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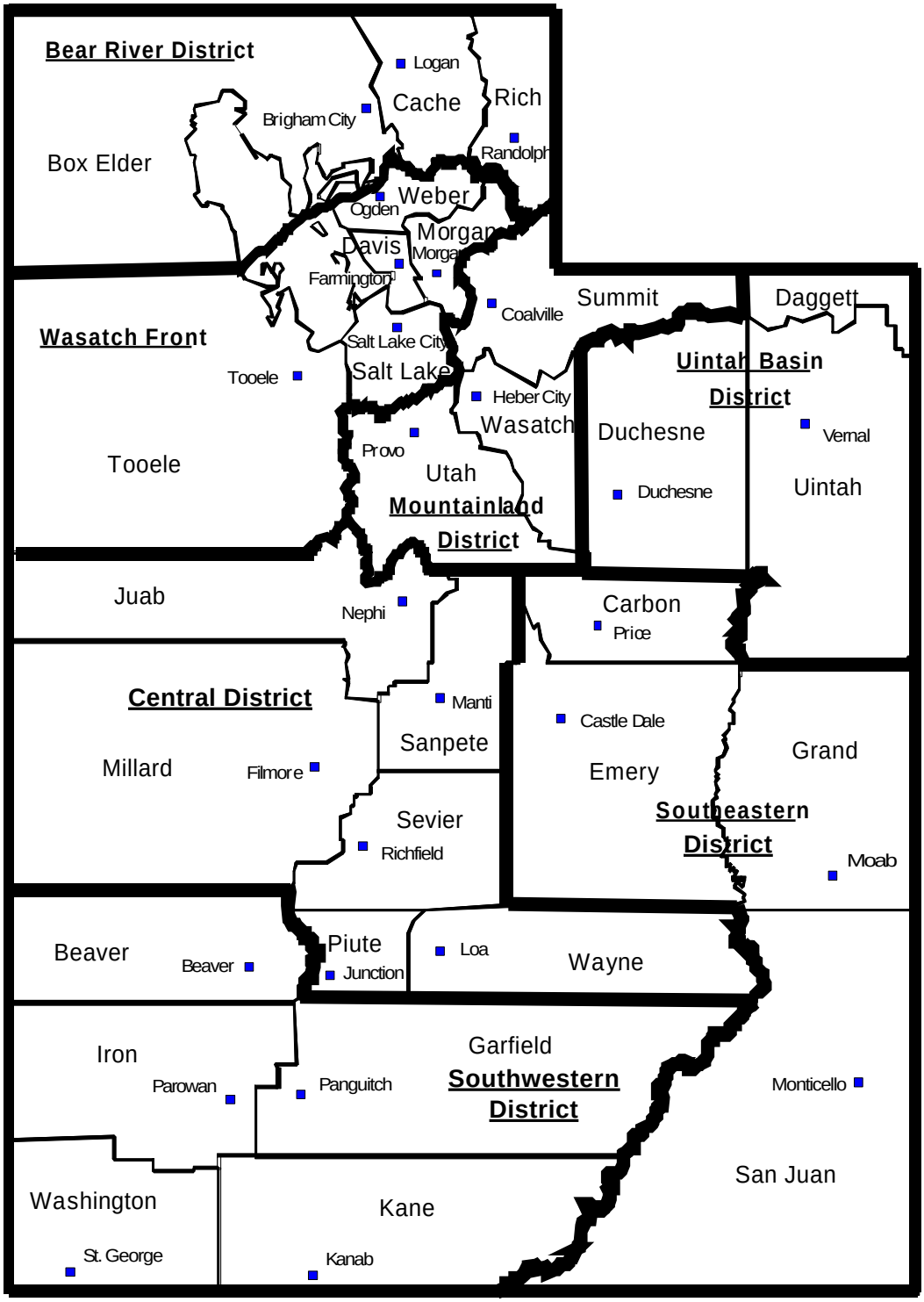
Map of Utah


Bear River District
Logan
Cache
Rich
Brigham City
Randolph
Box Elder
Ogden
Weber
Morgan
Davis
Morgan
Farmington
Summit
Daggett
Coalville
Wasatch Front
Salt Lake City
Salt Lake
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Uintah Basin District
Heber City
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Manti
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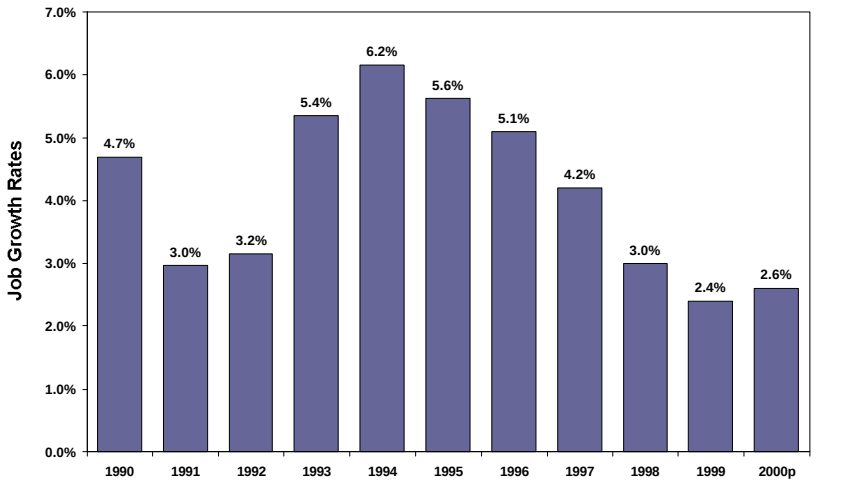
Kanab

Executive Summary

Executive Summary

Utah's economy performed well in 2000, with growth continuing on a moderate track. The decline in Utah's job growth rates bottomed out in the third quarter of 1999. Since 1994, the peak year of the current cycle, the annual rate of job growth has fallen gradually from 6.2% to 2.4% in 1999. This orderly deceleration has now stabilized, and the rate of job growth increased slightly in 2000 to 2.6%, and is expected to be 2.7% in 2001. These increases are largely due to preparations for the 2002 Olympic Winter Games, and favorable growth in information technology, the heart of the "New Economy."

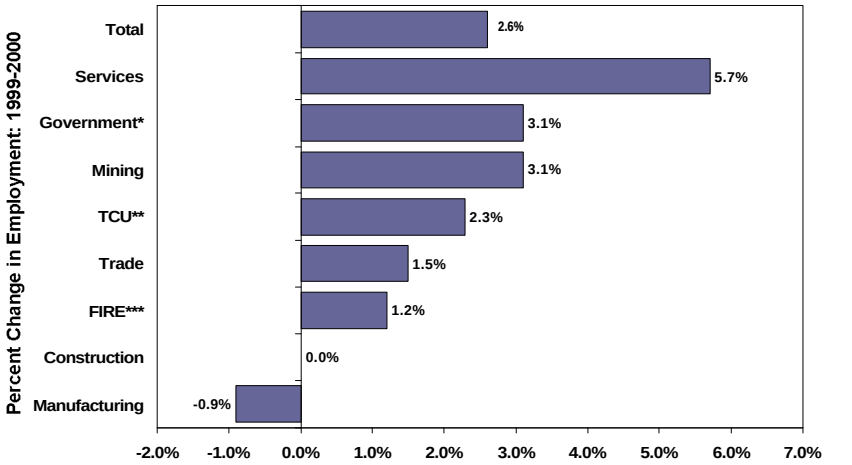
Figure A. The Five Year Decline in Utah's Job Growth Rate has Bottomed Out



Source: Utah Department of Workforce Services

During 2000, the pattern of Utah's economic activity began to change. Construction activity, a major catalyst for growth over the past decade, began to contract in 2000. This decline is expected to continue into 2001 as higher mortgage rates dampen residential construction, and many large projects are completed, some of which were accelerated for hosting the Winter Olympics. Nonetheless, construction jobs in 2001 are expected to remain well above the long-run average of 5.5% of total non-farm jobs. As the national economy slows, it won't bolster the Utah economy to the extent of the 1990s. Likewise, Utah's merchandise exports, flat in the range of $3.6 billion since 1995, won't be a force for growth. Services are the main driving force in the economy now.

Figure B. Services are the Main Driving Force in the Economy Now



*Government employment in 2000 was temporarily bolstered by the hiring of Census 2000 workers.
**Transportation, Communication and Utilities
***Finance, Insurance and Real Estate

Source: Utah Department of Workforce Services

The outlook calls for moderate growth as the state moves past the 2002 Olympic Winter Games. Population, job, and income growth rates in Utah are expected to continue to outpace those of the nation going into 2001. And, unlike the nation, the rate of non-farm job growth should increase slightly in 2001. Utah's economy remains prosperous with low unemployment and high income growth despite the slowdown in construction.

International, National, and Regional Context

Utah's current prosperity occurs against a backdrop of a healthy international economy, and cooling national and regional economies. The world economy is recovering from the troubles of the late 1990s. Though Asia is on a more stable growth path, Utah's merchandise exports there have not picked up.

The national economy is cooling down from the rapid pace of the past four years, but continues with steady growth. The current expansion, now almost ten years old, is the longest on record. Jobs remain plentiful, real wages are rising, and inflation is low. Worker productivity continues to grow. Though inflation-adjusted gross domestic product increased by a blistering 5.2% during 2000, it slowed in the second half of 2000 and is expected to grow 3.2% in 2001. The main concerns at present are the potential downside risks of tight labor markets, a widening trade deficit, low household savings rates, a severe correction in the stock market, and accelerating prices and wages if productivity does not keep pace. Still, the U.S. economy appears to have more to give and federal budget surpluses, productivity gains, low inflation, relatively confident consumers, and a resiliant global marketplace bode well for the U.S. economy during 2001.

For more than a decade the Mountain West has had sustained and strong economic growth. The eight mountain states show population, employment, average annual pay, and per capita personal income growth rates above national averages. Among the mountain states, Utah ranked above the national average in population, employment, and personal income growth rates for the 1990s. While Utah's growth rates have been slowing, Utah remains economically healthy as 2001 begins.

A special feature in this year's Report analyzes the economic relationship between California and Utah. For most of the past 50 years, employment growth in Utah and California has been closely correlated. Although there is a significant relationship between employment growth in California and growth in Utah, Utah's economy is far more dependent on changes in its own economic conditions and those in the rest of the U.S., than it is on changes in conditions in California.

Themes of the Past Year

In many respects, 2000 represented a change from recent years. Although the economy remains strong, it appears to be on a moderate growth path. With construction cycling lower, rapid growth in the economy at large is unlikely. Despite the tempering of activity, growth remains a dominant theme of the past year. Even though the economy is slowing, growth is still occurring and the economy remains prosperous.

Sub-themes involve the performance of various sectors: defense and high tech are up; merchandise exports, agriculture, energy and minerals are level; and construction and tourism are down.

Growth Continues

Population

On April 1, 2000, the U.S. Census Bureau conducted the 22nd national census. The Census Bureau released national and state unadjusted population totals on December 28, 2000. This is the first set of data released from the 2000 decennial census. Data for smaller geographical areas (down to the block level), along with more detail, will be released beginning March 31, 2001, and will continue through 2003.

The total 2000 population count for the U.S. was 281,421,906. This represents a population increase of 32,712,033 persons, or 13.2% from 1990.

Utah's population reached 2,233,169 in 2000. This represents a population increase of 510,319 persons, or 29.6% from 1990, ranking Utah fourth among states in population growth increase from 1990 to 2000. Utah grew more than twice as fast as the U.S. during this ten year period.

And, over the longer term, economic and demographic projections also confirm Utah's growth trajectory. It is expected that Utah's population will reach approximately 2.7 million in 2010, surpass 3.0 million by 2020, and tally roughly 3.7 million by 2030.

Jobs and Wages

Economic activity in Utah, as measured by the rate of job growth, slowed from 6.2% in 1994 to 2.4% in 1999, before increasing slightly to 2.6% in 2000. Despite this moderation, Utah is currently the 11th fastest growing state in terms of job creation (November 1999-November 2000). During 2000, Utah added 27,100 net new jobs, and the unemployment rate fell to 3.3%. The majority of these new jobs were in the service sector which now comprises slightly more than one in every four jobs in the state.

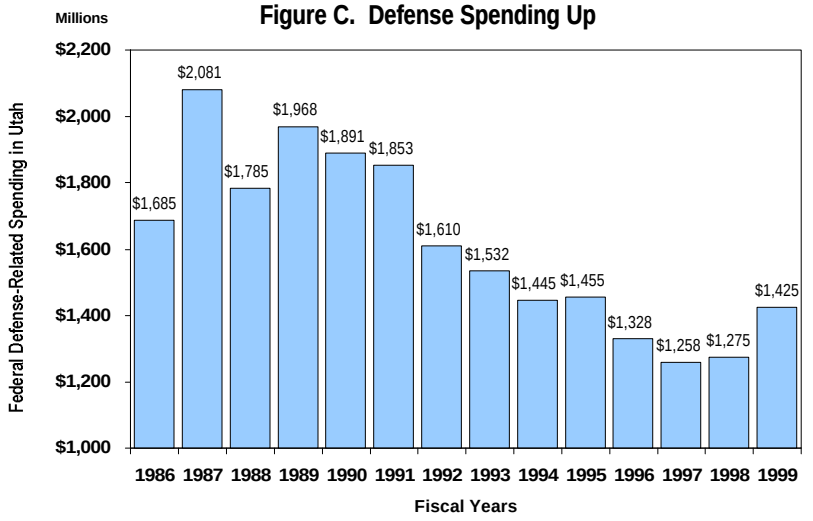
The average Utah wage increased 5.1% in 2000, to $28,900. This is up from 1999's 3.8% increase, and higher than the consumer price increase of 3.4%. Wages have now increased faster than inflation for six consecutive years.

Defense and High Tech Up

Defense

Utah's defense industry continued to rebound in 2000, as base closures and realignments in other states shifted jobs and military spending to Utah. Hill Air Force Base has become the Air Force's new "center of excellence" for low-observable technology. This new classification, the result of a prime military contractor relocating to Hill, will help ensure the viability of this large Utah employer. Although the defense industry in Utah and in the US as a whole has decreased significantly since the end of the Cold

Figure C. Defense Spending Up



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

War, in the past few years this trend has shown signs of leveling. Defense spending in Utah in 1999 totaled $1.42 billion, rising nearly 12% from the previous year.

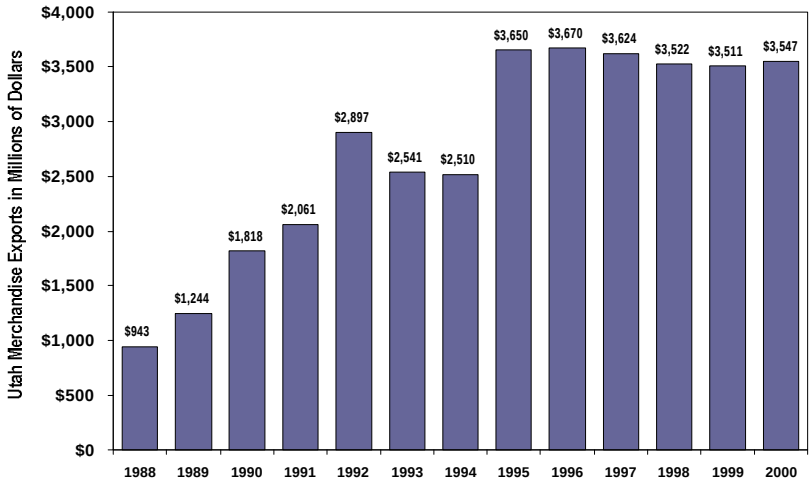
High Tech

Utah's high tech sector continues to grow, albeit slowly, despite downturns in its early successes such as Novell, WordPerfect, Evans & Sutherland and Iomega. At present, the state's technology sector is characterized by numerous small firms, a few medium-sized firms, and almost no large firms. With 65,000 workers, it represents 6.0% of the state's nonagricultural worker base.

There are bright spots on the horizon for Utah's high tech sector. One is the possible continued expansion of activities at the Micron facility in Lehi. Plans at the Micron facility include the installation of a new line to manufacture 12 inch wafers. If this process is successful and the demand for chips remains strong, employment at the Lehi plant could reach 3,000 by 2003.

An even broader impact on the state's technology sector could be the Intel research facility in Riverton. At present, Intel is putting in place its administrative infrastructure and should begin hiring its first R&D workers in 2002. Intel's current plans call for the addition of 600 R&D workers per year at the Utah facility up through 2009. The importance of Intel is not limited to potential size of its work force. Rather, Intel could create new synergies within the technology sector, encouraging both the development and possibly the relocation of new technology companies.

Figure D. Merchandise Exports Flat



Source: U.S. Census Bureau, Massachusetts Institute for Social and Economic Research
Note: 2000 exports estimated .

