,301	19,347	20,275	43	3.2%	42	4.8%	9	86.7%	82.0%	82.5%
UTAH	17,863	20,074	20,874	38	3.2%	44	4.0%	28	89.5%	85.1%	84.9%
WYOMING	18,969	20,049	20,591	41	1.7%	50	2.7%	51	95.0%	84.9%	83.8%
OTHER STATES											
ALABAMA	17,638	20,468	21,287	34	3.8%	26	4.0%	26	88.3%	86.7%	86.6%
ALASKA	28,442	29,946	30,830	2	1.6%	51	3.0%	48	142.5%	126.9%	125.5%
ARKANSAS	16,162	18,204	19,008	47	3.3%	40	4.4%	17	80.9%	77.1%	77.3%
CALIFORNIA	21,998	26,180	27,499	7	4.6%	15	5.0%	5	110.2%	110.9%	111.9%
CONNECTICUT	22,518	28,995	30,689	3	6.4%	1	5.8%	1	112.8%	122.8%	124.9%
DELAWARE	19,637	24,423	25,647	11	5.5%	6	5.0%	7	98.4%	103.5%	104.4%
D.C.	27,137	33,717	35,570	1	5.6%	5	5.5%	3	135.9%	142.9%	144.7%
FLORIDA	17,680	21,030	21,991	28	4.5%	16	4.6%	15	88.6%	89.1%	89.5%
GEORGIA	18,745	22,115	23,164	21	4.3%	18	4.7%	11	93.9%	93.7%	94.3%
HAWAII	18,101	23,167	24,104	13	5.9%	4	4.0%	24	90.7%	98.2%	98.1%
ILLINOIS	21,445	25,312	26,310	8	4.2%	21	3.9%	29	107.4%	107.2%	107.1%
INDIANA	19,024	21,699	22,522	25	3.4%	36	3.8%	35	95.3%	91.9%	91.6%
IOWA	16,598	19,224	19,810	44	3.6%	31	3.0%	47	83.1%	81.5%	80.6%
KANSAS	17,934	20,238	21,002	36	3.2%	43	3.8%	36	89.8%	85.7%	85.5%
KENTUCKY	17,357	19,947	20,730	40	3.6%	29	3.9%	31	86.9%	84.5%	84.4%
LOUISIANA	18,290	20,646	21,501	31	3.3%	41	4.1%	23	91.6%	87.5%	87.5%
MAINE	16,326	20,154	20,870	39	5.0%	11	3.6%	40	81.8%	85.4%	84.9%
MARYLAND	20,121	24,730	25,960	10	5.2%	9	5.0%	8	100.8%	104.8%	105.6%
MASSACHUSETTS	20,925	26,699	28,041	6	6.0%	3	5.0%	6	104.8%	113.1%	114.1%
MICHIGAN	22,721	25,376	26,125	9	2.8%	47	3.0%	49	113.8%	107.5%	106.3%
MINNESOTA	19,633	23,121	23,961	15	4.1%	22	3.6%	38	98.3%	98.0%	97.5%
MISSISSIPPI	15,420	17,718	18,411	49	3.6%	30	3.9%	34	77.2%	75.1%	74.9%
MISSOURI	18,915	21,716	22,567	24	3.6%	32	3.9%	33	94.7%	92.0%	91.8%
NEBRASKA	16,106	18,577	19,372	46	3.8%	27	4.3%	20	80.7%	78.7%	78.8%
NEW HAMPSHIRE	18,303	22,609	23,600	20	5.2%	10	4.4%	18	91.7%	95.8%	96.0%
NEW JERSEY	22,309	28,449	29,992	5	6.1%	2	5.4%	4	111.7%	120.5%	122.0%
NEW YORK	23,200	28,873	30,011	4	5.3%	8	3.9%	30	116.2%	122.3%	122.1%
NORTH CAROLINA	16,999	20,220	21,087	35	4.4%	17	4.3%	19	85.1%	85.7%	85.8%
NORTH DAKOTA	15,778	17,626	18,132	50	2.8%	48	2.9%	50	79.0%	74.7%	73.8%
OHIO	19,903	22,844	23,603	19	3.5%	34	3.3%	43	99.7%	96.8%	96.0%
OKLAHOMA	18,345	20,288	20,968	37	2.7%	49	3.4%	42	91.9%	86.0%	85.3%
OREGON	18,321	21,332	22,348	26	4.1%	23	4.8%	10	91.8%	90.4%	90.9%
PENNSYLVANIA	19,403	23,457	24,393	12	4.7%	13	4.0%	27	97.2%	99.4%	99.3%
RHODE ISLAND	17,733	22,387	23,082	23	5.4%	7	3.1%	45	88.8%	94.9%	93.9%
SOUTH CAROLINA	16,603	19,668	20,439	42	4.2%	20	3.9%	32	83.2%	83.3%	83.2%
SOUTH DAKOTA	14,477	16,430	17,131	51	3.4%	37	4.3%	21	72.5%	69.6%	69.7%
TENNESSEE	17,661	20,611	21,541	30	4.1%	24	4.5%	16	88.5%	87.3%	87.7%
TEXAS	19,934	22,700	23,760	18	3.6%	33	4.7%	13	99.8%	96.2%	96.7%
VERMONT	16,862	20,532	21,355	33	4.8%	12	4.0%	25	84.5%	87.0%	86.9%
VIRGINIA	18,972	22,750	23,804	17	4.6%	14	4.6%	14	95.0%	96.4%	96.9%
WASHINGTON	19,645	22,646	23,942	16	4.0%	25	5.7%	2	98.4%	95.9%	97.4%
WEST VIRGINIA	18,402	20,715	21,356	32	3.0%	45	3.1%	46	92.2%	87.8%	86.9%
WISCONSIN	18,202	21,101	21,838	29	3.7%	28	3.5%	41	91.2%	89.4%	88.9%

Source: U.S. Bureau of Labor Statistics

Table 41 (con't)
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Employees on Nonagricultural Payrolls (in thousands)				Avg. Ann. Growth Rate		Percent Change		Employees on Nonagricultural Payrolls (Not seasonally adjusted in thousands)			
	Amount 1986	Amount 1990	Amount 1991	Rank	1986-91	Rank	1990-91	Rank	September 1991	September 1992p	Pct Chg 1991-92	Rank
UNITED STATES	99,525.0	109,782.0	108,310.0		1.7%		-1.3%		108,751.0	108,868.0	0.1%	
MOUNTAIN STATES	5,176.3	5,812.2	5,903.5		2.7%		1.6%		5,966.0	6,073.3	1.8%	
ARIZONA	1,337.8	1,485.7	1,497.6	26	2.3%	20	0.8%	17	1,501.0	1,518.1	1.1%	16
COLORADO	1,408.3	1,520.9	1,542.2	24	1.8%	30	1.4%	12	1,548.6	1,579.9	2.0%	5
IDAHO	328.2	384.9	398.1	44	3.9%	4	3.4%	1	409.1	420.7	2.8%	3
MONTANA	275.4	297.3	302.0	46	1.9%	29	1.6%	10	310.3	317.6	2.4%	4
NEVADA	468.1	620.9	632.5	37	6.2%	1	1.9%	7	642.4	653.6	1.7%	6
NEW MEXICO	528.1	580.4	583.2	39	2.0%	26	0.5%	20	589.7	594.4	0.8%	19
UTAH	**634.1**	**723.6**	**745.3**	**34**	**3.3%**	**7**	**3.0%**	**2**	**754.9**	**777.7**	**3.0%**	**1**
WYOMING	196.3	198.5	202.6	51	0.6%	45	2.1%	4	210.0	211.3	0.6%	22
OTHER STATES												
ALABAMA	1,463.3	1,635.7	1,639.0	21	2.3%	19	0.2%	22	1,646.2	1,656.4	0.6%	21
ALASKA	220.7	238.1	243.0	50	1.9%	27	2.1%	5	253.8	256.3	1.0%	18
ARKANSAS	813.8	923.5	936.7	33	2.9%	10	1.4%	11	953.9	981.4	2.9%	2
CALIFORNIA	11,258.1	12,830.1	12,497.1	1	2.1%	23	-2.6%	42	12,506.4	12,260.3	-2.0%	46
CONNECTICUT	1,604.2	1,632.9	1,557.8	23	-0.6%	49	-4.6%	48	1,553.1	1,504.1	-3.2%	51
DELAWARE	303.2	347.6	341.4	45	2.4%	18	-1.8%	35	341.3	337.6	-1.1%	39
D.C.	640.1	686.1	676.9	36	1.1%	43	-1.3%	31	677.2	672.5	-0.7%	37
FLORIDA	4,599.4	5,387.4	5,280.2	4	2.8%	11	-2.0%	38	5,236.6	5,241.8	0.1%	28
GEORGIA	2,672.4	2,991.8	2,942.4	11	1.9%	28	-1.7%	34	2,951.0	2,968.3	0.6%	24
HAWAII	438.6	528.4	538.6	40	4.2%	2	1.9%	6	530.8	524.3	-1.2%	41
ILLINOIS	4,790.7	5,288.3	5,220.1	5	1.7%	32	-1.3%	30	5,243.5	5,229.9	-0.3%	32
INDIANA	2,221.8	2,521.9	2,502.2	14	2.4%	17	-0.8%	28	2,531.4	2,569.1	1.5%	11
IOWA	1,073.8	1,226.3	1,236.5	29	2.9%	9	0.8%	16	1,248.4	1,251.8	0.3%	26
KANSAS	984.8	1,088.5	1,095.1	31	2.1%	22	0.6%	19	1,106.8	1,125.8	1.7%	8
KENTUCKY	1,274.1	1,470.5	1,470.0	27	2.9%	8	-0.0%	25	1,485.8	1,493.0	0.5%	25
LOUISIANA	1,518.5	1,589.9	1,616.9	22	1.3%	39	1.7%	9	1,633.4	1,626.2	-0.4%	35
MAINE	477.4	534.9	513.4	41	1.5%	35	-4.0%	46	522.8	524.1	0.2%	27
MARYLAND	1,952.0	2,171.2	2,096.6	20	1.4%	36	-3.4%	43	2,096.8	2,051.0	-2.2%	49
MASSACHUSETTS	2,984.8	2,979.0	2,817.0	13	-1.2%	51	-5.4%	49	2,810.6	2,752.5	-2.1%	47
MICHIGAN	3,657.3	3,969.6	3,874.8	8	1.2%	42	-2.4%	41	3,900.3	3,898.0	-0.1%	30
MINNESOTA	1,892.5	2,129.5	2,136.3	19	2.5%	14	0.3%	21	2,157.1	2,194.7	1.7%	7
MISSISSIPPI	848.2	936.6	936.8	32	2.0%	25	0.0%	23	948.7	960.4	1.2%	14
MISSOURI	2,142.6	2,345.0	2,295.2	15	1.4%	37	-2.1%	39	2,313.6	2,304.1	-0.4%	34
NEBRASKA	652.5	730.1	736.2	35	2.4%	15	0.8%	15	740.7	740.0	-0.1%	31
NEW HAMPSHIRE	490.1	508.0	480.2	42	-0.4%	48	-5.5%	50	487.0	480.6	-1.3%	43
NEW JERSEY	3,490.5	3,642.3	3,493.1	9	0.0%	46	-4.1%	47	3,480.9	3,392.3	-2.5%	50
NEW YORK	7,904.4	8,213.0	7,885.8	2	-0.0%	47	-4.0%	45	7,857.2	7,692.6	-2.1%	48
NORTH CAROLINA	2,744.1	3,117.7	3,070.1	10	2.3%	21	-1.5%	33	3,096.1	3,116.3	0.7%	20
NORTH DAKOTA	249.9	265.9	270.7	48	1.6%	33	1.8%	8	275.5	279.3	1.4%	12
OHIO	4,471.4	4,882.4	4,811.2	7	1.5%	34	-1.5%	32	4,848.7	4,832.4	-0.3%	33
OKLAHOMA	1,124.4	1,193.2	1,201.9	30	1.3%	38	0.7%	18	1,205.5	1,197.0	-0.7%	38
OREGON	1,058.5	1,251.9	1,250.6	28	3.4%	5	-0.1%	26	1,270.0	1,285.4	1.2%	15
PENNSYLVANIA	4,790.9	5,170.1	5,077.4	6	1.2%	40	-1.8%	36	5,079.2	5,005.2	-1.5%	44
RHODE ISLAND	442.5	451.2	423.4	43	-0.9%	50	-6.2%	51	423.7	416.0	-1.8%	45
SOUTH CAROLINA	1,338.0	1,545.0	1,514.4	25	2.5%	13	-2.0%	37	1,520.1	1,501.7	-1.2%	40
SOUTH DAKOTA	251.9	288.7	296.7	47	3.3%	6	2.8%	3	300.5	305.1	1.5%	10
TENNESSEE	1,929.8	2,192.1	2,174.7	17	2.4%	16	-0.8%	29	2,199.2	2,212.5	0.6%	23
TEXAS	6,564.2	7,100.9	7,167.3	3	1.8%	31	0.9%	13	7,185.3	7,276.2	1.3%	13
VERMONT	234.4	257.5	248.4	49	1.2%	41	-3.5%	44	250.8	247.7	-1.2%	42
VIRGINIA	2,557.7	2,896.3	2,830.5	12	2.0%	24	-2.3%	40	2,838.9	2,824.2	-0.5%	36
WASHINGTON	1,769.9	2,152.1	2,170.8	18	4.2%	3	0.9%	14	2,210.7	2,211.4	0.0%	29
WEST VIRGINIA	597.5	630.1	629.3	38	1.0%	44	-0.1%	27	632.5	639.7	1.1%	17
WISCONSIN	2,023.9	2,291.5	2,291.0	16	2.5%	12	-0.0%	24	2,318.8	2,357.2	1.7%	9

p - preliminary

Source: U.S. Bureau of Labor Statistics

Table 41 (con't)
U.S., Mountain Division, and the States
Demographic and Economic Performance: 1986, 1990, 1991

	Unemployment Rate in Percent					Unemployment Rate			Unemployment Rate in Percent			
	1986	1990	1991	Change 1986-91	Change 1990-91	Rank 1986	Rank 1990	Rank 1991	September* 1991	Rank	September* 1992p	Rank
UNITED STATES	6.9	5.4	6.6	-0.3	1.2				6.4		7.2	
MOUNTAIN STATES	7.3	5.2	5.6	-1.8	0.4				5.0		5.6	
ARIZONA	6.9	5.3	5.7	-1.2	0.4	24	27	38	5.9	27	6.4	22
COLORADO	7.4	4.9	5.0	-2.4	0.1	21	36	43	3.8	47	4.5	44
IDAHO	8.7	5.8	6.1	-2.6	0.3	12	15	32	4.5	43	5.3	40
MONTANA	8.1	5.8	6.9	-1.2	1.1	17	17	18	6.2	23	6.2	30
NEVADA	6.0	4.9	5.5	-0.5	0.6	32	37	39	5.2	37	6.6	20
NEW MEXICO	9.2	6.3	6.9	-2.3	0.6	7	9	19	5.9	28	6.4	24
UTAH	6.0	4.3	4.9	-1.1	0.6	33	44	45	4.8	41	4.9	42
WYOMING	9.0	5.4	5.1	-3.9	-0.3	8	26	42	4.5	44	4.7	43
OTHER STATES												
ALABAMA	9.8	6.8	7.2	-2.6	0.4	5	6	13	6.7	17	6.4	25
ALASKA	10.8	6.9	8.5	-2.3	1.6	4	4	5	7.8	8	7.6	12
ARKANSAS	8.7	6.9	7.3	-1.4	0.4	11	5	11	6.9	13	6.9	17
CALIFORNIA	6.7	5.6	7.5	0.8	1.9	26	20	8	7.5	9	9.2	2
CONNECTICUT	3.8	5.1	6.7	2.9	1.6	49	31	21	7.0	11	7.1	15
DELAWARE	4.3	5.1	6.2	1.9	1.1	47	32	30	6.0	25	5.0	41
D.C.	7.7	6.6	7.7	0.0	1.1	20	8	7	8.0	5	8.4	9
FLORIDA	5.7	5.9	7.3	1.6	1.4	35	14	12	8.0	6	9.1	3
GEORGIA	5.9	5.4	5.0	-0.9	-0.4	34	24	44	4.8	42	6.7	19
HAWAII	4.8	2.8	2.8	-2.0	0.0	43	50	50	2.5	50	4.4	46
ILLINOIS	8.1	6.2	7.1	-1.0	0.9	16	10	16	6.6	18	6.1	32
INDIANA	6.7	5.3	5.9	-0.8	0.6	27	28	34	5.4	34	6.2	29
IOWA	7.0	4.2	4.6	-2.4	0.4	22	46	46	4.2	45	3.8	49
KANSAS	5.4	4.4	4.4	-1.0	0.0	36	42	47	3.9	46	4.1	48
KENTUCKY	9.3	5.8	7.4	-1.9	1.6	6	16	10	7.5	10	6.5	21
LOUISIANA	13.1	6.2	7.1	-6.0	0.9	1	11	17	6.7	16	8.2	10
MAINE	5.3	5.1	7.5	2.2	2.4	37	33	9	6.8	15	5.9	33
MARYLAND	4.5	4.6	5.9	1.4	1.3	46	41	35	5.6	32	6.7	18
MASSACHUSETTS	3.8	6.0	9.0	5.2	3.0	50	13	3	8.9	4	8.4	8
MICHIGAN	8.8	7.5	9.2	0.4	1.7	10	2	2	9.2	3	8.5	7
MINNESOTA	5.3	4.8	5.1	-0.2	0.3	38	39	41	5.0	39	4.4	47
MISSISSIPPI	11.7	7.5	8.6	-3.1	1.1	3	3	4	8.0	7	8.0	11
MISSOURI	6.1	5.7	6.6	0.5	0.9	31	18	23	6.1	24	5.9	34
NEBRASKA	5.0	2.2	2.7	-2.3	0.5	40	51	51	2.5	51	2.9	50
NEW HAMPSHIRE	2.8	5.6	7.2	4.4	1.6	51	21	14	7.0	12	7.2	14
NEW JERSEY	5.0	5.0	6.6	1.6	1.6	41	34	24	6.0	26	8.6	5
NEW YORK	6.3	5.2	7.2	0.9	2.0	28	29	15	6.8	14	8.8	4
NORTH CAROLINA	5.3	4.1	5.8	0.5	1.7	39	47	36	5.3	35	5.4	39
NORTH DAKOTA	6.3	3.9	4.1	-2.2	0.2	29	48	48	3.4	48	4.4	45
OHIO	8.1	5.7	6.4	-1.7	0.7	18	19	27	5.7	30	6.3	26
OKLAHOMA	8.2	5.6	6.7	-1.5	1.1	14	22	22	6.4	21	5.8	36
OREGON	8.5	5.5	6.0	-2.5	0.5	13	23	33	5.5	33	6.4	23
PENNSYLVANIA	6.8	5.4	6.9	0.1	1.5	25	25	20	6.3	22	7.0	16
RHODE ISLAND	4.0	6.7	8.5	4.5	1.8	48	7	6	9.5	2	8.6	6
SOUTH CAROLINA	6.2	4.7	6.2	0.0	1.5	30	40	31	5.7	31	6.2	27
SOUTH DAKOTA	4.7	3.7	3.4	-1.3	-0.3	44	49	49	3.1	49	2.8	51
TENNESSEE	8.0	5.2	6.6	-1.4	1.4	19	30	25	6.4	19	5.9	35
TEXAS	8.9	6.2	6.6	-2.3	0.4	9	12	26	6.4	20	7.5	13
VERMONT	4.7	5.0	6.4	1.7	1.4	45	35	28	5.2	38	5.5	37
VIRGINIA	5.0	4.3	5.8	0.8	1.5	42	45	37	5.3	36	6.2	28
WASHINGTON	8.2	4.9	6.3	-1.9	1.4	15	38	29	5.8	29	6.2	31
WEST VIRGINIA	11.8	8.3	10.5	-1.3	2.2	2	1	1	10.0	1	11.1	1
WISCONSIN	7.0	4.4	5.4	-1.6	1.0	23	43	40	4.8	40	5.4	38

* Not seasonally adjusted p - Preliminary

Source: U.S. Bureau of Labor Statistics

INDUSTRY FOCUS

AGRICULTURE

Land Use

Utah is a large state but it has a relatively small percentage of its land area that is used for the production of crops. For example, U.S. Department of Agriculture data indicate that 4 percent of Utah's 52.5 million acres is cropland. Most other states have more cropland and a much higher percentage of land that is devoted to the production of crops. For example, Maryland has approximately the same number of acres of cropland (2.1 million) as Utah (1.8 million) but in Maryland cropland represents about 1/4 of the land area of the state. Most of the land in Utah (72 percent) is classified as forest, pasture or rangeland. Utah is also an arid state that depends heavily on irrigation. As a result, land use and water are the two primary factors that limit agricultural production in the state.

Utah Agriculture: The National Perspective

Changes in the efficiency of agricultural production have allowed much of the prosperity that exists in America today. Only a small percentage of the people in the U.S. are directly engaged in farming. In addition, agricultural production as a percentage of GNP has declined over time from nearly 7 percent in 1950 to less than 2 percent today. This has allowed the nations citizens to spend a decreasing portion of their income on food — the citizens of no other nation spend a smaller percentage of their income on food.

The leading agriculture-producing states are California, Texas Iowa, Nebraska and Illinois. Utah has never been a leading producing state — Utah ranked 38th in the total value of agricultural production in 1991. Utah is however, a leading state in the production of some products. For example, Utah has ranked second nationally for a number of years in the production of mink pelts and sour cherries. Utah's dairymen also milk relatively productive herds — Utah ranks tenth in the nation in milk production per cow. Utah's fledgling aquaculture has become important nationally — Utah ranked tenth in the commercial production of trout in 1991.

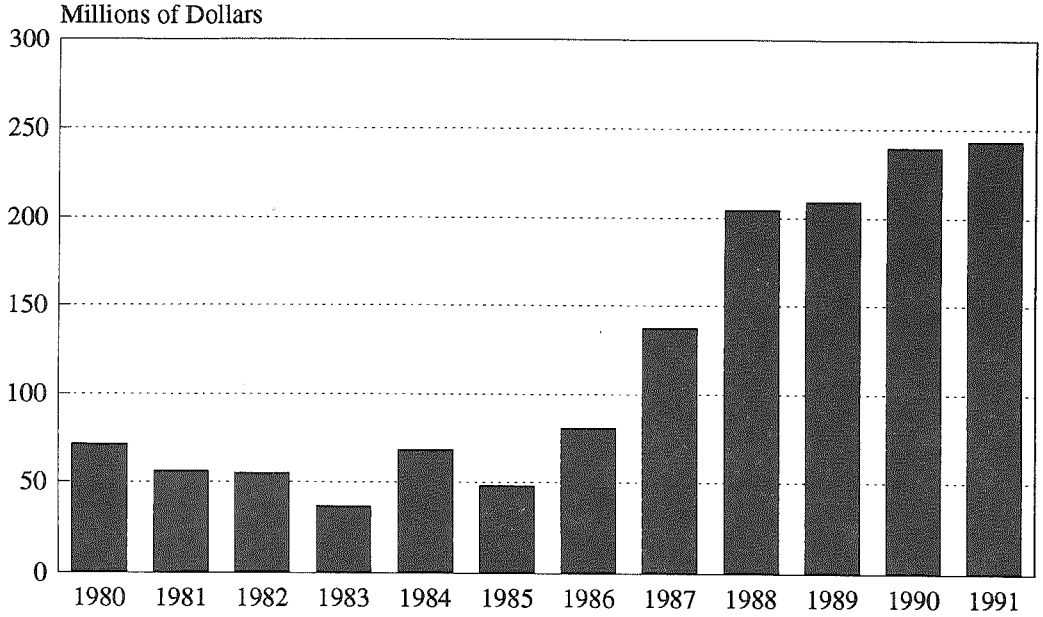
Agriculture is a dynamic industry that is changing nationally as well as within the state. For example, the number of stock sheep and lambs have declined in Utah and the nation, but the rate of decline has not been as rapid in Utah. As a result, the portion of the nation's sheep herd has increased in Utah — Utah now ranks sixth. Utah has also become a relatively important producer of calves.

Two areas where Utah differs from most other states concerns the number of farms and the role of part-time operators. For example, the number of farms in Utah increased from 12,764 in 1978 to 14,066 in 1987 (Census of Agriculture) while the number of farms nationally declined. Most of the increase in the number of farms has been in two general size classes — the small / part-time / hobby type farms and large commercial operations. This has a dramatic effect on farming in Utah. USDA data indicate that about 56 percent of the farms in Utah are operated by nonfarmers (Utah ranks eighth in the proportion of the farms who are operated by persons whose primary occupation is not farming) who operate farms on a part-time basis.

Farm Income

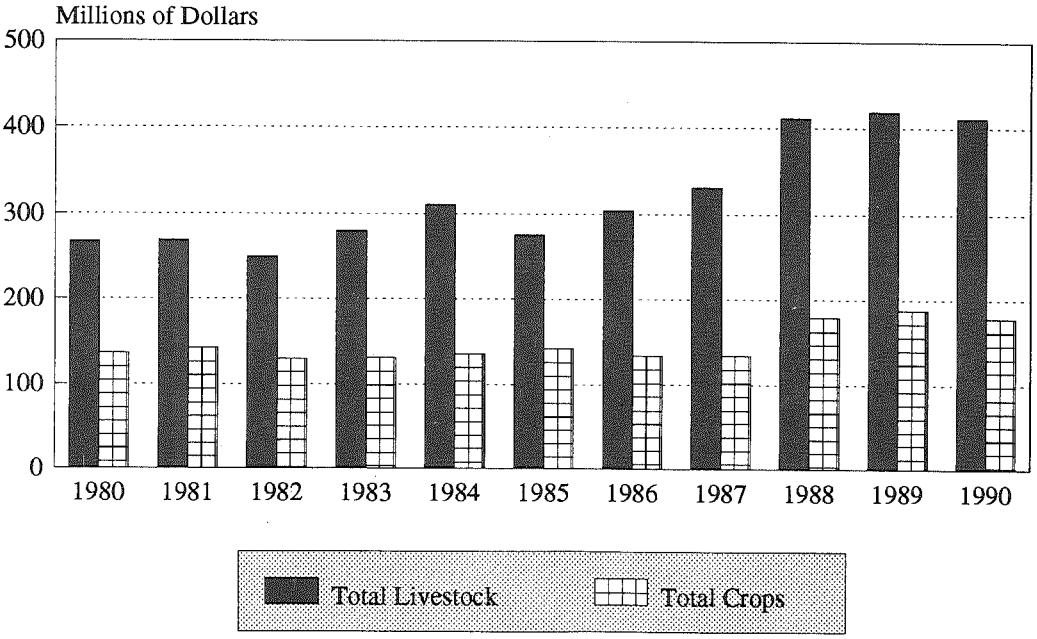
While cash income from farming generally increased throughout the 1980s, net farm income has been much more variable (Figure 44). The early 1980s was a period of financial crisis for agriculture in the U.S. and Utah was affected by this national trend. For example, net farm income in Utah decreased from $71.4 billion in 1980 to $36.8 billion in 1983, but increased rapidly after 1985. Much of this gain in income was due to the favorable prices received for livestock and the receipts obtained by livestock producers (Figure 45). The rapid increase in cattle and calf receipts has made livestock production a more dominant part of Utah agriculture than it has been in the past.

Figure 44
Net Farm Income in Utah
1980-1991



Source: Utah Agricultural Statistics

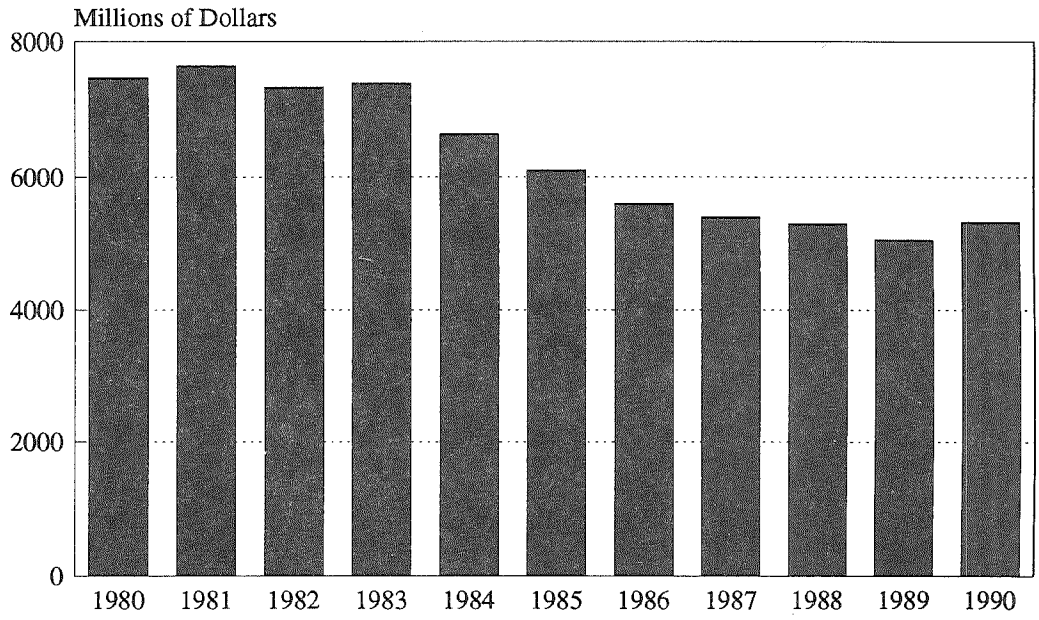
Figure 45
Cash Receipts by Commodity Group
in Utah: 1980-1990



Source: Utah Agricultural Statistics

Perhaps the biggest change in agriculture in Utah (and the nation) that occurred during the 1980s was the rapid decline in asset values, particularly real estate (Figure 46). For example, the value of assets declined from about $7.6 billion in 1981 to just over $5 billion in 1989. During this same period liabilities increased to a high of just over $1 billion in 1984 but have subsequently declined to just over $650 million at the end of 1990. These data are shown in Table 42. This period of decline resulted in a loss of farm equity although Utah's farm families have had higher equity positions (a smaller debt-to-equity ratio) in their farming operation than farmers nationally. As a result, they have not had as high a level of financial risk as farmers in other states.

Figure 46
Total Farm Assets in Utah
1980-1990

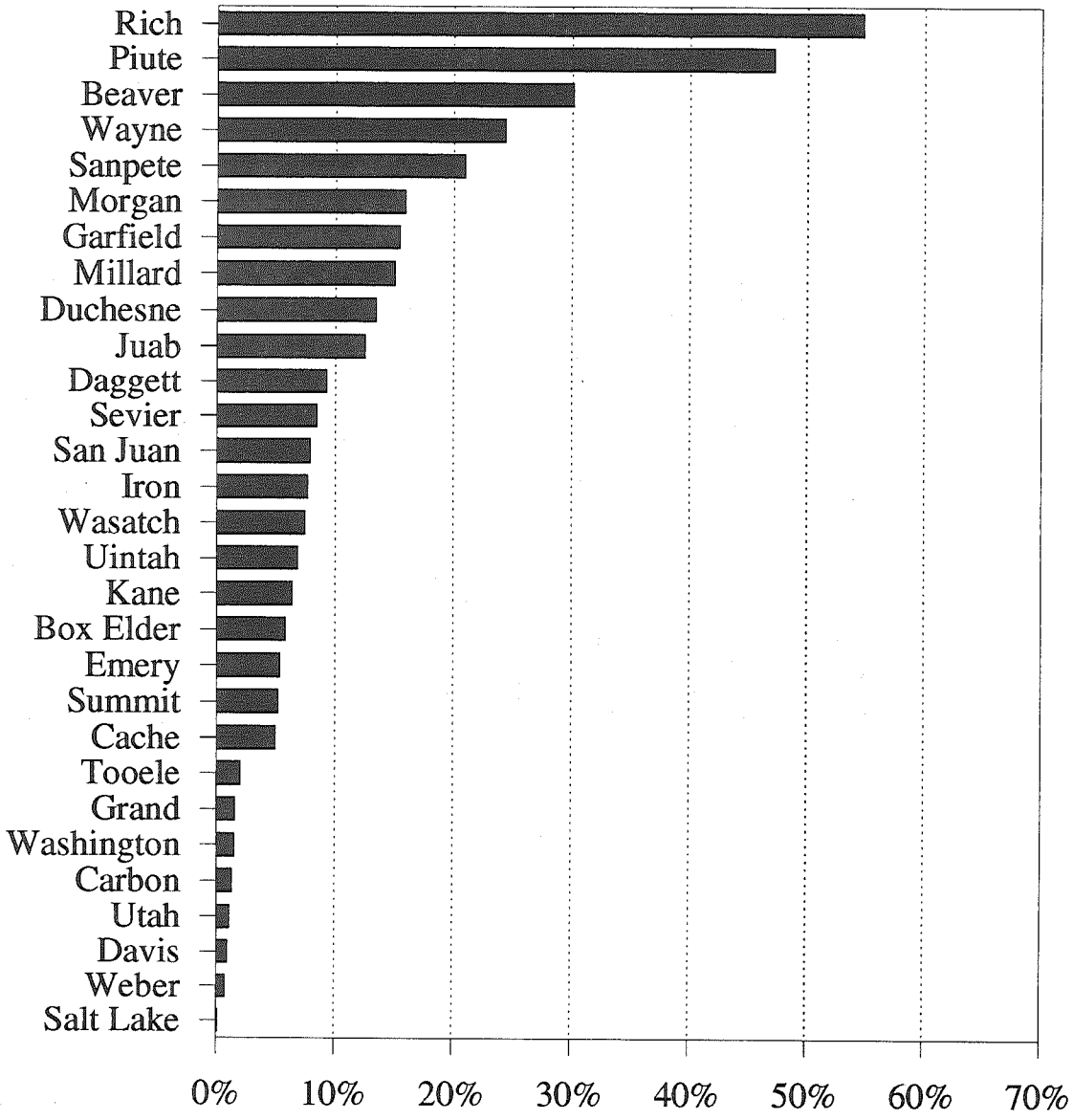


Source: Utah Agricultural Statistics

Personal Income from Farming

The Bureau of Economic Analysis derives figures for state and county total personal farm income from farm activities. These data are based on total agricultural receipts (including agricultural goods sold, government payments, and other farm-related income) minus production expenses. Personal farm income was $292.9 million in 1990 which is more than three times the decade low of $87.2 million that occurred in 1984. Farming has not been a major direct source of personal income in Utah for several decades; however, considerable variation occurs among counties (Figure 47).

Figure 47
Farm Earnings as a Percent of Total Earnings by County: 1990



Source: U.S. Bureau of Economic Analysis

Agriculture in Utah Counties

The leading agricultural production counties are: Cache, Sanpete, Box Elder, Millard, Davis, and Duchesne. There are however, large differences not only in the total amount of production by county but by the products produced. Some counties are dominated by the production of particular commodities such as dairy (Cache) and turkeys (Sanpete), but most counties are more diversified. Livestock production is the primary source of revenue in most counties though there are exceptions. Agricultural production is changing in some counties as shown in Table 44. For example, counties such as Daggett and San Juan have become more livestock-oriented while Davis, Weber and Salt Lake Counties have become more crop-oriented. The increases in crop production in the urban area counties are largely a function of increased vegetable and horticultural production intended for urban consumers, while the more rural counties have tended to become more dependent on cattle (beef) production.

The data in Figure 47 indicate that farm earnings in comparison to nonfarm earnings are relatively important in some counties (e.g., Rich and Piute), while farm earning are fairly insignificant in urban counties such as Salt Lake. Many of the rural counties have become more dependent on agriculture during the 1980s. For example, farm earnings as a percent of farm plus nonfarm earnings increased from 7.62 percent to 30.07 percent in Beaver County (Table 43). The increase in agricultural dependency for most counties occurred as a result of increases in agricultural income coupled with relatively minor increases in nonfarm income. All of the counties that had double digit increases in the percentage of farm earnings as compared to nonfarm earnings were rural counties and most have a high percentage of livestock-related income. Thus, while agricultural production in Utah may not be large when viewed from the point of view of the nation, it is very important in many rural areas of the state.

Table 42
Utah Farm Balance Sheet
Excluding Operator Households
December 31, 1980 to 1990

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	(Millions of Dollars)										
Total Assets	7,479.7	7,649.8	7,338.1	7,394.6	6,653.6	6,107.5	5,601.9	5,392.0	5,288.7	5,053.4	5,313.0
Real Estate	6,271.5	6,466.1	6,101.5	6,235.0	5,523.1	5,053.1	4,534.1	4,197.0	4,124.3	3,881.0	4,020.7
Livestock/Poultry	453.2	387.4	412.3	385.8	356.9	352.2	360.6	484.4	536.5	572.0	582.7
Machinery	455.9	493.6	498.2	485.3	474.7	434.3	428.0	429.1	433.3	448.6	470.2
Crops	145.9	138.8	142.5	124.5	115.6	114.4	104.0	114.3	99.8	95.2	113.3
Inputs	NA	NA	NA	NA	NA	NA	7.0	7.4	12.0	13.2	15.5
Coops	NA	NA	NA	NA	NA	NA	113.8	105.8	26.9	(12.3)	50.9
Other Assets	153.3	163.9	183.7	164.0	183.4	153.4	54.4	54.0	55.9	55.6	59.6
Total Liabilities	876.0	960.5	1,005.6	1,002.0	1,011.4	952.9	829.0	756.3	743.0	694.3	656.9
Real Estate	498.5	553.1	572.4	595.0	588.9	549.0	499.4	447.0	428.2	396.4	366.6
Non Real Estate	371.5	399.4	423.2	407.0	422.4	403.9	329.6	309.3	314.8	297.9	290.3
Other Liabilities	6.0	8.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity	6,603.7	6,689.3	6,332.5	6,392.5	5,642.2	5,154.6	4,772.9	4,635.7	4,545.7	4,359.1	4,656.1
Debt/Equity	0.1327	0.1436	0.1588	0.1567	0.1793	0.1849	0.1737	0.1631	0.1635	0.1593	0.1411

Source: U.S. Department of Agriculture.

Table 43
Utah Farm and Nonfarm Earnings by County
(Thousands of Dollars)

	1980				1990				Change in
	Total Earnings	Farm	Non-farm	Farm Percent	Total Earnings	Farm	Non-farm	Farm Percent	Percent 1980-1990
Beaver	17,906	1,365	16,541	7.62	37,561	11,295	26,266	30.07	22.45
Box Elder	217,276	12,101	205,175	5.57	530,700	30,739	499,961	5.79	0.22
Cache	255,470	15,569	239,901	6.09	593,596	29,493	564,103	4.97	-1.13
Carbon	154,843	771	154,072	0.50	204,712	2,670	202,042	1.30	0.81
Daggett	5,900	636	5,264	10.78	7,359	684	6,675	9.29	-1.48
Davis	822,872	7,499	815,373	0.91	1,690,204	16,060	1,674,144	0.95	0.04
Duchesne	73,206	3,340	69,866	4.56	107,580	14,445	93,135	13.43	8.86
Emery	102,290	432	101,858	0.42	127,811	6,840	120,971	5.35	4.93
Garfield	24,792	949	23,843	3.83	33,998	5,231	28,767	15.39	11.56
Grand	54,026	744	53,282	1.38	50,172	782	49,390	1.56	0.18
Iron	75,163	1,283	73,880	1.71	167,193	12,864	154,329	7.69	5.99
Juab	23,398	328	23,070	1.40	36,724	4,587	32,137	12.49	11.09
Kane	12,595	382	12,213	3.03	29,889	1,913	27,976	6.40	3.37
Millard	34,067	8,153	25,914	23.93	110,768	16,592	94,176	14.98	-8.95
Morgan	19,383	2,053	17,330	10.59	29,821	4,741	25,080	15.90	5.31
Piute	4,547	1,239	3,308	27.25	6,466	3,050	3,416	47.17	19.92
Rich	5,424	1,217	4,207	22.44	12,580	6,886	5,694	54.74	32.30
Salt Lake	4,724,053	11,474	4,712,579	0.24	9,538,900	12,477	9,526,423	0.13	-0.11
San Juan	57,596	2,048	55,548	3.56	74,857	5,902	68,955	7.88	4.33
Sanpete	37,050	2,139	34,911	5.77	95,701	19,998	75,703	20.90	15.12
Sevier	77,058	3,829	73,229	4.97	125,160	10,583	114,577	8.46	3.49
Summit	57,893	3,498	54,395	6.04	174,614	9,074	165,540	5.20	-0.85
Tooele	173,858	2,152	171,706	1.24	310,403	6,262	304,141	2.02	0.78
Uintah	133,804	3,190	130,614	2.38	188,474	12,900	175,574	6.84	4.46
Utah	919,882	8,620	911,262	0.94	2,144,741	23,743	2,120,998	1.11	0.17
Wasatch	31,425	1,486	29,939	4.73	56,509	4,226	52,283	7.48	2.75
Washington	83,449	3,031	80,418	3.63	319,405	4,819	314,586	1.51	-2.12
Wayne	8,245	917	7,328	11.12	13,325	3,241	10,084	24.32	13.20
Weber	721,564	4,261	717,303	0.59	1,530,479	10,762	1,519,717	0.70	0.11
									0.00
State	8,929,035	104,706	8,824,329	1.17	18,349,702	292,859	18,056,843	1.60	0.42

Source: Bureau of Economic Analysis.

Table 44
Cash Receipts by Source in Utah Counties
(Thousands of Dollars)

COUNTY	1990			1989			1988			1987			1986		
	Crops	Livestock	TOTAL	Crops	Livestock	TOTAL	Crops	Livestock	TOTAL	Crops	Livestock	TOTAL	Crops	Livestock	TOTAL
BEAVER	3.9	17.1	21	4	16	20	3.3	15.2	18.5	2.4	13.9	16.3	2.5	12.6	15
BOX ELDER	26.4	47.3	73.7	27.4	47.7	75.1	26.6	42.7	69.3	20.7	40	60.7	19.9	36.7	56.6
CACHE	13.4	78.6	92	13.5	75	88.5	12.4	67.2	79.6	10.1	61.5	71.6	9.8	55.8	65.5
CARBON	0.6	4.3	4.9	0.7	4.2	4.9	0.8	4.9	5.7	0.5	4.3	4.8	0.6	3.4	4
DAGGETT	0.2	1.7	1.9	0.3	1.5	1.8	0.3	1.3	1.6	0.2	0.9	1.1	0.4	0.8	1.2
DAVIS	22.4	12.4	34.8	20.9	11.2	32.1	20.6	10.6	31.2	14	10.1	24.1	10	9	19
DUCHESNE	4.4	26	30.4	5	26	31	4.8	22.9	27.7	3.5	19.4	22.9	2.9	17.3	20.2
EMERY	2	10.6	12.6	2.1	10.8	12.9	2.2	8.4	10.6	1.4	7.7	9.1	1.6	6.8	8.4
GARFIELD	1.2	7.7	8.9	1.7	8	9.7	1.5	6.7	8.2	1.2	5.7	6.9	1	5	6
GRAND	0.6	2.1	2.7	0.5	2	2.5	0.5	2.8	3.3	0.3	2.2	2.5	0.3	1.8	2.2
IRON	9.7	12.1	21.8	9.6	12.2	21.8	8.4	11	19.4	6.5	10.7	17.2	7.8	9.7	17.5
JUAB	2.9	5.3	8.2	3.2	5.5	8.7	2.7	5	7.7	2.1	4.6	6.7	2.5	3.9	6.4
KANE	0.4	4	4.4	0.4	3.9	4.3	0.3	3.7	4	0.3	2.9	3.2	0.3	2.2	2.5
MILLARD	21.5	27.8	49.3	20.4	27.3	47.7	18.6	25.2	43.8	15.5	22.1	37.6	20.4	19.5	39.8
MORGAN	1.3	11.5	12.8	1.3	11.5	12.8	1.1	12.4	13.5	0.8	10	10.8	0.8	10.7	11.5
PIUTE	1	7	8	1.1	6.8	7.9	0.8	5.9	6.7	0.7	5.5	6.2	0.6	5.1	5.7
RICH	1.7	17.1	18.8	3.4	17.2	20.6	3.2	14.9	18.1	2.6	12	14.6	1.3	9.9	11.3
SALT LAKE	9	23.1	32.1	9.1	23.5	32.6	8.5	21	29.5	5.7	18.2	23.9	6.3	17.5	23.8
SAN JUAN	1.6	8.1	9.7	2.8	8	10.8	3.1	7	10.1	2.9	6.2	9.1	3.2	5.3	8.5
SANPETE	4.7	75.7	80.4	6	73.6	79.6	5	74.4	79.4	4.1	62.6	66.7	4.1	70.9	75
SEVIER	4.2	24.1	28.3	4.4	23.7	28.1	3.4	21.3	24.7	3	18.6	21.6	4.1	20.6	24.7
SUMMIT	0.9	15.6	16.5	1.5	16.5	18	1.5	16.8	18.3	1.3	13.2	14.5	1	12.8	13.8
TOOELE	2.9	8.7	11.6	3.1	9.1	12.2	3	8.7	11.7	2.3	7.2	9.5	3.2	6.7	9.9
UINTAH	3.9	20.2	24.1	4.1	19.8	23.9	3.9	16.9	20.8	3.1	14.9	18	3	12.6	15.6
UTAH	22.5	56.5	79	26.1	55.7	81.8	22.5	54.9	77.4	18.3	48.9	67.2	18	45.7	63.8
WASATCH	1.3	9.9	11.2	1.4	9.5	10.9	1.4	8.6	10	1.1	8.6	9.7	0.9	8.3	9.3
WASHINGTON	6	7.6	13.6	5.8	7.6	13.4	5.4	6.7	12.1	4.2	6	10.2	3.6	5.3	8.3
WAYNE	1.5	8.6	10.1	1.6	9.1	10.7	1.3	7.9	9.2	1	6.6	7.6	1.1	6.1	7.2
WEBER	6.6	25.4	32	6.8	24.2	31	5.9	23.3	29.2	4.1	21.2	25.3	3.3	20	23.3
TOTAL	178.7	576.1	754.8	188.2	567.1	755.3	173	528.3	701.3	133.9	465.7	599.6	133.8	442	575.8

Source: Utah Agricultural Statistics.

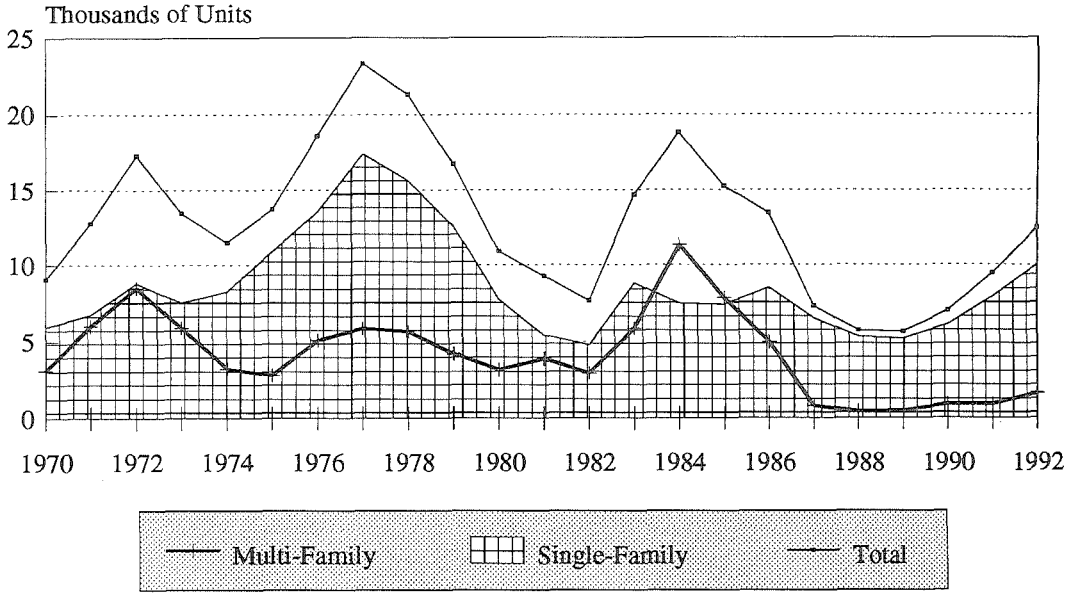
CONSTRUCTION ACTIVITY

Residential Construction

Residential construction activity grew impressively in 1992. Single-family home construction continued to be the mainstay of residential construction growth while multifamily construction, after five years of negligible growth, began to rebound. A total of 12,450 units are estimated to be authorized in 1992, an increase of 31.9 percent over 1991 figures.[1] The dollar value of residential construction expanded 32.7 percent to $1.05 billion, the first time residential construction values have exceeded $1 billion in a single year.

Several factors combined to stimulate the recovery of Utah's construction industry in 1992. Low and stable mortgage interest rates, population growth enhanced by net in-migration, and the shrinking supply of existing structures for sale or rent in the marketplace have created a housing market where demand for housing outpaces supply, which in turn creates lower vacancy rates and increases prices. These factors have resulted in a significant increase in the demand for housing, particularly along the Wasatch Front, and will remain strong in 1993, providing further expansion and growth for the construction industry.

Figure 48
Utah Residential Construction Activity
Permit Authorized Construction



* 1992 Estimated
U of U, Bureau of Economic and Business Research

[1] Through the first three quarters of 1992 (January-September) a total of 9,999 units were authorized. The estimation is an additional 2,451 units will be added to this figure during the fourth quarter of 1992 (October-December).

The previously-mentioned factors will continue to positively influence construction activity in 1993, particularly for single-family dwellings. Total dwelling units should increase to 14,900 units in 1993. Single-family structures will account for 11,000 of the total residential construction units while multifamily structures will jump to 3,000 units and mobile homes and cabins should add an additional 900 units.

Multifamily construction, which plummeted in prior years when vacancy rates were high, and credit was tight, is poised to expand in 1993. Economic growth has increased the demand for multifamily structures and the low vacancy rates in metropolitan Utah will spur increased development in 1993. The growth in 1992 was concentrated around colleges, universities, and recreation areas near Provo-Orem, Logan and Park City. These areas should continue to build structures as demand is high and vacancy rates are extremely low. In addition, expanded growth is likely in the Salt Lake County, Davis County and Weber County which also have strong demand and low vacancy rates. Residential construction activity from 1970 to 1992 is presented in Table 45 and Figure 47.

Nonresidential Construction

Nonresidential construction activity increased in 1992 at a rate lower than residential construction. Nonresidential construction increased 11.0 percent to $380 million (Figure 48 and Table 46). The $42 million industrial plant in Iron County and the $20 million LDS Temple in Davis County were major factors in the rise in nonresidential activity. The outlook for 1993 is brighter because of the Kennecott Smelter project and an improved climate for the construction of industrial and retail buildings as the economy expands. Nonresidential construction values are projected to be $430 million in 1993.

The value of new construction for offices, banks, and other professional buildings improved from $28 million in 1991 to $50 million in 1992. Because of these new office buildings, vacancy rates for Class A office space decreased slightly to 16.6 percent. Vacancy rates for Class B office space decreased to 20.6 percent. Industrial buildings valuation increased 159.4 percent to $120 million. This increase is primarily due to the $42.million American Pacific industrial facility in Iron County. The greatest improvement in nonresidential construction values, in relative terms, occurred in rural Utah during 1992. Vacancy rates for industrial buildings have decreased to 7.6 percent. Recent trends indicate that there is no appreciable inventory of industrial space available as vacancy rates continue to decrease.

Office buildings, industrial buildings, religious buildings and hotels and motels experienced improvement. Hotels and motels increased 312.7 percent to $15.0 million. Increased recreation and tourism in Utah has spurred development of these properties.

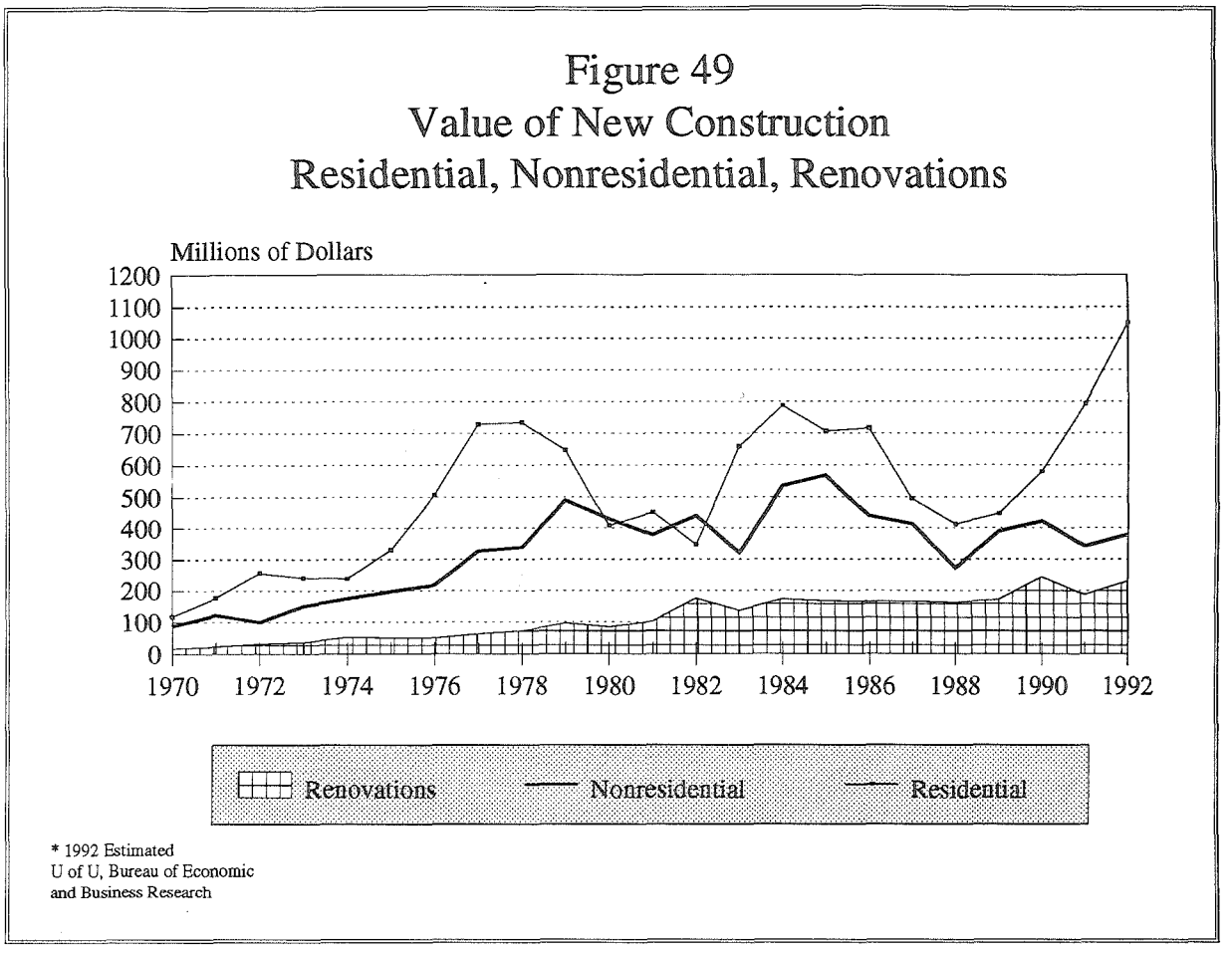
Retail establishments, public construction and other buildings (parking garages, service stations, hospitals, schools, and agricultural buildings) showed decreases in valuation. Nonresidential construction should expand more in 1993 because of major projects on the horizon, lower vacancy rates for industrial buildings, and the probability that the economy in metropolitan Utah will improve in 1993.

Additions, Alterations, and Repairs

Additions, alterations and repairs increased 23.0 percent to $230 million in 1992. Continued economic growth, strong demand for housing and low interest rates have spurred renovations for both residential and nonresidential structures. This trend should continue in 1993 with additions, alterations and repairs increasing to a projected $240 million.

Total Construction Activity

The value of total permit authorized construction increased 25.7 percent from $1.32 billion in 1991 to $1.66 billion in 1992. With increased construction activity forecast for residential, nonresidential and additions, alterations and repairs the value of total construction is projected to rise to $1.97 billion in 1993.



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 Facilities Management and Construction, and the Bureau of Reclamation.

The total value of nonbuilding construction for 1992 was approximately $430 million. This figure is based primarily on increased highway construction spending for the West Valley Highway. Nonbuilding construction should increase in 1993 as highway construction increases and because funding was recently passed for the final phase of the Central Utah Project. The long term prospects are for increased activity associated with the Central Utah Project, the possibility of increased infrastructure improvements under the new administration, and increased demand for water, sewer and power as Utah's economy and population continue to grow.

Table 45
Construction Activity in Utah

Year	Single Family Units	Multi-Family Units	Total Units	Value of Residential Construction (Millions)	Value of Nonresidential Construction (Millions)
1970	5,962	3,108	9,070	$117.0	$87.3
1971	6,768	6,009	12,777	$176.8	$121.6
1972	8,807	8,513	17,320	$256.5	$99.0
1973	7,546	5,904	13,450	$240.9	$150.3
1974	8,284	3,217	11,501	$237.9	$174.2
1975	10,912	2,800	13,712	$330.6	$196.5
1976	13,546	5,075	18,621	$507.0	$216.8
1977	17,424	5,856	23,280	$728.0	$327.1
1978	15,618	5,646	21,264	$734.0	$338.6
1979	12,570	4,179	16,749	$645.8	$490.3
1980	7,760	3,141	10,901	$408.3	$430.0
1981	5,413	3,840	9,253	$451.5	$378.2
1982	4,767	2,904	7,671	$347.6	$440.1
1983	8,806	5,858	14,664	$657.8	$321.0
1984	7,496	11,327	18,823	$786.7	$535.2
1985	7,403	7,844	15,247	$706.2	$567.7
1986	8,512	4,932	13,444	$715.5	$439.9
1987	6,530	775	7,305	$495.2	$413.4
1988	5,297	418	5,715	$413.0	$272.1
1989	5,179	453	5,632	$447.8	$389.6
1990	6,099	910	7,009	$579.4	$422.9
1991 (r)	7,911	958	9,411	$921.0	$341.6
1992 (e)	10,000	1,600	12,450	$1,050.0	$380.0

(r) = revised
(e) = estimate

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November 1992.

Table 46
Utah Nonresidential Construction by Sector
(Millions of Dollars)

Sector	1988	1989	1990	1991(r)	1992(e)	Average Percent of Total (a)
Hotels and Motels	$17.1	$6,073.3	$8,331.3	$3,634.2	$15,000.0	1.8
Churches and Religious Buildings	20,909.1	23,036.0	15,401.7	35,846.0	39,000.0	7.4
Industrial Buildings	57,906.6	65,510.2	92,655.1	46,266.0	120,000.0	21.2
Offices, Banks and Professional Buildings	46,909.0	102,310.6	47,838.1	28,035.3	50,000.0	15.2
Stores and Other Mercantile Buildings	49,598.5	58,753.5	86,717.5	71,808.8	62,000.0	18.2
Publicly Owned Buildings	24,584.3	60,673.9	55,003.2	29,565.3	25,000.0	10.8
Other Nonresidential Construction	72,130.5	73,245.3	116,999.0	127,204.6	69,000.0	25.4
Total Nonresidential Construction	$272,055.1	$389,602.8	$422,945.9	$342,360.2	$380,000.0	100.0

(e) = estimate
(r) = revised
(a) Data represents five year average, 1987 to 1992.

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November 1992.

DEFENSE / AEROSPACE

Utah's Defense Sector

Defense-related employment and spending peaked in Utah during 1986 when defense spending hit at an all-time high of $2.5 billion. Since then, Utah's defense sector has been downsizing in response to cutbacks in national defense spending, and a more competitive environment.

Utah's defense sector continues to be almost evenly split between federal defense operations and defense contracting and subcontracting. Less significant components of defense spending in Utah include military retirement payments and grants from the Department of Defense (DoD) to state and local governments. By the end of 1991, defense-related spending in Utah totaled $1.85 billion; a drop of more than $39 million from the $1.89 million reported in 1990. Federal defense spending in Utah has not been so low since 1988 when total expenditures topped $1.79 billion. Nearly all of the decline is the result of a drop in Prime Contract Awards (PCAs) from $881.9 million in 1990 to $802.1 million in 1991; the lowest level since 1985. Table 47 provides federal defense-related spending in Utah from 1985 to 1991. The impact of this reduction is manifested in Utah's defense-related employment base.

In 1990, between 75,500 and 78,300 people were employed as a result of defense spending in Utah. These jobs reflect the direct, indirect and induced employment impacts which result from direct defense-related expenditures. In 1990, defense-related jobs accounted for 9 to 10 percent of all civilian employment. In contrast, by the end of 1991, spending cuts pushed defense-related employment to between 70,470 and 73,100, or roughly 8 to 9 percent of all civilian employment in the state. Given the continuing budget-cutting trend, estimates for 1992 indicate the loss of approximately 3,200 jobs by year's end.

Military Operations

Federal defense operations are primarily concentrated in four military bases, including Hill Air Force Base, Tooele Army Depot, Dugway Proving Grounds, and Ogden Defense Depot. The major component of defense spending derived from these operations are wage and salary payments made to Active Duty Military and Civilian DoD employees. By year-end 1991, employment at military bases in Utah was 25,254, a reduction of 6.5 percent from the previous year. Although none of Utah's military bases has been slated for closure, much uncertainty still exists as to future defense spending levels, and further consolidations are anticipated.

Industrial Sector

The primary component of the Utah's defense-related industrial sector is Prime Contract Awards (PCAs) which represent payments made to contractors and subcontractors who provide DoD with a variety of goods and services. In 1991, PCAs totaled $802.1 million, a decline of more than $79.1 million from 1990. Within the industrial sector, defense spending is concentrated in a few counties: Box Elder, Davis, Salt Lake, Tooele and Weber. This level of concentration has remained constant over the past five years with the exception of a substantial increase in expenditures in Tooele County, the result of several large construction projects at Tooele Army Depot and Dugway Proving Grounds. Table 48 shows expenditures by county since 1987.

Utah's defense sector is characterized by a high concentration in the missile program, and underscores this sector's dependence upon large expenditures on the nation's strategic defense systems. Components of two of the country's largest unclassified strategic systems are being manufactured in Utah. In fact, the missile program has been a key factor in Utah's industrial defense base. Prominent players in this growth have been Thiokol Corporation and Hercules Aerospace Company. Both have been downsizing since 1990. Other defense contractors which supply components for the country's strategic defense systems, Boeing, TRW, and Teleflex Defense Systems, have also experienced reductions in overall employment.

Trends in Utah's Defense Sector

Utah has already experienced a significant amount of reduction in its defense sector. Even so, widespread support is still apparent for further reductions in defense spending at all levels. Deeper cuts will continue to erode not only Utah's defense base, but that of every state throughout the nation.

Utah's military bases, which have been especially hard hit over the past two years, will continue to experience further declines as the federal government continues its policy of base consolidation. On the bright side, none of Utah's military bases is scheduled for closure at this time.

Utah's industrial sector will likely experience even further retrenchment. Most of the state's largest defense contractors have been steadily scaling back their work forces since 1990. Given the prevailing sentiment, there is no indication that these decreases will end soon. It is entirely possible that some defense contractors will reevaluate their commitment to defense and will opt to leave the industry altogether. However, on average, three to five years are needed for a defense contractor to successfully reduce the ratio of defense-to-commercial business.

Those contractors who choose to remain in the defense sector will have to streamline and fight even harder for a decreasing number of contracts. Either option has limitations and a high degree of certainty that further employment reductions are forthcoming.

Table 47
Federal Defense-Related Spending in Utah
(Thousands of Dollars)

Year	Wages and Salaries (a)	Prime Contract Awards	Military Retirement	State/ Local Grants	Total
1985	$737,548	$1,115,879	$90,220	$695	$1,944,342
1986	784,567	1,688,947	94,612	301	2,568,427
1987	794,294	1,343,924	98,743	5,766	2,242,727
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	802,182	125,526	598	1,850,341

(a) Does not include fringe benefits.

Source: 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 48
Department of Defense Contract Awards in Utah by County
(Thousands of Dollars)

County	1987	1988	1989	1990	1991
Beaver	$0	$0	$0	$0	$47
Box Elder	558,619	186,480	286,668	159,787	141,986
Cache	13,281	17,535	35,659	47,643	44,248
Carbon	650	7,323	4,215	0	1,010
Davis	154,528	211,153	143,119	113,247	114,041
Duchesne	98	0	4,029	1,316	0
Iron	0	0	0	0	1,787
Juab	91	35	0	0	55
Millard	0	0	0	0	295
Morgan	62	35	0	0	0
Rich	0	56	0	0	0
Salt Lake	485,428	333,418	318,662	336,058	229,134
San Juan	972	794	1,410	626	0
Sanpete	92	0	0	0	0
Sevier	532	357	605	29	0
Summit	45	0	1,232	655	7,223
Tooele	44,989	47,187	131,824	115,036	148,102
Uintah	135	392	225	0	296
Utah	23,023	35,542	34,727	41,685	23,992
Washington	0	489	199	1,500	3,785
Weber	61,379	35,428	47,442	65,715	86,181
Total	$1,343,924	$876,681	$1,010,016	$881,947	$802,182

Source: Federal Procurement Data System, Department of Defense.

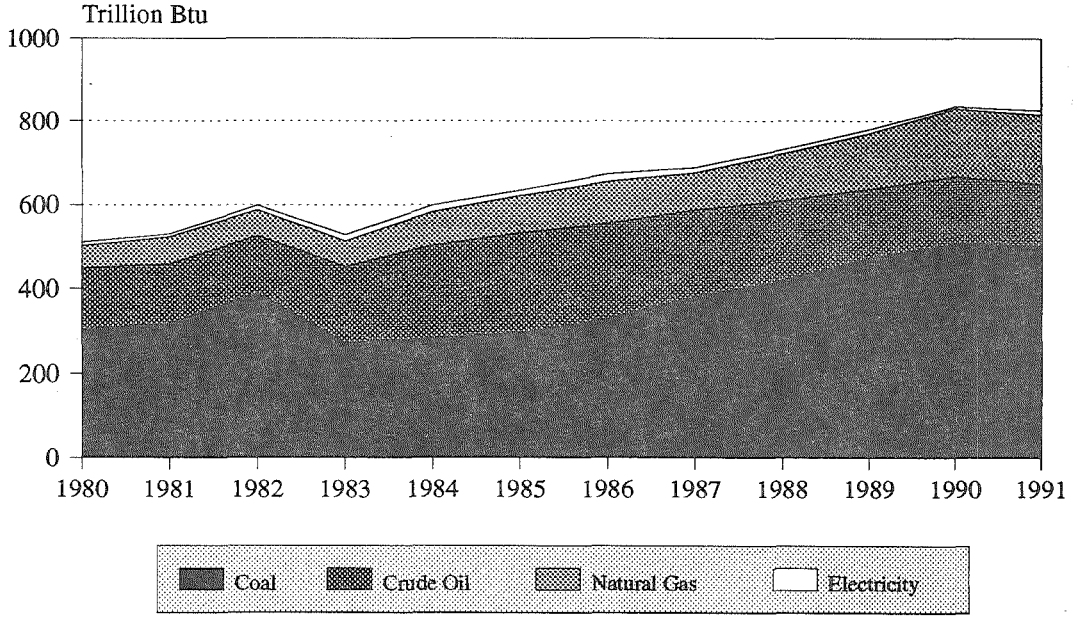
ENERGY AND MINERALS

Energy Production

Utah's reserves of coal, crude oil, natural gas and uranium have fostered the development of the energy industry. The structure of this industry includes not only the production of primary energy fuels, but also the conversion of these resources into other forms of energy such as petroleum products and electricity. In 1992, Utah's primary energy sectors will produce an estimated 800 trillion BTU of primary energy (Figure 50). This energy will be consumed in Utah, shipped to other states and exported to overseas markets. In 1992, coal will account for 62 percent of Utah's total primary energy production, natural gas production, 21 percent, crude oil, 16 percent and electricity generated from non-fossil fuel resources such as hydro and geothermal energy will make up the remaining 1 percent.

The value of primary energy production in Utah at the point of extraction is estimated to be $1.19 billion in 1992, a 6 percent decline from 1991. Coal will rank first in value and account for $469 million, or 40 percent of the total. The value of crude oil and natural gas production is expected to be $432 million and $244 million respectively, while electricity generated from non-fossil fuel sources will contribute $40 million.