Exports, Agriculture, Energy and Minerals Level

Merchandise Exports

International merchandise exports from Utah have remained at approximately $3.6 billion for six consecutive years. This measure of exports excludes business services (such as financial services or computer software), educational services (international students studying in Utah), and tourist services (an estimated 750,000 foreigners visited Utah during 2000). Still, exports of primary metals, transportation equipment, electric and industrial machinery, instruments, chemicals, food, coal, and other manufactured merchandise have not been a source of new growth for Utah since 1995.

Agriculture

While incomes received by farmers and ranchers have varied over time, the financial position of Utah agriculture is healthy—the value of farm assets (primarily real estate) and farm equity has increased. This trend will likely continue in the future but, some sectors of Utah agriculture are facing troubled times.

Energy

Crude oil production declined slightly in 2000, although natural gas production increased. Crude oil production is estimated to be about 15.5 million barrels in 2000, some 4.5% below the 1999 level. Wellhead prices were much higher in 2000 than in recent years and will encourage oil and gas drilling. Coal production was near 27 million tons, as it has been for the past few years.

Minerals

Utah's mineral industry continues to maintain near record-level valuations, although some slowdown in the production of industrial minerals occurred in 2000. The estimated value of mineral production was $1.9 billion in 2000, an increase of $70 million from 1999. The value of base metal production, which includes copper, magnesium, molybdenum, and the like, was $770 million; coal production was $465 million; industrial minerals production, which includes sand, gravel, crushed stone, potash, lime, gypsum, and others, was $450 million; and precious metals production, gold and silver, was $210 million. In 2001, the value of mineral production in Utah is expected to remain relatively high.

Construction and Tourism Down

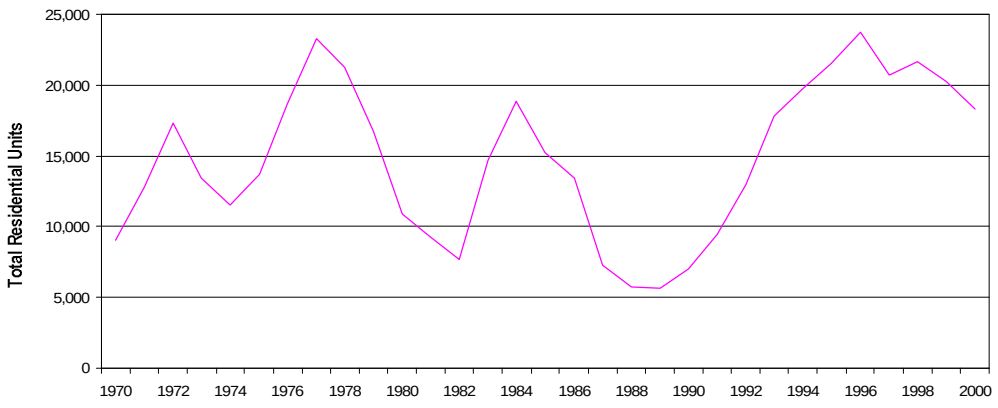
Construction

In 2000, the value of permit authorized construction in Utah was $3.93 billion, less than 2% below last year's record high of $3.97 billion. This near record pace is due, in part, to the continued strength of the nonresidential sector, which in 2000 generated $1.2 billion in new construction activity. The nonresidential sector was led by two major projects: McKay Dee Hospital in Ogden City ($104 million) and The Gateway a mixed-use commercial

development in downtown Salt Lake City (to date, $92.6 million).

The residential sector, this past year, has not fared quite as well as the nonresidential sector. In terms of residential construction value, 2000 ranks as one of the best years ever, recording nearly $2.2 billion in new construction. However, when measured in terms of the number of new dwelling units, residential construction activity is down 10%, dropping from 20,400 in 1999 to about 18,300 units in 2000.

Figure E. Construction Cycling Down



Source: Bureau of Economic and Business Research

Tourism

Tourism arrivals to Utah decreased in 2000 for the first time in several years. Visitation declined at both national and state parks. Skier days were down nearly 5% over the 1998/99 season due to marginal snow conditions and Y2K fears. Passenger counts at Salt Lake City International Airport and visitation to Utah's Welcome Centers remained largely unchanged for the year. Vehicle traffic along Utah's major highways and Interstates registered positive growth, although slower than in recent years. During 2000, an estimated 17.8 million non-resident visitors traveled to Utah for leisure and/or business purposes, a 2% decrease from 1999. Notwithstanding the decline in the number of tourist arrivals to Utah, visitor spending actually increased by 1%, to $4.25 billion.

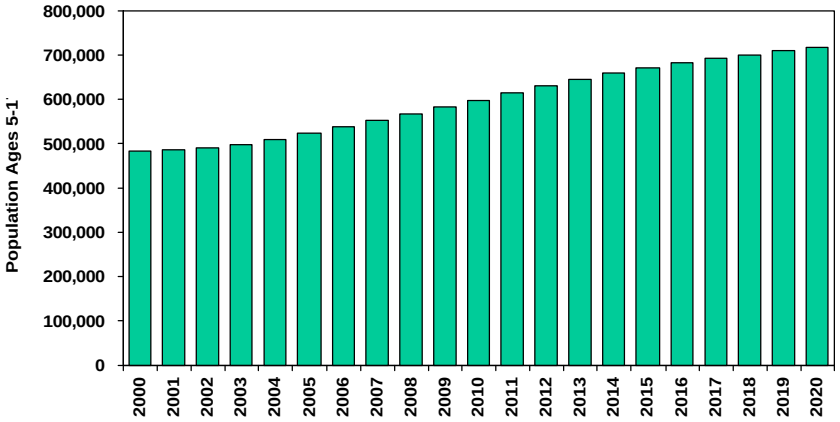
Significant Issue: The Coming Boom in School-Age Population

Utah's long term prosperity depends on providing the highest quality education for the dramatic increase in school children over the next two decades. Educating these children while maintaining a reasonable tax burden will be a major challenge for policy makers.

Utah consistently ranks among the youngest and fastest growing populations with the highest fertility rates and largest household sizes among all states. These distinguishing demographic characteristics should continue into the foreseeable future. Among the most significant of the long-term demographic trends confronting the state is the expected substantial increase in the school-age population, (those aged 5 to 17), beginning in 2004 and extending to at least 2015. This acceleration in the growth rate of the school-age population is largely explained by the pattern of births in the state over time, especially the large number of births in the early 1980s. The number of births is determined by the number, age structure, and fertility patterns of women in Utah, which is further influenced by the cycles of in and out migration.

After over a decade of decelerating growth rates in the number of school-age persons in Utah, this trend will soon reverse. Growth rates of the school-age population will accelerate significantly over the next five years and remain high for the subsequent ten years. According to projections from the Utah Governor's Office of Planning and Budget, the school-age population is expected to increase to 523,000 by 2005 and to about 600,000 ten years from now. From 2005 through 2015, an average of nearly 15,000 school-age persons will be added to the Utah population each year. There will be 114,000 more school-age persons in the state in 2010 as compared to 2000, which is an increase of 24%. The total population is expected to grow by roughly the same rate to

Figure F. Utah School-Age Population



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

2010, so that the school-age population share of the total population is expected to remain constant at about 22.5%.

Looking Ahead

Utah's economy should continue on a moderate growth track during 2001. Because of the build-up for the Olympics, job growth should accelerate a bit to 2.7%. The unemployment rate is expected to remain low, 3.5%, which, though slightly higher than 2000, will still be lower than the previous few years. The average wage should once again increase just above inflation. Because of the beginning decline in construction, the pattern of growth is changing.

Over the next few years, Utah's population and economy will continue to grow. During this period the growth in school-age population will begin to challenge educators and policy makers. Finding the resources to fund the highest quality education without hampering other programs, such as transportation, and while maintaining a healthy tax climate, will be a delicate balancing act.

Economic Outlook

National Outlook

Overview

Growth in the national economy should decline to a moderate pace in 2001. Business investment will also drop to moderate levels and inflation will remain controlled. Businesses will continue to strive for enhanced productivity growth in order to remain competitive in an international economy. In 2001 inflation should average approximately 2.7% while unemployment should hold at about 4.3%. Wage pressure will remain in place as labor markets continue to remain tight.

2000 Summary

The U.S. economy is moderating. The economy is being influenced by weakening equity markets. A weak point in the economy is the slowing of job growth across the country, however, robust consumer spending continues to help offset any slowing in employment growth. Productivity will slow slightly, however, it will grow enough to allow for Gross Domestic Product (GDP) growth of 5.2% in 2000. Productivity growth should be strong enough to help hold down inflation. GDP has grown for four consecutive years at rates above 4%, but it will slow to 3.2% in 2001.

Employment increased by 2.1% in 2000 and the unemployment rate held around 4.1%. Tight labor markets will keep pressure on wage increases into 2001. Currently, inflation growth is coming from wage and energy price increases, but pressures associated with energy prices will subside in 2001. For the present, consumers will continue to spend more than they receive in income, and private debt will continue to grow.

American workers' productivity slowed slightly from 1999 levels. Productivity growth, a measure of worker efficiency in relation to overall economic growth, has raised living standards for the past few years. The U.S. currently leads the industrialized world in both hours worked and productivity. However, other industrialized countries are beginning to catch up. As long as workers are increasingly productive, employers can afford to pay them more without raising prices. Currently the U.S. economy is growing with relatively little inflation. A major reason is the rise in productivity. If productivity falters, pressures for higher wages can result in inflation. Policy makers should keep this in mind during 2001.

2001 Outlook

Personal consumption will slow to approximately 3.2% in 2001. Both residential and non-residential construction will slow in 2001. Productivity performance will be healthy due to high business investment and a slower growing labor force. The high tech boom should also improve productivity over the forecast period. Productivity in areas outside of the high tech sector will flatten. As this occurs there will be upward wage pressure. Higher energy prices will cut into consumer's discretionary income. This will cause a change in spending patterns and increased borrowing.

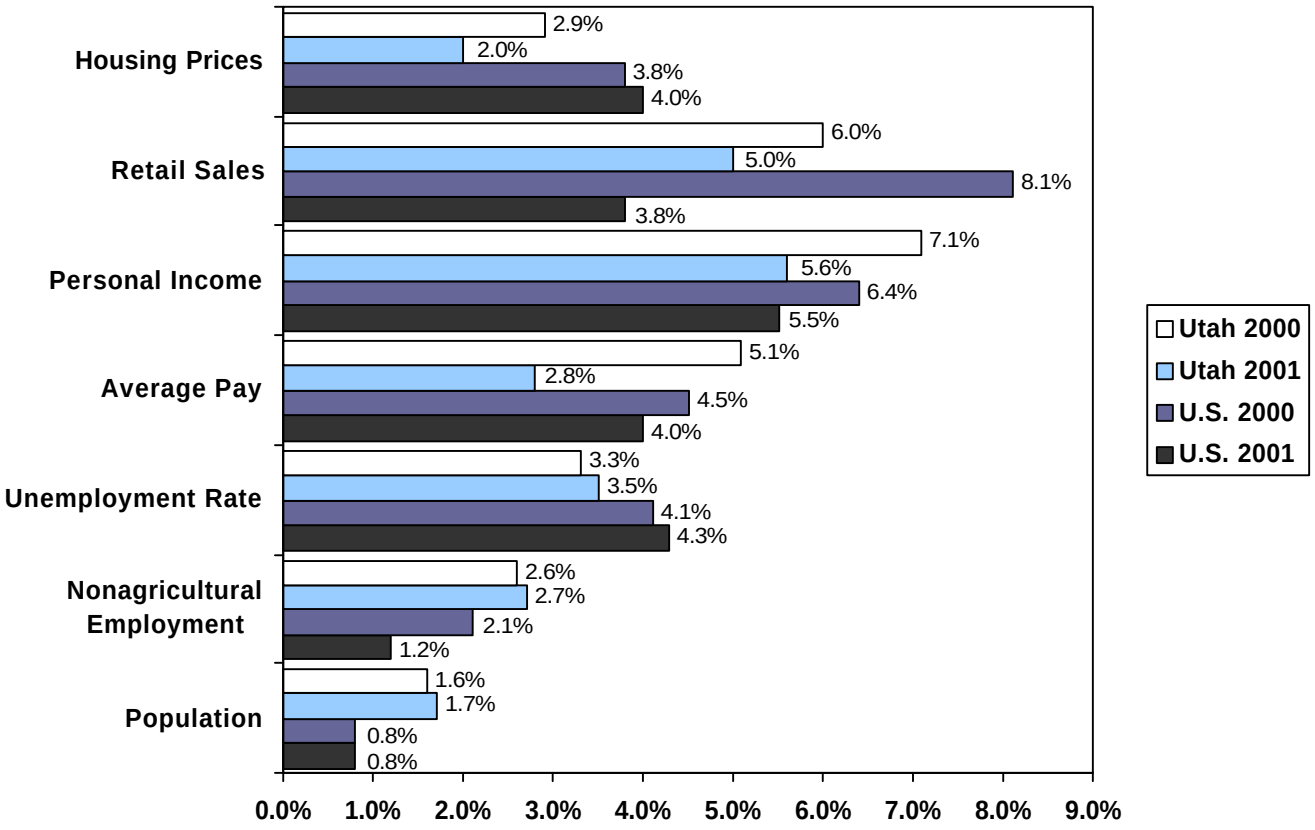
Significant Issues

Potential risks to the economy include the possibility of further stock market declines, low savings rate for households, labor supply shortages, and accelerating prices and wages. The economy is facing increasing energy costs, which will affect consumer spending. A tight labor market will keep wage growth relatively high, and may touch off upward wage pressures, forcing businesses to raise prices.

Conclusion

The gradual slowdown in the growth of the labor force continues to be one of the fundamental forces shaping the employment outlook. With slower labor growth, increases in productivity may be necessary to preserve non-inflationary GDP growth. However, these are good times for consumers. With tight labor market conditions and credit availability, additional spending becomes feasible.

Figure 1
Comparison of Utah and U.S. Economic Indicators
2000 Estimates and 2001 Forecasts



Source: Council of Economic Advisors' Revenue Assumptions Committee

Utah Outlook

Overview

The decline in Utah's job growth rates bottomed out in the third quarter of 1999. Since 1994 (the peak year of the current cycle) the year-over, annual rate of job growth has fallen gradually from 6.2% to 2.4% in 1999. This orderly deceleration has now stabilized, and the rate of job growth will increase slightly in 2000 (to 2.6%) and 2001 (to 2.7%). These increases are largely due to preparations for the 2002 Winter Olympics Games, favorable growth in information technology, and call center service industries in the "New Economy."

Summary of Economic Conditions

Construction Jobs. Construction is the most volatile of Utah's major industries. The most recent construction boom started in 1989. There are currently 73,000 construction jobs in the state, nearly three times as many as existed at the start of the decade. The number of construction workers and the value of permitted construction have increased every year from 1989 to 1999. One in every six housing units that presently exist in Utah was built since 1990.

Construction continued to be the fastest growing industry in Utah in 1999. By 2000 construction employment stopped growing. Construction job growth is expected to decline in 2001 as many large projects are completed (some of which were accelerated for hosting the Winter Olympics). Nonetheless, construction jobs in 2001 should still be 6.4% of total non-farm jobs (well above the 1950 to 2001 average of 5.5%).

Construction projects that are nearing completion include (but are not limited to) Interstate 15 reconstruction ($1.6 billion), ski resort additions and expansions ($700 million), Little America Grand Hotel ($185 million), University of Utah Olympic Village ($120 million), and the Marriot Hotel ($50 million). The total value of construction permits, measured in current dollars, peaked at a historic high of $3.97 billion in 1999. Total value declined slightly in 2000 to $3.93 billion, and should decline to $3.54 billion in 2001. Construction values in 2001 are likely to still exceed the inflation-adjusted, long-run average for 1978 to 2001 of $2.97 billion (measured in constant 2001 dollars).

Construction Projects. Construction projects are usually listed in reports as either their "project value" or "construction value." Construction values are the value of "sticks, bricks and land." Project values include construction values as well as architectural and engineering costs. Heavy construction, such as highways, are non-permitted projects.

Exports. Year-over growth in merchandise exports in Utah through September 2000 was 1.3%. This ranks Utah 34th in the nation for export growth. Year-over growth for the nation through September 2000 was 13.9%. From 1995 through 1999, Utah's exports have remained fairly constant (falling from $3.7 billion to $3.5 billion). Utah exports to Asia are about half of what they were in 1995. Exports should grow slightly in 2000, but remain around $3.6 billion. These merchandise export figures for Utah and the nation do not include services exports.

Firm Openings and Closings. Many recent expansions have occurred in New Economy, technology-based industries. These include (but are not limited to) bio-technology and health-care companies, computer applications, networking, hardware and software companies, internet call centers, and chip production and testing.

Among these firms, Intel and Micron have added over 300 jobs each in 2000. Micron's current employment is around 500 with over 300 jobs in chip testing. Micron has also announced that it will begin production of prototype chips from 12-inch wafers at its Lehi facility in late 2001 (or early 2002). Currently they do not know how many jobs this additional work will create. Intel consolidated administrative personnel activities at its Riverton campus in 2000 that had been spread-out over five states. Intel will begin hiring around 600 R&D employees per year starting in late 2001 (or early 2002).