Figure 50
Utah Energy Production
by Primary Source



Source: Utah Division of Energy

Crude Oil

For the past several years, the price for crude oil has been largely determined by whether OPEC adhered to production levels that balanced worldwide demand. This year was no different. Crude oil prices began 1992 substantially lower than the levels of early 1991, when the Persian Gulf War tightened world supplies and drove prices to their highest level in 10 years. Crude oil prices in Utah were $17.41 per barrel in January and remained near that figure through March. A decision by Saudi Arabia to cut production by 500,000 barrels per day in March led to a tightening of supplies on the world market and helped boost the average price paid for a barrel of Utah crude oil from $17.63 in March to $21.38 in June. With OPEC members adhering to production levels that balanced worldwide demand and the U.S. economy experiencing a modest recovery, crude oil prices in Utah stabilized at $20.00 for the remainder of 1992. For the year, the average wellhead price paid for a barrel of Utah-produced crude oil was $19.24, a 4 percent decrease from 1991's $19.99 (Table 49). Similarly, refiner acquisition costs for Utah refineries experienced a modest decrease in 1992, falling from $20.85 in 1991 to $20.45 per barrel.

While a federal tax credit for unconventional fuels (tight-sands and coalbed methane) contributed significantly to increased drilling and development of Utah gas reserves, oil well drilling slumped badly in 1992. Relatively stable oil prices, a string of San Juan County drilling successes by Chuska Energy and increased interest in Utah's Paradox Fold with the successful completion of Columbia Gas Company's Kate Springs #1-27 horizontal well in 1991 fueled expectations that 1992 oil drilling activity would equal or exceed 1991. Year-end figures indicate this has not occurred. Oil well completions totaled 55 and accounted for 23 percent of total wells drilled in Utah in 1992 (Table 50). This 31 percent drop from 1991 represented the fifth lowest total of oil wells completed in the last 20 years. Only three counties reported oil well completions in 1992 -- Duchesne, San Juan and Uintah. Duchesne led all counties with almost half of all wells completed in 1992 followed by San Juan County with 26 percent and Uintah County with 24 percent.

Due in large part to this drilling slump, Utah crude oil production will continue a seven-year decline that began in 1986. Production from oil wells in Utah's 150 producing fields will fall to 22.4 million barrels in 1992, an 11 percent decrease from 25.2 million barrels in 1991. Utah remains in 11th place among producing states in the United States. San Juan led all Utah counties with 6.8 million barrels of production. Most of this was exported for processing in New Mexico and Texas refineries. Duchesne County moved into second place with 5.9 million barrels at the expense of Summit County, whose production fell from 6.5 million barrels in 1991 to 5.8 million barrels in 1992. Uintah County was the fourth leading producer with 3.4 million barrels.

Petroleum Products

The production of petroleum products from Utah's five refineries is projected to climb to 47 million barrels in 1992. Utah refineries have been operating near full capacity during the past year. Crude oil inputs into the refineries will reach 49.9 million barrels, increasing refinery utilization rates from 86.6 percent to 88 percent. Table 51 presents data on the supply and disposition of crude oil in Utah. Utah's refineries will produce a record 25.7 million barrels of motor gasoline in response to growing demand in the transportation market. Production of aviation fuels, including jet fuels, will increase over 1991 production levels to 6 million barrels, while middle distillates will decline slightly to 15 million barrels.

An increase in demand for petroleum products combined with a tightening of crude oil supplies in the Western United States and closure of Amoco's Casper Wyoming refinery have led to higher prices for petroleum products throughout the Rocky Mountain supply region. Utah prices have tracked below average prices in the region resulting in increased pressure on supplies of petroleum products in Utah. In several instances, marketers from northern Colorado sent tanker trucks to refineries in Salt Lake City to pick up products, taking advantage of a price differential in excess of nine cents per gallon. Fearing they would run out of supply, some local refineries limited the volume of distillate fuels they allowed the tankers to load. Data on supply and consumption of petroleum products are in Table 52.

Due to falling production in Utah oil fields, Utah refineries continue to increase their dependency on crude oil supplies from Colorado, Wyoming and Nevada. In 1992, Utah's oil-producing basins are projected to supply only 17.1 million barrels of crude oil to Utah's refineries necessitating imports of 33.5 million barrels from other Rocky

Mountain states. This will mark the seventh consecutive year Utah refiners have increased their shipments of crude oil from other states to meet Utah's needs.

Perhaps the most important change in the motor fuel market in 1992 resulted from requirements of the Clean Air Act Amendments of 1990. Oxygenated motor fuels were introduced in Utah County during the third quarter of 1992. Salt Lake, Davis and Weber Counties will be required to use oxygenated motor fuels beginning November 1, 1993. Currently, local refineries are leaning toward blending ethanol due to lower cost. However, at least two Utah refineries have said they intend to use MTBE as their oxygenate. No shortages of oxygenates are anticipated along the Wasatch Front.

Natural Gas

For the second year in a row, the number of completed natural gas wells increased significantly. Although the expiration of the federal non-conventional fuel tax credit on December 31, 1992 is credited for much of this increased drilling activity, other factors have played a role. Because of other states' limits on gas production, expected cold weather and Hurricane Andrew, this year witnessed a reversal in the six-year downtrend in wellhead prices. Also in 1992, the Kearn River pipeline opened, providing Utah gas producers access to California markets. Additional pipeline capacity planned for the Uintah Basin by Questar Corporation and Colorado Interstate Gas Company will provide access to California, Midwest and East Coast markets. Together these factors are responsible for a 46 percent increase in gas well completions, a jump from 92 in 1991 to a projected 134 in 1992. Most of the drilling activity once again focused on the tight-sand formations in the Uintah Basin. Many more gas wells have been spudded but will not be completed until 1993 or later, providing well servicing companies employment opportunities beyond the expiration of the federal tax credit.

Gross natural gas production is projected to be 305,369 million cubic feet in 1992. This represents a 7.3 percent decline from 1991 and will mark the first year since 1983 that gross production of natural gas has fallen. Over 70 percent of gross production will come from the Anschutz Ranch East field in Summit County. Since 1980, on average, 46 percent of gross production has been put on the market with the remainder either reinjected to maintain reservoir pressure or flared. The effect of the rise in market price in 1992 on marketed production will partially offset the effect of the decline in gross production. Marketed production is projected to rise by 1.9 percent to 153,589 million cubic feet. Table 53 presents data on the supply and consumption of natural gas in Utah.

Several factors will affect the market for natural gas in the future. Foremost is federal environment and energy policy. The Energy Policy Act of 1992 and the Clean Air Act Amendments of 1990 both encourage the use of natural gas. However, in order for natural gas to increase market share, the perception that it is an undependable fuel source subject to high price volatility must be overcome. The main competitor for gas will continue to be coal. Not only is coal plentiful at relatively low and stable prices, but new environmental control technology will increase coal's attractiveness as a primary fuel source for utilities and large industrial users. The prevalence of fuel-switching technology will also affect the market penetration of natural gas and will limit the extent of future increases in gas prices. In addition, recent rulings by the Federal Energy Regulatory Commission should make the transportation sector more competitive by allowing producers to sell directly to end users.

Utah's production of natural gas will be affected by these factors as well as by the growth in the California market and the access to gathering and transportation pipelines. The demand for natural gas is expected to significantly increase over the next decade in California because of tightening environmental regulations and enhanced oil recovery projects. The effect of this growth on Utah's production will depend on the access Utah producers have to pipeline capacity and on whether California has access to Canadian natural gas. Added pipeline capacity is planned for the Uintah Basin. Construction of the Altamont pipeline, which would bring Canadian gas through Montana connecting with the Kearn River pipeline, has been postponed for a year. However, Pacific Gas Transmission Company is continuing construction of a pipeline that will bring gas to both California and the Pacific Northwest from British Columbia and Alberta. The ultimate effect on Rocky Mountain prices and on Utah producers will depend on the interplay of future gas demand and supply in the Western United States and Canada.

Coal

In 1992, 12 operators employing 2,216 miners will produce 21,521,000 tons of coal out of 16 operating mines. These numbers indicate that Utah coal production will stabilize at around 22 million tons per year (Table 54), which is the highest production level in the 123-year history of Utah coal production. It also indicates that if productivity continues to increase due to installation of long-wall mining machines, employment in Utah's coal industry will decrease.

During the last decade, Utah coal mines have been the most productive underground coal mines in the entire country. These mines also have been more productive than the majority of states with surface coal mines. In 1991, productivity rose from 37 tons per man day to 44 tons per man day, and in 1992 it will be 45 tons per man day. More than 70 percent of Utah coal production is distributed to the electric utilities in Utah, Nevada and California. During 1992, small amounts were also shipped to some of the Midwestern states.

Three percent of Utah's coal production (or 600,000 tons) is shipped to coke plants (Geneva Steel), and 13 percent (or 2.8 million tons) is shipped to other industrial sectors in California, Utah, Nevada, Washington, Arizona, Wyoming, Minnesota, Idaho and Oregon. Two percent of Utah coal is distributed to residential and commercial sectors, and more than 10 percent is shipped to the Pacific Rim countries of Japan, Taiwan, Korea and Hong Kong.

Utah coal prices have fallen continuously since 1982, but they appear to be stabilizing around $22 per ton. The value of coal produced in 1990 was $479 million; in 1991, it was $472 million; and in 1992 it will be $469 million.

Electricity

Utah electricity generation in 1992 was 7 percent higher than in 1991, overcoming the drop in annual electricity generation experienced in 1991. At a projected total of 32,372 gigawatthours, 1992 electricity generation is just slightly above that of 1990 (Table 55). In 1991, electricity generation fell to 94 percent of that generated in 1990. This was primarily due to the fact that electricity generation at Utah's Intermountain Power Project (IPP) was displaced by Northwest hydro power sales to Los Angeles Department of Water and Power (LADWP), IPP's biggest customer. Low water conditions in the Northwest in 1992 contributed to LADWP's renewed reliance on coal-fired generation from IPP for this block of electricity.

Electricity generated in 1992 was primarily from coal, hydro, natural gas, geothermal and petroleum. Coal-fired generation continued to account for the majority of Utah electricity generation, contributing about 95 percent or an estimated 30,913 gigawatthours. Despite six years of drought, hydro-generated electricity was up about 6.6 percent in 1992, contributing an estimated total of 643 gigawatthours or 2.0 percent of the total. This increase is primarily due to increased generation at Flaming Gorge Dam, Utah's largest source of hydroelectric power. The 10 to 15 percent expected increase in generation at Flaming Gorge occurred primarily as a result of dam operation changes adopted in 1992 as part of a five-year, multi-agency study to address downstream endangered fish concerns. The contribution of natural gas-fired generation continued to increase as Gatsby Unit 3 completed its first year of full operation. In 1992, natural gas contributed an estimated 606 gigawatthours, increasing from 1.0 to 2.0 percent of the total and up 39 percent from 1991. Output from Utah's geothermal resources is also expected to be up about 6.5 percent contributing an estimated 198 gigawatthours and maintaining a 1.0 percent share of electricity generation. The contribution of petroleum as a source of electricity generation continued to decline, dropping 18 percent from 1991 and contributing an estimated 40 gigawatthours of electricity to the total.

The average retail price of electricity to Utah consumers fell 3.7 percent due to a price decrease authorized for Utah Power by the Public Service Commission. This decrease is the last in a series of merger-related price decreases required by Utah Power in satisfaction of its merger agreement with Pacific Power.

Employment in the electricity industry continued a six-year decline primarily due to the Utah Power/Pacific Power merger. Employment in 1992 dropped by nearly 200 employees from 1991. This decline brings the total drop in employment in this industry to 1,077 employees since its peak in 1986 at 5,262.

Uranium

The national uranium glut continues to dominate market conditions in the United States. In Utah, this market glut has resulted in the shutdown of the only operable uranium mill in the state. The UMETCO uranium mill, located at White Mesa near Blanding, Utah, has been in standby shutdown since autumn of 1990. The mill operator/owner, UMETCO Minerals Corporation, has not been idle during this shutdown. They have spent $0.5 million on mill improvements and are planning to spend an additional $2.5 million before a planned 1994 fourth-quarter startup. Because of the mill shutdown, no uranium yellowcake (U_3O_8) has been produced there or any other location in Utah since 1990. The last production, occurring in 1990, was about two million pounds of yellowcake.

The price of uranium has been depressed for nearly a decade due to the uranium market glut. Recent circumstances threaten to further exacerbate this glut. Countries that formerly made up the Soviet Union, now called the Commonwealth on Independent States or CIS, are trying to sell their stockpiles of uranium. This uranium is being offered at low prices and in large quantities which have had a negative effect on Utah's uranium industry. The presence of these supplies of uranium will only increase the worldwide glut. One bright spot is that Utah's Senator Orrin Hatch has obtained an agreement with the CIS to limit export of its uranium to the United States by linking the amount offered to buyers to the U.S. uranium price. If the U.S. price is $13.50 or less per pound, the CIS will offer only small quantities of its uranium to U.S. buyers. When the price goes up to $21.00, imports of CIS uranium are limited to 21 million pounds of yellowcake. When the price is greater then $21.00 a pound, the CIS countries will be allowed to supply U.S. buyers with whatever quantities they are willing to buy.

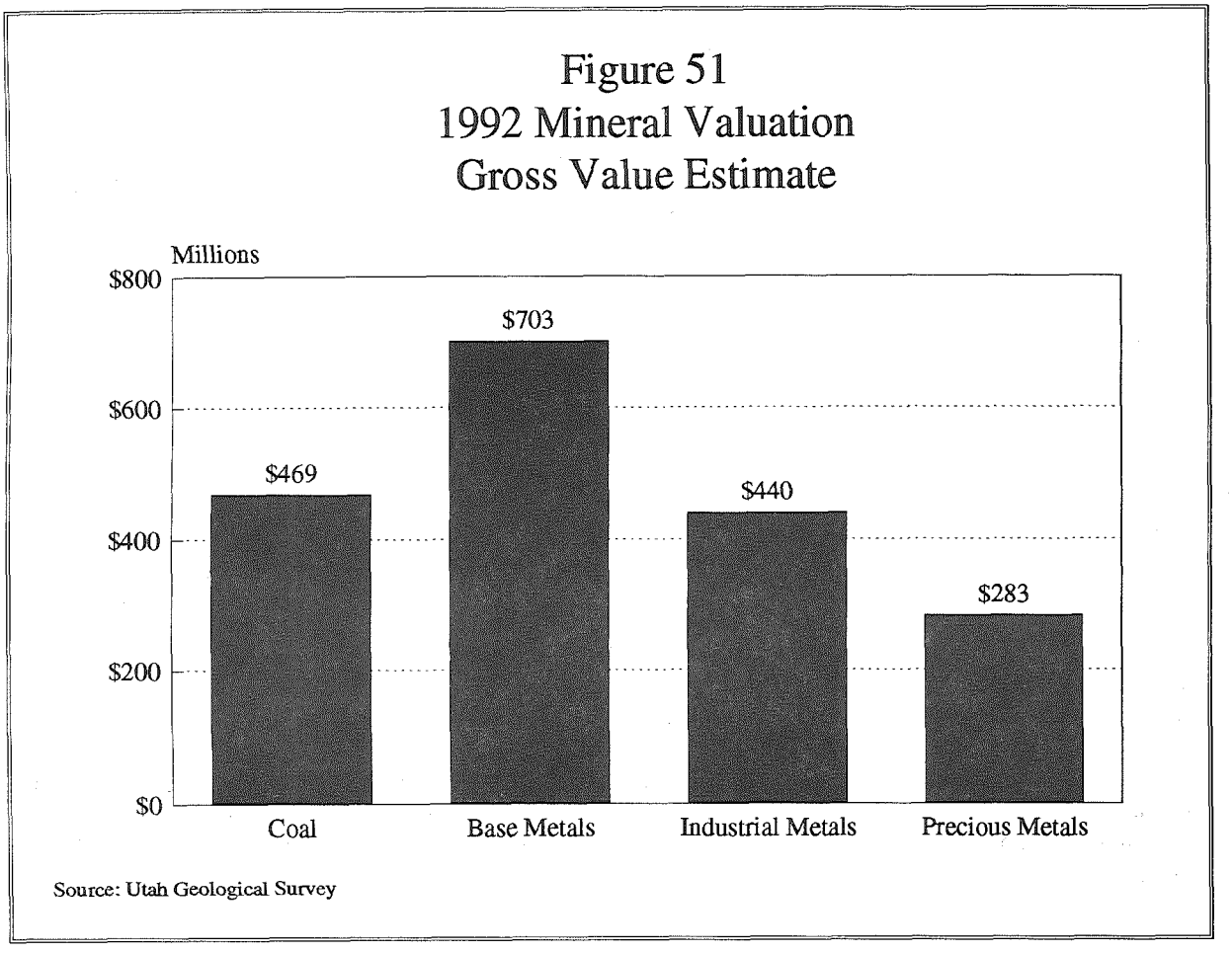
Energy legislation recently passed by Congress contains several provisions important to the uranium industry. Perhaps the most important are the provisions to streamline the Nuclear Power Plant licensing process. If proponents' arguments are correct, these provisions will help revive the ailing nuclear power industry and eventually the uranium industry as well.

Energy Industry Employment

Employment in the four primary energy producing sectors, oil, natural gas, coal and uranium, has fallen precipitously since 1981 (Table 56). From a high of 11,898 in 1981, employment has fallen 40 percent over the course of the past 11 years. Employment directly attributed to energy production in 1992 was 4,708 jobs, paying total wages of $130 million. These figures represented less than 1 percent of total employment of non-agricultural jobs in the state.

All sectors have experienced substantial decreases in employment since 1982 as reflected in the total energy industry figures. At the height of Utah's oil boom in 1981, 5,915 individuals were employed in exploration and production activities. By the end of 1989, employment in this sector had declined to a decade low of 1,891 -- 68 percent of 1981's peak level. Since 1989, employment in this sector has rebounded somewhat, increasing to 2,394 in 1992.

Despite significant annual increases in production since 1983, employment in Utah's coal industry continues to decline. The installation of longwall mining equipment in Utah's coal mines has been the primary reason for the reduction in manpower. Between 1982 and 1992, employment in Utah's coal fields has declined 44 percent to 2,394. Similarly, the uranium industry achieved record levels of production during the 1980s, yet employment through the third quarter of 1992 was only 6.4 percent of that in 1980. With the White Mesa Mill on standby status for all of 1992, as a result of an oversupply of yellowcake on the world market, the employment growth prospects for the uranium industry are expected to remain bleak for the near future.



Minerals

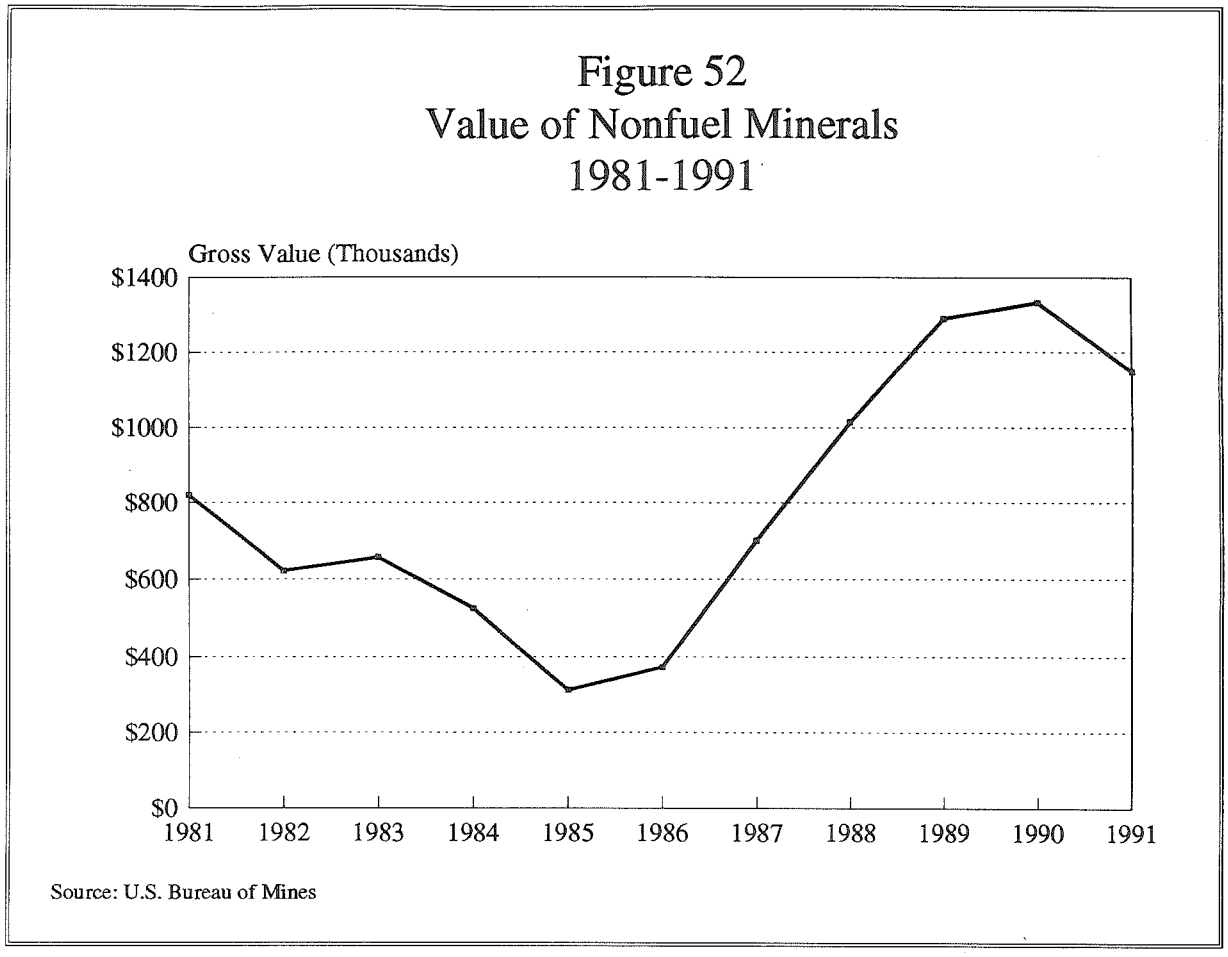
The value of Utah's mineral production in 1992 is estimated at $1.9 billion, the same level as in 1991. Contributions from each of the major industry segments are projected as follows (Figure 51): base metals $703 million (37 percent of total); coal $469 million (25 percent of total); industrial minerals $440 million (23 percent of total); precious metals $283 million (15 percent of total).

Coal mining is thoroughly addressed in the previous section. Production values are shown here for comparative purposes only.

Production of coal and precious metals showed a slight decline, while production of industrial minerals and base metals showed an improvement. Commodity prices for base metals, precious metals, and coal showed a decline over 1991 price levels, while prices for industrial minerals, especially magnesium, showed an improvement.

The outlook for 1993 is mixed. Market prices for precious metals, coal, and base metals are expected to remain depressed, while industrial minerals are expected to remain steady or slightly improve.

Through November 1, 1992, the Utah Division of Oil, Gas, and Mining received applications for 46 new Small Mine permits (less than 5 acres disturbance) and three Regular Mine permits (5 acres and larger disturbance). As of November 1, 1992, 65 regular mines and 156 small mines were classified as active operations. In 1991, 103 mines reported production.



In 1991 Utah ranked eighth in the nation in value of nonfuel mineral production. The state ranked first in the production of beryllium, second in the production of potash and magnesium, and third in the production of both copper and gold. Utah ranked fourth in overall metal production and accounted for almost 10 percent of the value of all domestic metal production. From 1981 through 1991 the value of nonfuel mineral production in Utah has increased from $820 million to $1.15 billion (Figure 52). In 1990 the value of nonfuel minerals reached an all time high of $1.33 billion.

Mineral exploration continued its three year decline throughout the state. Notices of Intent filed to November 1, 1992 total 60 compared to 73 for all of 1991, and 92 in all of 1990. Due to the continued weakness in precious metal prices and changes in the holding cost for mineral claims, this pattern is expected to continue for the next several years.

Base Metals and Precious Metals

Copper production from Kennecott's Bingham Canyon Mine increased in 1992 over the 1991 production of 260,000 tons and accounted for nearly half of the value of all metals produced from Utah's mines. Kennecott completed a $227 million mill expansion program involving construction of a fourth grinding and flotation circuit. This expansion increased milling capacity to 142,000 tons per day and increased copper and by-product capacity by 15 percent. By-products include gold, silver, and molybdenum.

Gold production state-wide in 1992 is estimated at nearly 767,000 Troy ounces, a small (4.6 percent) increase over the 1991 production of 733,000 Troy ounces. The Bingham Canyon Mine was the largest gold producer with over 450,000 Troy ounces as a by-product of copper mining. The largest primary producer was the Barrick Mercur Gold

Mine (estimate 121,000 Troy ounces) located in Tooele County. Other primary producers are, in descending order of production: Kennecott's Barneys Canyon Mine in Salt Lake County, Tenneco Mineral's Goldstrike Mine in Washington County, North Lily Mining Company's leaching operation at Mammoth in Juab County, and Sunshine Mining Company at the Trixie Mine near Eureka, in Utah County. The Trixie Mine was shut down indefinitely in late October and it is not known when or if production will resume.

Silver is produced primarily as a by-product from the Bingham Canyon Mine with lesser amounts from other precious metals producers. The estimate for 1992 production is 4.6 million Troy ounces, an increase of 18 percent over 1991 production of 3.9 million Troy ounces. Utah's only primary silver producing mine (Hecla Mining Company's Escalante mine) was closed in 1990.

Molybdenum production is projected to increase by 33 percent in 1992. All of the production is a by-product from the Bingham Canyon operation. The current price for molybdenum concentrates is extremely low ($1.98/lb.) and is not expected to rise significantly in the near term.

Brush Wellman, Inc. continued to be the nation's leading producer of beryllium. Ore is produced at its Topaz-Spor Mountain Mine and processed at the company's facility located a few miles north of Delta in Juab County. In 1992 approximately 400,000 pounds of beryllium oxide will be produced at the Delta plant and sent to the company-owned refinery and finishing plant in Ohio. The demand for beryllium is currently depressed due to curtailments in the defense and automobile industries. Foreign markets for beryllium products are also affected by the depressed European economy.

In 1992 Geneva Steel will produce an estimated 550,000 tons of iron ore from its operations west of Cedar City for use in its steel plant at Vineyard. This estimate is a decrease of 35 percent from 1991 production of 850,000 tons. Due to the continued slump in the steel industry, no improvements are forecast for 1993.

Industrial Minerals

Industrial rocks and minerals continued to be an important segment of Utah's mineral industry, comprising 31 percent ($440 million) of the $1.4 billion total nonfuel mineral revenue estimate for 1992. Major commodities produced include magnesium metal, Portland cement, sand and gravel, salt, sodium sulfate, magnesium chloride, lime, phosphate, common clay, and gypsum. Commodities produced in lesser amounts include bentonite and fuller's earth, potassium sulfate, building stone, lightweight aggregate, fluorspar, masonry cement, gemstones, and industrial sand.

Magnesium Corporation of America (Magcorp) was the largest contributor in the industrial minerals segment with the production of magnesium metal from its electrolytic plant at Rowley in Tooele County. The 1992 production estimate of 35,000 tons is substantially higher than 1991. Magnesium compounds are derived from brines from the Great Salt Lake. The market price for magnesium metal has stabilized following two years of precipitous declines due to marketing practices by Canadian exporters. The market for magnesium metals is expanding and should show good improvements over the next several years.

Portland cement was the second largest contributor to the value of industrial minerals. Two operators produce Portland cement in Utah: Holnam, Inc. which purchased Ideal Basic Industries and Ash Grove Cement Company, Inc. which purchased Martin Marietta's Leamington cement operation. Holnam's Devils Slide operation is located east of the town of Morgan in Morgan County, and Ash Grove's Leamington plant is located east of Lynndyl in Juab County. The two plants are operating at capacity and should produce over 1 million tons of cement products in 1992 with an estimated value of $65 million.

Sand and gravel, and crushed stone combined to be the third largest contributor with a production value estimated to exceed the 1991 value of $48 million.

Limestone usage continues to expand while dolomite production remains steady. Chemstar, Inc. and Continental Lime, Inc. are the two largest commercial suppliers of calcined limestone (quick lime) in the state with a combined capacity of 550,000 tons per year. Both operations are running near capacity and serve markets in Utah and

surrounding states. Chemstar's operation is located near Grantsville in Tooele County. Continental Lime's facility is located in the Cricket Mountains, approximately 35 miles southwest of Delta in Millard County.

In addition to mining iron ore, Geneva Steel produces over 200,000 tons of limestone and dolomite annually from a quarry located near the southeast end of Utah Lake. The limestone is used in the steel plant while the dolomite is processed and marketed for use in underground coal mines as a fire suppressant.

Salt production is estimated to exceed 1.9 million tons in 1992 for a total dollar value of over $75 million. Most of this production comes from companies operating around the Great Salt Lake. A new operation, Crystal Peak Minerals, is producing a small amount of salt from subsurface Sevier Lake brines in Millard County. Salt production state-wide has grown over 80 percent since 1988.

In addition to salt (sodium chloride), sodium sulfate, magnesium chloride, and potassium sulfate are produced from Great Salt Lake brines. Great Salt Lake (GSL) Minerals, one of the largest operators on the lake, is the largest domestic supplier of sodium sulfate, a fertilizer which is marketed primarily to Pacific Rim countries as well as Kentucky and North Carolina. GSL has doubled its pond acreage (40,000 acres) over the past two years and will produce over 1 million tons of brine products in 1992. The majority of their production is in the form of industrial salt products and potassium sulphate.

Potash production is estimated at 80,000 tons in 1992. Steady increases in the market and pricing are being forecast for 1993. Two companies produce potash in Utah: Reilly Wendover, Inc. from subsurface brines near Wendover and Moab Salt Company from solution mining of a sylvite bed near Moab.

Utah's only phosphate operation (FS Industries' Little Brush Creek mine) is located 11 miles north of Vernal in Uintah County. FS Industries is a partnership comprised of Farmland Industries of Kansas City, Missouri and J. R. Simplot of Boise, Idaho. Approximately 2.4 million tons of ore are processed into 860,000 tons of slurry concentrate and transported to the company's Rock Springs, Wyoming fertilizer plant via a 90-mile underground pipeline. Although fertilizer prices are at a 30-year low, the mine will continue to operate at the same level due to its unique situation as a captive operation. The value of the phosphate concentrate produced in 1992 is approximately $27 million.

Gypsum production remained steady in 1992. The two major producers are Georgia Pacific Corporation and United States Gypsum. Both companies have wall board manufacturing facilities located near Sigurd in Millard County. Several independent operators supply raw gypsum to these two plants as well as to regional cement companies where it is used as an additive to retard the setting time of cement.

The continued depressed market for uranium resulted in no production for 1992. The only processing facility in the state (UMETCO's White Mesa mill) remained idle during the year.

Several significant changes have taken place in the industrial minerals industry over the last two years. Chevron Oil Company sold its Little Brush Creek phosphate mine, plant, and slurry line to FS Industries Ltd. Chevron also sold its American Gilsonite Company to Stratford Enterprises Company of Tulsa, Oklahoma. American Gilsonite Company operates the Bonanza gilsonite mine at Bonanza, Uintah County. Chevron is no longer active in Utah's mining industry.

In 1991 Kennecott acquired Morton Salt Company's Saltair facility on the Great Salt Lake. Morton moved its operation to a site near Grantsville which was previously owned by North American Salt. North American then moved its operation to the recently expanded GSL Minerals operation located on the north end of the lake west of Ogden. Both North American and GSL are owned by G. Harris Associates.

Table 49
Utah Energy Prices

	Field Price (Dollars per Unit)			Average End-Use Price (Dollars per Unit)					
						Petroleum Products			
	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	$0.045	--	--	--	$3.12
1981	$26.87	$34.14	$1.87	$32.79	$0.049	--	--	--	$3.43
1982	$29.42	$30.50	$2.47	$33.38	$0.055	--	--	--	$3.10
1983	$28.32	$28.12	$2.56	$30.64	$0.059	$0.832	$0.864	--	$3.91
1984	$29.20	$27.21	$3.16	$32.14	$0.061	$0.851	$0.819	--	$4.83
1985	$27.69	$23.98	$3.23	$31.62	$0.065	$0.796	$0.814	$0.844	$4.40
1986	$27.64	$13.33	$2.90	$31.33	$0.067	$0.497	$0.529	$0.547	$4.27
1987	$25.67	$17.22	$1.82	$26.90	$0.065	$0.631	$0.580	$0.565	$4.58
1988	$22.85	$14.24	$1.70	$28.58	$0.063	$0.524	$0.562	$0.533	$4.27
1989	$22.00	$18.63	$1.58	$27.87	$0.058	$0.632	$0.654	$0.631	$4.33
1990	$21.78	$22.61	$1.64	$26.47	$0.056	$0.733	$0.750	$0.796	$4.52
1991	$21.56	$19.99	$1.56	$26.20	$0.054	$0.653	$0.681	$0.767	$4.50
1992	$21.81	$19.24	$1.59	$26.51	$0.052	$0.656	$0.698	$0.724	$4.67

Source: Utah Division of Energy, Energy Data Information System.

Table 50
Oil and Natural Gas Development in Utah

	Drilling Permits	Average Active Rotary Rigs	Wells Completed			
			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	253	5	49	16	28	93
1991	400	11	80	92	37	209
1992 (e)	349	14	55	134	51	240

(e) = estimate

Source: Utah Division of Energy, Energy Data Information System.

Table 51
Supply and Disposition of Crude Oil in Utah
(Thousand Barrels)

	Supply		Disposition			
	Field Production	Imports	Utah Crude Exports	Refinery Receipts	Refinery Inputs	Refinery Stocks
1980	24,979	28,769	8,232	45,516	45,599	757
1981	24,309	27,257	7,866	43,700	42,673	762
1982	23,595	25,477	7,826	41,246	40,368	614
1983	31,045	20,886	8,316	43,615	43,185	632
1984	38,054	19,234	13,616	43,672	43,746	607
1985	40,971	19,175	14,597	45,549	45,021	556
1986	39,172	21,681	15,721	45,132	45,034	588
1987	35,788	22,013	12,137	45,664	44,483	603
1988	33,018	24,275	8,411	48,882	47,618	593
1989	28,425	24,529	6,179	46,775	46,767	524
1990	27,604	29,225	7,725	49,104	48,985	658
1991	25,227	33,140	8,961	48,647	48,852	497
1992 (e)	22,448	35,263	7,018	49,889	49,804	565

(e) Estimate

Source: Utah Division of Energy, Energy Data Information System.

Table 52
Supply and Consumption of Petroleum Products in Utah
(Thousand Gallons)

	Supply			Consumption by End-Use					
	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	251,034	251,874	1,348,704	981,323
1986	1,776,367	337,091	78,246	736,722	186,690	307,944	234,570	1,465,926	839,288
1987	1,797,929	349,466	66,402	749,784	212,856	285,222	245,532	1,493,394	870,198
1988	1,918,644	361,879	75,936	763,224	213,738	308,658	244,692	1,530,312	979,726
1989	1,913,310	393,766	91,980	726,726	218,442	259,728	277,452	1,482,348	937,692
1990	1,929,270	503,917	72,786	698,376	226,254	308,784	254,562	1,487,976	1,069,984
1991	1,894,201	477,078	68,576	749,824	223,990	313,983	265,312	1,553,109	1,104,054
1992 (e)	1,958,237	493,134	67,998	763,711	228,313	312,630	268,785	1,573,440	1,196,875

(e) Estimate

Source: Utah Division of Energy, Energy Data Information System.

Table 53
Supply and Consumption of Natural Gas in Utah
(Million Cubic Feet)

	Supply		Consumption by End-Use					
	Gross Production	Marketed	Residential	Commercial	Industrial	Utilities	Electric Other	Total
1980	87,766	47,857	42,949	22,503	38,386	4,758	8,445	117,041
1981	90,936	58,865	40,589	21,753	35,568	2,732	1,231	101,873
1982	100,628	56,367	53,003	27,798	34,574	2,573	7,091	125,039
1983	96,933	54,700	42,813	23,640	29,632	740	5,756	102,581
1984	183,062	73,154	47,719	27,023	31,606	576	9,390	116,314
1985	210,019	80,122	44,884	25,120	27,072	657	10,202	107,935
1986	238,388	90,013	47,199	25,434	21,589	704	14,391	109,317
1987	262,282	79,597	40,597	21,685	16,914	556	18,493	98,245
1988	277,566	101,028	43,356	20,672	25,310	537	18,251	108,126
1989	277,811	129,089	45,438	20,537	29,032	758	17,248	113,013
1990	321,634	145,875	43,408	20,660	31,094	516	20,594	116,272
1991	329,533	140,170	51,928	27,695	33,795	4,636	14,602	132,656
1992 (e)	305,369	158,589	44,910	24,049	37,512	6,391	13,992	126,854

(e) = estimate

Source: Utah Division of Energy, Energy Data Information System.

Table 54
Supply and Consumption of Coal in Utah
(Thousand Short Tons)

	Supply			Consumption by End-Use				
	Utah Production	Imports	Exports	Residential & Commercial	Coke Plants	Industrial	Electric Utilities	Total
1980	13,236	1,215	6,728	237	1,528	446	4,895	7,106
1981	13,808	1,136	8,764	196	1,567	714	4,956	7,432
1982	16,912	797	8,261	177	841	822	4,947	6,787
1983	11,829	937	6,133	191	839	629	5,223	6,882
1984	12,259	1,539	6,432	259	1,386	548	5,712	7,905
1985	12,831	1,580	6,549	252	1,288	438	6,325	8,303
1986	14,269	1,145	5,366	191	814	351	6,756	8,112
1987	16,521	1,165	5,633	123	231	276	11,175	11,806
1988	18,164	2,448	5,925	196	1,184	589	12,544	14,513
1989	20,517	2,367	7,283	231	1,178	686	12,949	15,044
1990	22,012	2,137	7,467	181	1,318	676	13,563	15,738
1991	21,875	2,007	7,954	320	1,310	624	13,472	15,726
1992 (e)	21,521	2,220	8,509	201	1,335	693	12,988	15,217

(e) = estimate

Source: Utah Division of Energy, Energy Data Information System

Table 55
Supply and Consumption of Electricity in Utah
(Gigawatthours)

	Supply			Consumption by End-Use				
	Fossil Fuel	Renewable	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	29,371	789	30,160	4,449	4,986	5,676	722	15,833
1992 (e)	31,531	841	32,372	4,363	5,131	6,004	672	16,165

(e) Estimate

Source: Utah Division of Energy, Energy Data Information System.

Table 56
Energy Employment in Utah

	Uranium	Coal	Petroleum 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	4,720	3,948	2,769	24,274
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	14,000
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	98	2,216	2,394	844	1,379	4,185	2,213	13,330

Source: Utah Division of Energy, Energy Data Information System.

INFORMATION TECHNOLOGY

The information technology industry includes those industries that produce or provide computer-related or telecommunications-related products or services. Utah's information technology industry is an important component of the state's economy and can be better understood by examining data for this complex industry.

Information is crucial in an advanced economy such as the United States' economy. An important, perhaps defining, feature of such economies is that the amount of information expands at an increasing rate. This fact has implications for all facets of society. Because there is more available, and more that is relevant, the means to absorb ever increasing amounts of information must be developed. This is why economies that develop strong information technology industries will thrive, which, in turn, is why understanding information technology is important.

Definition

Defining the information technology sector is difficult. The U.S. Office of Management and Budget (OMB), which oversees the nation's industrial classification and publishes the *Standard Industrial Classification Manual*, does not use the Standard Industrial Classification (SIC) to define an information technology sector. The reason is that the activities characterizing a given information technology establishment do not always correspond to the general definition of the SIC code in which the establishment is classified. For example, a contractor installing telecommunications equipment might be considered part of the information technology industry. Although such a contractor is classified in SIC 1731, electrical work, not all electrical work is related to information technology. From OMB's perspective, anomalies like electrical work are too numerous to allow the accurate classification of an information technology industry. Nonetheless, information technology exists, and is produced by the information technology industry. Using SIC industries which appear to be information technology oriented, this chapter examines the characteristics of this industry in Utah, reporting employment, wages and number of firms for the state as a whole and by county.

Utah Information Technologies Association

Recognizing the importance of information technology to Utah, individuals from a wide spectrum of industry, government, and academia formed the Utah Information Technologies Association (UITA) during 1991. UITA defines the industry to include "enterprises which produce or provide computer-related or telecommunications-related products or services, and which are headquartered or operate in Utah." Using this definition, establishments distributing information technology, which are included in wholesale and retail trade, are also included. In contrast, however, firms using information technology to market their product, which include telemarketing enterprises such as Matrixx Marketing, and credit card payment centers such as Discover Card and American Express, are not included. Though these establishments could not operate without information technology, because they use it, rather than produce or provide it, they are not considered part of the industry.

In its *Utah Information Technologies Industry: 1992 Industry Directory*, UITA estimates state-wide Information Technology employment to have been 55,000 during the fourth quarter of 1991. Although the time periods are different, the primary reason for the discrepancy between UITA's employment estimate and the estimate presented in this chapter is methodological. An estimate based on the SIC, which requires the majority of employment in an SIC industry to be information technology related before the industry is categorized as information technology, will likely underestimate employment. While 30 SIC industries have been included, information technology enterprises operate in at least 60 SIC industries. Using the SIC may slightly overestimate employment in some of the industries which are included, but this method does not count any of the employment in the industries which are excluded from information technology. On balance, then, the estimates of employment and total wages presented in this chapter will probably be low.

Number of Firms, Employment, Wages

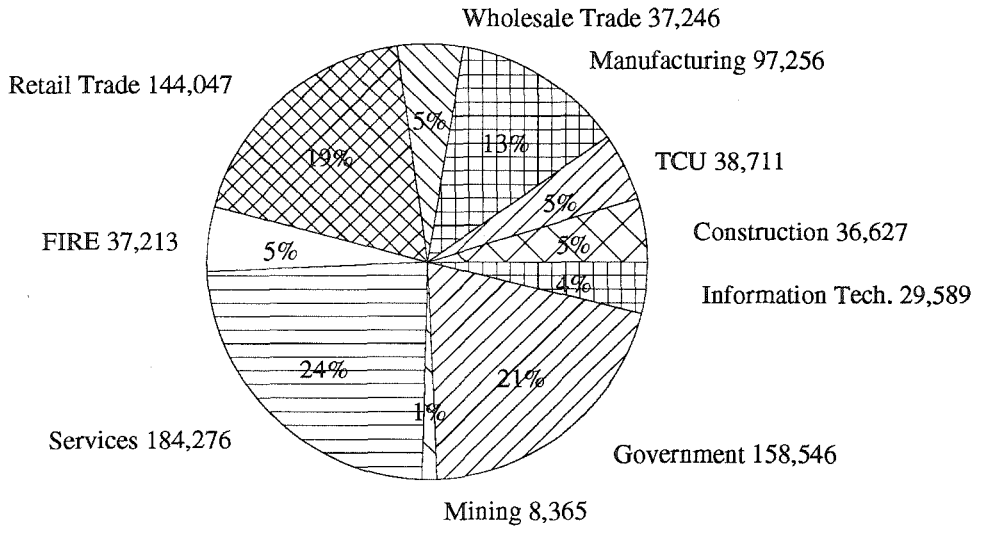
Notwithstanding the problems associated with using the SIC to define information technology, Table 57 presents the list of SIC industries, and the number of firms, employment and total payroll wages in the industry during the second

quarter of 1992. The SIC industries are more suggestive, rather than definitive, of information technology. In Utah, though perhaps not elsewhere, the majority of employment in each of the 30 SIC industries listed in Table 57 appears to be at information technology firms. The number of firms and employment are as reported to the Department of Employment Security for the month of June, but wages are as reported for the entire second quarter. The average annual wage, therefore, is annualized based on June employment and second quarter wages.

While the 1,218 information technology firms comprised 2.7 percent of the state's 44,831 nonagricultural firms, and the 29,589 jobs comprised 3.8 percent of the 771,877 nonagricultural employment during June of 1992, wages were $257 million, which was 6.4 percent of the state's $4 billion nonagricultural wages during the second quarter of 1992. Consequently, the industry's average wage of $34,704 was 167 percent of the state's $20,753 average wage. On an annual basis, over $1 billion in wages are paid to information technology workers.

Figure 53 displays June 1992 nonagricultural employment by major industry for the state as a whole. As discussed above, information technology is comprised of a number of minor industries which the SIC includes in manufacturing; transportation, communications, and utilities; wholesale and retail trade; and services. In Figure 53, these information technology minor industries are not included in their respective SIC major industries. While not nearly as large as services, retail trade, manufacturing or government, information technology is comparable to construction; transportation, communications and utilities; wholesale trade; and finance, insurance, and real estate. Moreover, it is three times the size of mining. Thus, measured by employment, information technology is an important part of the Utah economy.

Figure 53
Nonagricultural Employment
by Major Industry



Source: Ut. Dept. of Employment Security

Two of the 30 SIC industries, prepackaged software (SIC 7372) and telephone communications (SIC 4813), account for over 1/3 of information technology employment. Prepackaged software, which has 22 percent of employment, includes industry giants WordPerfect and Novell, as well as other firms such as Folio, Equis International and Wicat, which are gaining national recognition. Telephone communications, which has 15.2 percent of employment, includes the major phone companies, US West, AT&T, MCI, and Sprint, as well as a host of other local and regional companies. Companies such as Cellular One are included in radiotelephone communications (SIC 4812). Since software provides over 1/5 of information technology jobs, it will play a leading role in the industry's evolution. And the fact that software pays wages which average 117 percent of the industry's, and almost twice the state average, will tend to keep information technology a very high-paying industry.

Interestingly, the two highest paying of the information technology SIC industries, computer manufacturing (SIC 3571) and rental and leasing (SIC 7377), are commonly thought of as central to information technology. Most of the other SIC industries directly related to computers, such as wholesale distribution (SIC 5045), programming (SIC 7371), and facilities management (SIC 7376), pay near the industry average and substantially above the state average. Since computers make information technology a meaningful term, the fact that much of the work associated with computers is high-salaried bodes well for information technology as a tool for Utah's economic development.

Table 58 presents the number of firms, employment and payroll wages for the information technology and nonagricultural sectors, by county during second quarter 1992. The rise and advance of information technology is often discussed, almost mystically, in terms of lone inventors working feverishly to produce path breaking innovations which revolutionize commerce and industry. Given the histories of Apple and Microsoft, and the respective importance of Steven Jobs and Bill Gates to these companies, there must be some truth to these stories. Nonetheless, the activity engaged in by individual inventors is not well measured by the payroll reports employers file with the Department of Employment Security, which are the primary data source for this chapter. The importance of individual genius and its distribution throughout Utah can only be speculated. But when payroll data are examined, the striking feature of information technology in Utah is that it is concentrated in Salt Lake County and Utah County.

Not surprisingly, given that distributors as well as producers are included, Salt Lake County dominates information technology. With 763 information technology firms, it has almost 2/3 of all the industry's firms. Salt Lake County has over four times as many firms as Utah County, which, with 189, has the second largest number of firms. Between them, Salt Lake County and Utah County have 78 percent of information technology firms, but 88 percent of the jobs. Although, with 61 percent of the jobs, Salt Lake County dominates employment, Utah County still has 27 percent. Thus, Salt Lake County's dominance of information technology is less pronounced when employment, rather than number of firms, is considered. As a consequence, firms average 43 employees in Utah County, but only 24 employees in both Salt Lake County and the state as a whole. However, average firm size in Utah County is skewed by WordPerfect, Novell and Signetics, which together account for almost half of employment in that county.

As a percent of nonagricultural payroll wages, information technology is most important in the counties of: Utah (16.1 percent), Salt Lake (7.1 percent), Weber (3.5 percent), Summit (3.1 percent), and Cache (2.1 percent). Average wages earned by information technology workers are more than twice the state nonagricultural average in the counties of: Grand (232 percent), Sanpete (228 percent), and Millard and Sevier (204 percent). Unfortunately, in these four counties where information technology wages are so high, the number of workers constitute less than 1 percent of employment.

Figure 54 displays information technology employment as a percent of nonagricultural employment during June, 1992, across the state, which is the 11th column of Table 58. Arguably, this is the best measure of information technology's relative importance to a locale's economy, and its concentration in the state. By this measure, information technology in Utah appears to be centered in Utah County, with strong satellite development in Salt Lake County. Information technology is important in Garfield County because the county has a small employment base and the South Central Utah Telephone Association is located there. In light of the national recognition of Utah Valley as the county's third hot spot, after California's Silicon Valley and North Carolina's Research Triangle, the result that information technology in Utah is centered in Utah County is not surprising. Furthermore, sales of software products and services originating in the Provo-Orem area are second in the world only to Redmond, Washington, where Microsoft is located.

Table 57
Number of Firms, Employment and Wages in Utah's Information Technology Industry Second Quarter 1992

SIC	Industry	Firms	Jobs	Wages	Average Wage	Average Wage As a Percent of Non-ag Average	Average Wage As a Percent of IT Average	Jobs As a Percent of Total IT Jobs
3571	Electronic computers	16	2,496	$28,167,074	45,140	217.5%	130.1%	8.4%
3572	Computer storeage devices	2	D	D	D	D	D	D
3575	Computer terminals	2	D	D	D	D	D	D
3577	Computer peripheral equipment, not elsewhere classified	14	251	1,618,890	25,799	124.3%	74.3%	0.8%
3578	Calculating and accounting equipment	0	0	0	NA	NA	NA	0.0%
3661	Telephone and telegraph apparatus	3	120	643,380	21,446	103.3%	61.8%	0.4%
3663	Radio & TV communications equipment	13	762	6,245,781	32,786	158.0%	94.5%	2.6%
3669	Communications equipment, not elsewhere classified	1	D	D	D	D	D	D
3672	Printed circuit boards	24	2,108	17,071,876	32,394	156.1%	93.3%	7.1%
3674	Semiconductors and related devices	8	1,841	16,699,413	36,283	174.8%	104.6%	6.2%
3695	Magnetic & optical recording media	3	3	18,072	24,096	116.1%	69.4%	0.0%
3823	Process control instruments	9	213	960,408	18,036	86.9%	52.0%	0.7%
3825	Instruments to measure electricity	6	70	417,142	23,837	114.9%	68.7%	0.2%
4812	Radiotelephone communications	18	332	2,704,184	32,581	157.0%	93.9%	1.1%
4813	Telephone communications, except radio	126	4,498	37,342,551	33,208	160.0%	95.7%	15.2%
4822	Telegraph & other communications	2	D	D	D	D	D	D
4841	Cable & other pay TV services	32	464	2,832,413	24,417	117.7%	70.4%	1.6%
5045	Computers, peripherals & software	160	1,766	17,988,307	40,744	196.3%	117.4%	6.0%
5065	Electronic parts & equipment	153	992	8,833,571	35,619	171.6%	102.6%	3.4%
5734	Computer & software stores	123	852	4,731,899	22,215	107.0%	64.0%	2.9%
7371	Computer programming services	161	1,073	8,422,910	31,399	151.3%	90.5%	3.6%
7372	Prepackaged software	74	6,496	66,128,788	40,720	196.2%	117.3%	22.0%
7373	Computer integrated systems design	53	1,214	11,426,271	37,648	181.4%	108.5%	4.1%
7374	Data processing and preparation	53	1,168	7,713,847	26,417	127.3%	76.1%	3.9%
7375	Information retrieval services	11	1,002	3,568,288	14,245	68.6%	41.0%	3.4%
7376	Computer facilites management	4	18	155,713	34,603	166.7%	99.7%	0.1%
7377	Computer rental & leasing	9	32	352,187	44,023	212.1%	126.9%	0.1%
7378	Computer maintenance & repair	48	144	1,025,023	28,473	137.2%	82.0%	0.5%
7379	Computer related services, not elsewhere classified	74	367	2,678,872	29,198	140.7%	84.1%	1.2%
8243	Data processing schools	16	128	555,466	17,358	83.6%	50.0%	0.4%
	Information Technology	1,218	29,589	256,711,631	34,704	NA	NA	NA
	Non-Agricultural	44,831	771,877	4,004,787,102	20,753	NA	NA	NA
	Information Technology as a percent of Non-Agricultural	2.7%	3.8%	6.4%	167.2%	NA	NA	NA

D = Not Disclosed

Sources: Utah Department of Employment Security and Utah Office of Planning and Budget.

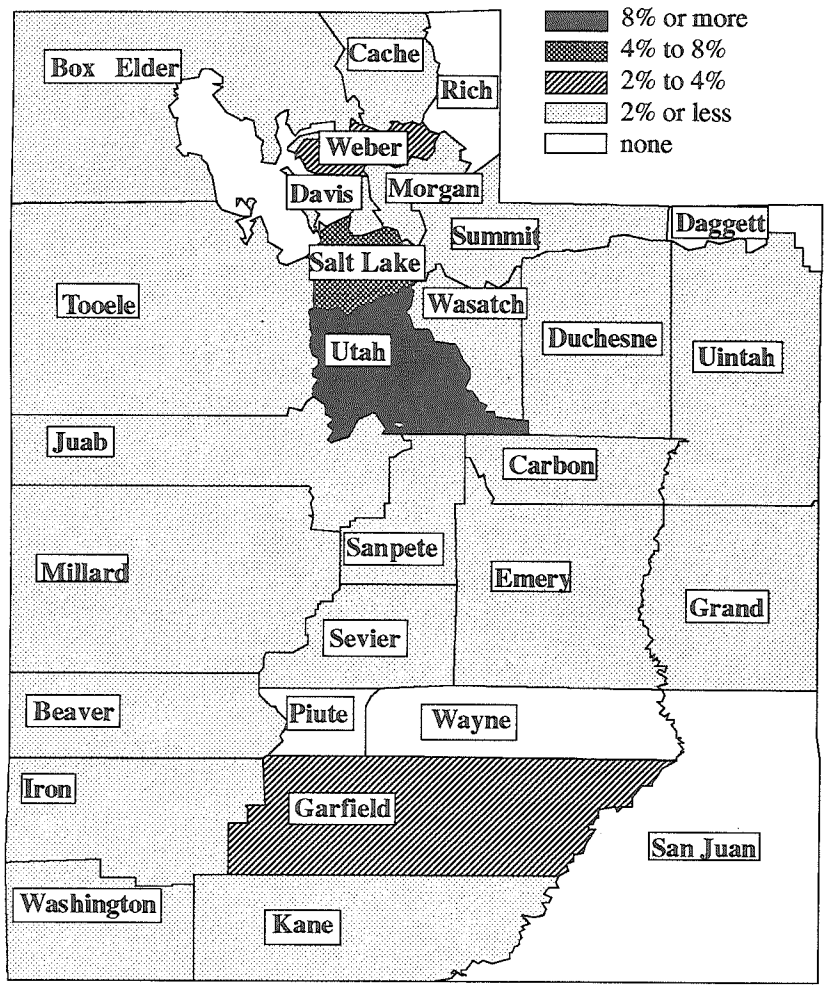
Table 58
Number of Firms, Employment and Wages in Utah's Information Technology Industry by County During Second Quarter 1992

	Information Technology Industry				Non Agricultural Total				Information Technology As a Percent of Non Agricultural Total			
County	Firms	Jobs	Wages	Average Annual Wage	Firms	Jobs	Wages	Average Annual Wage	Firms	Jobs	Wages	Average Annual Wage
Beaver	2	D	D	D	183	1,419	5,489,350	15,474	1.1%	D	D	D
Box Elder	6	37	316,374	34,203	745	15,246	107,578,206	28,225	0.8%	0.2%	0.3%	121.2%
Cache	36	524	2,625,559	20,042	1,546	30,823	126,669,893	16,438	2.3%	1.7%	2.1%	121.9%
Carbon	6	44	312,335	28,394	574	7,844	39,899,285	20,346	1.0%	0.6%	0.8%	139.6%
Daggett	0	0	0	D	49	456	1,866,452	16,372	0.0%	0.0%	0.0%	D
Davis	80	621	5,530,771	35,625	3,218	62,552	322,743,885	20,638	2.5%	1.0%	1.7%	172.6%
Duchesne	3	37	278,059	30,060	430	4,110	18,425,614	17,932	0.7%	0.9%	1.5%	167.6%
Emery	2	D	D	D	247	3,906	26,090,927	26,719	0.8%	D	D	D
Garfield	2	D	D	D	191	1,865	5,526,270	11,853	1.0%	D	D	D
Grand	4	25	199,070	31,851	354	3,258	11,201,811	13,753	1.1%	0.8%	1.8%	231.6%
Iron	10	70	493,229	28,185	679	8,479	30,983,812	14,617	1.5%	0.8%	1.6%	192.8%
Juab	1	D	D	D	172	2,017	7,442,912	14,760	0.6%	D	D	D
Kane	1	D	D	D	214	1,922	5,647,778	11,754	0.5%	D	D	D
Millard	4	14	148,506	42,430	325	3,550	18,435,291	20,772	1.2%	0.4%	0.8%	204.3%
Morgan	1	D	D	D	114	1,197	5,417,702	18,104	0.9%	D	D	D
Piute	0	0	0	D	42	197	833,412	16,922	0.0%	0.0%	0.0%	D
Rich	0	0	0	D	69	502	1,245,196	9,922	0.0%	0.0%	0.0%	D
Salt Lake	763	17,938	154,674,921	34,491	21,893	392,249	2,178,916,796	22,220	3.5%	4.6%	7.1%	155.2%
San Juan	0	0	0	D	292	3,624	14,639,462	16,158	0.0%	0.0%	0.0%	D
Sanpete	5	28	205,702	29,386	388	4,792	15,459,432	12,904	1.3%	0.6%	1.3%	227.7%
Sevier	4	13	111,867	34,421	462	5,247	22,148,783	16,885	0.9%	0.2%	0.5%	203.9%
Summit	15	132	1,032,368	31,284	889	7,792	33,461,044	17,177	1.7%	1.7%	3.1%	182.1%
Tooele	10	70	514,841	29,419	467	10,711	69,552,874	25,974	2.1%	0.7%	0.7%	113.3%
Uintah	5	23	174,085	30,276	669	7,369	35,233,619	19,125	0.7%	0.3%	0.5%	158.3%
Utah	189	8,074	76,153,539	37,728	5,204	99,671	472,169,725	18,949	3.6%	8.1%	16.1%	199.1%
Wasatch	2	D	D	D	296	2,748	10,042,961	14,619	0.7%	D	D	D
Washington	17	210	1,340,683	25,537	1,509	17,652	68,427,027	15,506	1.1%	1.2%	2.0%	164.7%
Wayne	0	0	0	D	92	689	2,210,308	12,832	0.0%	0.0%	0.0%	D
Weber	50	1,664	12,153,199	29,214	3,518	69,990	347,027,275	19,833	1.4%	2.4%	3.5%	147.3%
State Total	1,218	29,589	256,711,631	34,704	44,831	771,877	4,004,787,102	20,753	2.7%	3.8%	6.4%	167.2%

D = Not Disclosed

Sources: Utah Department of Employment Security and Utah Office of Planning and Budget.

Figure 54
Information Technology Employment as a Percent of Nonagricultural Employment
June 1992



SOURCE: Utah Department of Employment Security

TOURISM

Utah's tourism industry contributes to the health of the state's economy by increasing the diversity of the economic base and bringing new monies into the state. Utah is home to five national parks, five national monuments, six national forests, a dozen ski resorts, and the Church of Jesus Christ of Latter-day Saints with the accompanying temples, genealogical library and other facilities. These and other attractions help to make tourism a vital industry to the state's economy and help explain why in 1990 Utah ranked as the 11th most travel-dependent state in the nation.[1]

According to a recent study on rural Utah tourism, an estimated 14 million visitors traveled to Utah during 1991, spending approximately $2.9 billion.[2] The same study estimates that 61,200 jobs or 8.2 percent of the total jobs in the state are tourism-related. In 1991 winter visitors spent an estimated $152 per person per day and summer visitors spent $27 per person per day. These expenditures generated $214 million of revenues for state and local governments. Table 59 provides a profile of the Utah tourism industry.

Because tourism is a hybrid industry made up of a mix of industry sectors such as retail trade, services and government, analysts disagree about how to define the industry.[3] By all definitions, however, tourism has experienced significant growth over the past decade and the prospects for the future are equally bright. Table 60 presents a ten-year history of state-wide tourism indicators and Figures 55 and 56, and Table 60 illustrate the growth trend in hotel room rents, national park visits and skier visits. By nearly every measure the tourism industry has exceeded the growth of the overall economy.

For instance, hotel room rents provide a useful measure of tourism activity because hotel operators are required by state law to collect and report room rents. From 1981 to 1991, hotel room rents more than doubled and in inflation-adjusted dollars increased at an annual average rate of 5.8 percent. This increase compares to annual growth in the overall economy of 2.8 percent (measured as the inflation adjusted annual average growth in total personal income). Over this same period, national park visits grew at an annual average pace of 6.5 percent; Salt Lake International Airport passengers, 11.9 percent; skier visits, 4.8 percent; and tourism-related employment, 3.9 percent.

The only state-wide tourism indicator that has declined over the past decade is state park visits and this trend is distorted because the Division of Parks and Recreation has changed the way visitors are counted. As the counting methodology changes, real growth in visitation can be obscured by data errors that overstated visitation in earlier years.

Table 61 shows recreation visits to Utah's national parks and monuments. Zion National Park receives the most visits followed by Bryce Canyon National Park and Arches National Park. Visitation to Canyonlands National Park increased the most rapidly from 1981 to 1991, rising from just under 90,000 in 1981 to over 339,000 in 1991. Visitation at all of the national parks and monuments has increased during the past decade.

Utah's tourism attractions are found in all parts of the state with most of the national parks and monuments in southern Utah and most of the ski resorts and urban attractions in northern Utah. National forests exist in every county and Utah offers 45 state parks. Since these attractions are located throughout the state, tourism is important

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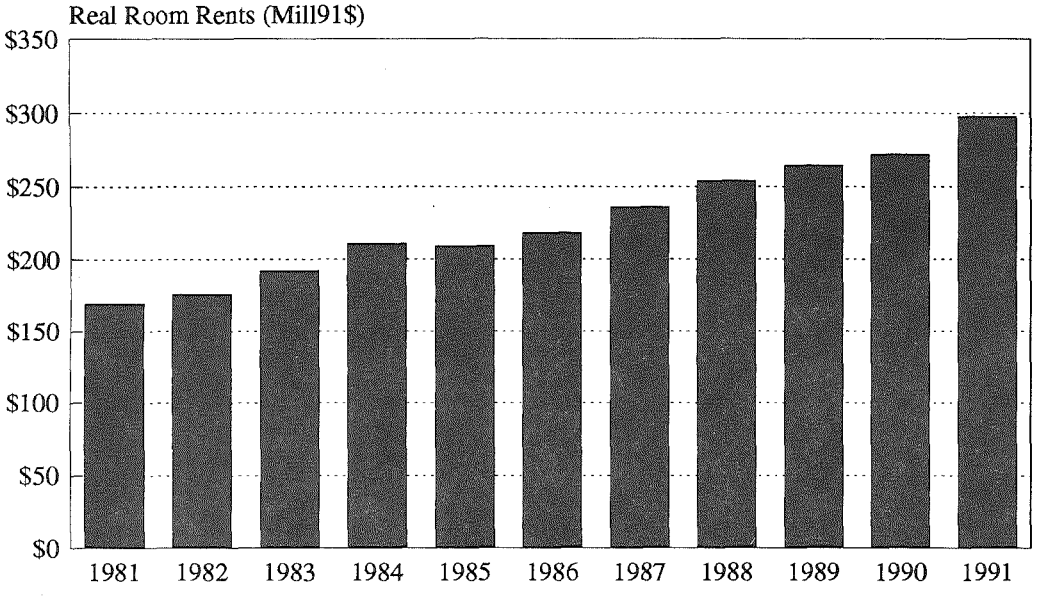
[1] The measure of travel dependency used here is U.S. Travel Data Center estimates of travel-related employment as a percent of total state employment.

[2] *Rural Utah Tourism*, April 1992, Utah Office of Planning and Budget.

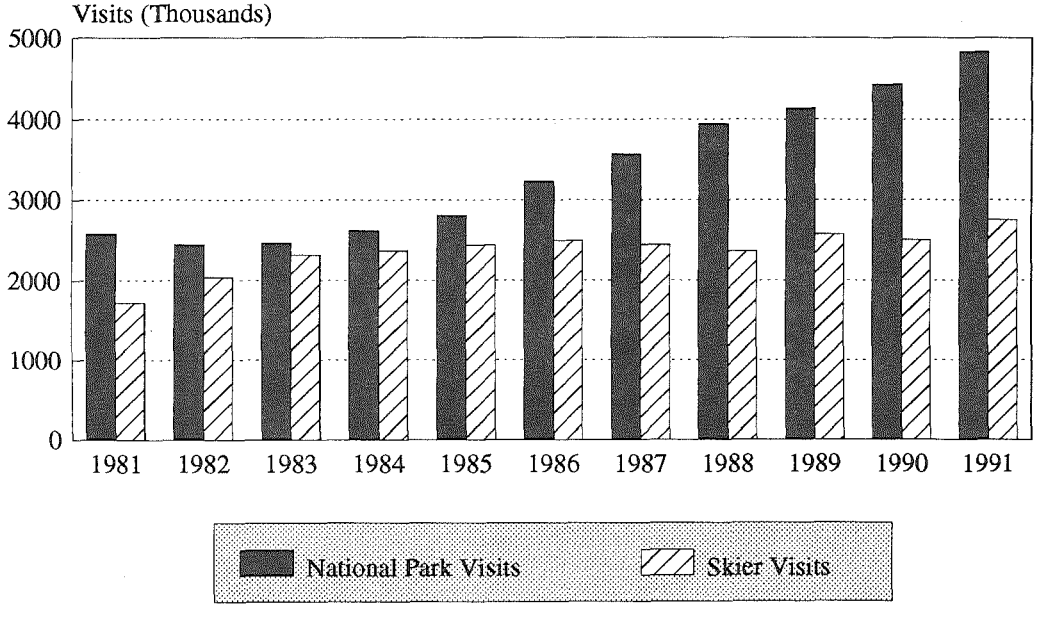
[3] There is no commonly accepted definition of tourism in use at this time. The U.S. Travel Data Center, widely recognized as a primary source for state travel data and research, avoids the use of the word "tourism" because of its vague meaning. Instead they define "travel" as activities associated with all overnight trips away from home in paid accommodations, and day trips to places 100 miles or more from the traveler's origin. The Utah Office of Planning and Budget has often utilized a much broader delineation of tourism that includes aspects of both business and personal travel as well as recreation by residents.

Figure 55
Utah Tourism Indicators
Hotel Room Rents



Source: Utah State Tax Commission,
National Park Service, & Utah Ski Assoc.

Figure 56
Utah Tourism Indicators
National Park & Skier Visits



Source: Utah State Tax Commission,
National Park Service, & Utah Ski Assoc.

to both urban and rural Utah. However, as industries such as logging, mining, and grazing have declined in many parts of rural Utah, tourism has emerged as an important contributor to the economic base.

One measure of the dependence of counties on tourism activity is the ratio of hotel room rents to total personal income. Using this measure the counties most dependent on tourism by a wide margin are Garfield, Summit and Grand (Table 62). Garfield County is where Bryce National Park is located; Summit County is the location of Park City and the adjacent ski resorts; and Grand County is the location of Moab; one of the most popular towns in close proximity to Arches and Canyonlands National Park and other red rock attractions. Many of Utah's urban counties such as Salt Lake, Weber, Utah, and Davis have larger, more diversified economies. In these counties room rents comprise 1 percent or less of total personal income. Figure 57 shows rankings of tourism dependency.

The future for tourism in Utah is positive. Many factors are expected to contribute to tourism growth in the future:

- The aging of america. The U.S. population is expected to increase by 7.2 percent between 1990 and 2000. In contrast, the age group from 45 to 54 years, an age group with high propensities to travel, is expected to increase by 46.0 percent over the same period.

- Rising real disposable income. Income continues to rise in this country, even after adjusting for inflation and taxes. According to the Bureau of Economic Analysis, real disposable income per capita from 1982 to 1991 increased 18.5 percent. Since travel is largely a discretionary spending item, it is powerfully affected by changes in income.

- Large increases in foreign travel. The combination of rising prosperity and growing personal freedoms in other parts of the world is proving to be a boon for the travel industry. The estimated number of foreign visitors in Utah has doubled in the past four years.