Call centers have become a large and rapidly growing industry in Utah with most centers oriented towards providing customer support to technology related products such as telecommunication, software, internet, and personal computers. Utah is an ideal location for this industry because of its low-cost labor pool, sizable bilingual population, and large number of college students willing to work part-time and at unusual hours. Though not all call centers deal with technology products, they provide a total of over 53,000 jobs, according to the Utah Department of Workforce Services.

Outlook for 2001

Population, job, and income growth rates in Utah should continue to outpace those of the nation going into 2001. And, unlike the nation, the rate of non-farm job growth is expected to increase slightly in 2001. This will occur despite a slowdown in construction employment. This up-tick in employment growth is due to continued strong growth in New Economy industries and preparations for hosting the 2002 Olympic Winter Games.

The services industry is Utah's largest and fastest growing industry. Year-over growth as of September 2000 was around 6%. Within this industry, computer-related business services is the fastest growing detailed sector. This sector within the services industry has grown over 12% (adding around 2,900 jobs) since September 1999. The services industry will continue to grow around 6%, and will continue to become an increasing share of total non-farm jobs, in both 2000 and 2001.

The 2002 Games will generate a significant amount of employment and earnings prior to and during the presentation of Olympic events. Economic impacts occur due to externally financed spending by the Salt Lake Organizing Committee, public and private investment (such as transportation infrastructure, venue and ski resort spending), host broadcast expenditures, and visitor spending. Between 1996 and 2002 the Olympic Winter Games will create 35,000 job years of employment and $1.5 billion in earnings for Utah workers. Many of these impacts have already occurred. On an annualized basis, however, 2001 will experience the largest economic effects from the Olympics.

Nationwide Reports and Rankings in 2000

Utah was recognized by several independent, nationwide reviews and studies in 2000 as an excellent place in which to live and conduct business. Some of these studies included, but were not limited to:

Money Magazine ranked the Salt Lake City/Ogden metropolitan area as the best place to live in the West. Utah received this favorable ranking because of affordable housing prices, agreeable commute time, recreational opportunities and the quality of schools.

Utah ranked 12th in the nation in 2000 in readiness to take advantage of the opportunities for growth in the New Economy. The Milken Institute's New Economy Index ranks each state based on 12 criteria critical for future high tech growth. The index measures the likelihood of success in the New Economy. The criteria includes patents issued, business starts, initial public offering (IPO) proceeds, the population's percentage of advanced degrees, venture capital and research and development investments, scientists and engineers as a percent of the population, and high tech exports.

The Salt Lake/Ogden area was ranked third by both Dun & Bradstreet and *Entrepreneur* magazine as a hot spot for high tech business growth. Metropolitan areas were ranked based on universities that turn out a quality labor force, investment money, ethnic diversity, and government support.

Inc. magazine ranked Salt Lake City-Provo as the second best metropolitan area in the country to launch and grow a new business. The criteria included access to airports, proximity of universities, availability of a skilled work force, real estate costs, and local culture and infrastructure that support new business.

Utah was named the fourth most livable state by *Morgan Quitno Press* in 2000. The award is based on statistical indicators for affordable housing, safe streets, employment opportunities, the strength of education systems, and the general health of state economies.

Utah was one of only three states that earned straight A's in the 14th annual *2000 Development Report Card for the States*. The *Development Report Card*, published by the Corporation for Enterprise Development, is an annual assessment of each state's economy based upon 70 data measures. Major categories are economic performance, business vitality, and development capacity. Utah's ranking reflected strong employment growth, a low poverty rate, an even income distribution, strong charitable giving, and high rates of home ownership.

Utah was ranked first in the nation in two independent surveys of families owning home computers. The U.S. Commerce Department in its report, *Falling Through The Net: Toward Digital Inclusion*, ranked Utah ahead of all other states with an estimated home computer ownership of 66.1%. Scarborough Research ranked Salt Lake City top of the nation with an estimated 73% of families owning home computers. The Commerce Department ranked Utah in eighth place with 48.4% of households, and Scarborough ranked Salt Lake City fifth in the nation with an estimated 50% of households being Internet connected.

Sprint Business ranked both Provo/Orem and Salt Lake/Ogden in the top ten out of 313 metropolitan areas for economic productivity. The ranking was based on factors such as output per worker, income and job growth, education and workforce training, and proximity to air transportation.

Forbes Magazine ranked Provo/Orem 18th and Salt Lake/Ogden 20th in its annual "best places to do business in America." The ranking was based on job growth, earned income, and output by companies in technology sectors.

Utah received the Certificate of Financial Achievement for Excellence in Financial Reporting. The award is issued by the Government Finance Officers Associations. This is the 15th year Utah has received this award.

The U.S. Census Bureau ranked Utah eighth in median household income, fourth in percentage of population over 25 with a high school diploma, 10th in percent of population over 25 with a bachelor's degree or more, and second lowest poverty rate in the nation. All rankings are based on 1999 estimates.

Income and Pay Measurements

Per Capita Income. Utah's 1999 per capita income of $23,288 was 81.6% of (or $5,254 less than) the national average of $28,542. Per capita income in Utah only ranked 41st in the nation in 1999. Utah's per capita income is lower than the nation's per capita income because average annual pay in Utah is only 83.7% of the national average, and because Utahns have relatively more children than any other state. Utah ranked first in the nation in 1999 for the percentage of population under 18 at 33.2%. This compares to the U.S. average of only 25.7%, according to the U.S. Bureau of the Census.

Average Annual Pay. Average annual pay in Utah is expected to remain around 84% of the national average in the near-term. Data released in November 2000 by the Bureau of Labor Statistics shows that Utah ranked 33rd in the U.S. at $27,884 in average annual pay for 1999. This was 83.7% of the national average pay of $33,313 (or $5,429 less). Lower pay in Utah is attributed to more part-time workers and a younger workforce than in the rest of the nation.

Median-Household Income. This low pay, relative to the nation, would be a much more serious problem for Utah were it not for more wage earners per household in Utah than in the nation. Median household income data recently released by the U.S. Department of Commerce shows that Utah continues to have household incomes that are significantly above the national average. Median household income in Utah ranked eighth highest in the nation (at $45,257) for the 3-year period 1997 to 1999. This was 14.1%, or $5,600 higher than the national 3-year average of $39,657. The Bureau of Census recommends using 3-year averages when ranking states due to the small sample size in small states like Utah.

Higher median household income, despite lower average annual pay, is due to more wage earners per household in Utah than in the nation. The average household size in Utah (3.06 in 1998) is the highest in the nation, and is far higher than the national average of 2.61 persons per household. And, according to the 1990 Census, 64.8% of Utah households are comprised of married-couple families (which ranks Utah first in the nation). Utah also has the lowest ranking in the nation for the percent of families with children headed by a single parent. Married-couple families, which usually have two or more incomes, help raise median-household incomes in Utah.

Economic Condition of Households. Utah households are more likely to be headed by two parents, with more than one wage earner helping to support the family. But, because these families are apt to have more children than the national average, each worker is likely to be supporting more children than the national average. These families, on the other hand, have higher incomes than their national counterparts and they are more likely to own their own homes. This is not to minimize the plight of single, wage earning families. Utah wage earners on average earn only 84% of national pay. Single wage families must compete with dual earning families for housing and services. Still, median household incomes that are the eighth highest in the nation (along with the second

lowest poverty rate in the nation) means that Utah households are generally in good economic condition.

Housing Prices and Home Ownership

There are three differing measurements of housing price movements in Utah. These measurements come from the National Association of Realtors (NAR), the federal Office of Federal Housing Enterprise Oversight (OFHEO), and the Utah Association of Realtors (UAR).

National Association of Realtors. The NAR measures median-average prices for existing single-family homes on a changing mix of existing homes. Utah's median housing price has exceeded the U.S. median existing home price since 1995, however, the U.S. median price has grown closer to the Utah median price each year since its largest gap in 1997. In 1997 Utah's median existing home price was $128,600, and the U.S. median existing home price was $121,800. By the third quarter of 2000 the U.S. median existing home price was $142,800, whereas Utah's comparable price was $145,600. In 2001 Utah's median existing home price will reach $144,700, while the U.S. median existing price will nudge up to $143,800.

Office of Federal Housing Enterprise Oversight. The OFHEO follows the price movements on repeat sales of the same single-family homes with Fannie Mae or Freddie Mac mortgages. The growth rate in these prices rose steadily beginning in 1988 to a high of 17.2% in 1994. As recently as September 30, 1997, Utah's year-over growth ranking in housing price appreciation was second in the nation. As of June 30, 2000, Utah's percent change in median housing prices for existing homes dropped to 50th in the nation, underlining the slowdown in the existing house market.

Utah Association of Realtors. The UAR measures the mean-average price on a changing mix of new and existing homes. These prices are based on the homes for sale on the multiple listing service. The average sales price for Utah homes in the second quarter of 2000 was $168,414. The mean, unlike the median, can be skewed by high prices, such as in Park City. The average sales price for the same time period minus Park City was $156,452.

According to figures released by the Utah Association of Realtors, year-over average sales prices for the State of Utah are up 5% from second quarter last year. This figure is considerably higher than OFHEO and NAR growth rate appreciation in median-average prices, which reported 1.1% and 2.4% respectively for second quarter 2000. The higher growth rate in UAR prices is due to the inclusion of new homes in the UAR measurements, and the fact that the UAR uses mean-average prices rather than median-average prices.

Softening Housing Prices. Housing price appreciation in Utah should continue to soften into 2001. The softening of housing prices is largely due to the high home ownership rate in Utah (74.7% in Utah versus 66.8% nationwide in 1999, ninth highest in the nation), the recent slowing of job growth in Utah, and the 28.1% run up in housing prices over the last 5 years. Housing price growth in Utah has lagged behind growth in housing prices in the U.S. since second quarter 1998. This is expected to continue through 2001.

Hotel, Office and Apartment Vacancies and Rents

Hotels. Hotel occupancy rates continue to decline as new units are built. According to the Utah Hotel and Lodging Association, the number of hotel units in Salt Lake County increased from 10,700 in 1994 to 17,000 units in 2000 (a 59% increase). Occupancy rates in the Salt Lake area have declined from 80% in the mid-1990s to 64.6% in second quarter 2000.

According to *Rocky Mountain Lodging Report*, statewide average room rates and occupancy rates have decreased for the first 10 months of 2000 compared to the same period last year. Room rates decreased from $73.07 to $72.02 and occupancy rates dropped from 63.9% to 63.1%. Occupancy rates for the Salt Lake area declined from 67.8% to 64.6%, and room rates have gone from $75.63 to $72.41.

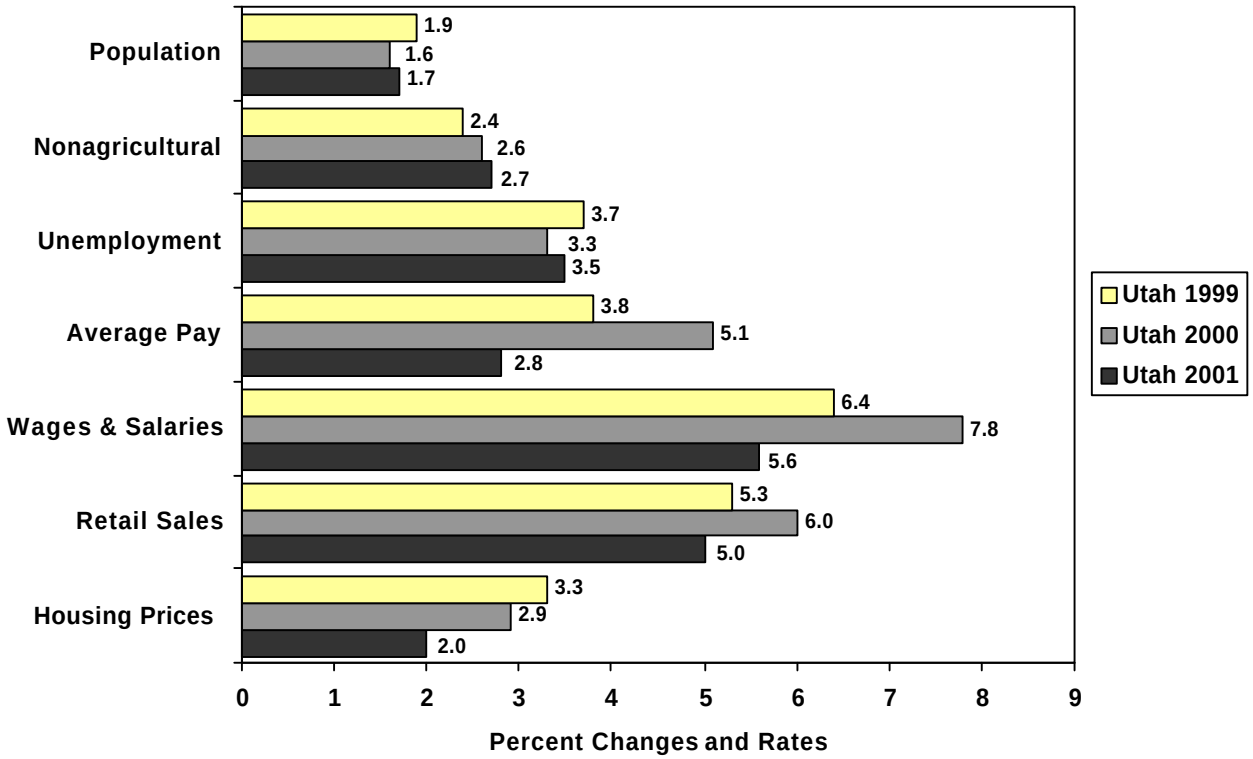
Offices. In a recent study by the Federal Deposit Insurance Corporation, Salt Lake City was ranked as one of six areas nationwide at greatest risk of being overbuilt in commercial real-estate properties. The same study ranked the Salt Lake City area fourth in the risk of over-building office space. Lenders have taken note of the recent build-up in office and hotel capacity and are shying away from lending to these projects.

Salt Lake City metropolitan area office vacancy rates, as reported by CB Richard Ellis, have increased steadily since 1995, when they were around 6.6%. Still, vacancy rates are well below the 20% registered in 1990, when Utah's economy was in the doldrums. Vacancy rates decreased downtown from 10.7% in the second quarter of 1999 to 10.1% for the second quarter 2000. But, vacancy rates for suburban areas increased from 8.8% in the second quarter of 1999 to 11.7% in the second quarter of 2000. Office vacancy rates also increased for the (Salt Lake City) metropolitan area from 9.7% second quarter 1999 to 11.0% second quarter of 2000.

Apartments. According to EquiMark Properties, Salt Lake County rents grew 0.9% for the first 6 months of 2000 compared to 1.5% for all of 1999. The overall rental rate increased from $614 per unit in 1999 to $621 per unit by June 2000. Apartment vacancy rates in Salt Lake County decreased from 7.7% in 1999 to 7.0% for the first six months of 2000. This drop in vacancy rates is in part due to lower multifamily construction.

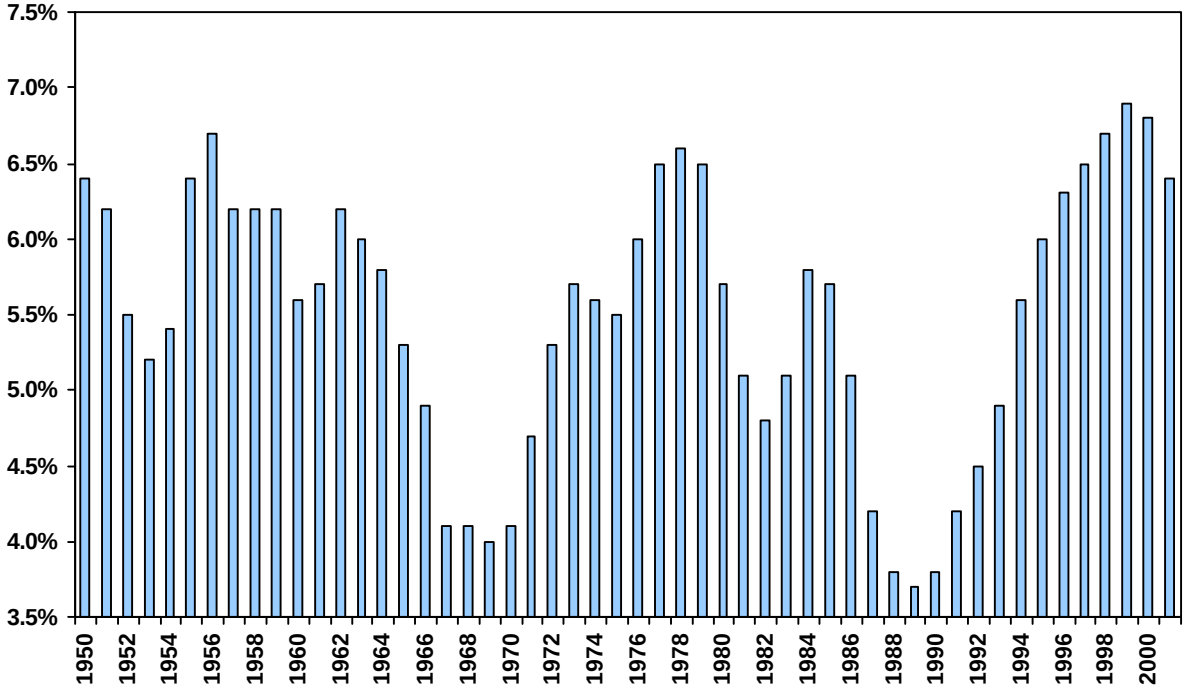
Developers and lenders have reduced their exposure to multi-unit construction for fear of over building. According to the Bureau of Economic and Business Research (BEBR) at the University of Utah, new multifamily construction permits decreased 19.2% for the first nine months of 2000 compared to the same period in 1999. BEBR also reports that vacancy rates are currently below 5.0% in most cities in the state.