- Favorable media coverage. Utah has received favorable media coverage in recent years because of the relative strength of Utah's economy and from efforts to secure the Winter Olympic Games.

- Growth in the LDS Church. Salt Lake City is headquarters for the Church of Jesus Christ of Latter-day Saints. Since its beginning over 160 years ago, the Church has enjoyed steady membership growth. In recent years the growth has been a consistent 5 percent per year. Total membership is now over 8 million. The Church headquarters, genealogical library, Brigham Young University, several temples, and other sites continue to be a draw for members in other states and foreign countries.

The positive impact of these factors will be offset somewhat by the increase in dual-income households and reduced leisure time. The aging of the national population may also negatively impact growth in some tourism and recreation activities. Overall, however, tourism is expected to be a growth industry.

To capitalize on the expected growth in the tourism industry, a tourism research group, consisting of the Utah Office of Planning and Budget, the Utah Department of Community and Economic Development, and the Bureau of Economic and Business Research (University of Utah), identified several needs and findings related to the tourism industry.[4] The research group determined the industry needs better coordination, more infrastructure development, improved data and information, additional funding and enhanced planning. The primary findings of their 18-month study include:

- Tourism represents one of the most important activities in the Utah economy and is vital to rural Utah.

- The prospects for continued growth in the industry are favorable.

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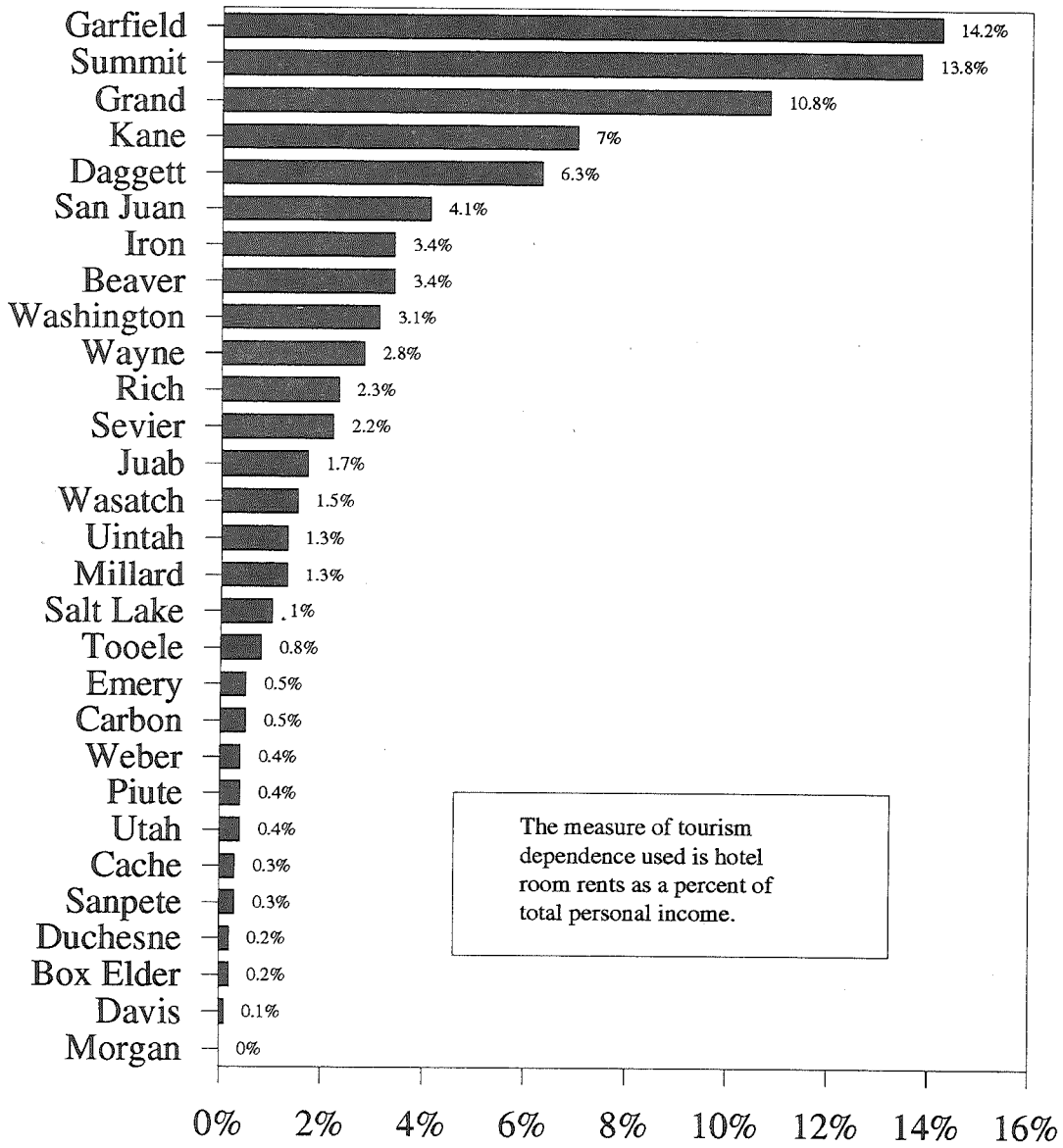
[4] Ibid, *Rural Utah Tourism* report.

Figure 57
1990 Tourism Dependence by County



Source: Utah State Tax Commission and Bureau of Economic Analysis

- The impact on state and local revenues is generally positive.
- Tourism can help stabilize and diversify the economic base without displacing other industries.
- Although the infrastructure to support tourism is substantial, improvements and / or additions are needed.
- Many sources exist to finance tourism infrastructure improvements.

As part of this research effort, a tourism infrastructure inventory was developed. The inventory includes summary characteristics of airports, rest areas, rentals, auto services, retail services, campgrounds, national parks / monuments / recreation areas, state parks, cultural / recreational facilities, events, tours, medical services, utilities, and public services. The inventory provides a starting point for entrepreneurs, government officials, and other tourism decision makers to assess Utah's tourism infrastructure needs.

Over the coming years tourism will continue to grow in importance to the state's economy. As tourism's relative significance increases, the public and private sector's role in promoting, analyzing and responding to this dynamic industry will become increasingly more important.

Table 59
Profile of the Utah Tourism Industry

	1990	1991
Total Spending by Out-of-State Travelers	$2.66 billion	$2.90 billion
Expenditures Per Person Per Day		
Winter	$145.00	$151.55
Summer	$25.82	$26.92
Total Number of Out-of-State Visitors	13.0 million	14.0 million
Number of U.S. Visitors	12.4 million	13.3 million
Number of Foreign Visitors	0.6 million	0.7 million
Total Tourism-Related Employment	58,560	61,200
Percent of Utah Jobs in Tourism	8.1%	8.2%
Total State & Local Taxes Generated by Tourism Spending	$196 million	$214 million

Source:
Estimates based on U.S. Travel Data Center, "Impact of Travel on State Economies" 1989; 1987 Utah Tourism Study; Utah Skier Survey; and travel indicators including visitor counts, interstate border crossings, and air traffic.

Table 60
Utah Tourism Indicators

	Hotel Room Rents (Current$)	Hotel Room Rents (1991$)	National Park Visits	State Park Visits	Salt Lake Int'l Airport Passengers	Skier Visits	Temple Square Visits	Travel, Tourism Recreation Employment
1981	$113,273,174	$169,722,842	2,577,112	6,430,174	4,149,316	1,726,000	2,229,530	41,694
1982	$124,787,207	$176,124,535	2,443,787	6,436,488	5,861,477	2,038,544	2,246,888	42,442
1983	$140,728,877	$192,442,500	2,465,294	5,214,498	7,059,964	2,317,255	2,210,882	43,378
1984	$161,217,797	$211,336,515	2,616,301	4,400,103	7,514,113	2,369,901	2,294,991	46,072
1985	$165,280,248	$209,211,615	2,804,693	4,846,637	8,984,780	2,436,544	2,231,978	48,533
1986	$175,807,344	$218,475,915	3,224,694	5,387,791	9,990,986	2,491,191	2,599,441	49,845
1987	$196,960,612	$236,144,677	3,566,069	5,489,539	10,163,883	2,440,668	3,401,155	50,689
1988	$220,687,694	$254,079,999	3,941,791	5,072,123	10,408,233	2,368,985	4,162,440	52,485
1989	$240,959,095	$264,666,361	4,135,399	4,917,615	11,898,847	2,572,154	4,345,879	55,637
1990	$261,017,079	$272,000,965	4,425,086	5,033,776	11,982,276	2,500,134	4,788,278	58,560
1991	$298,000,000	$298,000,000	4,829,317	5,425,129	12,477,926	2,751,551	NA	61,200
Percent Change 1981-91	163.1%	75.6%	87.4%	-15.6%	200.7%	59.4%	114.8%	46.8%
Average Annual Rate of Change 1981-91	10.2%	5.8%	6.5%	-1.7%	11.6%	4.8%	7.9%	3.9%

Sources:
Utah State Tax Commission, National Park Service, Utah Division of Parks and Recreation, Salt Lake Airport Authority, Utah Ski Association, Church of Jesus Christ of Latter-Day Saints, Utah Office of Planning and Budget.

Table 61
Recreation Visits to Utah National Parks and Monuments

NATIONAL PARKS	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
Percent Change 1981-91	116.2%	96.0%	277.4%	55.4%	73.6%	87.4%
Annual Average Rate of Change 1981-91	8.0%	7.0%	14.2%	4.5%	5.7%	6.5%

NATIONAL MONUMENTS	Cedar Breaks	Dinosaur	Natural Bridges	Rainbow Bridge	Timpanogos Cave	Total National Monuments
1981	402,680	345,784	60,131	114,555	104,497	1,027,647
1982	374,695	396,938	55,209	172,126	104,630	1,103,598
1983	329,268	427,375	56,368	161,551	98,475	1,073,037
1984	353,092	493,140	59,123	177,971	119,688	1,203,014
1985	385,381	418,187	61,179	177,038	128,622	1,170,407
1986	425,732	430,891	73,069	283,597	124,410	1,337,699
1987	430,559	412,089	88,243	210,708	137,279	1,278,878
1988	477,493	474,452	98,559	238,307	138,694	1,427,505
1989	480,276	436,303	103,822	238,307	126,876	1,385,584
1990	417,330	450,368	101,958	255,420	114,247	1,339,323
1991	456,001	447,781	124,596	258,346	104,745	1,391,469
Percent Change 1981-91	13.2%	29.5%	107.2%	125.5%	0.2%	35.4%
Annual Average Rate of Change 1981-91	1.3%	2.6%	7.6%	8.5%	0.0%	3.1%

Source: National Park Service, Statistical Unit.

Table 62
Utah Gross Taxable Room Rents and Tourism Dependency in 1990

County	Room Rents	Personal Income (000)	Rents as a Percent of Personal Income	Ranking of Tourism Dependency Ratio
Beaver	2,013,023	59,627	3.4%	8
Box Elder	1,105,697	575,481	0.2%	27
Cache	2,926,981	866,669	0.3%	24
Carbon	1,520,227	302,347	0.5%	20
Daggett	729,887	11,507	6.3%	5
Davis	2,970,519	2,530,011	0.1%	28
Duchesne	361,700	153,887	0.2%	26
Emery	605,313	114,409	0.5%	19
Garfield	7,260,123	51,154	14.2%	1
Grand	9,527,958	88,012	10.8%	3
Iron	7,877,653	228,417	3.4%	7
Juab	1,049,546	62,289	1.7%	13
Kane	4,207,395	60,019	7.0%	4
Millard	1,804,719	140,756	1.3%	16
Morgan	18,851	81,853	0.0%	29
Piute	58,427	14,115	0.4%	22
Rich	594,818	26,115	2.3%	11
Salt Lake	116,590,783	11,224,410	1.0%	17
San Juan	4,233,749	103,169	4.1%	6
Sanpete	525,350	174,669	0.3%	25
Sevier	4,070,715	183,696	2.2%	12
Summit	43,994,111	318,073	13.8%	2
Tooele	3,045,922	397,833	0.8%	18
Uintah	3,185,944	244,867	1.3%	15
Utah	10,997,824	3,036,573	0.4%	23
Wasatch	1,894,236	127,594	1.5%	14
Washington	17,007,008	557,472	3.1%	9
Wayne	628,452	22,213	2.8%	10
Weber	10,210,151	2,427,922	0.4%	21
Total	261,017,079	24,185,159	1.1%	

Note: The measure of tourism dependency is room rents as a percent of total personal income.
Source: Utah State Tax Commission and Bureau of Economic Analysis.

SPECIAL TOPICS

UTAH HOSPITAL CHARGES COMPARED TO OTHER STATES

The Bureau of Economic and Business Research (BEBR) of the University of Utah recently provided Intermountain Health Care, Inc. (IHC) with an independent evaluation of data reliability and of the adequacy and sufficiency of statistical measures used in IHC's internal program of tracking and comparing hospital charges. Researchers Frank Hachman and Boyd Fjeldsted of BEBR closely examined selected data sets and statistical procedures and provided several recommendations to IHC. These BEBR staff members also formulated a specific hospital charge comparison method that the IHC staff applied to data derived from the available national Medicare files for the year 1989. The resulting hospital charge comparisons are not themselves sufficient to allow inferences as to either the causes or consequences of differences in hospital charge levels among states, but they are sufficiently robust in their nature and so significant in their implications as to be of interest to a wider audience.

An exceedingly interesting finding is that Utah ranks very low — 44th among the 50 states and the District of Columbia — in the average level of Medicare hospital charges (Table 63). Even more striking are the differences in average level of Medicare hospital charges between Utah and many of the eastern or more southern states. As cases in point, average Medicare hospital charges in Michigan, Illinois, and California were respectively 142.5 percent, 143.5 percent and 172.1 percent of the average Utah Medicare hospital charge. But, before the findings are examined in more detail, the database used and the measure of charge level employed ought to be carefully described.

MEDPAR

The foundation for the analysis is the "MEDPAR" file of Medicare discharge data for 1989. The Medicare program is the familiar federal hospital insurance plan covering hospital and related services for nearly all persons age 65 and over. Medicare also covers disabled beneficiaries of any age after 24 months of entitlement to cash benefits under the Social Security or Railroad Retirement programs and also persons with end-stage renal disease. These "regardless-of-age" extensions account for the fact that the United States Medicare enrollment as of July 1, 1989 (at 32.86 million persons) was substantially in excess of the resident U.S. population age 65 and over (estimated to have been 30.98 million). Total enrollment in the Hospital Insurance part of Medicare as of July 1, 1989, including outlying and foreign residents, was 33.04 million persons with 29.87 million being 65 or over and 3.17 million disabled persons under 65 years of age. Medicare enrollment in Utah as of July 1, 1989 was 154,000 persons or slightly less than 0.5 percent of the U.S. resident enrollment.

Of immediate interest is the very large size of the database of hospital charges generated by this insured population. These data are also of unusually good quality within the sphere of data generally available to social scientists. Uniform standards of qualification and definition are imposed by the U.S. Health Care Financing Administration (HCFA), and claims are subject to audit with appropriate civil or criminal penalties for violations. Access to the MEDPAR data files is restricted to qualified contractors, and in July of 1991 one of these, LEWIN/ICF of Washington, D.C., produced a documented database on magnetic tape for IHC. The most recent accessible year as of that date was 1989. For 1989 the MEDPAR files report that 6,623 hospitals in the 50 states and the District of Columbia reported charges for 9,541,698 qualifying discharges. Of these 6,623 hospitals, 49 were in the state of Utah, reporting charges for 37,853 of the discharges. The ratio of discharges to enrollees is substantially lower in Utah than for the rest of the nation. Utah's 37,853 discharges amounted to 24.6 per 100 enrollees, while the rest of the nation experienced 29.0 per 100 or 17.9 percent greater than Utah's rate.

Hospital Charges and DRGs

Importance and particular attention should be given to the terms "qualifying discharges" and "hospital charges". The "qualifying discharges" are completed hospital stays associated with a standardized category of medical conditions referred to as a *diagnostically related group* (DRG). In 1989 there were 475 DRGs eligible for Medicare reimbursement. Several of these categories, however, rarely apply to Medicare enrollees. For example, in the United States as a whole, there were zero cases in DRG 330 (Urethral Stricture, Ages 0 to 17). The category with the greatest number of discharges — 512,086 in 1989 — was DRG 127 (Heart Failure and Shock). Ineligible DRGs

in 1989 largely encompassed experimental procedures, such as DRG 480 (Liver Transplant), with seven discharges reported and DRG 488 (HIV with Extensive O.R. Procedure), with 278 discharges.

The grouping of Medicare claims into generalized DRG categories provides a level of statistical control over the enormous range of conditions and charges to be found within the general distribution of hospital charges. This is especially important to the task of comparing charges across states, where the variation in the mix of cases is a major complication. A DRG of particular significance to Utah is number 472 (Extensive Burns with O.R. Procedure). Nationally, 226 Medicare cases were reported in 1989, of which only two were in Utah. For the rest of the nation, 224 cases among 32.73 million non-Utah U.S. enrollees is a rate of 6.84 cases per million enrollees, which is only about 1/2 the rate of occurrence found in Utah's two cases of 154,000 enrollees (13.0 per million). This relatively high incidence for Utah can be explained in terms of the regionalization of higher order medical services, and is even more strongly observed in DRG 103 (Heart Transplant) where Utah reported ten of the nation's 123 cases. The impact of regionalization of higher order services is compounded by the enormous size of hospital charges that can be observed in these cases. The mean charge for a heart transplant in 1989 was $101,232 in Utah and $98,154 in the rest of the nation. The mean Utah charge for the two burn cases was $290,540 compared to an average of $81,946 elsewhere. Clearly, an "average" case is a concept of very limited usefulness in some DRGs, but it is as clear that a standardization of case mix is an absolute requisite for comparing hospital charges among states.

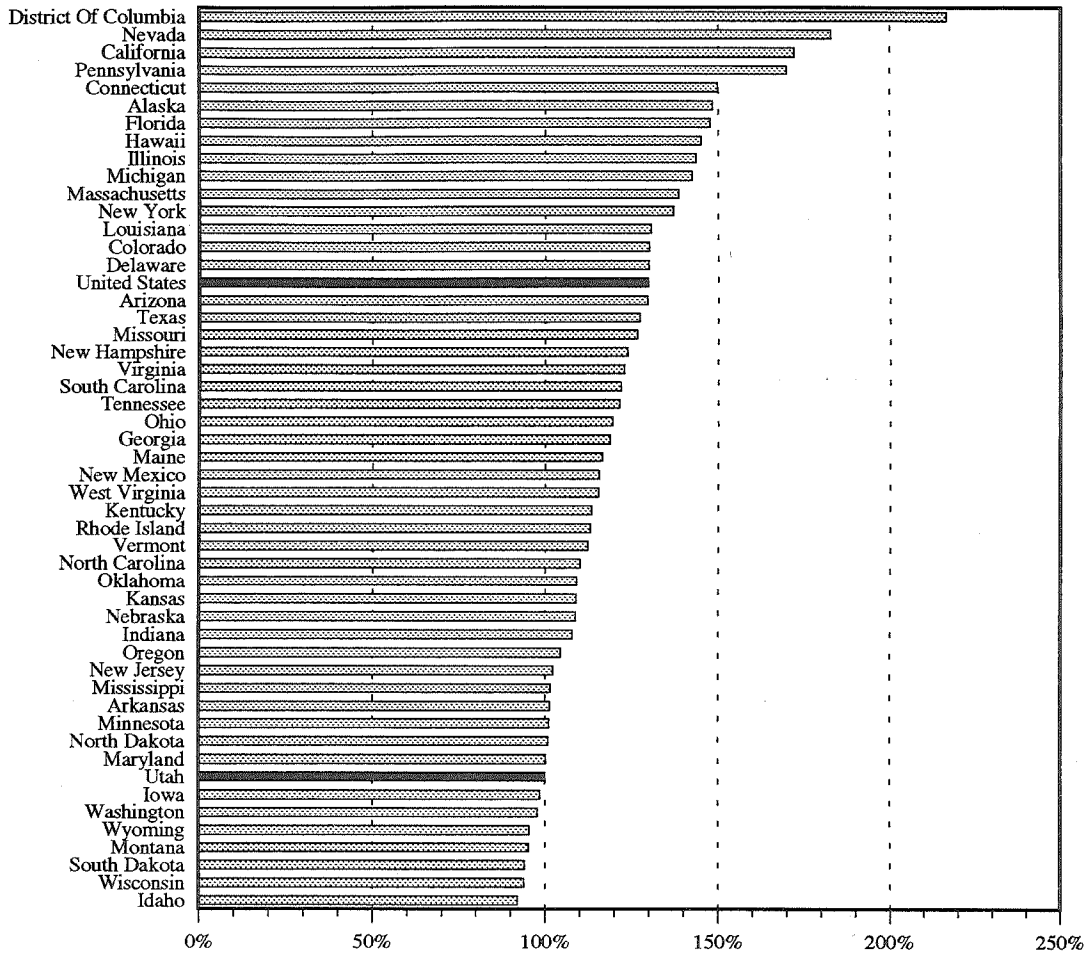
Hospital Charge Index

The standard of comparison appropriate to this examination is that of comparing Utah's charges to those of other areas as if the other areas provided services for Utah's mix of cases. The index generated in this approach is the measure of Utah's average charge relative to the average charge in the other region if the other region had provided Utah's mix of cases. The simple average of the 9,503,845 claims in 1989 for the rest of the nation was $8,115, while the simple average of the 37,853 charges of Utah hospitals was $6,966. If the charges in the rest of the nation had been weighted in the same proportions as the Utah charges, the national average would have been $9,037 instead of $8,115 (Table 63). Thus, the Charge Index for the rest of the nation relative to Utah is 129.7 (9,037 times 100 divided by 6,966). Figure 58 graphically depicts the results of the Hospital Charge Index calculations for each state and the District of Columbia.

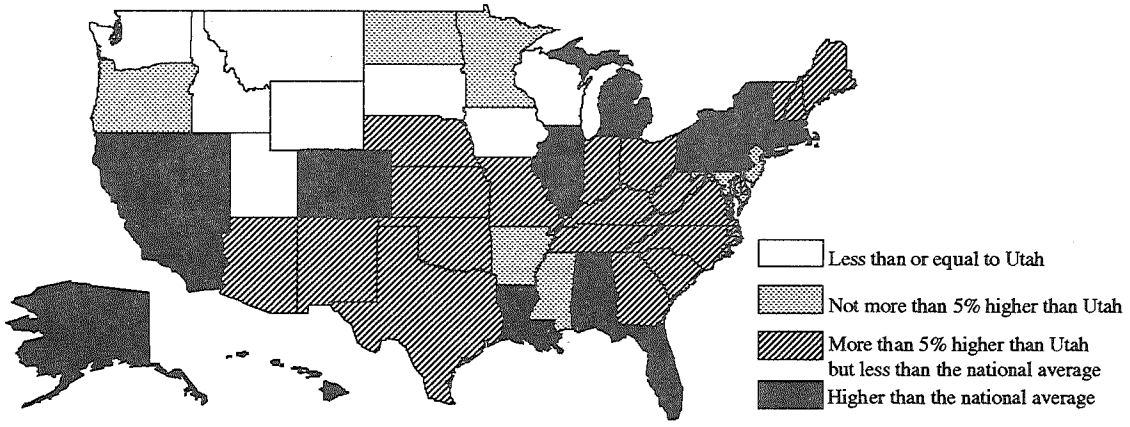
In the circumstances of Utah's extensive burn cases, the rest of the nation's less costly cases were given Utah's higher weight of 0.0053 percent of all cases. This "Utah share of mix" is more than twice the share of the rest of the nation's mix, where 224 extensive burn cases is 0.0024 percent of 9.5 million cases. In the domain of DRG 472, weighting the nation's much lower charge with Utah's relative mix lowers the Hospital Charge Index for the rest of the nation relative to Utah. However, the nation's mix in general is much more concentrated in lower charge DRGs and weighting the nation's charges with Utah's relative case mix raises the national average charge from $8,115 to $9,037. If, on the other hand, Utah's charges had been weighted at the mix of cases found in the rest of the nation, Utah's average would have fallen from $6,966 to approximately $6,265, and the Hospital Charge Index for the rest of the nation computed on this basis would be 129.5 ($8,115 divided by $6,265 times 100).

When the rest of the nation is compared to Utah by Utah's mix of cases, the result is little different from the index derived with the standard of comparison being the mix in the rest of the nation. This insensitivity to index number type would not in general be expected to extend to comparisons of Utah with each of the other states. But the appropriate standard is Utah's mix of services, when comparing charges from other states to Utah's charges. There is a small element of distortion introduced with this formulation when small states are compared to Utah. When the other state reports no cases in a DRG, the Utah standard must be changed by imputing zero cases for that DRG in Utah. The index for Alaska of 148.4 is on a basis of 37,267 Utah cases, since 586 of Utah's 37,853 cases occurred in DRGs where Alaska had no cases in 1989. These exclusions disproportionately involved higher charge DRGs, since Utah's average fell from $6,966 to $6,901 (an imputed average of $11,100 for the excluded 586 cases). But, even in this extreme case of excluded cases, the distortion is quite small. If, in contrast to Alaska's generally higher charges, the excluded DRGs had been imputed to Alaska at Utah's charges, 147.2 would have been the resulting value of the Alaska index.

Figure 58
Hospital Charges as a Percent of Utah Hospital Charges



Geographic Distribution of Hospital Charges as Compared to National Average and Utah Charges



Source: Bureau of Economic and Business Research from calculation performed on MEDPAR data as explained in text.

Hospital Charge Comparisons

Figure 58 of ordered index values for states shows only seven states to have lower average charges than Utah, as measured by the Utah mix of cases. Of these seven states, Iowa, Washington, and Wisconsin have larger populations and more Medicare enrollees than Utah. One exceedingly interesting aspect of Figure 58 is the remarkable difference in charge levels within the United States. California and Pennsylvania, having average charges 70 percent higher than Utah's, make a large contribution to the fact that the nation's Hospital Charge Index is nearly 30 percent higher than Utah's.

The geographic placement of the states with low charges is also striking. With the exception of Maryland, the other ten of the 11 lowest charge states constitute a geographic band from the Great Lakes to the Pacific. The map shown in Figure 58 displays this array in distinct manner. Also apparent is the general fashion of average hospital charges increasing as one moves east or south. It is additionally of consequence for the average U.S. hospital charge that the population of the United States is more densely concentrated in the higher charge areas. The ten states in the low charge band hold less than 9 percent of the U.S. population and account in total for only 7 percent of the U.S. Medicare enrollment.

Inferential Limitations

Emphasis should be made of the fact that the charge data reported in the MEDPAR file are not the payment amounts allowed by Medicare. Rather they represent charges reported for hospital services in individual Medicare cases, which are required to be equal to charges made for the same services to non-Medicare patients. This requirement is enforced through an active audit program, and thus provides a high level of assurance that the hospital charges as measured in the Medicare program are an accurate measure of the magnitudes of charges in 1989. The charges faced by the community using a hospital can reasonably be assumed to differ from the Medicare charges only to the extent that the non-Medicare population demands a different mix of services from that provided to the Medicare patients.

The actual payments received by a hospital for providing services to Medicare enrollees are generally less than the charges reported for the services. Medicare payment amounts are structured by formulas relating payment levels to factors such as hospital size, teaching or research activity, and area wage levels. The participating hospital necessarily accepts the Medicare payment as compensation in full for the services provided the enrolled patient, regardless of what a particular hospital may believe about the correspondence between its costs, its charge structure, and the payments obtained.

It is also important to note that a hospital's billed charges for non-Medicare patients do not necessarily reflect the actual payment that will be received by the hospital for the service. It is common practice for contracts between hospitals and medical insurance carriers to specify discounts from billed charges. Thus the payment actually received by the hospital from an insurance company may be substantially less than the billed charge. It is quite possible that the average discount may vary systematically among regions for reasons having to do with traditional expectations and practices, but also possibly related to the relative market power of health care providers versus health care insurers in different regions. Therefore, circumspection should be observed in attempting to extend inferences derived from an analysis of Medicare charges to actual prices paid for hospital services generally.

Table 63
Charge Comparisons: 1989 Medicare Discharges
Average Charges of Other States
Relative to Utah Charges at Utah Mix of DRGs

	Number of Admissible Cases with Matching DRGs		Average 1989 Charges of Other States Weighted by the Utah Mix of DRGs	Average Utah Charge Among Matching DRGs	Other State Charge as a Percentage of Utah Charge
	Other State	Utah			
Alaska	4,845	37,267	$10,244	$6,901	148.4
Arizona	134,823	37,850	$9,024	$6,966	129.5
Arkansas	130,596	37,833	$7,031	$6,942	101.3
California	857,471	37,853	$11,987	$6,966	172.1
Colorado	90,978	37,835	$9,027	$6,942	130.0
Connecticut	110,328	37,831	$10,397	$6,942	149.8
Delaware	24,545	37,722	$8,952	$6,898	129.8
District Of Columbia	34,723	37,828	$15,039	$6,943	216.6
Florida	593,292	37,852	$10,287	$6,966	147.7
Georgia	254,436	37,843	$8,241	$6,941	118.7
Hawaii	23,702	37,817	$10,062	$6,941	145
Idaho	29,817	37,748	$6,331	$6,891	91.9
Illinois	419,807	37,852	$10,001	$6,966	143.6
Indiana	239,774	37,852	$7,512	$6,966	107.8
Iowa	125,509	37,840	$6,812	$6,926	98.4
Kansas	109,277	37,833	$7,558	$6,942	108.9
Kentucky	183,876	37,851	$7,895	$6,966	113.3
Louisiana	196,353	37,843	$9,058	$6,941	130.5
Maine	51,260	37,836	$8,079	$6,942	116.4
Maryland	173,437	37,831	$6,942	$6,926	100.2
Massachusetts	259,338	37,838	$9,610	$6,941	138.5
Michigan	344,822	37,853	$9,930	$6,966	142.5
Minnesota	152,169	37,848	$7,035	$6,966	101.1
Mississippi	141,879	37,836	$7,040	$6,942	101.4
Missouri	243,054	37,852	$8,803	$6,966	126.4
Montana	37,809	37,747	$6,560	$6,890	95.2
Nebraska	64,168	37,823	$7,526	$6,927	108.6
Nevada	33,845	37,734	$12,621	$6,906	182.8
New Hampshire	35,819	37,741	$8,517	$6,891	123.6
New Jersey	303,771	37,838	$7,087	$6,941	102.1
New Mexico	47,943	37,823	$8,027	$6,941	115.6
New York	669,670	37,852	$9,540	$6,966	137.0
North Carolina	242,882	37,838	$7,627	$6,941	109.9
North Dakota	36,956	37,812	$6,981	$6,929	100.8
Ohio	455,033	37,842	$8,288	$6,941	119.4
Oklahoma	143,208	37,844	$7,602	$6,967	109.1
Oregon	10,298	37,841	$7,272	$6,967	104.4
Pennsylvania	409,951	37,852	$11,828	$6,966	169.8
Rhode Island	44,063	37,744	$7,790	$6,891	113.0
South Carolina	108,793	37,832	$8,452	$6,942	121.8
South Dakota	35,530	37,756	$6,478	$6,891	94.0
Tennessee	261,555	37,852	$8,462	$6,966	121.5
Texas	558,403	37,853	$8,862	$6,966	127.2
Utah	**37,853**	**37,853**	**$6,966**	**$6,966**	**100.0**
Vermont	18,913	37,787	$7,767	$6,927	112.1
Virginia	22,146	37,849	$8,554	$6,966	122.8
Washington	145,050	37,837	$6,784	$6,941	97.7
West Virginia	99,942	37,837	$8,013	$6,941	115.4
Wisconsin	207,709	37,842	$6,511	$6,941	93.8
Wyoming	14,339	37,709	$6,567	$6,891	95.3
United States	9,503,845	37,853	$9,037	$6,966	129.7

Source: Medicare Cases: Data from Lewin/ICF tapes provided to Intermountain Health Care, Inc. of Salt Lake City.
Index of Hospital Charges: Calculated from LEWIN/ICF data by staff of IHC as described in the text.

THE 1990 CENSUS: AN ECONOMIC AND SOCIAL PORTRAIT OF UTAH

No other source provides the broad variety of data, from the city block level to the national level, than the U.S. Decennial Census does. During 1992, tapes, compact diskettes and publications became available from the U.S. Bureau of the Census containing income, labor force, poverty, educational attainment and other statistics. This information provides not only a portrait of a place, race, age group or other group information at one point in time, but it can also be used to determine changes from previous decennial Censuses and to draw relative comparisons.

In 1990, a Census questionnaire was received by each household in the U.S. From it, population, race and housing data were gathered pertaining to April 1, 1990. About one in every six households received the longer questionnaire, which asked additional questions about income, employment, ancestry and more. Income questions pertained to the calendar year 1989. Labor force questions applied to persons 16 years and over. The educational attainment information provided herein was applicable to persons 25 years and over (Figure 59).

Utah's Income Ranking Among States

Per capita income (1989 total income divided by April 1, 1990 total population) is relatively low in Utah (46th, including Washington, D.C.) due to the highest number of persons per household (3.15) in the nation. While Utah's median household and median family income rankings are more favorable (21st and 26th respectively), median household and median family income are still below the national average. In 1989, median family income in Utah was $33,246, meaning that one-half of the families earned less than $33,246 while the other half earned more. Median household income was $29,470. Because single-person households are included in the determination of household income and not family income, it tends to be lower for a given area (Table 64 and Figure 60).

Nationally, median household income grew about 79 percent from 1979 to 1989. But, when adjusted for inflation, the real growth was 6.5 percent. Real growth in Utah was -.5 percent, virtually unchanged from 1979 and placing the state at 32nd for growth.

Income Distribution

Utah's distribution of income is not strikingly different from the nation's, according to household income figures shown in Figure 60 and Table 66. Utah has a lower percentage of households receiving income of less than $10,000 and more than $50,000 than the United States. Utah's combination of fewer very poor, fewer very rich and a concentration of households in the middle-income ranges results in median household income of $586 less than the U.S. (Table 66 and Figure 60). Utah household income by source is shown in Table 68.

Utah: First in Family Households

In Utah, 88.5 percent of all persons live in family households, which is the nation's highest percentage. Utah is also first for children (under the age of 18) who live in married-couple families. Conversely, 12.5 percent of the state's children live in households with no spouse present, placing it 51st in the nation. Of those 65 years and over, 69.4 percent live in family households in Utah. The state therefore ranks third, behind Arizona and Hawaii, and ahead of Florida in persons age 65 and older residing in family households (Table 65).

Poverty

National poverty thresholds, which vary as a function of the number of persons in each household and other considerations, are established by the U.S. Office of Management and Budget. In 1989, the weighted average threshold for a family of four was $12,674. Of Utahns, 192,415 were below the poverty threshold, or that level considered "poverty level" in 1989, which was 11.4 percent of the state total. The U.S. rate was 13.1 percent. Poverty status is not determined for institutionalized persons, persons in military group quarters, persons in college dormitories and unrelated individuals under 15 years old (e.g., foster children). Poverty rates in Utah and the U.S. are higher for non-whites, female householders with children and unrelated persons living together.

Poverty exists in every county in Utah, in both cities and in rural areas. While Utah does not have large ghettos, very high rates of poverty are found among Native Americans on reservations. For example, the poverty rate on the Goshute Reservation was 100 percent in 1989. While the state's per capita income was a relatively low $11,029, it was $3,572 for the 5,252 Native Americans on the Navajo Reservation. Also characteristic of reservations are high rates of unemployment and low levels of educational attainment. These figures and additional data for reservations are shown in Table 71.

Poverty Changes

In the past four decennial Censuses, Utah's rate of poverty for all persons has been below the national average. But, between 1979 and 1989, the number of persons in poverty increased by 30.0 percent in Utah while the U.S. rate increased by 15.9 percent. Utah's increase in poverty also exceeded the nation's for all families (30.6 and 14.4 percent, respectively) and female-headed families (51.6 and 30 percent, respectively). For persons over 65 years of age however, Utah's rate of growth was only 2.5 percent while nationally it was 5.6 percent (Table 67).

Utah Counties: The Highest and the Lowest Incomes

Summit County's income was the highest of any county in Utah in 1989 in terms of median household income ($36,756), median family income ($40,162) and per capita income ($16,739). It also had the highest percentage of high-school graduates (91.6) and labor force participation (70.5 percent) and the second-lowest rate of poverty (7.2 percent). Median household income grew in Summit County by 12.0 percent during the 1980s, the state's third highest rate.

Home to the Utah portion of the Navajo reservation, San Juan County's income was the lowest of any Utah County in 1989 in terms of median household income ($17,289), median family income ($19,183) and per capita income ($5,907). It also had the lowest percentage of high-school graduates (59.7), its poverty rate for all persons was the highest in the state (36.4 percent) and labor force participation rate (57.3 percent) ranked 25th. San Juan County has the highest number of children as a percentage of its population (43.3) of any county *in the United States*. These factors do not bode well economically for San Juan County: the next generation is growing up in poverty with little hope of significant change on the horizon (Tables 69, 70, 72, and 73, and Figures 61 and 62).

Cities, Towns and Census Designated Places

The Census Bureau geographically defines and names unincorporated areas of the state as Census Designated Places (CDPs). A CDP is the statistical counterpart of incorporated cities and towns. A CDP is densely populated and has boundaries which usually coincide with physical boundaries or are adjacent to incorporated places. Of the 50 most populous cities, towns and CDPs, Mt. Olympus CDP has the highest median household income of $65,046. It also has the highest figures for educational attainment — over 97 percent of all persons 25 years and over have completed high school — and over half have bachelor's degrees or higher. Statistics for the 50 largest cities, towns and CDPs are shown in Table 74.

Data Problems

There are several reasons why Census data are not perfect:

- Respondents and Census enumerators may make errors.
- Some households never respond, even during the personal visits conducted during follow-up.
- Income, labor force and educational attainment questions were asked only of a sample of the population, therefore the data have been extrapolated to represent figures that would have been obtained from a complete count.

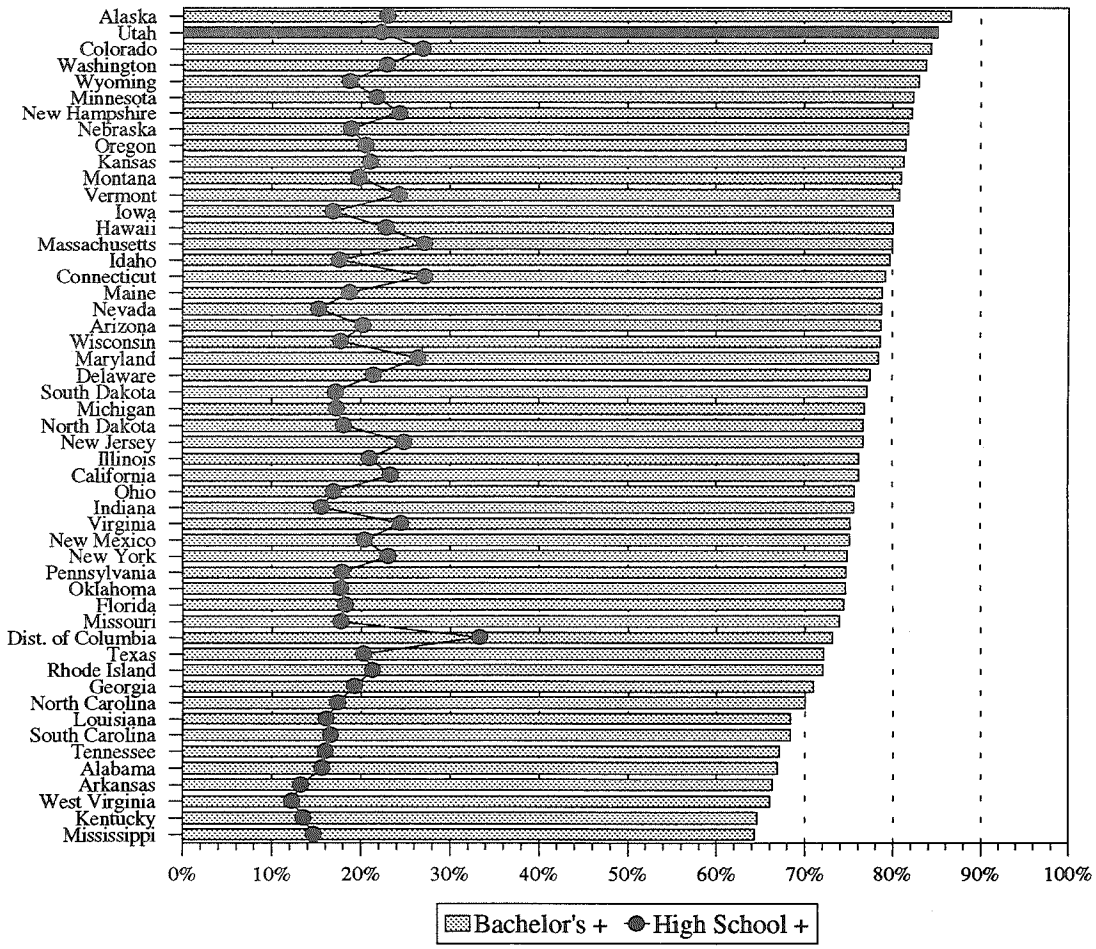
- Title 13 of the U.S. Code mandates that answers about specific individuals, households or housing units are not disclosed by the Census Bureau for 72 years. Therefore, an edit is applied to the data utilizing statistical tools to suppress, substitute or impute the information.

- Undercoverage occurred in certain areas.

- Errors may occur in processing.

In spite of the problems, decennial Census data are the most comprehensive available, and are comparable down to the city block for population, race and housing units, and block groups for all other data. These figures are invaluable to government and private entities for a variety of purposes including marketing, planning and many types of economic and demographic research.

Figure 59
Educational Attainment by State
High School and Higher
Bachelor's Degree and Higher



Source: U.S. Bureau of the Census.

Table 64
Educational Attainment, Income, Poverty and Labor Force Participation Statistics
United States, States and the District of Columbia

Place	High School Graduate & Higher	Rank	Bachelor's Degree & Higher	Rank	Median Household Income	Rank	Median Family Income	Rank	Per Capita Income	Rank	Poverty Rate for Persons	Rank	Labor Force Participation	Rank
United States	75.2%	---	20.3%	---	$30,056	---	$35,225	---	$14,420	---	13.1%	---	65.3%	---
Alabama	66.9%	47	15.7%	45	$23,597	42	$28,688	42	$11,486	40	18.3%	7	61.1%	45
Alaska	86.6%	1	23.0%	12	41,408	2	46,581	3	17,610	5	9.0%	44	74.7%	1
Arizona	78.7%	20	20.3%	24	27,540	28	32,178	32	13,461	24*	15.7%	13	62.9%	41
Arkansas	66.3%	48	13.3%	50	21,147	49	25,395	50	10,520	49*	19.1%	5	59.8%	48
California	76.2%	29	23.4%	10	35,798	8	40,559	8	16,409	8	12.5%	25	67.0%	20
Colorado	84.4%	3	27.0%	4	30,140	19	35,930	18	14,821	17	11.7%	29	70.3%	5
Connecticut	79.2%	17	27.2%	3	41,721	1	49,199	1	20,189	1	6.8%	50	69.0%	9
Delaware	77.5%	23	21.4%	17	34,875	9	40,252	9	15,854	10	8.7%	46	68.3%	12
Dist. of Columbia	73.1%	39	33.3%	1	30,727	18	36,256	17	18,881	2	16.9%	9	66.3%	24
Florida	74.4%	37	18.3%	30	27,483	29	32,212	31	14,698	18	12.7%	23	60.4%	47
Georgia	70.9%	42	19.3%	26	29,021	24	33,529	25	13,631	22	14.7%	16	67.9%	14
Hawaii	80.1%	14	22.9%	14	38,829	5	43,176	6	15,770	11	8.3%	48	70.4%	4
Idaho	79.7%	16	17.7%	36	25,257	39	29,472	40	11,457	41	13.3%	19	65.5%	32
Illinois	76.2%	28	21.0%	20	32,252	12	38,664	12	15,201	14	11.9%	27	66.4%	23
Indiana	75.6%	31	15.6%	46	28,797	25	34,082	24	13,149	29	10.7%	38	65.9%	30
Iowa	80.1%	13	16.9%	41	26,229	37	31,659	34	12,422	35	11.5%	30	66.0%	28
Kansas	81.3%	10	21.1%	19	27,291	30	32,966	27	13,300	27	11.5%	31	66.8%	21
Kentucky	64.6%	50	13.6%	49	22,534	46	27,028	47	11,153	44	19.0%	6	60.5%	46
Louisiana	68.3%	44	16.1%	43	21,949	48	26,313	48	10,635	48	23.6%	2	59.3%	50
Maine	78.8%	18	18.8%	29	27,854	27	32,422	28	12,957	31	10.8%	36	65.6%	31
Maryland	78.4%	22	26.5%	5	39,386	4	45,034	4	17,730	4	8.3%	47	70.6%	3
Massachusetts	80.0%	15	27.2%	2	36,952	6	44,367	5	17,224	6	8.9%	45	67.8%	15
Michigan	76.8%	25	17.4%	38	31,020	15	36,652	16	14,154	20	13.1%	20	64.1%	36
Minnesota	82.4%	6	21.8%	16	30,909	17	36,916	14	14,389	19	10.2%	40	69.7%	7
Mississippi	64.3%	51	14.7%	48	20,136	51	24,448	51	9,648	51	25.2%	1	59.7%	49
Missouri	73.9%	38	17.8%	33	26,362	35	31,838	33	12,989	30	13.3%	18	64.5%	34
Montana	81.0%	11	19.8%	25	22,988	45	28,044	44	11,213	43	16.1%	11	63.7%	38
Nebraska	81.8%	8	18.9%	27	26,016	38	31,634	35	12,452	34	11.1%	33	68.3%	11
Nevada	78.8%	19	15.3%	47	31,011	16	35,837	19	15,214	13	10.2%	41	70.3%	6
New Hampshire	82.2%	7	24.4%	8	36,329	7	41,628	7	15,959	9	6.4%	51	71.9%	2
New Jersey	76.7%	27	24.9%	6	40,927	3	47,589	2	18,714	3	7.6%	49	67.4%	19
New Mexico	75.1%	33	20.4%	22	24,087	41	27,623	45	11,246	42	20.6%	3	62.8%	42
New York	74.8%	34	23.1%	11	32,965	11	39,741	10	16,501	7	13.0%	21	63.6%	39
North Carolina	70.0%	43	17.4%	37	26,647	34	31,548	37	12,885	33	13.0%	22	67.6%	17
North Dakota	76.7%	26	18.1%	31	23,213	44	28,707	41	11,051	45	14.4%	17	65.3%	33
Ohio	75.7%	30	17.0%	40	28,706	26	34,351	23	13,461	24*	12.5%	24	63.5%	40
Oklahoma	74.6%	36	17.8%	34	23,577	43	28,554	43	11,893	39	16.7%	10	62.5%	43
Oregon	81.5%	9	20.6%	21	27,250	31	32,336	29	13,418	26	12.4%	26	64.4%	35
Pennsylvania	74.7%	35	17.9%	32	29,069	23	34,856	21	14,068	21	11.1%	34	61.7%	44
Rhode Island	72.0%	41	21.3%	18	32,181	13	39,172	11	14,981	15	9.6%	43	66.1%	26
South Carolina	68.3%	45	16.6%	42	26,256	36	30,797	38	11,897	38	15.4%	15	66.0%	27
South Dakota	77.1%	24	17.2%	39	22,503	47	27,602	46	10,661	47	15.9%	12	66.2%	25
Tennessee	67.1%	46	16.0%	44	24,807	40	29,546	39	12,255	37	15.7%	14	64.0%	37
Texas	72.1%	40	20.3%	23	27,016	33	31,553	36	12,904	32	18.1%	8	66.0%	29
Utah	**85.1%**	**2**	**22.3%**	**15**	**29,470**	**21**	**33,246**	**26**	**11,029**	**46**	**11.4%**	**32**	**68.0%**	**13**
Vermont	80.8%	12	24.3%	9	29,792	20	34,780	22	13,527	23	9.9%	42	69.4%	8
Virginia	75.2%	32	24.5%	7	33,328	10	38,213	13	15,713	12	10.2%	39	68.9%	10
Washington	83.8%	4	22.9%	13	31,183	14	36,795	15	14,923	16	10.9%	35	66.7%	22
West Virginia	66.0%	49	12.3%	51	20,795	50	25,602	49	10,520	49*	19.7%	4	53.0%	51
Wisconsin	78.6%	21	17.7%	35	29,442	22	35,082	20	13,276	28	10.7%	37	67.6%	18
Wyoming	83.0%	5	18.8%	28	27,096	32	32,216	30	12,311	36	11.9%	28	67.7%	16

Sources: U.S. Bureau of the Census and Utah Office of Planning and Budget.

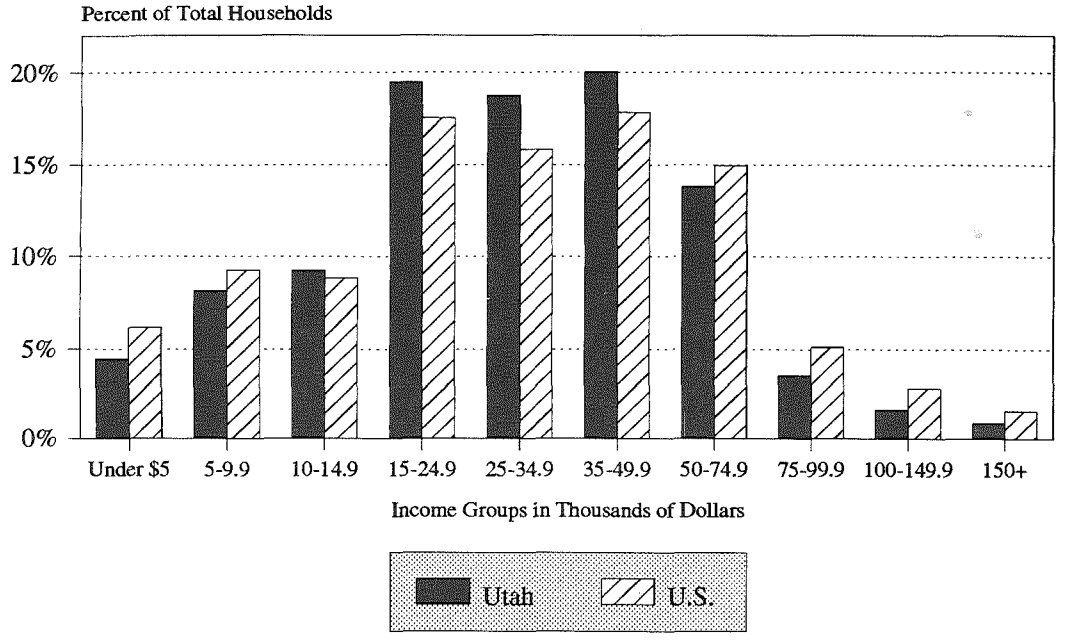
Notes: A * denotes a tie in ranking. Income and poverty figures are for 1989. Education and labor force statistics are for 1990. Education figures apply to persons 25 years and over. Labor force participation rates apply to persons 16 years and over.

Table 65
Population in Family Households
United States, States and the District of Columbia

Place	All Persons			Persons Under Age 18					Persons 65 Years and Over		
	Total	Percent in Family Households	Rank	Total	Married-Couple Households	Rank	No-Spouse Present Households	Rank	Total	Percent in Family Households	Rank
United States	248,709,873	83.7%	---	63,604,432	70.2%	---	20.2%	---	31,241,831	64.1%	---
Alabama	4,040,587	86.3%	3	1,058,788	66.7%	44	21.6%	9	522,989	64.5%	19
Alaska	550,043	82.7%	38	172,344	73.9%	16	18.4%	33	22,369	66.2%	10
Arizona	3,665,228	82.9%	34	981,119	68.9%	37	20.9%	15	478,774	69.5%	2
Arkansas	2,350,725	85.9%	6	621,131	69.4%	33	20.3%	21	350,058	63.4%	25
California	29,760,021	82.8%	37	7,750,725	67.9%	42	20.0%	22	3,135,552	66.0%	12
Colorado	3,294,394	81.1%	47	861,266	73.3%	18	19.9%	24	329,443	63.7%	24
Connecticut	3,287,116	83.1%	29	749,581	72.5%	22	20.0%	23	445,907	63.9%	21
Delaware	666,168	83.3%	26	163,341	69.2%	36	20.6%	19	80,735	65.2%	14
Dis. of Columbia	606,900	66.3%	51	117,092	33.6%	51	38.7%	1	77,847	52.0%	51
Florida	12,937,926	82.0%	43	2,866,237	65.8%	47	22.4%	7	2,369,431	68.8%	4
Georgia	6,478,216	84.9%	15	1,727,303	65.8%	46	22.6%	5	654,270	64.5%	18
Hawaii	1,108,229	85.2%	14	280,126	69.4%	34	14.9%	48	125,005	77.6%	1
Idaho	1,006,749	85.8%	9	308,405	80.3%	3	14.3%	49	121,265	66.2%	9
Illinois	11,430,602	84.0%	21	2,946,366	70.0%	32	20.6%	18	1,436,545	62.4%	33
Indiana	5,544,159	84.4%	19	1,455,964	73.4%	17	18.6%	32	696,196	61.7%	36
Iowa	2,776,755	82.4%	40	718,880	79.1%	6	15.8%	46	426,106	59.4%	48
Kansas	2,477,574	82.9%	32	661,614	77.2%	10	16.8%	41	342,571	60.8%	43
Kentucky	3,685,296	85.9%	8	954,094	72.8%	21	18.8%	30	466,845	62.5%	31
Louisiana	4,219,973	86.0%	5	1,227,269	62.4%	49	25.3%	3	468,991	62.9%	29
Maine	1,227,928	82.9%	35	309,002	75.4%	14	18.3%	36	163,373	61.3%	39
Maryland	4,781,468	84.0%	22	1,162,241	67.5%	43	20.8%	17	517,482	66.0%	11
Massachusetts	6,016,425	80.8%	48	1,353,075	72.1%	24	20.9%	16	819,284	61.4%	38
Michigan	9,295,297	84.7%	17	2,458,765	69.2%	35	22.5%	6	1,108,461	63.9%	22
Minnesota	4,375,099	82.2%	42	1,166,783	79.3%	4	16.2%	43	546,934	59.4%	47
Mississippi	2,573,216	86.9%	2	746,761	60.2%	50	25.9%	2	321,284	63.1%	28
Missouri	5,117,073	83.5%	25	1,314,826	72.1%	25	19.5%	25	717,681	60.5%	44
Montana	799,065	82.9%	31	222,104	75.9%	13	17.8%	39	106,497	61.1%	42
Nebraska	1,578,385	82.9%	33	429,012	79.3%	5	15.8%	45	223,068	59.3%	49
Nevada	1,201,833	80.6%	50	296,948	68.6%	38	21.1%	11	127,631	66.6%	6
New Hampshire	1,109,252	83.1%	28	278,755	79.0%	7	15.1%	47	125,029	63.1%	27
New Jersey	7,730,188	85.6%	10	1,799,462	71.7%	29	18.6%	31	1,032,025	66.6%	7
New Mexico	1,515,069	85.9%	7	446,741	68.5%	39	21.4%	10	163,062	67.9%	5
New York	17,990,455	82.5%	39	4,259,549	66.0%	45	23.4%	4	2,363,722	62.3%	35
North Carolina	6,628,637	83.9%	23	1,606,149	68.3%	41	20.9%	14	804,341	65.1%	16
North Dakota	638,800	82.3%	41	175,385	82.2%	2	14.2%	50	91,055	59.3%	50
Ohio	10,847,115	84.5%	18	2,799,744	71.7%	30	20.3%	20	1,406,961	62.4%	32
Oklahoma	3,145,585	84.2%	20	837,007	72.0%	28	19.4%	28	424,213	61.2%	40
Oregon	2,842,321	81.8%	44	724,130	72.4%	23	19.5%	27	391,324	65.0%	17
Pennsylvania	11,881,643	83.6%	24	2,794,810	72.9%	20	18.3%	35	1,829,106	63.3%	26
Rhode Island	1,003,464	81.6%	45	225,690	72.1%	26	21.0%	13	150,547	61.6%	37
South Carolina	3,486,703	85.4%	12	920,207	65.1%	48	21.8%	8	396,935	66.5%	8
South Dakota	696,004	83.0%	30	198,462	78.0%	9	16.1%	44	102,331	59.6%	46
Tennessee	4,877,185	85.3%	13	1,216,604	68.4%	40	21.0%	12	618,818	64.3%	20
Texas	16,986,510	85.4%	11	4,835,839	70.4%	31	18.9%	29	1,716,576	65.1%	15
Utah	**1,722,850**	**88.5%**	**1**	**627,444**	**82.8%**	**1**	**12.5%**	**51**	**149,958**	**69.4%**	**3**
Vermont	562,758	80.6%	49	143,083	75.9%	12	18.4%	34	66,163	60.3%	45
Virginia	6,187,358	82.8%	36	1,504,738	72.0%	27	18.1%	37	664,470	65.7%	13
Washington	4,866,692	81.5%	46	1,261,387	73.1%	19	19.5%	26	575,288	63.9%	23
West Virginia	1,793,477	86.0%	4	443,577	74.7%	15	17.4%	40	268,897	62.7%	30
Wisconsin	4,891,769	83.2%	27	1,288,982	76.2%	11	18.1%	38	651,221	61.1%	41
Wyoming	453,588	84.7%	16	135,525	78.3%	8	16.3%	42	47,195	62.3%	34

Source: U.S. Bureau of the Census. OPB acknowledges and appreciates assistance by the Bureau of Economic and Business Research.

Figure 60
1989 Households by Income Group
Utah and the United States



Source: U.S. Bureau of the Census

Table 66
1989 Household by Income Group
Utah and the United States

Income Group	Utah		United States	
	Households	Percent of Total	Households	Percent of Total
Under $5,000	23,914	4.5%	5,684,517	6.2%
$5,000-9,999	43,891	8.2%	8,529,980	9.3%
$10,000-14,999	49,726	9.3%	8,133,273	8.8%
$15,000-24,999	104,664	19.5%	16,123,742	17.5%
$25,000-34,999	100,655	18.7%	14,575,125	15.8%
$35,000-49,999	107,616	20.0%	16,428,455	17.9%
$50,000-74,999	74,290	13.8%	13,777,883	15.0%
$75,000-99,999	18,939	3.5%	4,704,808	5.1%
$100,000-149,999	8,725	1.6%	2,593,768	2.8%
Over $150,000	4,776	0.9%	1,442,031	1.6%
Total Households:	537,196	100.0%	91,993,582	100.0%
Median Household Income:	$29,470	---	$30,056	---

Source: U.S. Bureau of the Census.

Table 67
Changes in Utah and U.S. Labor Force Participation and Poverty: 1980 and 1990 Censuses

Labor Force Participation (ages 16 and over)	1990 Utah	1990 Utah Percent of Total	1990 U.S. Percent of Total	1980 Utah	1980 Utah Percent of Total	1980 U.S. Percent of Total	1980-90 Utah Change	1980-90 U.S. Change
Total Labor Force	784,501	68.0%	65.3%	626,709	64.3%	62.0%	25.2%	18.0%
Males	438,899	77.8%	74.4%	379,746	79.8%	75.1%	15.6%	11.5%
Females	345,602	58.6%	56.8%	246,963	49.5%	49.9%	39.9%	26.9%
with children 6-17	84,474	76.2%	75.0%	55,339	64.5%	63.0%	52.6%	15.3%
with children under 6	76,130	57.0%	59.7%	49,346	37.4%	45.7%	54.3%	46.2%

Poverty Status	1989 in Poverty	1989 Utah Percent of total	1989 U.S. Percent of total	1979 in Poverty	1979 Utah Percent of total	1979 U.S. Percent of total	1979-89 Utah Percent Change	1979-89 U.S. Percent Change
All persons	192,415	11.4%	13.1%	148,005	10.3%	12.4%	30.0%	15.9%
Persons 65 years and over	12,682	8.8%	12.8%	12,367	11.8%	14.8%	2.5%	5.6%
Related persons under age 18	75,504	12.2%	17.9%	56,986	10.7%	16.0%	32.5%	11.3%
Related persons under age 5	26,564	15.8%	20.1%	---	---	---	---	---
Unrelated persons	55,232	30.6%	24.2%	42,527	30.3%	25.1%	29.9%	29.3%
All families	35,443	8.6%	10.0%	27,133	7.7%	9.6%	30.6%	14.4%
with children under age 18	29,006	11.5%	14.9%	21,590	9.7%	13.2%	34.3%	18.5%
with children under age 5	18,167	14.7%	18.3%	---	---	---	---	---
Female Householder Families	14,210	30.3%	31.1%	9,372	28.0%	30.3%	51.6%	30.0%
with children under age 18	13,234	38.9%	42.3%	8,790	35.7%	40.3%	50.6%	29.0%
with children under age 5	7,485	57.1%	57.4%	---	---	---	---	---
with children under age 6	---	---	---	5,686	51.9%	55.6%	---	---

Note: The U.S. average poverty threshold for a family of four in 1979 was $7,412, and $12,674 in 1989--an increase of 71.0%. In real 1989 dollars, the threshold was $12,423 in 1979 and $12,674 in 1989--an increase of 2.0%

Source: U.S. Bureau of the Census.

Table 68
1989 and 1979 Utah Household Income by Source

Income Source	1989	1989 Percent of Households	1979	1979 Percent of Households	1979-89 Changes Total	1979-89 Changes Real Income
All Households	537,273	100.0%	449,524	100.0%	19.5%	---
Earnings: Average Income	NA		NA		NA	NA
Earnings: Households	455,142	84.7%	390,405	86.8%	16.6%	
Wage or Salary: Average Income	$32,680		$19,088		71.2%	2.2%
Wage or Salary: Households	441,038	82.1%	375,868	83.6%	17.3%	
Nonfarm Self-Employment: Average Income	$14,434		$11,074		30.3%	-22.2%
Nonfarm Self-Employment: Households	77,306	14.4%	52,583	11.7%	47.0%	
Farm Self-Employment: Average Income	$6,909		$5,039		37.1%	-18.2%
Farm Self-Employment: Households	13,372	2.5%	14,501	3.2%	-7.8%	
Interest, Dividend or Net Rental: Average Income	$4,988		$2,383		109.3%	24.9%
Interest, Dividend or Net Rental: Households	214,444	39.9%	183,320	40.8%	17.0%	
Social Security: Average Income	$8,204		$4,202		95.2%	16.5%
Social Security: Households	116,828	21.7%	89,055	19.8%	31.2%	
Public Assistance: Average Income	$3,733		$2,390		56.2%	-6.8%
Public Assistance: Households	29,569	5.5%	21,548	4.8%	37.2%	
Retirement: Average Income	$10,302		NA		NA	NA
Retirement: Households	83,373	15.5%	NA	NA	NA	NA
Other Types of Income: Average Income	$3,565		$4,031		-11.6%	-47.2%
Other Types of Income: Households	62,060	11.6%	108,696	24.2%	-42.9%	

NA = Not Available.
Source: U.S. Bureau of the Census and Utah Office of Planning and Budget.

Table 69
1989 and 1979 Median Household Income, Median Family Income and Per Capita Income
State of Utah, Metropolitan Statistical Areas, and Counties

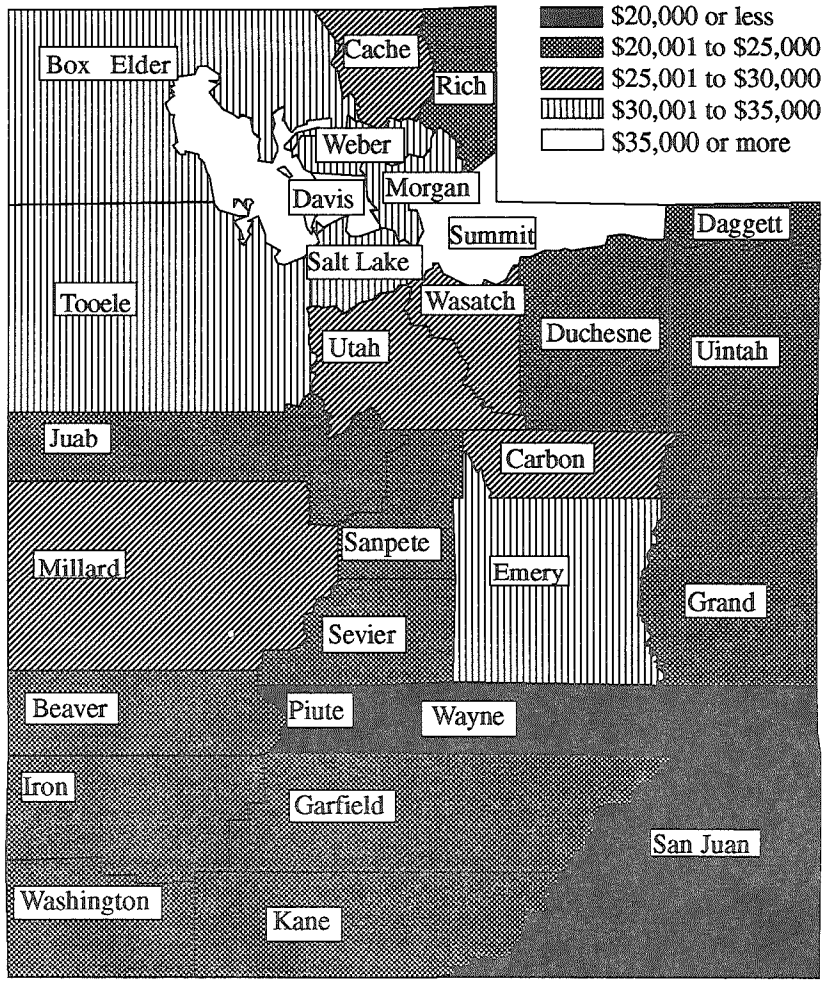
Place	Median Household Income								Median Family Income					Per Capita Income				
	1989	Size Rank	1979	Size Rank	1979-89 Change	Real 1979 Income	1979-89 Real Change	Growth Rank	1989	Size Rank	1979	Size Rank	1979-89 Change	1989	Size Rank	1979	Size Rank	1979-89 Change
State of Utah	$29,470	---	$17,671	---	66.8%	$29,617	-0.5%	---	$33,246	---	$20,024	---	66.0%	$11,029	---	$6,305	---	74.9%
Provo-Orem MSA	$27,432	---	$16,197	---	69.4%	$27,146	1.1%	---	$30,536	---	$17,768	---	71.9%	$9,051	---	$5,199	---	74.1%
Salt Lake-Ogden MSA	$30,882	---	$18,641	---	65.7%	$31,242	-1.2%	---	$35,239	---	$21,017	---	67.7%	$12,029	---	$6,816	---	76.5%
Beaver	$21,092	25	$12,755	24	65.4%	$21,377	-1.3%	14	$25,000	23	$14,453	24	73.0%	$8,558	20	$4,908	22	74.4%
Box Elder	33,468	3	17,428	9	92.0%	29,209	14.6%	2	36,648	3	19,597	10	87.0%	11,045	5	5,798	11	90.5%
Cache	26,949	11	14,902	19	80.8%	24,976	7.9%	6	31,562	9	17,236	18	83.1%	9,544	12	5,401	17	76.7%
Carbon	25,555	13	20,149	4	26.8%	33,770	-24.3%	28	31,208	10	22,030	2	41.7%	10,225	9	6,883	3	48.6%
Daggett	22,941	21	16,488	13	39.1%	27,634	-17.0%	24	26,167	22	18,125	13	44.4%	9,575	11	5,662	13	69.1%
Davis	35,108	2	20,862	2	68.3%	34,965	0.4%	12	38,050	2	21,948	3	73.4%	11,611	4	6,275	7	85.0%
Duchesne	23,653	17	17,345	10	36.4%	29,070	-18.6%	25	26,491	20	18,808	12	40.8%	8,197	25	5,531	14	48.2%
Emery	30,525	5	20,299	3	50.4%	34,021	-10.3%	22	34,401	7	21,501	4	60.0%	9,257	14	5,896	9	57.0%
Garfield	21,160	23	12,364	25	71.1%	20,722	2.1%	10	23,701	26	14,176	25	67.2%	8,248	24	4,969	21	66.0%
Grand	21,695	22	17,163	12	26.4%	28,765	-24.6%	29	26,500	19	19,523	11	35.7%	9,899	10	6,495	5	52.4%
Iron	23,185	20	14,471	20	60.2%	24,253	-4.4%	17	27,283	18	16,726	20	63.1%	8,539	21	5,158	20	65.5%
Juab	23,569	18	15,095	18	56.1%	25,299	-6.8%	19	27,342	17	17,089	19	60.0%	8,332	23	5,223	18	59.5%
Kane	21,134	24	12,244	26	72.6%	20,521	3.0%	9	24,904	24	14,103	26	76.6%	8,721	16	4,528	28	92.6%
Millard	26,376	12	13,004	23	102.8%	21,795	21.0%	1	30,342	12	15,038	22	101.8%	8,574	19	4,809	25	78.3%
Morgan	33,274	4	20,882	1	59.3%	34,998	-4.9%	18	36,105	4	22,618	1	59.6%	10,448	8	6,237	8	67.5%
Piute	19,125	28	11,420	28	67.5%	19,140	-0.1%	13	22,273	27	12,819	28	73.7%	8,160	26	4,893	23	66.8%
Rich	24,940	14	16,142	15	54.5%	27,054	-7.8%	20	28,333	14	17,757	15	59.6%	8,610	18	5,821	10	47.9%
Salt Lake	30,149	7	18,418	8	63.7%	30,869	-2.3%	16	34,699	5	21,064	7	64.7%	12,222	2	7,013	2	74.3%
San Juan	17,289	29	13,216	22	30.8%	22,150	-21.9%	26	19,183	29	14,064	27	36.4%	5,907	29	3,701	29	59.6%
Sanpete	20,197	26	12,224	27	65.2%	20,487	-1.4%	15	23,956	25	14,860	23	61.2%	7,585	28	4,531	27	67.4%
Sevier	23,300	19	15,733	16	48.1%	26,369	-11.6%	23	27,986	15	17,404	17	60.8%	8,615	17	5,481	15	57.2%
Summit	36,756	1	19,577	6	87.8%	32,811	12.0%	3	40,162	1	21,410	5	87.6%	16,739	1	8,454	1	98.0%
Tooele	30,178	6	19,682	5	53.3%	32,987	-8.5%	21	33,507	8	21,305	6	57.3%	10,568	7	6,458	6	63.6%
Uintah	23,968	16	18,555	7	29.2%	31,098	-22.9%	27	26,489	21	20,026	8	32.3%	8,379	22	5,768	12	45.3%
Utah	27,432	10	16,197	14	69.4%	27,146	1.1%	11	30,536	11	17,768	14	71.9%	9,051	15	5,199	19	74.1%
Wasatch	27,981	9	15,519	17	80.3%	26,010	7.6%	7	30,132	13	17,659	16	70.6%	10,722	6	5,466	16	96.2%
Washington	24,602	15	13,507	21	82.1%	22,638	8.7%	4	27,690	16	15,466	21	79.0%	9,450	13	4,869	24	94.1%
Wayne	20,000	27	11,047	29	81.0%	18,515	8.0%	5	22,017	28	12,402	29	77.5%	7,692	27	4,675	26	64.5%
Weber	30,125	8	17,287	11	74.3%	28,973	4.0%	8	34,464	6	19,748	9	74.5%	11,637	3	6,585	4	76.7%

Source: U.S. Bureau of the Census.