Figure 2
Utah Economic Indicators: 1999-2001



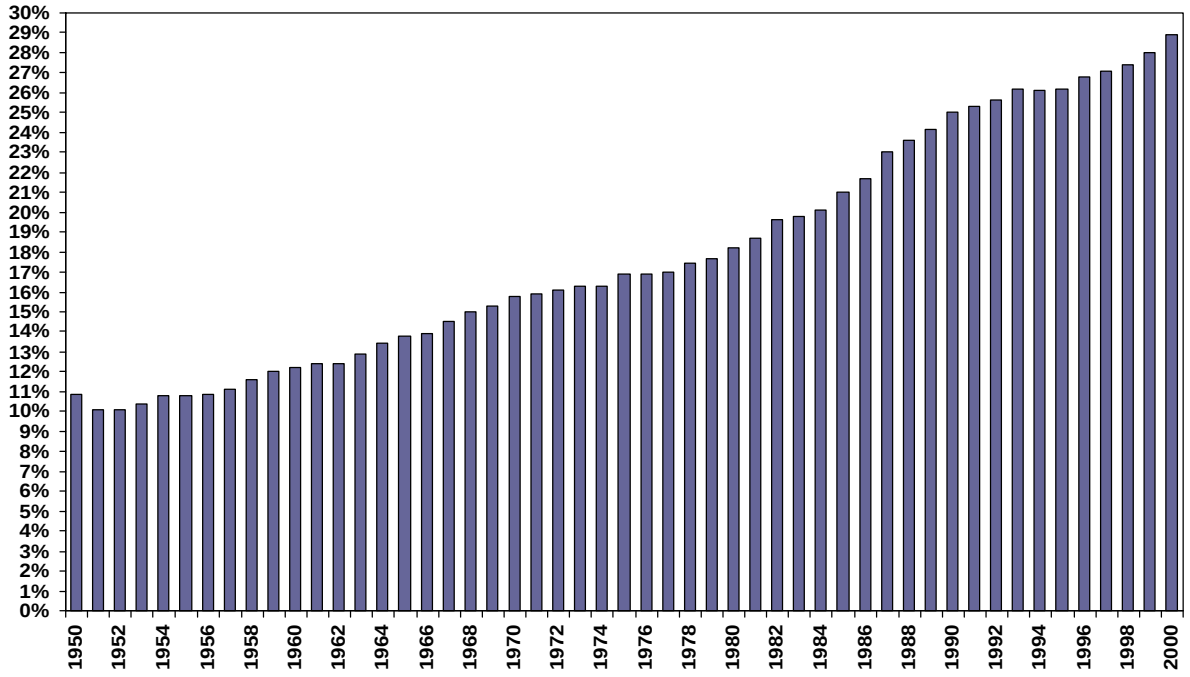
Source: Council of Economic Advisors' Revenue Assumptions Committee

Figure 3
Construction Jobs as a Percent of Total Non-Farm Jobs



Source: Department of Workforce Services

Figure 4
Services Jobs as a Percent of Total Non-Farm Jobs



Source: Department of Workforce Services

Table 1
2000 and 2001 Construction and Employment Summary

Announced 2000 and 2001 Additions:
Additions of 100 or more jobs

Alorica Inc. (call center for computers)
Brigade Corp. (internet call center)
Buyersonline.com (internet call center)
Center 7/Inc. (computer application service provider)
Cerro Copper (copper tube manufacturer)
Convergys (telemarketing sales and service)
Communications & Commerce Inc. (high-tech support call center)
DLJdirect Inc. (online brokerage call center)
Ebay Inc (online auction call center)
Fairchild Semiconductor International Inc.(power control chips)
First USA Paymentech (commercial credit card)
Fresenius Medical Care (kidney dialysis products)
Goldman Sachs (investment call center)
Gossner Foods Inc. (cheese plant)
Hill Air Force Base (defense)
Ikano (internet call and service center)
Ingenix (health-care software/consulting)
Intel (adminstrative and research personnel)
Jet Blue Airways (reservations center)
Lineo Inc. (Linux software for embedded devices)
Malt-O-Meal (cereal manufacturing)
MarketStar Corp. (marketing company)
Medicity (physician's internet communications)
Merit Distribution Services (trucking for Wall-Mart)
Micron Technology Inc. (chip testing and production)
Neighborhood Box Office (gift certificates call center)
NextPage Inc. (computer business to business networking)
Riverstone Inc. (internet products distribution center)
Rocky Mountain Medical Center (hospital)
Salt Lake County Jail (incarceration center)
Salt Lake Organizing Committee (full/part-time Olympics staff)
SkyWest (pilots and mechanics)
Star Bridge (reconfigurable super computers)
STSN (internet access to hotel rooms)
Sysco Intermountain Foods (food distribution facility)
U. S. West (tele-communications)
Wall-Mart (distribution and retail)
Wells Fargo's (banking operations and internet call center)

Announced 2000 and 2001 Reductions:
Reductions of 100 or more jobs

Associated Foods (food distribution)
Autoliv (wire business to Mexico)
CrossLand Mortgage Corporation (home mortgage loans)
Elk Meadows (ski resort)
Franklin Covey Co. (day planners)
Granny Goose Foods (potato chip plant)
JC Penney (retail)
JDS Services (prepaid calling cards)
Novell (computer software)
O'Sullivan Industries (furniture maker)
Packard Bell (call center)
PointClick (pay-to-surf the internet)
Rite Aid (distribution center)
Trail Mountain Mine (coal mining)
University of Utah Health Network (medical services)
Utah Power (electric power)
Williams Energy (energy research engineers)
Willow Creek (coal mining)
ZCMI (retail)

Projects in 2000 Began Before 2000:
Construction projects of $30 million or more

Canyons Hotel and Village ($202 million)
Davis County Interstate-15 Expansion ($50 million)
Deer Mountain Project ($150 million)
Heritage Industrial Park ($30 million)
Hill Air Force Base mobile hospital facility ($31 million)
Intel research campus Phase I ($60 million)
Interstate-15 ($1.6316 billion)
Jordan Landing mixed use ($800 million)
Latter Day Saints Conference Center ($240 million)
Little America Hotel ($185 million)
Logan Canyon Highway renovation ($60 million)
Marriott Hotel ($50 million)
McKay-Dee Hospital Complex ($180 million)
Oquirrh Park Speedskating Oval ($32 million)
Park City Ski Resort Expansion ($150 million)
Providence Center ($78 million)
Salt Palace Expansion ($47 million)
SnowBasin Resort ($100 million)
Solitude Resort Expansion ($100 million)
South Jordan South Gate Project ($130 million)
SouthTowne Convention Center ($65 million)
Stien Eriksen Lodge ($30 million)
Sysco International plant ($30 million)
Thanksgiving Point Phase 2 ($250 million)
Tooele Army Depot Endeavor business park ($56 million)
University of Utah Olympic Village ($120 million)
Wal-Mart Distribution Center ($30 million)
Zermatt Swiss Resort ($40 million)

Projects in 2000 Began in 2000:
Construction projects of $30 million or more

American Fork Hospital ($32 million)
Canyon River Corporate Center ($65 million)
Cerro Copper tube manufacturing plant ($50 million)
Diamond Fork Central Utah Project ($50 million)
Gateway Project ($375 million)
Huntsman Cancer Institute Research Hospital ($100 million)
Interstate-80 Silver Creek/Kimball Junction ($52 million)
Light Rail West/East ($118.5 million)
NAMDAR Business Park ($30 million)
NorthShore Corporate Center ($100 million)
One Airport Center ($100 million)
Pioneer Pipe Line Co. sinclair/conoco ($100 million)
Renaissance Town Center ($100 million)
RiverPark Corporate Center ($300 million)
Round Valley Golf Resort ($100 million)
Salt Lake City Library ($84 million)
Sand Hollow Reservoir ($35 million)
Salt Lake Community College 90th South Campus ($143 million)
University of Utah chill water plant ($50 million)

Projects in 2001 to Begin in 2001:
Construction projects of $30 million or more

Intermountain Health Care Murray Hospital ($300 million)
Legacy Highway ($400 million)
Murray High School ($30 million)
Nebo and Weber School District schools ($85 million)
Salt Lake City and Tooele School District schools ($186 million)
Traverse Mountain (Fox Ridge) ($2 billion)

Table 2
Actual and Estimated Economic Indicators for Utah and the Nation

ECONOMIC INDICATORS	UNITS	1998 ACTUAL	1999 ACTUAL	2000 ESTIMATE	2001 FORECAST	% CHG 1998-99	% CHG 1999-00	% CHG 2000-01
PRODUCTION AND SPENDING								
U.S. Real Gross Domestic Product	Billion Chained $96	8,515.7	8,873.4	9,334.8	9,633.5	4.2	5.2	3.2
U.S. Real Personal Consumption	Billion Chained $96	5,678.7	5,979.7	6,296.6	6,498.1	5.3	5.3	3.2
U.S. Real Fixed Investment	Billion Chained $96	1,485.3	1,621.9	1,777.7	1,877.2	9.2	9.6	5.6
U.S. Real Defense Spending	Billion Chained $96	341.7	348.5	347.1	348.9	2.0	-0.4	0.5
U.S. Real Exports	Billion Chained $96	1,003.6	1,032.7	1,143.2	1,271.2	2.9	10.7	11.2
Utah Coal Production	Million Tons	26.6	26.5	26.4	26.9	-0.4	-0.4	1.9
Utah Oil Production Sales	Million Barrels	19.2	16.3	15.5	14.9	-15.3	-4.6	-4.0
Utah Natural Gas Production Sales	Billion Cubic Feet	201.4	205.0	217.8	223.3	1.8	6.2	2.5
Utah Copper Mined Production	Million Pounds	657.4	615.7	615.0	620.0	-6.3	-0.1	0.8
SALES AND CONSTRUCTION								
U.S. New Auto and Truck Sales	Millions	15.4	16.8	17.4	15.9	9.1	3.6	-8.6
U.S. Housing Starts	Millions	1.63	1.70	1.58	1.45	4.3	-7.1	-8.2
U.S. Residential Investment	Billion Dollars	365.4	403.8	415.9	415.5	10.5	3.0	-0.1
U.S. Nonresidential Structures	Billion Dollars	283.2	285.5	315.7	323.0	0.8	10.6	2.3
U.S. Repeat-Sales House Price Index	1980Q1=100	216.7	229.4	241.4	250.9	5.9	5.2	4.0
U.S. Existing S.F. Home Prices (NAR)	Thousand Dollars	128.4	133.3	138.4	143.8	3.8	3.8	4.0
U.S. Retail Sales	Billion Dollars	2,745.7	2,994.0	3,236.5	3,359.5	9.0	8.1	3.8
Utah New Auto and Truck Sales	Thousands	84.1	83.8	85.5	84.6	-0.3	2.0	-1.0
Utah Dwelling Unit Permits	Thousands	21.7	20.4	18.3	17.0	-6.4	-10.1	-7.1
Utah Residential Permit Value	Million Dollars	2,188.7	2,238.1	2,150.0	1,990.0	2.3	-3.9	-7.4
Utah Nonresidential Permit Value	Million Dollars	1,148.4	1,195.4	1,200.0	1,000.0	4.1	0.4	-16.7
Utah Additions, Alterations and Repairs	Million Dollars	461.3	537.4	575.0	550.0	16.5	7.0	-4.3
Utah Repeat-Sales House Price Index	1980Q1=100	236.6	242.4	247.8	252.7	2.5	2.2	2.0
Utah Existing S.F. Home Prices (NAR)	Thousand Dollars	133.5	137.9	141.9	144.7	3.3	2.9	2.0
Utah Taxable Retail Sales	Million Dollars	15,657	16,493	17,490	18,368	5.3	6.0	5.0
DEMOGRAPHICS AND SENTIMENT								
U.S. July 1st Population (BEA/Census)	Millions	270.2	272.7	274.9	277.1	0.9	0.8	0.8
U.S. Consumer Sentiment of U.S.	1966=100	104.6	105.8	107.6	109.6	1.1	1.7	1.9
Utah July 1st Population (UPEC)	Thousands	2,082.5	2,121.6	2,155.9	2,193.4	1.9	1.6	1.7
Utah July 1st Net Migration (UPEC)	Thousands	1.3	5.3	0.5	2.7	na	na	na
Utah July 1st Population (BEA/Census)	Thousands	2,100.6	2,129.8	2,164.1	2,201.6	1.4	1.6	1.7
Utah Consumer Sentiment of Utah	1966=100	107.0	106.1	107.6	109.5	-0.9	1.4	1.9
PROFITS AND RESOURCE PRICES								
U.S. Corporate Before Tax Profits	Billion Dollars	758.2	822.647	947.7	999.8	8.5	15.2	5.5
U.S. Before Tax Profits Less Fed. Res.	Billion Dollars	733.5	796.847	917.0	966.3	8.6	15.1	5.4
U.S. Oil Refinery Acquisition Cost	$ Per Barrel	12.6	17.4	27.9	21.1	38.2	60.4	-24.4
U.S. Coal Price Index	1982=100	93.6	90.7	88.1	85.5	-3.1	-2.9	-3.0
Utah Coal Prices	$ Per Short Ton	17.8	17.4	17.6	18.2	-2.6	1.2	3.4
Utah Oil Prices	$ Per Barrel	12.5	17.7	29.0	28.5	41.2	64.1	-2.0
Utah Natural Gas Prices	$ Per MCF	1.73	1.92	3.25	3.41	11.0	69.3	4.9
Utah Copper Prices	$ Per Pound	0.75	0.72	0.84	0.84	-4.0	16.3	0.3
INFLATION AND INTEREST RATES								
U.S. CPI Urban Consumers (BLS)	1982-84=100	163.0	166.6	172.2	176.9	2.2	3.4	2.7
U.S. GDP Chained Price Indexes	1996=100	103.2	104.8	107.0	109.2	1.6	2.1	2.1
U.S. Federal Funds Rate	Percent	5.35	4.95	6.25	6.50	na	na	na
U.S. 3-Month Treasury Bills	Percent	4.80	4.63	5.83	6.00	na	na	na
U.S. T-Bond Rate, 10-Year	Percent	5.28	5.63	6.10	6.33	na	na	na
U.S. Mortgage Rates, Fixed FHLMC	Percent	6.9	7.4	8.1	8.1	na	na	na
EMPLOYMENT AND WAGES								
U.S. Establishment Employment (BLS)	Millions	125.9	128.8	131.5	133.1	2.3	2.1	1.2
U.S. Average Annual Pay (BLS)	Dollars	31,945	33,313	34,814	36,190	4.3	4.5	4.0
U.S. Total Wages & Salaries (BLS)	Billion Dollars	4,022	4,291	4,578	4,816	6.7	6.7	5.2
Utah Nonagricultural Employment (WS)	Thousands	1023.5	1048.5	1075.6	1104.5	2.4	2.6	2.7
Utah Average Annual Pay (WS)	Dollars	26,483	27,495	28,896	29,715	3.8	5.1	2.8
Utah Total Nonagriculture Wages (WS)	Million Dollars	27,105	28,828	31,080	32,820	6.4	7.8	5.6
INCOME AND UNEMPLOYMENT								
U.S. Personal Income (BEA)	Billion Dollars	7,384	7,783	8,281	8,737	5.4	6.4	5.5
U.S. Unemployment Rate (BLS)	Percent	4.5	4.2	4.1	4.3	na	na	na
Utah Personal Income (BEA)	Million Dollars	46,831	49,600	53,100	56,100	5.9	7.1	5.6
Utah Unemployment Rate (WS)	Percent	3.8	3.7	3.3	3.5	na	na	na

Source: Council of Economic Advisors' Revenue Assumptions Committtee.

Table 3
Median Household Income, Homeownership Rates, Per Capita Income, and Mean Average Pay

Area	1997 to 1999 Median Household Income*	Rank	1999 Homeownership Rates	Rank	1999 Per Capita Income	Rank	1999 Mean Average Pay Per Job	Rank
UNITED STATES	$39,657	-	66.8%	-	$28,542	-	$33,313	-
Alabama	35,478	37	74.8%	8	22,987	43	28,069	31
Alaska	51,046	1	66.4%	38	28,577	18	34,034	12
Arizona	36,337	34	66.3%	39	25,189	36	30,523	23
Arkansas	28,398	51	65.6%	40	22,244	47	25,371	46
California	42,262	17	55.7%	49	29,910	14	37,564	5
Colorado	46,950	5	68.1%	33	31,546	7	34,192	11
Connecticut	47,997	4	69.1%	32	39,300	2	42,653	2
Delaware	44,627	11	71.6%	17	30,778	12	35,102	9
District of Columbia	35,309	39	40.0%	51	39,858	1	50,742	1
Florida	35,081	41	67.6%	34	27,780	20	28,911	30
Georgia	39,003	24	71.3%	19	27,340	23	32,339	17
Hawaii	42,864	16	56.6%	48	27,544	21	29,771	26
Idaho	36,023	36	70.3%	26	22,835	46	26,042	42
Illinois	44,459	12	67.1%	36	31,145	8	36,279	6
Indiana	40,635	19	72.9%	13	26,143	31	30,027	24
Iowa	38,047	28	73.9%	11	25,615	34	26,939	38
Kansas	37,618	29	67.5%	35	26,824	28	28,029	32
Kentucky	35,226	40	73.9%	10	23,237	42	27,748	34
Louisiana	33,218	45	66.8%	37	22,847	45	27,221	36
Maine	36,459	33	77.4%	1	24,603	38	26,887	39
Maryland	50,630	2	69.6%	30	32,465	6	34,472	10
Massachusetts	43,697	13	60.3%	47	35,551	4	40,331	4
Michigan	43,066	14	76.5%	3	28,113	19	35,734	8
Minnesota	46,802	6	76.1%	4	30,793	11	33,487	13
Mississippi	30,628	49	74.9%	6	20,688	51	24,392	47
Missouri	40,166	21	72.9%	12	26,376	30	29,958	25
Montana	31,280	48	70.6%	25	22,019	48	23,253	50
Nebraska	37,338	30	70.9%	22	27,049	25	26,633	40
Nevada	40,882	18	63.7%	44	31,022	10	31,213	20
New Hampshire	44,891	9	70.2%	27	31,114	9	32,139	18
New Jersey	50,234	3	64.5%	42	35,551	3	na	na
New Mexico	31,981	47	72.6%	14	21,853	49	26,270	41
New York	38,479	27	52.8%	50	33,890	5	42,133	3
North Carolina	37,057	32	71.7%	16	26,003	32	29,453	29
North Dakota	32,238	46	70.1%	28	23,313	40	23,753	49
Ohio	38,970	25	70.7%	24	27,152	24	31,396	19
Oklahoma	33,311	44	71.5%	18	22,953	44	25,748	44
Oregon	39,768	22	64.3%	43	27,023	26	30,867	22
Pennsylvania	38,938	26	75.2%	5	28,605	17	32,694	16
Rhode Island	40,213	20	60.6%	46	29,377	16	31,177	21
South Carolina	35,376	38	77.1%	2	23,545	39	27,124	37
South Dakota	33,438	43	70.7%	23	25,045	37	23,765	48
Tennessee	34,393	42	71.9%	15	25,574	35	29,518	28
Texas	37,320	31	62.9%	45	26,858	27	32,895	15
Utah	45,257	8	74.7%	9	23,288	41	27,884	33
Vermont	39,419	23	69.1%	31	25,889	33	27,595	35
Virginia	44,884	10	71.2%	20	29,789	15	33,015	14
Washington	46,788	7	64.8%	41	30,392	13	35,736	7
West Virginia	28,420	50	74.8%	7	20,966	50	26,008	43
Wisconsin	43,055	15	70.9%	21	27,390	22	29,597	27
Wyoming	36,039	35	69.8%	29	26,396	29	25,639	45
Utah as a % of U.S.	114.1%		111.8%		81.6%		83.7%	

*In estimating Median Household Income, because the number of households contacted in Utah is relatively few, the data collected for three years is averaged to calculate less variable estimates. The Census Bureau recommends using 3-year averages when ranking states.

Sources: 1997 to 1999 Median Household Income; U.S. Census Bureau: 1999 Homeownership Rates; U.S. Census Bureau: 1999 Per Capita Income; U.S. Bureau of Economic Analysis: 1999 Mean Average Pay Per Job; U.S. Bureau of Labor Statistics.

Utah's Long-Term Projections

Overview

Utah's population reached 2.16 million in 2000 and is expected to reach 3.68 million by the year 2030. The growth rate, which exceeds the rate of growth for the nation, will be sustained by a rapid rate of natural increase and a strong and diversified economy.

State Total Projections

Population. Utah's population, which was 1.73 million in 1990, reached 2.16 million in 2000. It is projected to achieve 2.66 million in 2010, 3.18 million in 2020, and 3.68 million in 2030. Although the projected average annual growth rate decelerates from 2.2% per year in the 1990s to 1.5% per year in the 2020s, these growth rates are over double those projected for the nation as a whole.

Natural Increase. Natural increase (i.e. the amount by which annual births exceed annual deaths) will fuel 81% of Utah's population growth over the projections period. The number of births per year is projected to average 49,500 in the 2000s, 57,400 in the 2010s, and 65,000 in the 2020s. This compares to projected annual average deaths of 13,100 in the 2000s, 15,800 in the 2010s, and 19,500 in the 2020s.

Migration. Net migration is gross in-migration less gross out-migration. Net in-migration is projected to occur in the State of Utah over the next three decades. Approximately 280,000 of the 1.5 million population increase over the thirty-year projections period can be attributed to net in-migration, meaning in-migration accounts for about 19% of the projected increase. Net in-migration occurs when 1) there is enough job creation to accommodate residents who are new entrants to the labor force, and 2) there is additional job creation such that in-migration is necessary to satisfy labor demand within the state. The sustained net in-migration is projected because job creation is also projected to be relatively rapid over the next three decades.

Age Structure and Fertility. A significant amount of attention has been given to the trends of the growing school-age population in Utah, where the grandchildren of the baby boomers are entering the school-age years (ages 5 to 17). The State of Utah is projecting an increase of 100,000 people in the school-age population over the next decade. It is important to note that this increase is not mainly fertility-driven or migration-driven, but rather the increase is mostly due to the fact that such a large number of women are in their childbearing years. The Utah population is young relative to the nation and, in consequence, a greater portion of the female population is in childbearing years compared to the nation. Therefore, even if Utah's fertility rate (children per woman) was equal to that of the nation, more children would be born in Utah relative to the size of the population. However, in addition to the young population, Utah women have higher fertility rates, ranking Utah first among states nationwide. For the projection period, Utah's fertility rate is projected to remain constant at 2.7 children per woman of childbearing age. The national projections have the fertility rate increasing from 2.1 during the next two decades to 2.2 during the last decade of the projection period. Further contributing to the rapid rate of natural increase is the fact that Utahns tend to have longer life expectancies (i.e. mortality rates at any given age are lower) compared to the nation.

The median age is the age that divides the age distribution of a given population into two equal groups, one that is younger than the median and one that is older than the median age. Utah's median age is projected to increase from 28 years in 2000 to 31 years by the year 2030. Over the same period, the U.S. median age is projected to increase from 36 to 39. The increasing median ages in both cases are largely the result of the aging of the baby boomers over time. The difference in median ages reflects the cumulative effect of Utah's higher fertility rate and the interaction of this high fertility rate with the younger population profile of the state. As Utah women in child-bearing years continue to have more children on average than women nationally, the younger age groups continue to be relatively larger as a portion of the population than is the case for the U.S. as a whole.

Dependency Ratio. One summary measure of a population's age structure is the dependency ratio. This ratio is defined as the number of non-working age persons (younger than 18, and 65 years and over) per 100 working age persons (ages 18 through 64). Utah's dependency ratio has historically been significantly higher than that of the nation. This has occurred because the preschool and school-age portions of Utah's population have been substantial relative to its total population. In 1970, Utah's dependency ratio was 90 while the nation's was 79. In 2000, the dependency ratio for the state fell to 70 while the nation's fell to 63. This decline occurred, in both cases, primarily because the baby boomers reached working age.

Utah's age structure will continue to be characterized by a relatively high dependency ratio. However, the state's dependency ratio will converge with that of the nation over the projections period. The projected dependency ratio for Utah in 2030 is 78, while that of the nation is also 78. This tendency to converge is primarily because the working age proportion of Utah's population will increase while that of the nation will decline. The aging of the baby boomers affects the age structure of both Utah and the U.S. However, the aging and retirement of the baby boomers will have a larger effect on the national dependency ratio because the younger age groups in Utah's population will increase more rapidly than those of the nation throughout the entire period.

Employment. Utah's non-farm payroll employment will increase from 1,075,600 in 2000 to 1,797,000 in 2030. This is an increase of 722,000 jobs over the projections period. The State of Utah's average annual growth rate for the projections period is 2.3%, while the corresponding growth rates for the U.S. are about half that of Utah. In the present economic cycle, western states have experienced very strong employment growth. Utah is currently among the top job growth states in the nation. The pace of job creation has slowed from the boom conditions of the 1990s, however, Utah's economy will continue to expand more rapidly than that of the nation throughout the projections period.

Employment growth will occur in every major industry[1] except agriculture and mining in Utah over the next three decades. Further, average annual growth in every industry, except mining and agriculture, will be higher than for those same industries at the national level. National projections indicate that three of the ten major industries will experience net declines in employment levels. The three industries are

[1] There are ten major industries in this classification scheme. TCPU is transportation, communications, and public utilities. FIRE is finance, insurance, and real estate. Non-farm proprietors are non-farm sole proprietorships (i.e., an unincorporated business owned by a single individual) and partnerships (i.e., an unincorporated business association of two or more partners) and tax-exempt cooperatives (i.e., an unincorporated nonprofit business organization owned collectively by its members). The remaining industries are: agriculture, mining, construction, manufacturing, trade, services, and government.

manufacturing, mining, and agriculture. Of the ten major industries, construction will have the highest average annual growth rate in the State of Utah over the next three decades at a rate of 3.3%. Other major industries in Utah will have strong employment growth (in excess of 2.0% per year on average) for the 1990 to 2030 period are TCPU, trade, FIRE, services, and non-farm proprietors. The slow growth industries in Utah will be manufacturing and government.

Services, non-farm proprietors, and trade are currently the three largest industries (in terms of employment) in Utah. The number of service jobs in Utah is expected to more than double, increasing from 308,100 in 2000 to 629,300 in 2030, an increase of 321,200 jobs. The number of non-farm proprietor jobs and new trade sector jobs are projected to increase significantly over the projections period as well. These three industries combined are projected to create 74% of the employment growth in the State of Utah over the next three decades.

Diversification. The State of Utah is becoming more economically diverse, and hence more like the economic structure of the United States, as measured by the Hachman Index.[2] There are specific counties that are very different from the U.S., and this is not necessarily bad. For example, if the mining industry moved out of Carbon County, the economic structure of Carbon County would score higher on the Hachman Index, meaning it would now be more representative of the economic base of the nation (however, the economy of Carbon County would not be better off). Although the direction of shifts in composition of employment by industry will be similar for Utah and the U.S., 2000 and 2030 distributions of employment by industry will be different.

In 2000 the most significant differences between the industrial composition of Utah and the U.S. were the relatively larger concentration of employment in the non-farm proprietors and the construction sectors, and relatively smaller concentration of employment in the services and manufacturing sectors. Utah also had a slightly greater share of employment in mining and TCPU, and a somewhat smaller proportion in the other four major industries than the nation (i.e., agriculture, trade, FIRE, and government).

The most significant differences between the employment shares for the projected industrial composition in 2030 of Utah and the U.S. are the relatively larger concentrations of Utah's employment in the non-farm proprietors sector, and the relatively smaller share of Utah's employment in services, manufacturing, and trade. Utah will have a slightly larger share of employment in construction and TCPU, and a somewhat smaller share of employment in agriculture, mining, FIRE, and government when compared to the nation. This is the combined result of the differential shifts in industrial composition between Utah and the U.S. in the projections period, and the initial differences in the composition of employment between the two.

County Level Population and Employment Projections

Population. About 1.1 million (or about 73%) of the 1.5 million population increase projected for the state between 2000 and 2030 will be concentrated in the counties of Salt Lake, Utah, Davis, and Weber. This is slightly less than the 76% share of the state's population in these counties in 2000. Therefore, the share of the state's population in these four counties in 2030 will decline slightly to 75%.

The counties with the projected highest annual average rates of growth over the 1990 to 2030 period are Washington (3.8%), Summit (3.5%), Wasatch (2.9%), Tooele (2.8%), Iron (2.7%), Kane (2.7%), Utah (2.4%), Juab (2.3%), Wayne (2.1%), and Morgan (2.1%). These growth rates are well in excess of the state's average annual rate of growth of 1.9% for the 1990 to 2030 period. Thus, these counties will gain in terms of their shares of the state's total population.

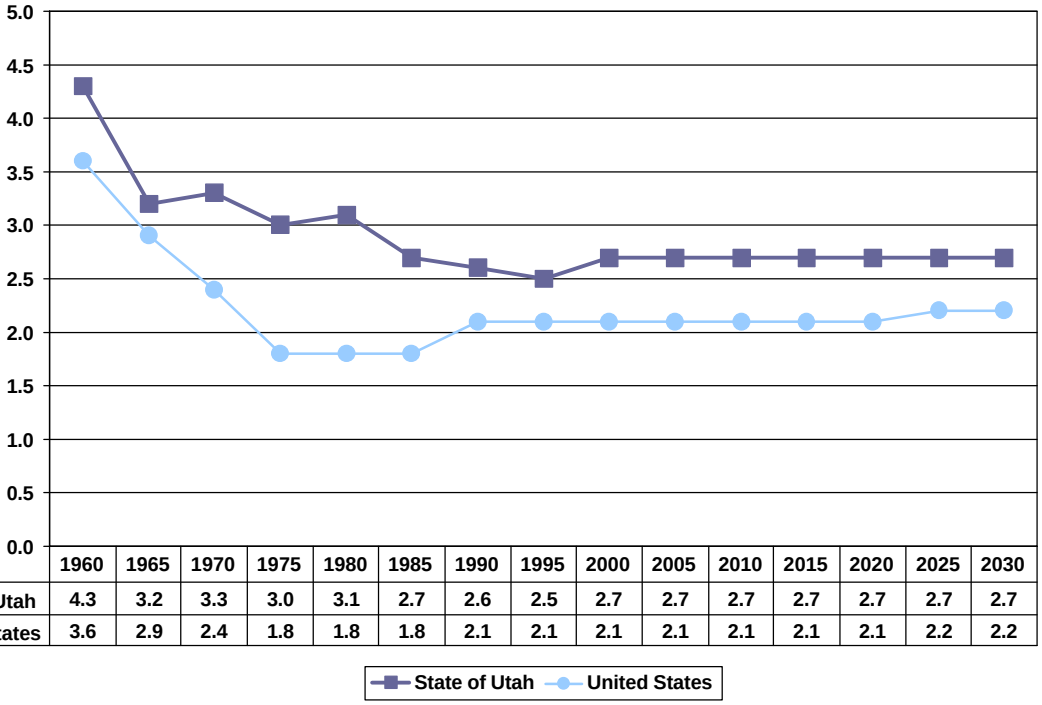
Employment. Of the 937,000 net employment creation projected for the state from 2000 to 2030, 75%, or 706,400 jobs, will be within Salt Lake, Utah, Davis, and Weber Counties. However, of these counties, only Utah will have an average annual growth rate of employment in excess of that of the state as a whole.

The counties with the most rapid rates of employment growth from 1990 to 2030 are Washington (4.55%), Kane (3.72%), Summit (3.37%), Wasatch (3.31%), and Iron (3.25%).

For Additional Information. For additional information on historical and projected economic and demographic data, including methods, procedures, and assumptions, visit the web site: www.qget.state.ut.us/projections/.

[2] This is an index of similarity that measures how closely the employment distribution of the subject region resembles that of the reference region. The value of the index is between zero and one. As the value of the index approaches one, this means that the subject region's employment distribution among industries is more similar to that of the reference region. If the reference region is the nation, and, given the assumption that the nation's economy is diversified, a larger value of the Hachman Index relative to the nation means that a subject region is more diversified. In 1977 the Hachman Index for the State of Utah was .93. It is .98 in 2000, and is projected to remain at .98 to 2030.