Notes: 1979 Real income figures, shown in 1989 dollars, are adjusted using CPI-U-X1 inflation factor of 1.676.

T[illegible] Pr[illegible]-Or[illegible] M[illegible]pol[illegible] St[illegible]tic[illegible] Are[illegible] MSA[illegible]s U[illegible] co[illegible]y; th[illegible] Salt[illegible]ke-[illegible]der[illegible]SA[illegible]lud[illegible] Salt[illegible]ke[illegible]avis[illegible]d W[illegible]er[illegible]ntic

Figure 61
Median Household Income
Income in 1989



STATE	$29,470	Grand	$21,695	Rich	$24,940	Salt Lake	$30,149
San Juan	$17,289	Daggett	$22,941	Carbon	$25,555	Tooele	$30,178
Piute	$19,125	Iron	$23,185	Millard	$26,376	Emery	$30,525
Wayne	$20,000	Sevier	$23,300	Cache	$26,949	Morgan	$33,274
Sanpete	$20,197	Juab	$23,569	Utah	$27,432	Box Elder	$33,468
Beaver	$21,092	Duchesne	$23,653	Wasatch	$27,981	Davis	$35,108
Kane	$21,134	Uintah	$23,968	Weber	$30,125	Summit	$36,756
Garfield	$21,160	Washington	$24,602				

SOURCE: US Bureau of the Census, 1990 Census of Population & Housing.
Map produced by Utah Office of Planning and Budget.

Table 70
Per Capita Income and Population by Race and Hispanic Origin
State of Utah, Metropolitan Statistical Areas, and Counties

Place	White		Black		Am. Indian, Eskimo & Aleut		Asian and Pacific Islander		Other Race		Hispanic Origin*	
	Per Capita Income	Population	Per Capita Income	Population	Per Capita Income	Population	Per Capita Income	Population	Per Capita Income	Population	Per Capita Income	Population
State of Utah	$11,274	1,615,845	$8,385	11,576	$5,125	24,283	$8,284	33,371	$7,415	37,775	$7,398	84,597
Provo-Orem MSA	$9,194	253,596	$2,875	374	$5,056	1,913	$5,781	3,958	$4,922	3,749	$5,550	8,488
Salt Lake-Ogden-MSA	$12,300	1,000,082	$8,686	10,464	$6,668	8,337	$8,963	25,598	$7,825	27,746	$7,783	61,964
Beaver	$8,618	4,647	$0	5	$6,711	39	$13,257	19	$4,319	55	$3,797	120
Box Elder	11,141	34,733	0	19	5,769	391	11,622	409	9,767	933	8,464	1,610
Cache	9,736	66,551	4,162	217	5,668	547	5,526	1,910	7,137	958	6,584	1,780
Carbon	10,358	19,060	11,741	62	5,761	150	7,107	116	8,187	840	7,294	2,247
Daggett	9,418	674	0	0	22,663	9	000	5	3,000	2	1,280	15
Davis	11,766	178,391	8,361	2,355	6,488	1,114	9,371	3,263	8,698	2,818	8,648	7,275
Duchesne	8,432	11,807	6,967	10	5,265	664	4,408	39	4,040	125	4,268	350
Emery	9,360	10,127	12,393	4	6,149	44	4,176	36	4,177	121	4,253	219
Garfield	8,384	3,890	0	1	4,034	73	3,374	8	3,619	8	5,840	35
Grand	10,155	6,341	0	7	3,265	203	11,260	24	7,397	45	6,744	291
Iron	8,713	19,922	1,708	43	4,651	635	6,019	98	7,185	91	6,836	382
Juab	8,438	5,680	0	2	4,225	85	0	10	735	40	1,935	73
Kane	8,928	5,032	0	5	1,726	77	1,136	25	3,180	30	6,467	101
Millard	8,705	10,798	0	2	4,429	184	4,869	105	5,781	244	4,482	402
Morgan	10,465	5,462	0	7	0	8	2,391	15	12,350	36	11,055	78
Piute	8,095	1,267	0	0	21,994	9	0	1	0	0	3,873	15
Rich	8,679	1,704	0	1	6,000	1	6,094	6	5,808	13	6,662	21
Salt Lake	12,532	675,141	8,760	5,663	6,403	6,111	8,621	20,035	7,773	19,006	7,645	43,647
San Juan	8,835	5,501	18,520	11	3,571	6,859	9,878	40	4,142	210	4,132	440
Sanpete	7,743	15,539	1,750	11	4,954	131	2,506	246	5,015	332	4,604	560
Sevier	8,756	14,982	0	6	3,472	318	446	27	5,572	98	4,669	289
Summit	16,714	15,304	0	18	9,517	66	46,410	78	6,080	52	10,450	326
Tooele	10,911	24,347	6,078	228	5,934	391	4,896	205	7,368	1,430	7,794	2,960
Uintah	8,912	19,537	4,441	9	4,371	2,335	9,146	82	4,531	248	4,523	691
Utah	9,194	253,596	2,875	374	5,056	1,913	5,781	3,958	4,922	3,749	5,550	8,488
Wasatch	10,773	9,937	3,500	3	8,626	68	7,306	19	4,862	62	5,848	253
Washington	9,586	47,202	7,501	66	3,999	706	4,278	290	7,033	296	7,360	862
Wayne	7,801	2,123	0	1	2,903	40	2,175	2	4,241	11	8,972	25
Weber	11,882	146,550	8,817	2,446	8,266	1,112	11,198	2,300	7,576	5,922	7,765	11,042

Note: the Provo-Orem Metropolitan Statistical Area (MSA) is Utah county; the Salt Lake-Ogden MSA includes Salt Lake, Davis and Weber counties.
Source: U.S. Bureau of the Census.

Table 71
Educational Attainment, Income, Poverty and Labor Force Participation Statistics
American Indian Reservations in Utah

Reservation/ County	Total Population	American Indian, Eskimo or Aleut					
		Population	High School Graduate & Higher	Bachelor's Degree & Higher	Per Capita Income	Unemploy-ment Rate	Poverty Rate for Persons
State of Utah	1,722,850	24,283	59.3%	6.4%	$5,125	20.7%	43.6%
Goshute	76	75	54.3%	11.4%	$1,325	28.6%	100.0%
Juab	37	36	73.1%	15.4%	$1,156	28.6%	100.0%
Tooele	39	39	n/a	n/a	$1,945	n/a	100.0%
Navajo	5,500	5,252	34.7%	4.4%	$3,572	39.0%	57.0%
San Juan	5,500	5,252	34.7%	4.4%	$3,572	39.0%	57.0%
Paiute	645	323	45.5%	n/a	$4,708	4.9%	40.7%
Iron	295	144	53.6%	n/a	$5,700	8.5%	31.2%
Millard	52	50	100.0%	n/a	$4,563	n/a	n/a
Sevier	50	44	n/a	n/a	$1,960	n/a	92.3%
Washington	248	85	26.8%	n/a	$4,348	n/a	44.4%
Skull Valley	32	32	n/a	n/a	$20,647	n/a	n/a
Tooele	32	32	n/a	n/a	$20,647	n/a	n/a
Uintah and Ouray	17,224	2,650	52.3%	4.1%	$4,520	28.6%	46.3%
Carbon	0	0	---	---	---	---	---
Duchesne	12,634	664	58.8%	7.9%	$5,265	22.9%	31.1%
Grand	0	0	---	---	---	---	---
Uintah	4,584	1,986	50.2%	2.8%	$4,267	30.6%	51.2%
Utah	0	0	---	---	---	---	---
Wasatch	6	0	---	---	---	---	---
Ute Mountain	251	245	39.0%	n/a	$4,304	32.7%	46.7%
San Juan	245	245	39.0%	n/a	$4,304	32.7%	46.7%
Trust Land	6	0	---	---	---	---	---
San Juan	6	0	---	---	---	---	---
All Persons in the State of Utah							
State of Utah	1,722,850	---	85.1%	22.3%	$11,029	5.3%	11.4%

Source: U.S. Bureau of the Census.
Notes: Income and poverty figures are for 1989. Population, Educational attainment and unemployment statistics are for 1990. Education figures apply to persons 25 years and over. Unemployment figures are for persons 16 years and over.
n/a = Not Available

Table 72
1979 and 1989 Poverty Rates for All Persons
United States, Utah, Metropolitan Statistical Areas and Counties

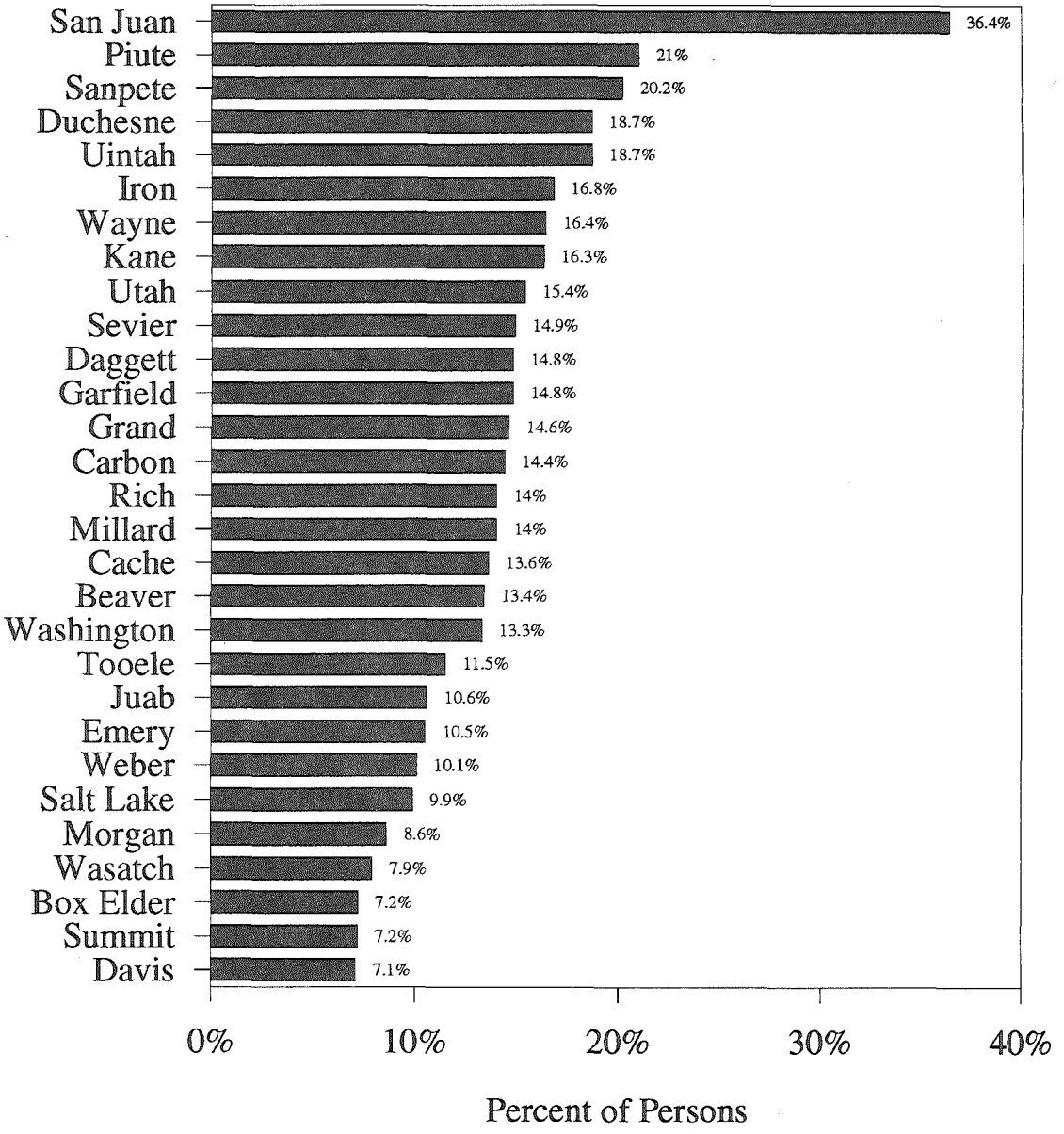
Place	1989 Persons in Poverty	Percent of Total	1989 Rank	1979 Persons in Poverty	Percent of Total	1979 Rank	1979-89 Change in Poverty	1980-90 Change in Population
United States	31,742,864	13.1%	---	27,392,580	12.4%	---	15.9%	9.8%
State of Utah	192,415	11.4%	---	148,005	10.3%	---	30.0%	17.9%
Provo-Orem MSA	39,100	15.4%	---	32,435	15.4%	---	20.5%	20.9%
Salt Lake-Ogden MSA	99,667	9.4%	---	77,431	8.4%	---	28.7%	17.8%
Beaver	631	13.4%	18	624	14.3%	9	1.1%	8.8%
Box Elder	2,629	7.2%	27	2,665	8.2%	24	-1.4%	9.8%
Cache	9,353	13.6%	17	7,035	12.7%	12	32.9%	22.7%
Carbon	2,858	14.4%	14	1,546	7.1%	27	84.9%	-8.8%
Daggett	102	14.8%	11	87	11.3%	16	17.2%	-10.3%
Davis	13,291	7.1%	29	9,776	6.7%	29	36.0%	28.3%
Duchesne	2,350	18.7%	4	1,555	12.5%	13	51.1%	0.6%
Emery	1,080	10.5%	22	949	8.4%	23	13.8%	-9.8%
Garfield	583	14.8%	12	434	12.0%	15	34.3%	8.4%
Grand	956	14.6%	13	899	11.0%	18	6.3%	-19.7%
Iron	3,380	16.8%	6	2,499	14.5%	8	35.3%	19.8%
Juab	604	10.6%	21	679	12.4%	14	-11.0%	5.2%
Kane	836	16.3%	8	695	17.3%	3	20.3%	28.5%
Millard	1,569	14.0%	16	1,326	14.9%	7	18.3%	26.3%
Morgan	474	8.6%	25	344	7.0%	28	37.8%	12.4%
Piute	268	21.0%	2	150	11.3%	17	78.7%	-3.9%
Rich	238	14.0%	15	297	14.2%	10	-19.9%	-17.9%
Salt Lake	70,625	9.9%	24	52,772	8.6%	22	33.8%	17.3%
San Juan	4,523	36.4%	1	3,882	31.9%	1	16.5%	3.0%
Sanpete	3,176	20.2%	3	2,261	16.0%	4	40.5%	11.2%
Sevier	2,259	14.9%	10	1,446	9.9%	20	56.2%	4.8%
Summit	1,107	7.2%	28	780	7.7%	25	41.9%	52.2%
Tooele	3,012	11.5%	20	1,955	7.6%	26	54.1%	2.2%
Uintah	4,127	18.7%	5	2,671	13.1%	11	54.5%	8.3%
Utah	39,100	15.4%	9	32,435	15.4%	6	20.5%	20.9%
Wasatch	790	7.9%	26	844	10.0%	19	-6.4%	18.4%
Washington	6,390	13.3%	19	4,045	15.8%	5	58.0%	86.3%
Wayne	353	16.4%	7	426	22.3%	2	-17.1%	13.9%
Weber	15,751	10.1%	23	12,928	9.1%	21	21.8%	9.5%

Source: U.S. Bureau of the Census.

Notes: Poverty status is detmined for all persons except institutionalized persons, persons in military quarters, college dormitories and unrelated individuals under 15 years old.

The Provo-Orem Metropolitan Statistical Area (MSA) is Utah county; the Salt Lake-Ogden MSA includes Salt Lake, Davis, and Weber Counties.

Figure 62
1989 Poverty Rates for Persons
Utah Counties



Source: U.S. Bureau of the Census

Table 73
Educational Attainment and Labor Force Participation 1980 and 1990
State of Utah, Metropolitan Statistical Areas, and Counties

Place	High School Graduate and Higher				Bachelor's Degree & Higher		Labor Force Participation Rate			
	1990	Rank	1980	Rank	1990	Rank	1990	Rank	1980	Rank
State of Utah	85.1%	---	80.0%	---	22.3%	---	68.0%	---	64.3%	---
Provo-Orem MSA	87.9%	---	82.7%	---	26.2%	---	64.1%	---	57.8%	---
Salt Lake-Ogden MSA	85.6%	---	80.5%	---	22.9%	---	70.4%	---	67.3%	---
Beaver	83.4%	11	76.0%	16	9.0%	28	54.6%	28	52.6%	26
Box Elder	83.6%	10	77.8%	12	17.6%	12	67.3%	9	63.1%	7
Cache	89.3%	4	84.4%	2	30.0%	2	68.9%	5	60.4%	13
Carbon	74.3%	27	65.8%	28	12.5%	20	59.0%	24	59.8%	14
Daggett	75.4%	25	81.3%	7	11.7%	24	64.9%	11	59.2%	18
Davis	89.9%	3	85.8%	1	23.5%	5	71.6%	2	68.2%	2
Duchesne	74.8%	26	74.8%	19	11.8%	23	62.9%	18	59.3%	16
Emery	82.4%	15	75.0%	18	10.4%	27	63.7%	13	58.5%	19
Garfield	79.9%	21	72.5%	24	15.0%	17	61.9%	19	55.1%	24
Grand	79.9%	20	73.5%	23	15.4%	15	63.4%	16	66.6%	4
Iron	85.8%	6	83.3%	5	21.9%	6	63.7%	15	63.0%	8
Juab	77.3%	23	74.5%	20	8.8%	29	65.5%	10	57.1%	21
Kane	82.5%	13	81.0%	8	11.8%	22	60.9%	21	55.9%	23
Millard	84.9%	8	77.4%	14	15.9%	13	63.7%	14	59.4%	15
Morgan	90.1%	2	83.3%	4	19.0%	8	68.6%	7	62.2%	10
Piute	79.8%	22	73.9%	22	12.5%	21	51.3%	29	48.8%	29
Rich	81.8%	19	76.0%	17	15.1%	16	63.3%	17	62.1%	11
Salt Lake	85.3%	7	80.3%	9	23.8%	4	70.8%	3	67.9%	3
San Juan	59.7%	29	58.8%	29	13.1%	18	57.3%	25	56.3%	22
Sanpete	82.0%	16	74.2%	21	15.6%	14	55.4%	27	53.3%	25
Sevier	81.9%	18	77.4%	15	12.6%	19	59.8%	22	59.3%	17
Summit	91.6%	1	83.9%	3	32.9%	1	75.0%	1	70.5%	1
Tooele	77.3%	24	72.2%	25	11.3%	25	68.6%	6	65.9%	5
Uintah	73.7%	28	69.5%	27	11.2%	26	61.2%	20	61.0%	12
Utah	87.9%	5	82.7%	6	26.2%	3	64.1%	12	57.8%	20
Wasatch	83.2%	12	78.0%	11	18.5%	9	69.7%	4	62.3%	9
Washington	84.5%	9	79.8%	10	17.7%	11	55.5%	26	52.3%	27
Wayne	82.0%	17	71.7%	26	20.0%	7	59.3%	23	51.1%	28
Weber	82.5%	14	77.8%	13	18.0%	10	67.5%	8	64.1%	6

Sources: U.S. Bureau of the Census and the Utah Office of Planning and Budget.
Notes: 1980 Bachelor's degree attainment statistics are not available.
Education figures apply to persons 25 years and over. Labor force participation rates apply to persons 16 years and over.
The Provo-Orem Metropolitan Statistical Area (MSA) is Utah county; the Salt Lake-Ogden MSA includes Salt Lake, Davis and Weber counties.

Table 74
Educational Attainment, Income, Poverty, and Labor Force Participation Statistics
Utah's 50 Largest Cities, Towns, and Census Designated Places

Place	County	Population	Rank	High School Graduate & Higher	Bachelor's Degree & Higher	Median Household Income	Median Family Income	Per Capita Income	Poverty Rate for Persons	Labor Force Participation
State of Utah	---	1722850	---	85.1%	22.3%	$29,470	$33,246	$11,029	11.4%	68.0%
American Fork	Utah	15,696	22	83.6%	20.1%	29,624	31,851	8,620	8.1%	65.5%
Bountiful	Davis	36,659	10	91.6%	30.5%	38,346	41,917	14,399	4.9%	67.1%
Brigham City	Box Elder	15,644	23	84.1%	22.2%	33,784	37,181	11,819	6.8%	64.9%
Canyon Rim CDP	Salt Lake	10,527	38	88.7%	31.4%	33,284	37,926	13,786	4.5%	65.6%
Cedar City	Iron	13,443	30	88.7%	26.8%	23,415	28,758	8,960	17.5%	65.8%
Centerville	Davis	11,500	35	94.2%	32.4%	42,032	46,026	12,078	3.6%	74.4%
Clearfield	Davis	21,435	18	86.5%	12.2%	26,875	28,678	8,672	17.5%	65.1%
Clinton	Davis	7,945	45	90.8%	15.7%	37,230	37,365	9,739	5.0%	78.7%
Cottonwood Hts. CDP	Salt Lake	28,776	14	93.2%	35.4%	43,429	46,261	15,273	4.6%	77.5%
Cottonwood West CDP	Salt Lake	17,476	21	92.0%	29.3%	33,750	37,700	16,373	6.4%	67.0%
Draper	Salt Lake	7,257	48	77.7%	11.6%	32,357	33,846	10,051	7.9%	39.5%
East Millcreek CDP	Salt Lake	21,184	19	93.7%	40.8%	37,257	43,371	15,919	3.8%	62.1%
Farmington	Davis	9,028	41	93.6%	37.2%	45,000	48,233	12,392	2.9%	68.5%
Holladay-Cottnwd. CDP	Salt Lake	14,095	24	94.0%	39.2%	39,667	47,321	19,358	5.2%	66.0%
Kaysville	Davis	13,961	25	93.4%	33.9%	39,221	41,687	11,142	5.4%	69.3%
Kearns CDP	Salt Lake	28,374	16	77.1%	7.8%	28,509	29,242	8,008	11.3%	72.0%
Layton	Davis	41,784	9	88.2%	19.7%	34,466	37,118	11,545	7.1%	75.5%
Lehi	Utah	8,475	43	81.9%	11.6%	29,184	31,655	8,713	6.8%	68.1%
Logan	Cache	32,762	11	90.4%	36.8%	21,312	26,178	9,394	21.6%	67.0%
Magna CDP	Salt Lake	17,829	20	77.0%	8.0%	27,691	29,437	8,773	11.0%	71.2%
Midvale	Salt Lake	11,886	33	73.7%	13.2%	21,183	23,681	9,631	20.7%	68.9%
Millcreek CDP	Salt Lake	32,230	12	82.0%	20.9%	23,709	26,469	11,819	14.6%	69.1%
Mt. Olympus CDP	Salt Lake	7,413	47	97.4%	54.2%	60,259	63,046	25,337	1.1%	64.2%
Murray	Salt Lake	31,282	13	84.2%	20.4%	28,950	33,504	13,216	8.0%	71.2%
North Ogden	Weber	11,668	34	93.7%	31.2%	41,178	42,294	11,895	2.9%	71.4%
Ogden	Weber	63,909	6	75.1%	16.2%	23,487	28,649	10,754	16.8%	62.8%
Oquirrh CDP	Salt Lake	7,593	46	89.0%	11.2%	32,007	32,411	8,228	7.9%	84.4%
Orem	Utah	67,561	5	90.0%	30.4%	31,262	33,459	9,726	9.0%	67.8%
Payson	Utah	9,510	40	81.5%	11.3%	25,225	26,447	7,670	11.2%	65.8%
Pleasant Grove	Utah	13,476	29	86.1%	20.5%	31,633	33,097	8,852	8.5%	67.5%
Price	Carbon	8,712	42	78.2%	15.9%	26,084	32,170	10,070	18.6%	61.9%
Provo	Utah	86,835	3	89.8%	34.5%	21,162	23,127	8,408	29.6%	60.3%
Riverton	Salt Lake	11,261	37	88.7%	14.7%	36,242	37,127	9,391	4.5%	75.0%
Roy	Weber	24,603	17	88.7%	15.6%	35,018	37,446	11,602	4.4%	74.9%
Salt Lake City	Salt Lake	159,936	1	83.0%	30.4%	22,697	29,697	13,482	16.4%	65.3%
Sandy City	Salt Lake	75,270	4	93.1%	29.4%	43,971	45,611	12,840	4.2%	75.5%
South Jordan	Salt Lake	12,218	31	90.9%	22.9%	43,804	45,205	10,626	3.2%	73.2%
South Ogden	Weber	12,105	32	87.2%	25.2%	33,524	37,023	14,031	7.4%	66.4%
South Salt Lake	Salt Lake	10,129	39	72.7%	9.6%	18,627	24,212	10,034	17.2%	69.6%
Spanish Fork	Utah	11,272	36	85.1%	13.0%	29,023	31,875	8,780	7.5%	66.1%
Springville	Utah	13,950	26	85.5%	19.3%	25,341	28,303	9,512	13.0%	63.3%
St. George	Washington	28,502	15	86.3%	19.9%	25,947	29,802	10,520	12.7%	56.5%
Taylorsville-Benn. CDP	Salt Lake	52,351	7	86.7%	15.5%	32,866	35,842	10,780	6.2%	77.7%
Tooele	Tooele	13,887	27	77.3%	11.2%	29,784	33,389	11,090	11.9%	64.4%
Union CDP	Salt Lake	13,684	28	88.0%	23.9%	31,271	33,969	12,796	7.1%	75.3%
Vernal	Uintah	6,644	49	76.3%	12.9%	21,793	26,855	9,649	17.2%	60.9%
Washington Terrace	Weber	8,189	44	82.5%	13.0%	28,330	31,880	11,070	9.9%	64.1%
West Jordan	Salt Lake	42,912	8	86.3%	15.9%	33,273	35,230	9,434	7.0%	77.9%
West Valley City	Salt Lake	86,976	2	79.7%	11.6%	29,510	31,238	9,511	11.5%	76.1%
White City CDP	Salt Lake	6,506	50	82.7%	11.8%	33,715	34,899	9,757	7.1%	75.5%

Sources: U.S. Bureau of the Census and Utah Office of Planning and Budget. Notes: About 76% of Utah's population reside in these 50 largest cities, towns, and CDPs.

A Census Designated Place is an unincorporated area of the county geographically defined and named by the Bureau of the Census.

Income and poverty figures are for 1989. Population, education and labor force statistics are for 1990.

Education figures apply to persons 25 years and over. Labor force participation rates apply to persons 16 years and over.

BUSINESS AND HOUSEHOLD TAX BURDEN

Overview

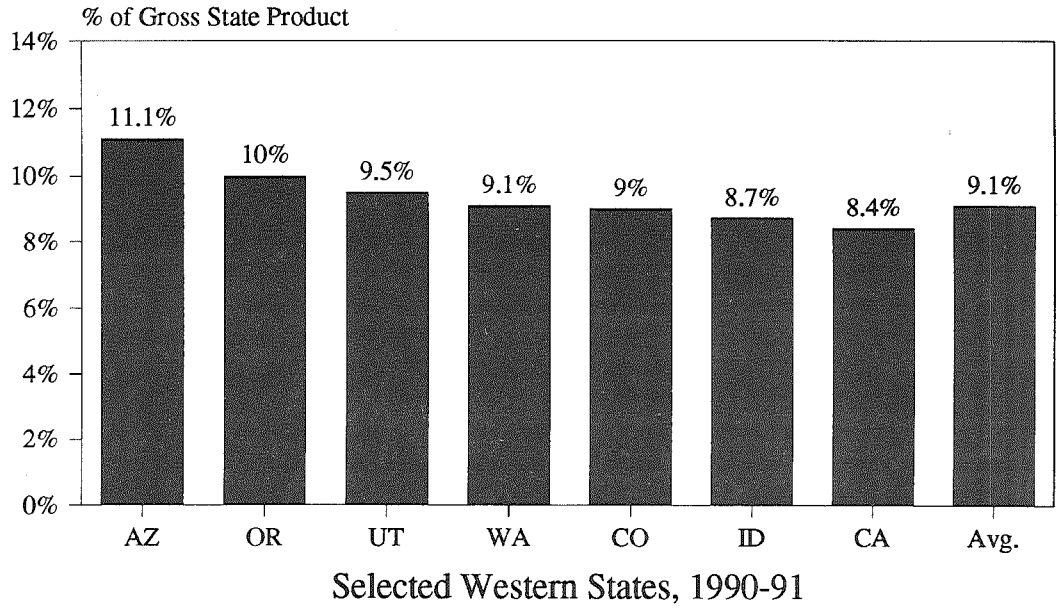
A comparison of overall household and business tax burden among seven western states in fiscal year 1991 reveals that these tax burdens range from 8.4 percent of gross state product to 11.1 percent. The seven western states compared for the overall tax burden, the business tax burden and the household tax burden were Arizona, California, Colorado, Idaho, Oregon, Utah and Washington. While the heaviest overall tax burden was found in Arizona, and the heaviest business tax burdens were found in Arizona and Washington, fairly heavy household tax burdens were seen in Utah, Arizona and Oregon. Table 75 summarizes the comparison.

Because Arizona's direct taxes on businesses were also the highest in the west, its overall major state and local tax burden ranked was the largest of the seven western states at 11.1 percent of gross state product (Figure 63). Both household and business tax burdens rose about 1/2 of a percent in Arizona over the past two years (although some of the increase may be due to calculation differences). Its business tax burden surpassed Washington, which was the largest for the past ten years.

In contrast to Arizona, California's recession and relatively stagnant growth from property taxes due to Proposition 13 dropped its combined tax burden to only 8.4 percent of gross state product, the lowest among the seven western states that were studied. At 2.7 percent of gross state product, California's tax burden on business was the lowest among these comparable western states.

At 10.1 percent of gross state product, Oregon had the second largest overall state and local tax burden among the seven western states that were studied. Its household tax burden has risen from 6.9 percent of personal income in fiscal year 1985 to 7.7 percent in fiscal year 1991. Over the same six-year period, business taxes fell from 3.6 percent to 3.4 percent of gross state product, offsetting the rising household tax burden.

Figure 63
Combined Business and Household
Initial Tax Burdens



Source: Utah State Tax Commission,
Economic & Statistical Unit

Utah took third place in the west for the combined business and household tax burdens at 9.5 percent of gross state product. Its household tax burden, which had been first in the west from fiscal year 1985 to fiscal year 1989, remained first, but by less than 1/10 of a percent. This was due to the following Executive and Legislative Branch actions which lowered household taxes from 7.9 percent to 7.7 percent of personal income:

- Personal income taxes were cut after Utah's 1987 Tax Reform brought in more funds than expected.
- Property tax revenue rose only 9.4 percent over two years due to stagnant property values and leveling tax rates due to the "Truth-in Taxation" law.
- Utah's business tax burden has steadily slipped from 4 percent of GSP in fiscal year 1985 to 3.35 percent in fiscal year 1991.

Washington maintained the lowest direct household tax burden in the west at only 5.7 percent of personal income in fiscal year 1991. And its business tax burden fell to second in the west, moving its overall tax burden (9.1 percent of GSP) into fourth place.