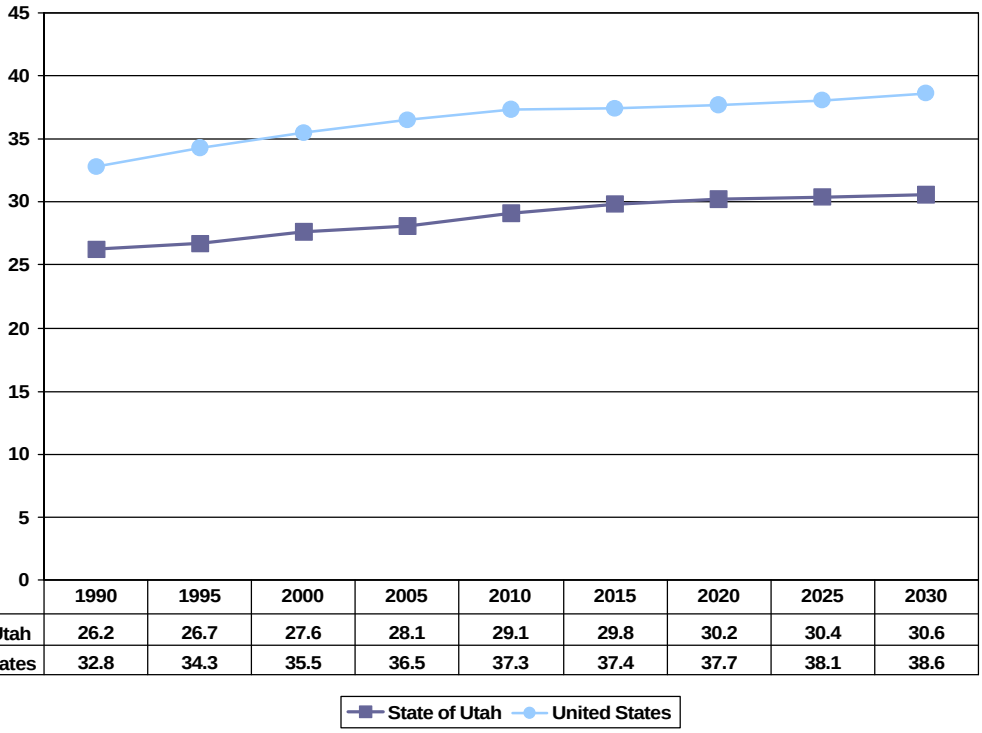
Figure 5
Historical and Projected Total Fertility Rates for Utah and the U.S.



	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025	2030
State of Utah	4.3	3.2	3.3	3.0	3.1	2.7	2.6	2.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7
United States	3.6	2.9	2.4	1.8	1.8	1.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2

Source: 2000 Baseline Projections, GOPB; UPED Model System

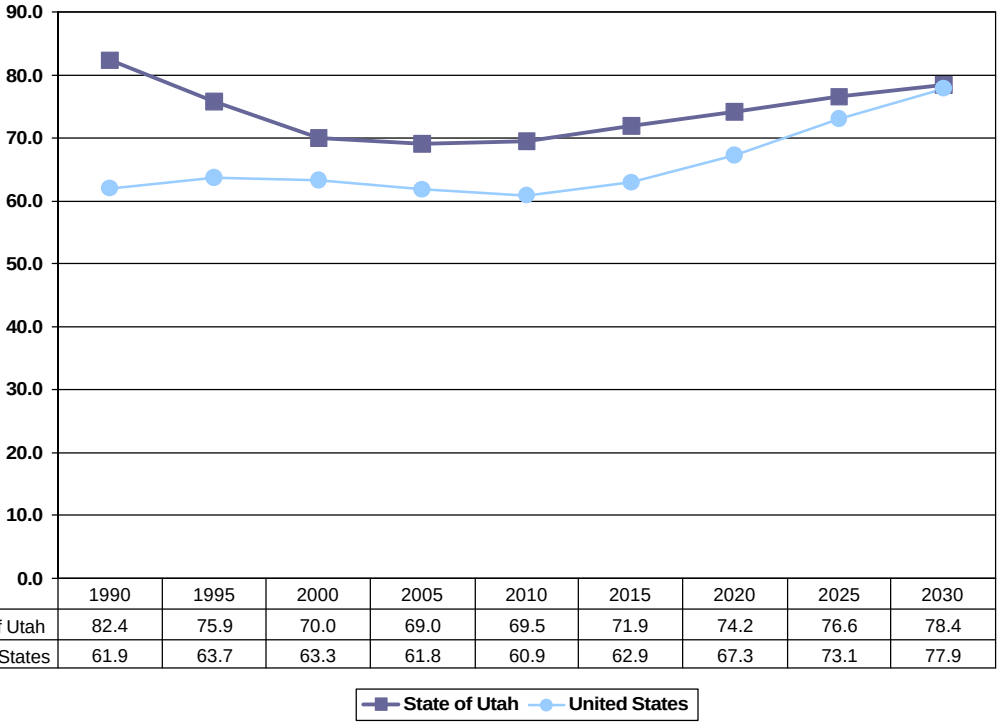
Figure 6
Historical and Projected Median Ages for Utah and the U.S.



	1990	1995	2000	2005	2010	2015	2020	2025	2030
State of Utah	26.2	26.7	27.6	28.1	29.1	29.8	30.2	30.4	30.6
United States	32.8	34.3	35.5	36.5	37.3	37.4	37.7	38.1	38.6

Source: 2000 Baseline Projections, GOPB; UPED Model System

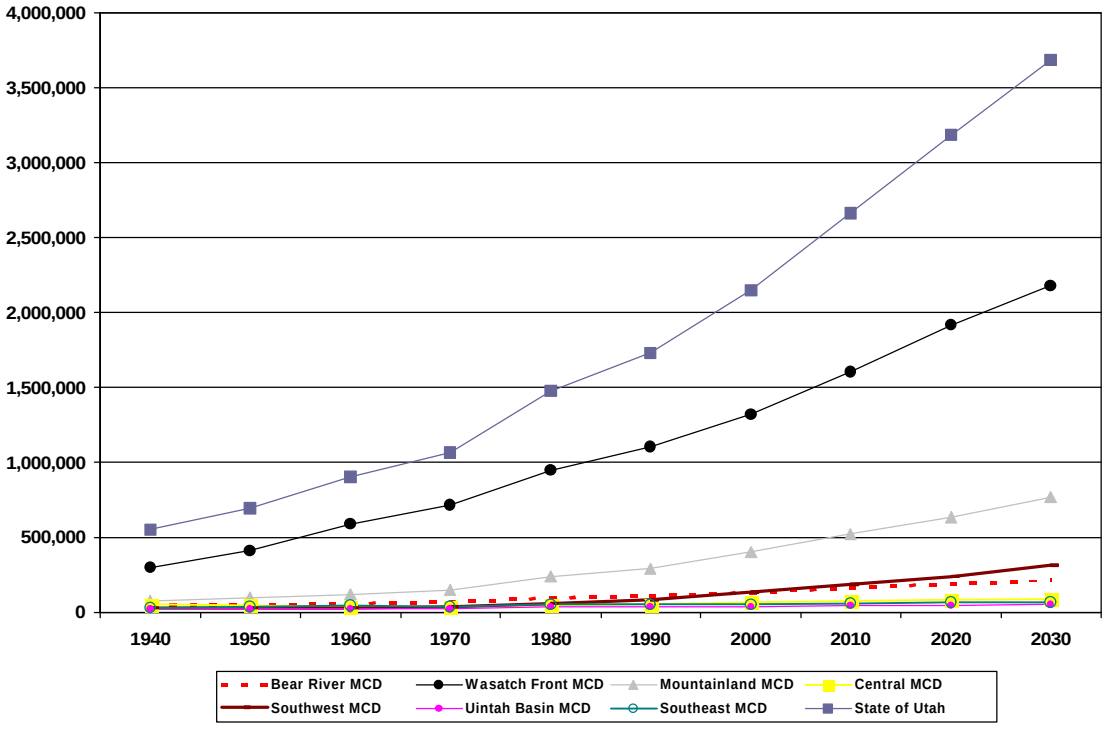
Figure 7
Historical and Projected Dependency Ratios for Utah and the U.S.



	1990	1995	2000	2005	2010	2015	2020	2025	2030
State of Utah	82.4	75.9	70.0	69.0	69.5	71.9	74.2	76.6	78.4
United States	61.9	63.7	63.3	61.8	60.9	62.9	67.3	73.1	77.9

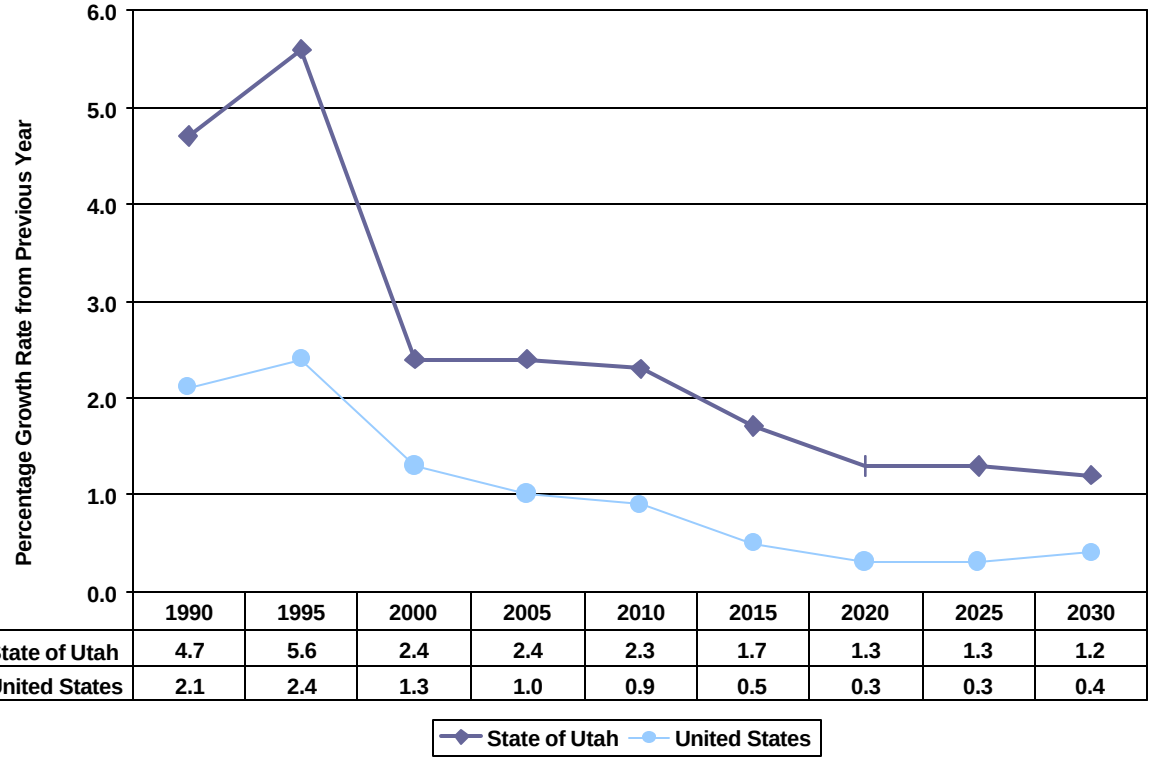
Source: 2000 Baseline Projections, GOPB; UPED Model System

Figure 8
Population Estimates and Projections by MCD



Source: 2000 Baseline Projections, GOPB, does not include Census 2000 updates; UPED Model System

Figure 9
Nonagricultural Payroll Employment Projected for Major Industries



	1990	1995	2000	2005	2010	2015	2020	2025	2030
State of Utah	4.7	5.6	2.4	2.4	2.3	1.7	1.3	1.3	1.2
United States	2.1	2.4	1.3	1.0	0.9	0.5	0.3	0.3	0.4

Note: Calculations may not match other projections in this report due to updated information.
Source: 2000 Baseline Projections, GOPB; UPED Model System

Table 4
Utah Economic and Demographic Summary

	Population		School Age Population (5-17)		Non-Ag Payroll Employment		Households		
Year	Total	AARC*	Total	AARC*	Total	AARC*	Total	AARC*	Average Size
1990	1,729,100	na	456,783	na	724,013	N/A	538,348	N/A	3.16
1995	1,959,344	2.50%	485,336	1.20%	908,371	4.60%	630,664	3.20%	3.05
2000	2,155,900	1.90%	484,305	-0.04%	1,075,600	3.40%	710,387	2.40%	2.97
2005	2,355,120	1.80%	523,315	1.60%	1,185,255	2.00%	792,017	2.20%	2.92
2010	2,661,902	2.50%	598,775	2.70%	1,337,090	2.40%	905,258	2.70%	2.89
2015	2,951,006	2.10%	672,057	2.30%	1,472,429	1.90%	1,012,556	2.30%	2.86
2020	3,183,388	1.50%	715,815	1.30%	1,579,919	1.40%	1,106,905	1.80%	2.83
2025	3,428,230	1.50%	752,349	1.00%	1,686,612	1.30%	1,209,420	1.80%	2.78
2030	3,683,687	1.40%	791,043	1.00%	1,796,816	1.30%	1,313,991	1.70%	2.75

*AARC- Annual Average Rate of Change

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.
This is the provisional 2000 Baseline, revised December 13, 1999; does not include Census 2000 data updates.
The last year of historical data is 1998 for employment and 1999 for population.
Total population is the population in households plus the population in group quarters. Persons per household is population in households divided by the number of households.
Populations are dated July 1.

Table 5
Population Projections by County and District

MCD/County	1980	1990	2000	2005	2010	2015	2020	2030	AARC 1990-2030
BEAR RIVER	92,498	108,393	133,246	146,692	163,984	180,460	193,189	215,926	1.74%
Box Elder	33,222	36,485	43,083	47,896	53,855	59,137	63,209	70,755	1.67%
Cache	57,176	70,183	88,320	96,904	108,150	119,272	127,896	143,040	1.80%
Rich	2,100	1,725	1,843	1,892	1,979	2,051	2,084	2,131	0.53%
WASATCH FRONT	941,172	1,104,356	1,319,638	1,427,643	1,606,875	1,779,180	1,917,301	2,176,633	1.71%
Davis	146,540	187,941	240,460	261,297	292,173	322,395	346,203	392,003	1.85%
Morgan	4,917	5,528	7,292	7,856	8,829	9,810	10,659	12,435	2.05%
Salt Lake	619,066	725,956	848,083	914,190	1,028,508	1,136,706	1,223,218	1,383,907	1.63%
Tooele	26,033	26,601	36,816	42,450	50,333	58,487	65,852	80,938	2.82%
Weber	144,616	158,330	186,987	201,850	227,032	251,782	271,369	307,350	1.67%
MOUNTAINLAND	236,827	289,197	402,419	454,011	524,651	584,866	632,920	769,392	2.48%
Summit	10,198	15,518	27,095	29,176	35,202	42,009	48,207	60,852	3.48%
Utah	218,106	263,590	361,213	408,220	469,691	520,353	559,907	677,304	2.39%
Wasatch	8,523	10,089	14,111	16,615	19,758	22,504	24,806	31,236	2.87%
CENTRAL	47,087	52,294	66,121	71,338	76,693	82,101	85,395	92,385	1.43%
Juab	5,530	5,817	8,332	9,435	10,572	11,732	12,589	14,338	2.28%
Millard	8,970	11,333	12,047	12,539	13,057	13,576	13,747	14,167	0.56%
Piute	1,329	1,277	1,669	1,789	1,889	1,973	2,009	2,062	1.21%
Sanpete	14,620	16,259	22,296	23,920	25,571	27,230	28,177	30,242	1.56%
Sevier	14,727	15,431	19,160	20,635	22,155	23,686	24,598	26,498	1.36%
Wayne	1,911	2,177	2,617	3,020	3,449	3,904	4,275	5,078	2.14%
SOUTHWEST	55,489	83,263	133,298	156,056	185,326	214,415	241,521	310,730	3.35%
Beaver	4,378	4,765	6,006	6,938	7,558	8,089	8,477	9,653	1.78%
Garfield	3,673	3,980	4,609	5,030	5,602	6,123	6,563	7,764	1.68%
Iron	17,349	20,789	32,564	36,911	41,656	46,076	49,892	60,191	2.69%
Kane	4,024	5,169	6,338	6,730	8,238	9,757	11,243	14,924	2.69%
Washington	26,065	48,560	83,781	100,447	122,272	144,370	165,346	218,198	3.83%
UINTAH BASIN	33,840	35,546	40,378	41,735	43,861	46,698	48,172	50,038	0.86%
Daggett	769	690	742	770	813	869	898	937	0.77%
Duchesne	12,565	12,645	14,518	15,253	16,247	17,492	18,216	19,212	1.05%
Uintah	20,506	22,211	25,118	25,712	26,801	28,337	29,058	29,889	0.75%
SOUTHEAST	54,124	49,801	55,105	57,645	60,512	63,286	64,890	68,583	0.80%
Carbon	22,179	20,228	21,876	22,951	24,091	25,245	25,732	27,248	0.75%
Emery	11,451	10,332	10,395	10,772	11,243	11,684	12,322	12,984	0.57%
Grand	8,241	6,620	9,106	9,349	9,665	9,954	9,989	10,288	1.11%
San Juan	12,253	12,621	13,728	14,573	15,513	16,403	16,847	18,063	0.90%
STATE OF UTAH	1,461,037	1,722,850	2,155,900	2,355,120	2,661,902	2,951,006	3,183,388	3,683,687	1.92%

Sources: U.S. Bureau of the Census; UPEC; 2000 Baseline, GOPB; UPED Model System
Does not include Census 2000 data updates.