Colorado's and Idaho's overall state and local tax burdens decreased since fiscal year 1989 due to falling direct business taxes as a percent of gross state product. Their household tax burdens remained surprisingly constant over the past two years. Colorado's direct taxes on business fell from 3.6 percent of gross state product in fiscal year 1985 and fiscal year 1989 to 3.3 percent in fiscal year 1991. Idaho's business tax burden fell over 1/2 of 1 percent to below 3 percent of gross state product (sixth place)

Business Tax Burdens

Results from the fiscal year 1991 survey of initial business tax burdens revealed that Arizona's business tax shot up to first place over the last two years. Previously Arizona's business tax burden was slightly less than Washington's. Both of these states had significantly higher business tax burdens than the five other states (Figure 64). Arizona's high ranking (4.5 percent of gross state product) stems from its heavy reliance on business property taxes. Significantly higher property tax assessment ratios for business appear to be the main factor in Arizona's heavy business tax burden. Washington's high business tax burden (4.2 percent of gross state product) is due to its use of a low-rate tax on gross income (instead of a net income tax), called the Business and Occupation Tax. Also, business pays a substantial share of Washington's high sales tax, due to the state's sales tax rate and sales tax on construction labor, materials and equipment purchases.

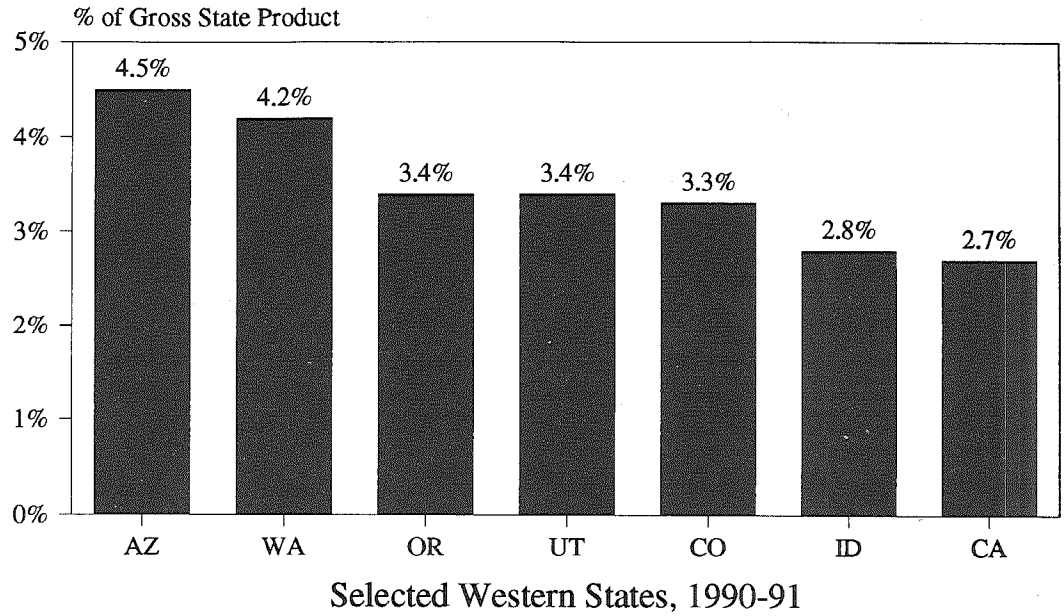
The business tax burden of Colorado, Utah, and Oregon clustered between 3.2 percent and 3.4 percent. Statistically, there is no real difference between these states' initial tax burden on business. This clustering represents a reasonable range within which all states seem to be economically competitive from a business tax standpoint.

The lowest tier of business tax burden states included Idaho and California. Idaho's business tax burden fell from 3.4 percent of GSP to 2.8 percent of GSP since fiscal year 1989. Idaho corporate net income taxes actually fell from $73 million to $60 million in the last two years. In addition, business property and sales taxes rose only 15 percent in Idaho, despite a 21 percent gain in personal income.

Because of the 12 percent drop in California's corporate profits, the 10 percent decline in unemployment insurance taxes and the modest 7 percent gain in business property taxes, that state's business tax burden dropped from 3.1 percent of GSP to 2.7 percent of GSP.

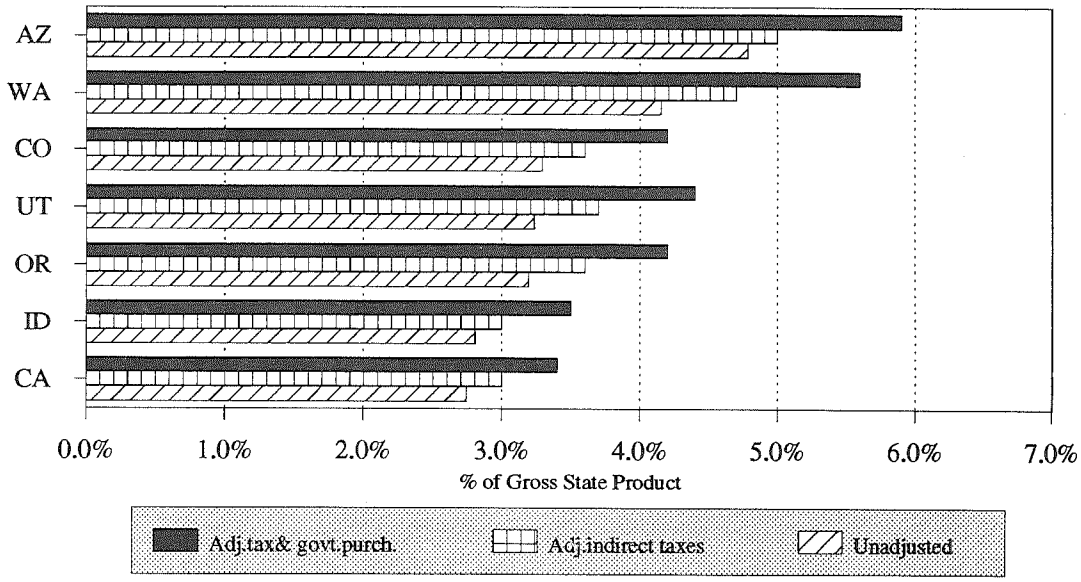
California's last place finish in the west for business tax burdens deserves a word of explanation. This study focused on only one major tax burden levied initially on business. Workers' compensation payments and fees have become a growing part of California's funding structure over the last two decades. Workers' compensation payments in California probably were more than $5 billion in 1990. Adding workers compensation payments (1988 payments were the latest information available) to initial business taxes moves the California business tax burden slightly ahead of Idaho's, but still next to last. Utah's light workers' compensation burden moved it from fourth place to fifth.

Figure 64
Business Tax Burdens
(Initial Direct Taxes as a % of GSP)



Source: Utah State Tax Commission,
Economic & Statistical Unit

Figure 65
Business Tax Burdens
(As Share of Unadjusted & Adjusted GSP)



Source: Utah State Tax Commission,
Economic & Statistical Unit

In summary, three states reduced their business tax burdens significantly (by more than 0.1 percent of gross state product) between fiscal years 1989 and 1991:

- California's business tax burden dropped about 0.4 percent of GSP, amounting to a savings of $2.8 billion.
- Idaho's burden also fell by about 0.6 percent, saving business almost $100 million.
- Utah reduced its rate by 0.2 percent of GSP, saving its businesses $55 million.

In contrast, Arizona's initial tax burden on business rose by 0.3 percent of GSP, increasing business taxes by $220 million. It is important to note that over half of this increase was due to the estimate that 57 percent (previously 54 percent) of property taxes were initially paid by business. Prior estimates of property taxes excluded the vehicle license tax, which undoubtedly distorts the comparison.

Figure 65 illustrates the impact of subtracting indirect business taxes from gross state product in order to arrive at what some economists see as a more pure measure of the business tax burden. The differences are almost not ascertainable, however. In addition, government services were also deducted from gross state product in order to measure the business tax burden against the private sector. Again, most of the comparative rankings held. By further reducing government services from the base, Utah's ranking moved up, since the federal government plays a major landowner and defense role. At 4.42 percent of adjusted gross state product, Utah's adjusted business tax burden ranking moved from fourth place to third place; however, it still fell in a second tier along with Colorado (4.24 percent) and Oregon (4.16 percent), well below the heavily business taxed states of Arizona (5.9 percent) and Washington (5.6 percent). Idaho and California still remained in a third tier, slightly above 3 percent of the adjusted gross state product.

Household Tax Burdens

At 7.7 percent of personal income, Utah (7.71), Arizona (7.67) and Oregon (7.66) ranked first, second and third, respectively for the highest direct household taxes among the seven western states (Figure 66). Given the assumptions that were necessary in this study, there may be no significant difference between the household tax burdens of these three states.

Rising home values and declining property tax relief lifted Oregon's household tax burden over the past two years. Oregon's individual income tax rose only 17 percent in two years, slower than its personal income growth of almost 20 percent between 1988 and 1990. In contrast to rising household tax burdens in Oregon and Arizona, Utah direct household taxes fell from 7.9 percent of personal income in fiscal year 1989 to 7.7 percent in fiscal year 1991. This was partly accomplished by reinstating one-half of its federal income tax deduction and lowering its personal income tax rates by 2/10 of a percent. In addition, as Utah rebounded from its 1986-88 recession in 1989 and 1990, its personal income grew 17 percent. At the same time, household taxes only rose 15.7 percent.

Arizona's household tax burden rose from 7.1 percent of personal income in fiscal year 1989 to 7.67 percent in fiscal year 1991. While income and sales taxes did not rise as fast as personal income growth of 12.8 percent over two years, the property tax on households jumped more than 16 percent. To some extent, the differing burden may be due to different methods of calculating property tax between the two studies.

Household tax burdens were just under 7 percent of personal income in Idaho and California, whose effective household tax rates were both about 6.8 percent. While Idaho's household tax burden was roughly constant between fiscal year 1989 and fiscal year 1991, California's tax burden on households dropped a significant 0.3 percent as its recession impacted personal income taxes. Despite a 16.4 percent personal income growth between 1988 and 1990, California's personal income taxes rose only 6 percent. Similarly, its inelastic property tax system only rose 6.7 percent in the same time period. Sixth place again goes to Colorado. Colorado's effective household tax burden has edged upwards over the past six years. Household tax rose slightly from 6.2 percent in fiscal year 1985 to 6.3 percent in fiscal year 1989 and then almost to 6.4 percent in fiscal year 1991. More than offsetting Colorado's

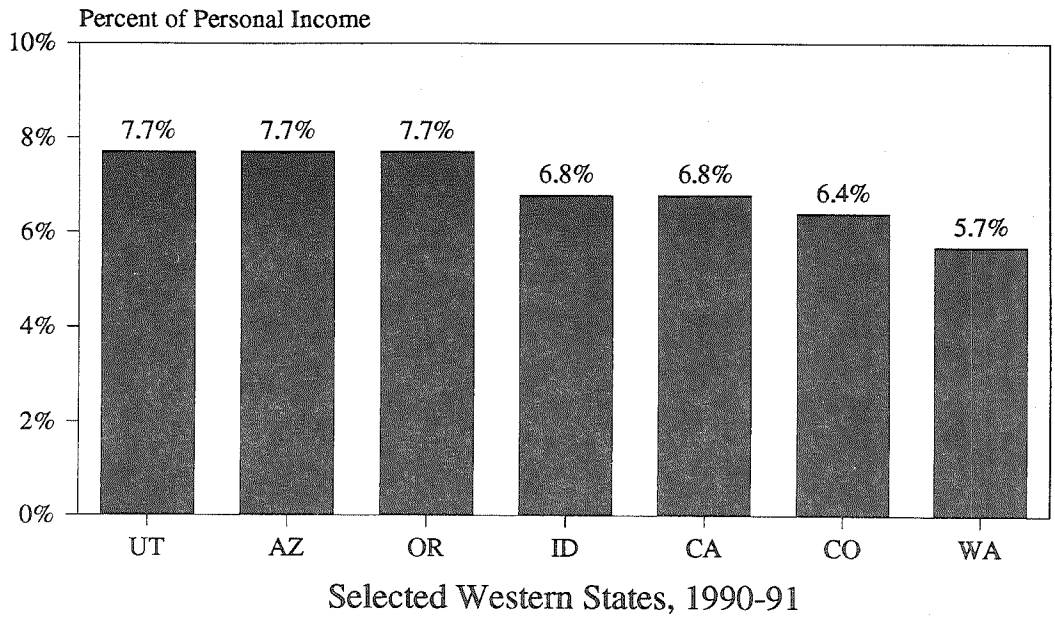


Figure 66
Effective Household Tax Burdens
(Direct Taxes as a % of Personal Income)

Source: Utah State Tax Commission, Economic & Statistical Unit

relatively flat household property taxes (up 1.7 percent) was the 34 percent jump in state and local sales taxes over the past two years. Personal income taxes grew 2 percent less than the 15 percent gain in personal income.

Washington's reliance on the Business and Occupation Tax, instead of a combination of personal and corporate income taxes, continued to pull down its direct household tax burden into last place. However, its 5.7 percent effective household tax rate was about 0.6 percent higher than it was in fiscal year 1985. This amounts to tax and base increases of almost $547 million compared to six years ago. Since fiscal year 1989, direct household taxes rose over 23 percent, about 3 percent faster than the 20 percent growth in personal income. In contrast, direct taxes on business only grew about 8 percent in the past two years.

Utah Tax Effort and Capacity, Fiscal Year 1991

The U.S. Advisory Commission on Intergovernmental Relations (ACIR) annually calculates under its "Representative Tax System" tax capacities and tax efforts for the 50 states. However, these calculations ignore the fact that businesses and households often pay differing amounts or have differing abilities to pay within a given state.

By using an average share of gross state product for business taxes and of personal income for household taxes, consideration is given to the households' or businesses' ability to pay. In addition, this method does not confine the analysis to just the variation in tax rates. It takes a broader approach by assuming that "average" includes both the tax base and the tax rate. For example, Washington, which periodically eyes the personal income tax as a possible addition to its sources of revenue, could consider Idaho's personal income tax (base and rate), since Idaho's income tax revenues as a percent of income were very close to the western state average. Washington could, therefore, review the impact of adopting Idaho's personal income tax statutes to achieve the desired amount of revenue. Under this method, analysts must consider not only the tax rate differential, but also the extent and breadth of the tax base.

Figure 67 illustrates Utah's tax capacity with its tax effort for the seven western states. Personal or household taxes are listed above the corporate or business taxes.

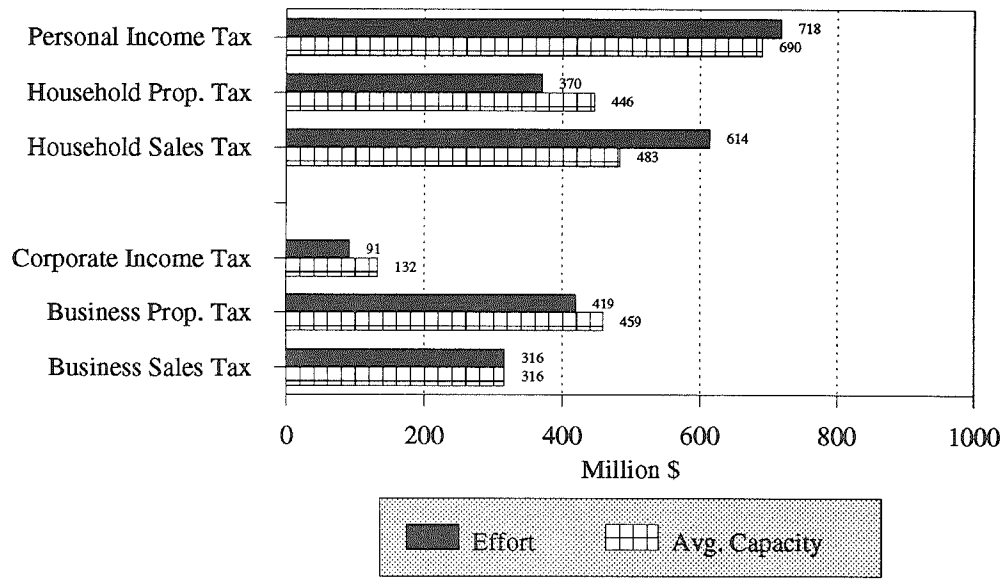
Utah's tax effort and capacity is very close to the average of the seven western states. In addition, the variation for each type of tax appears smaller for Utah than the other states. However, there is a distinct difference between who pays greater or lesser than average. Utah household taxes were about $83 million higher than average, while Utah businesses paid about $81 million less than the seven western state average.

Most of the extra household effort can be isolated to the sales tax. This extra effort of $131 million is very close to the amount collected by taxing non-prepared food, a tax which has come up for removal under two referendums over the past 20 years. Household property taxes were $76 million lower than Utah's capacity.

The two halves of the lower-than-average business tax effort were found in Utah corporate franchise taxes ($41 million) and property taxes on businesses ($40 millions). These findings dovetail with the findings of Price / Waterhouse whose "Evaluation of Utah's Business Tax Competitiveness" study [1989] indicated that Utah business taxes were relatively low:

Tax burdens on business investment are generally favorable in Utah compared with neighboring states. Relatively low property taxes and corporate income taxes are the two factors that lead to this result. Thus, the current business climate is a positive factor supporting investment in the State of Utah.

Figure 67
Utah
Tax Effort vs. Capacity



Source: Utah State Tax Commission, Economic & Statistical Unit

Table 75
Business and Household Initial State and Local Tax Burdens
Fiscal Year 1991

	Personal Income ($Millions)	No. of Households (000)	Household Income	Gross State Product ($Millions)	Household Taxes % of Income	Rank	Business Taxes % of GSP	Rank	Total Taxes % of GSP	Rank
Arizona	$58,946	1,369	$43,058	$69,159	7.67%	2	4.51%	1	11.05%	1
California	$619,381	10,381	$59,665	$748,987	6.79%	5	2.74%	7	8.36%	7
Colorado	$62,378	1,282	$48,657	$70,813	6.42%	6	3.29%	3	8.95%	5
Idaho	$15,423	361	$42,723	$17,810	6.83%	4	2.81%	6	8.72%	6
Oregon	$49,198	1,103	$44,604	$56,444	7.66%	3	3.37%	5	10.04%	2
Utah	$24,199	573	$42,232	$30,555	7.71%	1	3.35%	4	9.46%	3
Washington	$92,174	1,872	$49,238	$105,086	5.68%	7	4.15%	2	9.14%	4
Average			$47,168		6.97%		3.46%		9.39%	

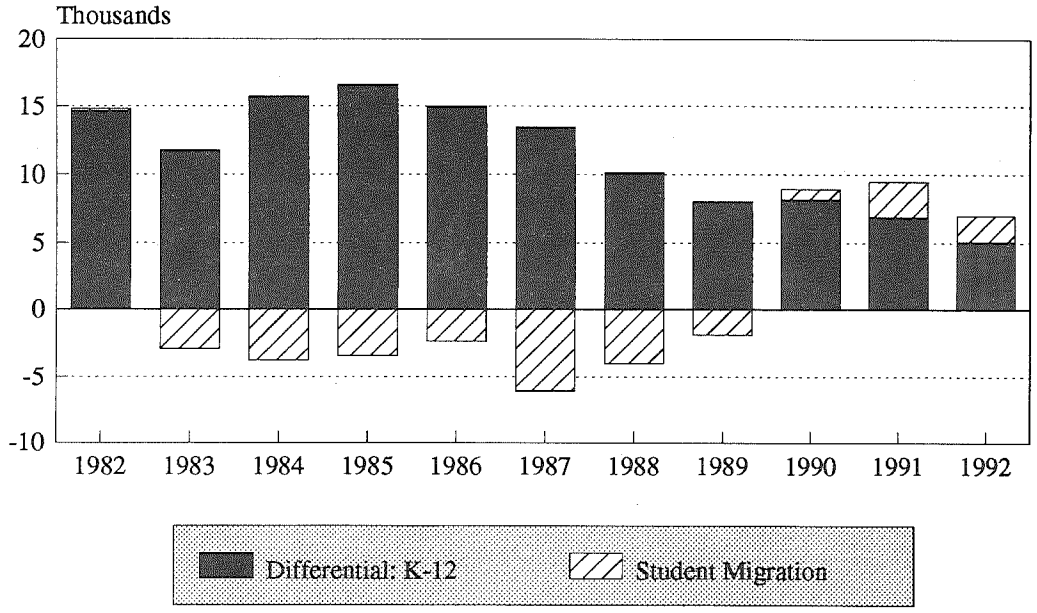
Source: Utah State Tax Commission.

PUBLIC AND HIGHER EDUCATION ENROLLMENT

The public and higher educational systems and the economy of the State of Utah have an interdependent relationship. Enormous financial resources are needed yearly to fund the educational systems in Utah, and consequently have a significant impact on the current and future economic vitality of the state. This special chapter has been organized to illustrate the challenges of the public and higher education systems in the State of Utah. The intention of this chapter is to present a brief overview of what has occurred in public and higher education enrollment during the last decade, along with what is likely to happen in the next decade. It is not the intent of this chapter to offer a comparison of the education systems of Utah, but rather to better characterize what is entailed in providing educational services to over 1/2 million persons per year. Given the investment made in education, it is important that there is a clear understanding of the impact education has in this state.

The demands placed on the state by the educational needs of its residents cannot be underestimated. Collectively, the education systems of public and higher education directly were serving over 560,000 persons in the State of Utah in fall 1992. In other words, almost 1/3 of the entire population in the state was in one of the two educational systems. The enrollment count included over 461,000 in the public education system, and 99,000 in higher education (Table 76). Education expenditures for fiscal year 1992 totalled over $1.7 billion. This amount accounts for over 47 percent of the total state budget of $3.8 billion.

Figure 68
Components in Public Education Growth
1982-1992



Source: State Office of Education and Office of Planning and Budget

Public Education

The public education system has experienced strong growth in the last decade. The system has increased by almost 92,000, a 25 percent increase. Enrollment growth is achieved two ways: in-migration into the area; and the difference between those entering the system (kindergarten) and those leaving (12th graders graduating). Figure 68

illustrates the fact that the overriding reason for the magnitude of the growth was the 'grade differential.' This differential is the difference between number of 12th graders graduating and kindergartners entering the system.

For a number of years in the 1980s, entering kindergartners totalled thousands more than the 12th graders leaving the system, thus creating the substantial growth. The large number of kindergartners was due to a combination of high fertility rates, net in-migration and the larger number of 'baby boomer' women in the child-bearing years. Table 77 shows the differences of kindergarten and 12th grade for the last ten years.

Table 77 also shows that births, as translated into kindergartners five years later, have been leveling off for the past five years. As these children move through the education system, the differential between kids leaving and entering the system is narrowing.

In the past public education has continued to experience significant growth even during periods of economic downturns in the state. This growth was due to the demographic differences between 12th graders and kindergartners. However, with the leveling off of the differential, any growth in the public education system becomes very closely tied with the economic well-being (i.e., net in-migration) of the state. If Utah does not experience substantial net in-migration in the mid- 1990s, public education total enrollment may actually decline for a short period.

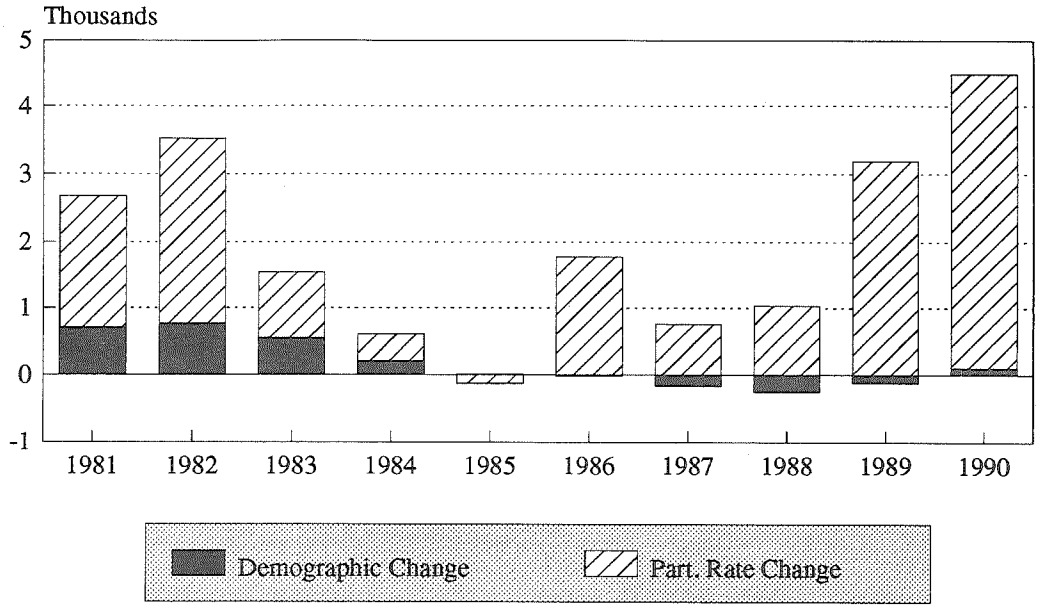
Higher Education

The last ten years have seen unprecedented growth in Utah's higher education system. Enrollment (fall headcount) increased by almost 50 percent, from 67,400 in Fall 1982 to 99,000 in Fall 1992. At the same time, the state's 18-34 year old population grew by only 3 percent. Clearly, something more than ordinary population growth caused the enrollment increase. The age group 18-34 years old was used as representative of the population 'at risk', given that the age group has historically captured approximately 85 percent of those enrolled in the system. Figure 69 presents a comparison of enrollment vs. population growth rates.

Participation rates (enrolled persons as a percent of total population) increases were the primary explanation. In fact, participation rates increase explains almost the entire enrollment increase in higher education. Figure 70 presents a breakdown of the causes for enrollment growth. Although the largest increase was in female rates (50 percent), male enrollment rates also increased by almost 20 percent. It should be emphasized that the increases in rates are the increase, not the actual rates themselves. A 50 percent increase in female rates does not imply that 50 percent of females 18-34 are attending colleges, but rather the rates increased from 9 percent to 13.5 percent.

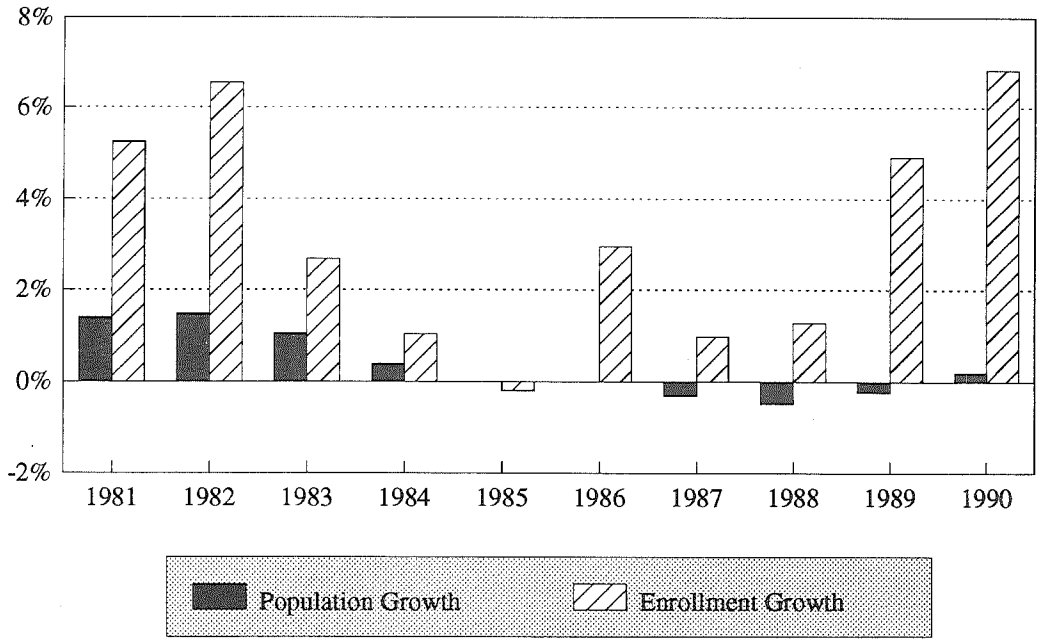
The population projections for the 1990s indicates that the 18-34 years old age group will increase at more than three times the rate of the 1980s (12.0 percent vs 3.4 percent). Assuming a 1991 constant (i.e., not increasing) enrollment participation rate, which is not likely, the demographic impact alone would be approximately 12,000 additional students ages 18 to 34 in the 1990s. The greater consideration in forecasting higher education enrollment involves the making of assumptions regarding enrollment participation rates changes. A number of variables could influence such changes. The relevant issues include, but are not limited to, employment opportunities, job retraining, limiting of admissions to institutions, entrance requirements, tuition increases, college loan availability, condition of the economy, availability of programs at institutions, and facility locations.

Figure 69
Enrollment Growth Components: 18-34 Year Olds



Source: Commissioner of Higher Education and Office of Planning and Budget

Figure 70
Annual Population and Enrollment Growth: 18-34 Year Olds



Source: Office of Planning & Budget

Table 76
Enrollment in Utah's Education System

Fall	Public Education Count	Percent Change	Higher Education Count	Percent Change
1981	354,540		63,450	
1982	369,338	4.2%	67,414	6.2%
1983	378,208	2.4%	70,908	5.2%
1984	390,141	3.2%	70,215	-1.0%
1985	403,305	3.4%	71,553	1.9%
1986	415,994	3.1%	73,950	3.3%
1987	423,386	1.8%	76,126	2.9%
1988	429,551	1.5%	75,999	-0.2%
1989	435,762	1.4%	81,162	6.8%
1990	444,732	2.1%	87,628	8.0%
1991	454,218	2.1%	94,924	8.3%
1992	461,259	1.6%	99,163	4.5%

Table 77
Utah Births, Kindergarten Enrollment, and 12th Grade Enrollment

Birth Year	Births	Enrollment Year	Kindergarten (K) Enrollment	12th Grade Enrollment	Difference: K (Yr 2) - 12th Gr (Yr 1)
1976	33,773	1981		21,784	
1977	36,709	1982	36,429	21,877	14,645
1978	38,265	1983	33,645	21,901	11,768
1979	40,134	1984	37,601	22,132	15,700
1980	41,591	1985	38,731	22,453	16,599
1981	41,511	1986	37,466	23,782	15,013
1982	41,774	1987	37,235	25,076	13,453
1983	40,557	1988	35,242	25,911	10,166
1984	38,643	1989	33,991	24,971	8,080
1985	37,508	1990	33,166	26,263	8,195
1986	37,145	1991	33,193	27,575	6,930
1987	35,469	1992	32,652	28,775	5,077
1988	35,648				
1989	35,549				
1990	35,569				
1991	36,312				

Sources: Utah Division of Vital Records.
State Office of Education.
Demographic & Economic Analysis, Office of Planning & Budget.

APPENDIX

SELECT PUBLICATIONS OF THE ORGANIZATIONS COMPRISING THE STATE ECONOMIC COORDINATING COMMITTEE*

Utah 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
1990 Census Brief: Cities and Counties of Utah
1990 Census Brief: Income and Poverty in Utah
1990 Census Brief: Minorities of Utah
2002 Utah Winter Olympic Games: Preliminary Economic Impact Analysis
Analysis of the Demand for Recreational Uses in the Wasatch Front Canyons
Federal Land Payments in Utah
Historic Analysis of Property Taxes 1989 Update
Initiative A: Fiscal Impacts of Removing the Sales Tax From Food (joint publication)
Issues of Fertility in Utah
Migration in Utah
Resident Population and Recreational/Seasonal Visitation Projections for a Portion of Wasatch County and the Francis/Woodland Area of Summit County
Rural Utah Tourism Report
Technical Report on the Economic Analysis of the Brighton Ski Area Master Plan
The Impact of Lake Powell Tourism on State and Local Tax Revenues
The Impact of Tax Limitation in Utah
The Value of the 1990 Census to Utah: An Examination of Federal and State Funds Distributed Based on Population Statistics
Utah State and Local Government Fiscal Benefit-Cost Model
Utah's Defense Economy

*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.

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 (Annually)
Utah Facts (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

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 (Quarterly, by District)
Occupations in Demand (Quarterly)
Utah Affirmative Action Information (Annually)
Utah Job Outlook for Occupations (Biennially)
Utah Labor Market Report (Monthly)

Special Reports
Utah Workforce 2000
Women in the Utah Labor Force

Utah State Tax Commission
160 East 300 South, S.L.C., Ut. 84134 (801) 530-6088

Regular Reports
Annual Report of the Utah State Tax Commission (Annually)
Gross Taxable Retail Sales and Purchases (Quarterly)
Hotel Sales, Room Rents and Transient Room Taxes in Utah (Annually)
New Car and Truck Sales (Quarterly)
Statistical Study of Assessed Valuations (Annually)
Utah Consumer Sentiment Index (Quarterly)
Utah Statistics of Income (Annually)

Special Reports
An Evaluation of Utah's Business Tax Competitiveness
Broadening the Base: An Evaluation of a Sales Tax on Services
Distribution of Local Sales Tax Revenue
Initial Tax Burdens on Business and Households in Ten Western States
Outlook for Utah's Defense Industry in the Post-Cold-War Era
Selected State Tax Rates in the U.S.
The Review of Sales and Use Tax Exemption for Manufacturing Machinery

Bureau of Economic and Business Research
University of Utah, S.L.C., Ut. 84112 (801) 581-6333

Regular Reports
Statistical Abstract of Utah (Triennially)
Utah Construction Report (Quarterly)
Utah Economic and Business Review (9 Per Year)

Special Reports
Great Salt Lake Mineral Royalties
The 1990-91 Utah Skier Survey, Final Report
The Brine Shrimp Industry of the Great Salt Lake
Utah's High Technology Directory

Division of Energy
3 Triad Center, Suite 450, S.L.C., Ut. 84180-1204 (801) 538-5428

Regular Reports
Data Source (Semiannually)
Utah Energy Statistical Abstract, 1990

First Security Bank Corporation
79 South Main, #201, P.O. Box 30006, S.L.C., Ut. 84111 (801) 350-5259

Regular Reports
Insights (Quarterly)
Local Index of Leading Economic Indicators (Monthly)
Wasatch Front Cost of Living Index (Monthly)

Utah Foundation
10 West 100 South, 323 Crandall Bldg., S.L.C., Ut. 84101 (801) 364-1837

Regular Reports
Research Briefs (Monthly)
Research Reports (Monthly)
Statistical Review of Government in Utah (Annually)

Special Reports
State and Local Government in Utah
(Textbook published approximately every five years with annual updates in Statistical Review of Government in Utah)

Utah State University
Economics Department, Logan, Ut. 84322-3530 (801) 750-2294

Perspectives (Quarterly)

Utah Geological Survey
2363 Foothill Dr., S.L.C., Ut. 84109-1491 (801) 467-7970

Survey Notes (Quarterly)