Table 6
Total Employment Projections by Major Industry

Industry	1980	1990	1995	2000	2005
Agriculture (4)	19,660	19,146	17,206	19,927	19,588
Mining	18,502	8,604	8,114	7,706	7,474
Construction	31,548	27,927	54,793	73,030	61,944
Manufacturing	87,707	107,102	123,865	133,977	139,586
TCPU (1)	34,127	42,286	51,496	60,596	66,723
Trade	128,692	172,394	220,026	253,493	273,042
FIRE (2)	25,768	34,133	47,678	58,492	63,603
Services (3)	105,839	185,865	243,716	308,096	374,069
Government	124,929	150,557	163,669	184,510	203,845
Non-farm Proprietors (4)	90,616	154,703	201,050	253,965	298,437
TOTAL EMPLOYMENT (5)	667,388	902,717	1,131,613	1,353,792	1,508,311
Non-Ag Payroll Emp (6)	551,833	724,013	908,371	1,075,600	1,185,255

Industry	2010	2015	2020	2025	2030
Agriculture (4)	19,092	18,422	17,666	16,715	16,365
Mining	7,391	7,262	6,984	7,059	5,444
Construction	73,847	81,470	88,278	95,031	101,947
Manufacturing	146,692	154,401	162,372	171,261	180,849
TCPU (1)	73,543	80,245	86,446	93,083	99,807
Trade	302,246	329,242	351,722	375,486	402,901
FIRE (2)	70,504	76,841	81,816	86,880	92,480
Services (3)	440,434	499,361	544,783	587,882	629,325
Government	227,609	248,849	262,737	275,096	289,366
Non-farm Proprietors (4)	342,786	382,080	412,882	442,409	472,335
TOTAL EMPLOYMENT (5)	1,704,144	1,878,173	2,015,686	2,150,902	2,290,819
Non-Ag Payroll Emp (6)	1,337,090	1,472,429	1,579,919	1,686,612	1,796,816

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.
This is the provisional 2000 Baseline, revised December 13, 1999.
Calculations may not match other projections in this report due to updated information.
(1) Transportation, Communications and Public Utilities
(2) Finance, Insurance and Real Estate
(3) Includes Private Household and Agricultural Services employment (SICs 88, 07, 08, and 09)
(4) U.S. Bureau of Economic Analysis definition
(5) Totals may not add due to rounding
(6) Excludes Agriculture, Private Household, and Non-Farm Proprietor employment

Table 7
Utah Population Projections by Selected Age Groups

Age	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
0-4	189,962	172,252	175,762	180,013	183,632	187,197	190,253	194,184	199,801	206,004	213,130
5-17	350,143	456,783	466,478	472,890	477,708	483,136	485,336	486,846	488,378	485,320	483,559
18-29	351,391	337,682	346,478	356,225	366,199	379,755	394,030	409,045	425,018	438,188	450,943
30-39	184,866	261,192	271,417	279,102	285,070	290,099	292,179	292,899	293,866	291,716	291,912
40-64	275,455	345,459	360,872	375,187	391,550	409,655	427,823	446,178	465,857	483,434	501,651
65+	109,220	149,482	154,500	158,535	162,290	166,156	169,723	173,246	175,829	177,809	179,838
15-44	678,160	789,887	822,144	849,906	876,666	906,916	932,674	956,534	978,344	990,538	1,002,238
16-64	864,989	1,003,330	1,040,496	1,075,784	1,113,036	1,154,285	1,190,639	1,227,395	1,266,165	1,291,657	1,320,871
60+	155,480	201,994	207,632	211,622	215,535	219,497	223,879	227,990	231,890	235,044	238,700
Total	1,461,037	1,722,850	1,775,507	1,821,952	1,866,449	1,915,998	1,959,344	2,002,398	2,048,749	2,082,471	2,121,033
Median Age	24	26	26	26	27	27	27	27	27	27	27

Age	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
0-4	219,157	225,285	229,555	233,897	238,158	242,697	247,309	252,201	257,302	262,631	267,670
5-17	484,305	486,511	490,578	498,321	509,237	523,315	537,825	552,893	567,730	583,356	598,775
18-29	453,208	457,065	461,101	466,776	474,320	480,871	486,361	491,507	496,962	502,528	505,449
30-39	293,556	297,957	297,625	298,907	303,056	310,496	320,067	333,683	348,305	362,882	374,877
40-64	518,174	536,388	551,380	568,156	584,955	602,234	618,146	635,440	650,907	668,418	689,711
65+	181,805	184,070	185,936	188,443	191,575	195,507	200,094	204,554	211,564	218,753	225,420
15-44	1,006,342	1,014,276	1,015,524	1,021,764	1,034,093	1,050,205	1,065,905	1,086,620	1,106,894	1,130,497	1,153,888
16-64	1,340,543	1,364,820	1,382,442	1,404,801	1,432,766	1,465,867	1,499,482	1,537,507	1,574,281	1,612,492	1,649,561
60+	241,878	246,118	249,634	256,207	263,242	270,402	277,151	288,716	301,287	313,834	327,277
Total	2,155,900	2,187,276	2,216,175	2,254,500	2,301,301	2,355,120	2,409,802	2,470,278	2,532,770	2,598,568	2,661,902
Median Age	28	28	28	28	28	28	28	28	29	29	29

Age	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2030
0-4	272,262	276,559	280,503	283,886	286,733	289,193	291,464	293,712	295,899	298,285	345,067
5-17	614,935	630,848	646,079	659,974	672,057	682,585	691,834	700,467	708,420	715,815	791,043
18-29	506,726	511,349	514,959	519,775	525,706	532,237	540,854	550,294	558,990	567,638	675,761
30-39	384,583	395,881	407,906	417,608	424,598	429,145	429,189	428,004	426,393	423,398	445,704
40-64	713,305	727,755	741,306	754,148	766,716	779,234	794,431	808,516	822,141	836,659	943,570
65+	231,522	241,819	253,033	263,675	275,196	287,286	298,974	312,604	326,730	341,593	482,542
15-44	1,177,915	1,203,493	1,229,175	1,252,060	1,269,585	1,283,251	1,301,224	1,319,123	1,336,476	1,352,800	1,500,847
16-64	1,686,411	1,719,582	1,752,233	1,783,111	1,811,644	1,837,679	1,863,240	1,887,149	1,909,276	1,930,706	2,180,637
60+	341,366	355,130	370,886	387,047	403,887	420,824	437,537	454,718	471,315	488,508	631,527
Total	2,723,333	2,784,211	2,843,786	2,899,066	2,951,006	2,999,680	3,046,746	3,093,597	3,138,573	3,183,388	3,683,687
Median Age	29	29	30	30	30	30	30	30	30	30	31

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.
This is the provisional 2000 Baseline, revised December 13, 1999; does notinclude Census 2000 data updates.
1980 and 1990 populations are April 1 U.S. Census MARS populations; all others are July 1 populations.

Table 8
Utah Population Projections by Selected Age Groups as a Percent of Total

Age	1980	1990	2000	2005	2010	2015	2020	2030
0-4	13.0%	10.0%	10.2%	10.3%	10.1%	9.7%	9.4%	9.4%
5-17	24.0%	26.5%	22.5%	22.2%	22.5%	22.8%	22.5%	21.5%
18-29	24.1%	19.6%	21.1%	20.4%	19.0%	17.8%	17.8%	18.3%
30-39	12.7%	15.2%	13.7%	13.2%	14.1%	14.4%	13.3%	12.1%
40-64	18.9%	20.1%	24.1%	25.6%	25.9%	26.0%	26.3%	25.6%
65+	7.5%	8.7%	8.5%	8.3%	8.5%	9.3%	10.7%	13.1%
15-44	46.4%	45.8%	46.8%	44.6%	43.3%	43.0%	42.5%	40.7%
16 - 64	59.2%	58.2%	62.3%	62.2%	62.0%	61.4%	60.6%	59.2%
60+	10.6%	11.7%	11.2%	11.5%	12.3%	13.7%	15.3%	17.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.
This is the provisional 2000 Baseline, revised December 13, 1999.
1980 and 1990 populations are April 1 U.S. Census MARS populations; all others are July 1 populations.

Table 9
Location Quotients and Hachman Index for the State of Utah

Industry	1980	1990	2000	2010	2020	2030
Agriculture	0.89	0.94	0.82	0.73	0.65	0.59
Mining	3.05	1.86	1.60	1.45	1.29	0.97
Construction	1.20	0.81	1.41	1.14	1.16	1.18
Manufacturing	0.73	0.86	0.86	0.84	0.84	0.86
TCU	1.13	1.12	1.10	1.07	1.08	1.10
Trade	1.06	1.01	1.00	0.95	0.94	0.95
FIRE	0.82	0.77	0.93	0.90	0.89	0.88
Services	0.88	0.93	0.88	0.94	0.94	0.93
Government	1.14	1.09	0.99	1.00	1.00	0.98
Non-Farm Proprietors	1.12	1.20	1.21	1.27	1.28	1.28
Hachman Index	0.94	0.98	0.98	0.98	0.98	0.98

*Location Quotients are measures of relative shares. The share of a given industry in the subject area (Utah) is compared to that of the reference region (United States). A location greater than 1 indicates specialization in a subject region relative to the reference region.

**The Hachman Index measures how closely the employment distribution of the subject region (Utah) resembles that of the reference region (United States). As the value of the index approaches one, this means that the subject region's employment distribution among industries is more similar to that of the reference region.

Source: 2000 Baseline Projections, GOPB, UPED Model System.

Table 10
Hachman Index by Individual County in the State of Utah

County	1980	1990	2000	2010	2020	2030
Beaver	0.48	0.46	0.29	0.29	0.33	0.37
Box Elder	0.69	0.53	0.55	0.59	0.60	0.58
Cache	0.84	0.81	0.86	0.86	0.86	0.85
Carbon	0.15	0.20	0.30	0.34	0.38	0.38
Daggett	0.35	0.49	0.56	0.59	0.60	0.62
Davis	0.73	0.83	0.88	0.89	0.89	0.89
Duchesne	0.21	0.33	0.35	0.52	0.57	0.59
Emery	0.06	0.10	0.12	0.13	0.15	0.15
Garfield	0.40	0.55	0.64	0.71	0.76	0.79
Grand	0.22	0.60	0.81	0.81	0.81	0.81
Iron	0.81	0.84	0.91	0.92	0.92	0.91
Juab	0.65	0.56	0.77	0.81	0.83	0.85
Kane	0.70	0.75	0.88	0.84	0.87	0.88
Millard	0.31	0.40	0.41	0.45	0.46	0.47
Morgan	0.45	0.32	0.39	0.45	0.48	0.50
Piute	0.24	0.13	0.15	0.19	0.21	0.22
Rich	0.22	0.18	0.25	0.26	0.28	0.30
Salt Lake	0.93	0.96	0.95	0.96	0.96	0.96
San Juan	0.10	0.33	0.40	0.24	0.43	0.54
Sanpete	0.47	0.48	0.63	0.66	0.68	0.70
Sevier	0.60	0.62	0.68	0.67	0.66	0.65
Summit	0.41	0.80	0.80	0.79	0.79	0.79
Tooele	0.42	0.53	0.80	0.82	0.82	0.82
Uintah	0.21	0.25	0.29	0.52	0.61	0.63
Utah	0.94	0.92	0.93	0.94	0.94	0.94
Wasatch	0.59	0.68	0.75	0.76	0.77	0.77
Washington	0.81	0.88	0.84	0.84	0.85	0.85
Wayne	0.30	0.27	0.47	0.58	0.64	0.69
Weber	0.93	0.94	0.96	0.97	0.97	0.97

*The subject region is each individual county, and the reference region is the United States.

Source: 2000 Baseline Projections, GOPB, UPED Model System.

Table 11
Utah Dependency Ratios

	1980	1990	2000	2005	2010	2015	2020	2030
Dependency Ratio	80	82	70	69	70	72	74	78
Pop 0-4 per 100 Pop age 18-64	23	18	17	17	17	17	16	17
Pop 5-17 per 100 Pop age 18-64	43	48	38	38	38	39	39	38
Pop 65+ per 100 Pop age 18-64	13	16	14	14	14	16	19	23

Source: Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.
This is the provisional 2000 Baseline, revised December 13, 1999.
1980 and 1990 populations are April 1 U.S. Census MARS populations; all others are July 1 populations.
The dependency ratio is defined as the population ages 0-17 and 65 plus per 100 persons ages 18-64.

Table 12
Historical and Projected Life Expectancies for Utah and the U.S.

	Utah			U.S.		
Year	Male	Female	Total	Male	Female	Total
1970	69.5	76.6	72.9	67.0	74.6	70.8
1980	72.4	79.2	75.8	70.1	77.6	73.9
1990	74.9	80.4	77.7	71.8	78.8	75.4
2000	75.6	81.4	78.5	73.0	79.7	76.3
2010	76.7	82.3	79.5	74.1	80.6	77.3
2020	77.9	83.1	80.5	75.3	81.4	78.4
2030	79.0	83.5	81.3	76.7	82.3	79.5

Sources: National Center for Health Statistics, Vital Statistics of the United States, Decennial Life Tables; Governor's Office of Planning and Budget--Demographic and Economic Analysis Section, UPED Model System.

Economic Development Activities

Economic Development Activities

Overview
The Utah Silicon Valley Alliance is a coordinated effort by the Department of Community and Economic Development and its partners to directly assist high tech start-ups and businesses in Utah, and to position the state as the Silicon Valley's preferred choice for expansion.

Development Activities in Utah

As the reality of the New Economy becomes ever more apparent, many states are re-orienting their economic development programs in an effort to capture a share of the burgeoning high tech clusters, and their associated high wages and long-term growth potential.

Fortunately Utah already has a head start in this regard. It already has well established information technology and bioscience industry clusters, with some 3,500 companies employing over 80,000 workers. It is also fortunate to have Old Economy attributes that also influence the location decisions of high tech companies, including:

- **Labor force.** Utah has a growing, young and technology-literate workforce which benefits from a strong, closely-coupled higher education system. This system includes 3 major research universities, a comprehensive system of 4-year colleges and universities, as well as a network of community colleges, applied technology centers, and specialty technical schools.

- **Infrastructure.** Utah has, in general, the necessary transportation and communications infrastructure required by high tech companies. This infrastructure has been significantly upgraded in the past several years, partly in preparation for the 2002 Winter Olympic Winter Games.

- **Location.** Although not as critical as in the past, geographic location and critical mass are still an important consideration in developing industry clusters. Utah has a central proximity to all the developing technology hubs in the western U.S., especially the Silicon Valley (the largest concentration of high tech companies in the world).

2001 Focus

The Silicon Valley Alliance has two parallel strategies. The first recognizes that Utah's existing businesses are the backbone of the state's economy. The Alliance seeks to help Utah high tech businesses and entrepreneurs starting businesses, grow and prosper by collaborating with experts from existing companies to improve the state's business climate. The second strategy is to position Utah as the number one choice for high tech “grow-out,” by implementing a set of recommendations addressing the needs of expanding high tech businesses.

To accomplish this, the Utah Silicon Valley Alliance was established as an operating center of the Department of Community and Economic Development. A series of task forces will formulate specific actions and recommendations.

A committee will be formed to create, introduce, and implement a coordinated advertising and branding scheme for Utah as a technology center. Among other responsibilities, this committee will coordinate advertising efforts by state, local, and private Alliance members to assure a consistent message.

Concurrently, a task group will establish and nurture a national "Friends of Utah" network and develop an associated schedule of regular and coordinated trade missions to Silicon Valley and other technology centers.

A task group will work to raise the profile of high technology companies in Utah. Proposed activities include: creating an Alliance newsletter; working with print and broadcast media to improve the quality of high tech reporting; and sponsoring events, career days, science contests, etc., to increase the number of K-12 students studying science and mathematics.

A task group will organize and coordinate the collection and dissemination of detailed industry-specific demographic, infrastructure, incentive, regulatory and other data required by prospective high tech companies interested in expansion in Utah, including service providers and relevant government agencies. The recommendation has been made to increase funding for the Industrial Assistance Fund.

A task group will inventory the State's current real estate market and related service providers, and encourage and facilitate the establishment of high technology magnet commercial and residential developments.

A task group will encourage and coordinate the rapid, uniform, and equitable deployment of telecommunications infrastructure. Specific attention will be given to "last mile" installations, more timely deployment to new commercial developments, and more uniform geographical distribution in both urban and rural areas.

A rural impact committee has been formed to define specific goals and activities designed to extend the economic benefits of the Alliance to Utah's rural communities.

It has been determined that an infrastructure already exists within Utah which is focused on identifying, funding, mentoring, and growing promising technology companies. A task group will be created to foster increased investment in the high technology cluster from within Utah. As part of this effort, a timely and accurate deal flow reporting mechanism will be created to increase the vitality and efficiency of this infrastructure.

Managing a start-up high tech company requires a different skill set than, for example, an established manufacturing company. A task group is charged with identifying skills that may be deficient in Utah executives and upgrading these skills through mentoring and other training programs.

With the goal of better preparing Utah companies to meet the requirements and processes of funding sources, a task group will create a training program for both Utah entrepreneurs and investors. Included will be a series of conferences on high tech investing, training local economic development personnel and local government officials in the needs of the high tech industry, and partnering with legal, accounting, banks and other necessary service providers to design training modules.

A task group will work to lay the foundations for creating an environment in which Utah's legal, banking and other professional services become the choice of companies looking to expand in Utah, and to address specific technology related issues identified by the professional services community.

Conclusion

Finally, an education task group will identify issues related to strengthening the training of Utah's workforce for the New Economy. For example, establishing entrepreneurship training curriculum in colleges and universities, strengthening the linkages between the venture capital community and Utah's research-oriented academic institutions, and defining the specific actions necessary to reach the goal of doubling the number of science and engineering graduates in five years.

Economic Indicators

Demographics

Overview

On December 28, 2000, the U.S. Census Bureau released national and state unadjusted population totals from the 2000 decennial census.[1] The total population count for the U.S. was 281,421,906. Utah's 2000 population count was 2,233,169 persons. This represents a population increase of 510,319 persons, or 29.6% increase from 1990, ranking Utah fourth among states in population growth from 1990 to 2000. Data for smaller geographical areas, along with more detail, will be released beginning March 31, 2001 and continue through 2003. Because of the limited availability of Census 2000 data at this time, this chapter focuses primarily on the state's official July 1, 1999 population estimates.[2]

According to the Utah Population Estimates Committee, the revised state population in 1999 is estimated to be 2,121,604 persons. With an annual increase of 1.9% from 1998, Utah continues to be one of the fastest growing states in the nation. Although the state has experienced net in-migration throughout the 1990s, natural increase accounted for the majority of the state's population growth. Utah also continues to have a distinctive demographic profile. The state's population is younger, women tend to have more children, people on average live in larger households, and people tend to survive to older ages in comparison to other states.

Census 2000 National and State Population Estimates

On April 1, 2000, the U.S. Census Bureau conducted the 22nd national census. The Census Bureau released national and state unadjusted population totals on December 28, 2000. This is the first set of data released from the 2000 decennial census. Data for smaller geographical areas (down to the block level), along with more detail, will be released beginning March 31, 2001, and will continue through 2003.

The total 2000 population count for the U.S. was 281,421,906. This represents a population increase of 32,712,033 persons, or 13.2% from 1990.

Utah's population reached 2,233,169 in 2000.[3] This represents a population increase of 510,319 persons, or 29.6% from 1990, ranking Utah fourth among states in population growth increase from 1990 to 2000. Utah grew more than twice as fast as the U.S. during this ten year period.

The majority of states that experienced the highest growth rates from 1990 to 2000 are located in the South and West regions of the U.S.. The top ten states with the highest growth rates include: Nevada (66.3%); Arizona (40%); Colorado (30.6%); Utah (29.6%); Idaho (28.5%); Georgia (26.4%); Florida (23.5%); Texas (22.8%); North Carolina (21.4%); and Washington (21.1%).

These unadjusted population totals will be used to apportion seats in the U.S. House of Representatives.[4] Based on these state totals, Utah will not gain an additional seat in the U.S. House of Representatives. The last time Utah gained an additional house seat, which brought the total number of seats to three, was after the 1980 decennial census.

States that gain house seats based on Census 2000 results include: Arizona (2); California (1); Colorado (1); Florida (2); Georgia (2); Nevada (1); North Carolina (1); and Texas (2). States that lose house seats include: Connecticut (1); Illinois (1); Indiana (1); Michigan (1); Mississippi (1); New York (2); Ohio (1); Oklahoma (1); Pennsylvania (2); and Wisconsin (1).

1999 State and County Population Estimates

The Utah Population Estimates Committee recently revised July 1, 1999 state and county population estimates. The state population reached 2,121,604, a year-over increase of 39,102 persons, or 1.9%. This is slightly higher than the population growth of 1.7% in 1998. Natural increase in 1999 (births minus deaths) and implied net in-migration also exceeded those of 1998.

Utah's counties experienced variable growth rates in 1999. The most rapid growth in Utah occurred in counties within, or adjacent to, the northern metropolitan region, counties in the southwest portion of the state, and several other lightly populated counties. The ten counties that are estimated to have increased in population by 3.0% or more include, Tooele County, with the highest growth rate of 8.0%, followed by Piute (3.9%), Utah (3.8%), Washington (3.6%), Iron (3.5%), Daggett (3.4%), Beaver (3.3%), Summit (3.3%), Wayne (3.1%), and Wasatch (3.0%).

Four of the state's counties experienced a decrease in population from 1998 to 1999. Three of these counties are located in the southeastern area of the state, and include Carbon (-1.1%), Emery (-0.5%), and San Juan (-0.1%). Millard County in central Utah also experienced a decrease in population of 0.6%.

Utah's Age Structure

Since 1940, Utah's rate of population growth has been about twice that of the nation. The state's population is younger, women tend to have more children, and people tend to survive to older ages in comparison to other states. All these factors lead to an age structure that is quite unique among states. According to 1999 Census Bureau estimates, Utah has the lowest median age (26.7) among states, and one of the highest shares of its total population in preschool age (9.9%) and school-age groups (23.3%). At the same time, the state has the smallest share of its population in the working age group (58.1%). Only Alaska has a smaller share of its total population in the 65 and older age group (5.6%) than does Utah (8.7%).

Another way to look at the age structure of a population is by examining the dependency ratio, a calculation of the number of non-working age persons (under 18 and 65 and over) per 100 persons of working age (18 to 64). Based on Census Bureau estimates, the total dependency ratio for Utah in 1999 was 72.2, slightly lower than 72.9 in 1998. Utah continues to have the highest dependency ratio among states, followed closely by Florida (71.7).

[1] On January 25, 1999, the U.S. Supreme Court ruled that adjusted 2000 census data, or data that uses statistical sampling in calculating the population, cannot be used for the purposes of congressional apportionment. The national and state population totals released on December 28, 2000 are unadjusted numbers, and must be used to apportion seats in the U.S. House of Representatives. The Census Bureau will, however, release both unadjusted and adjusted numbers with the Public Law 94-171 redistricting data on March 31, 2001. Individual states can choose which set of numbers will be used for redistricting. Also, the Supreme Court did not prohibit the use of adjusted numbers to distribute federal grant monies.

[2] This report was printed the last week of December, 2000.

[3] National and state decennial counts are dated April 1. Population estimates from the Utah Population Estimates Committee are dated July 1.

[4] Apportionment, the process of distributing the 435 congressional seats among the states, depends on the size of the population in each state as counted in the decennial census. After each census, the number of Congressional representatives from each state is reviewed on the basis of each state's population, and as a portion of the nation's total population, using a mathematical formula known as the method of equal portions (Title 2, Section 2a, U.S. Code).

Components of Population Change

Annual changes in population are comprised of two components: natural increase and net migration. Natural increase is the number of births minus the number of deaths. Annual births were at a record level in 1999 at 45,434, and annual deaths were 11,636. Since 1990, 74% of the state's population growth has resulted from natural increase.

Net migration, the second component of population change, is in-migration minus out-migration, or the number of people moving into a place minus the number of people moving out in a given period. Total population in the state increased by 39,102 persons from 1998 to 1999. Natural increase accounted for 33,798 persons, or 86%, while net in-migration accounted for 5,304 persons, or 14% of the total population increase.

In 1999, Utah experienced net in-migration for the ninth year in a row. The most recent cycle of in-migration to the state began in 1991, peaked in 1994, and continued at a decelerating rate through 1999, although the level is somewhat higher than 1998.

Fluctuations in the annual amount of natural increase may result from changes in the size, age structure, and vital rates (fertility and mortality) of the population. Total fertility rate is the number of births a woman would have during her lifetime if, at each year of age, she experienced the birth rate occurring for that specific year. Utah's fertility rate, at 2.68 in 2000, continues to be the highest among states.

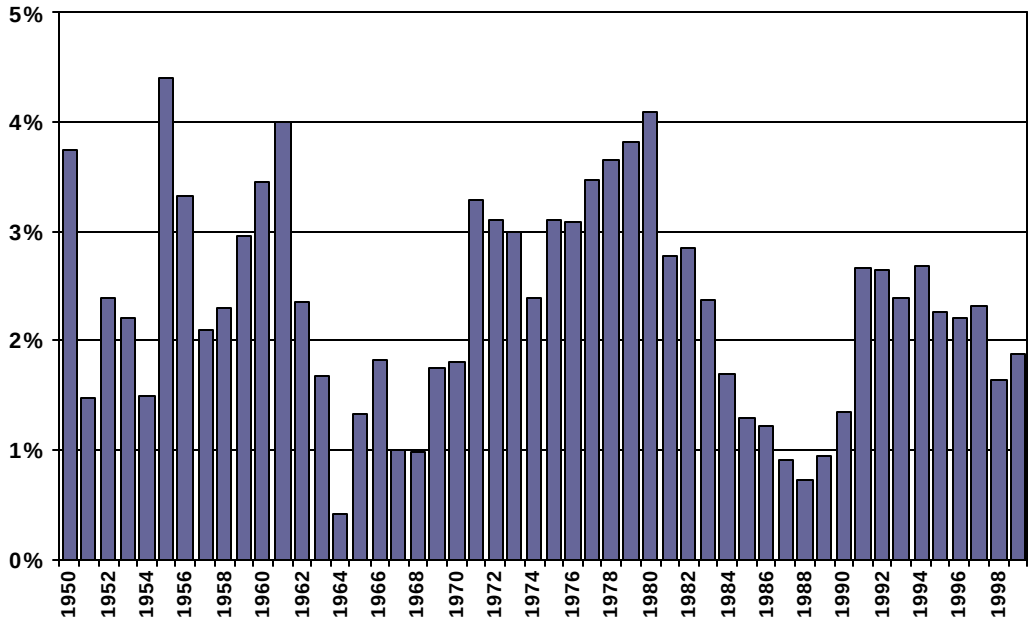
According to the National Center for Health Statistics, life expectancy has increased for both men and women in Utah and the U.S. from 1970 through 1990, although Utah life expectancy has been consistently higher than the national average. Total life expectancy in Utah has risen from 72.9 in 1970 to 77.7 in 1990, compared to 70.8 in 1970 and 75.4 in 1990 for the U.S.[5]

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

The most recent U.S. Census Bureau state and county level estimates for race and Hispanic origin (July 1, 1999), are included in this chapter, as well as state household estimates (July 1, 1998) and city population estimates (July 1,1999). Although Utah is less racially diverse than the nation, it is, over time, becoming more diverse. Within the state, Carbon, Salt Lake, San Juan, Tooele, Uintah, and Weber Counties are among the most diverse according to these estimates. Utah continues to rank first in the nation in persons per household, with 3.15 in 1990 and 3.06 in 1998.

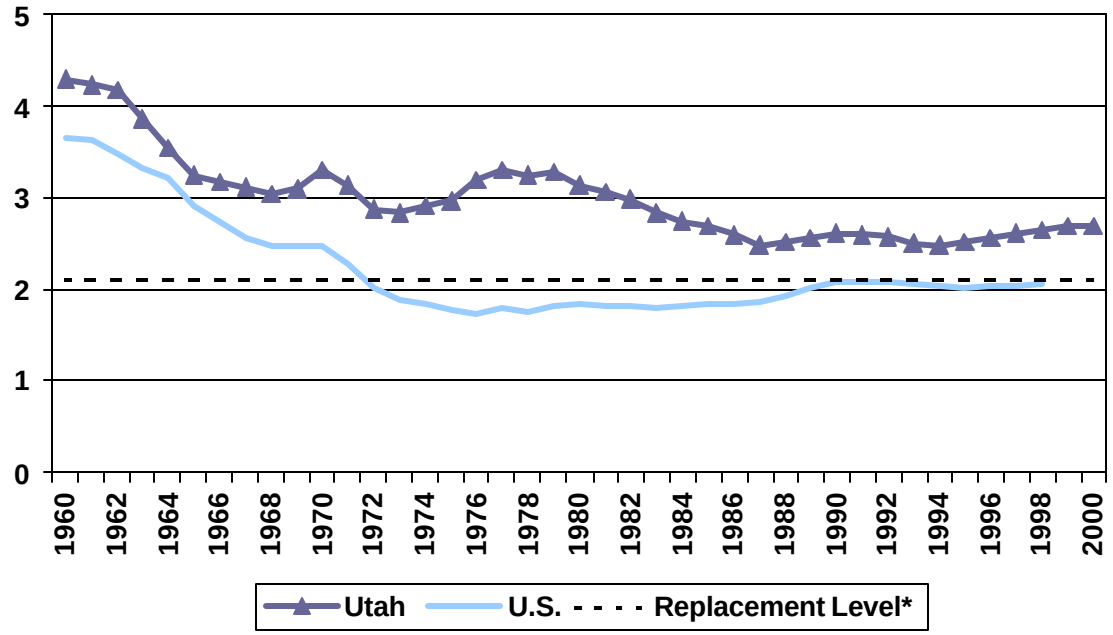
[5] Total life expectancy is the average of male and female life expectancies for a given year.

Figure 10a
Utah Population--Annual Percent Change



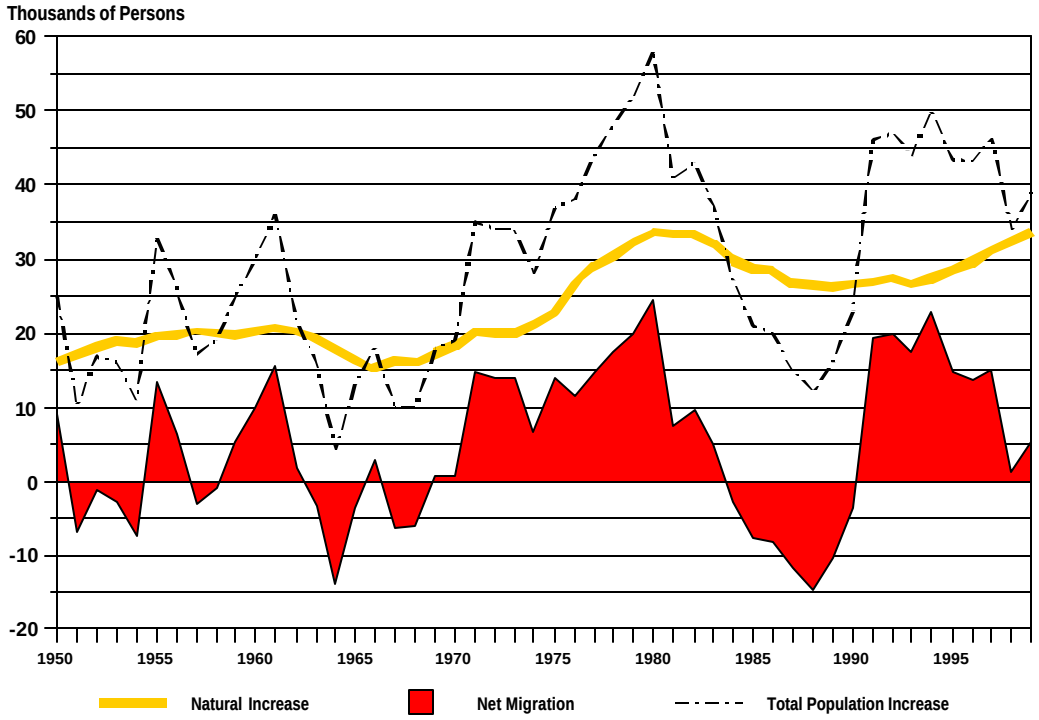
Source: Utah Population Estimates Committee

Figure 10b
Total Fertility for Utah and U.S.



*Fertility level at which current population is replaced
Source: National Center for Health Statistics, Governor's Office of Planning and Budget, UPED/CASA, Eileen Brown, "Fertility in Utah: 1960-1985"

Figure 11
Utah Components of Population Change



Source: Utah Population Estimates Committee

Table 13
National and State Population Counts: 1990 and 2000 Decennial Census

State	April 1, 1990 Population	1990 Rank	April 1, 2000 Population	2000 Rank	1990-2000 Absolute Change	1990-2000 Percent Change	Rank Based on Percent Change
U.S.	248,709,873		281,421,906		32,712,033	13.2	
Alabama	4,040,587	22	4,447,100	23	406,513	10.1	25
Alaska	550,043	49	626,932	48	76,889	14.0	17
Arizona	3,665,228	24	5,130,632	20	1,465,404	40.0	2
Arkansas	2,350,725	33	2,673,400	33	322,675	13.7	19
California	29,760,021	1	33,871,648	1	4,111,627	13.8	18
Colorado	3,294,394	26	4,301,261	24	1,006,867	30.6	3
Connecticut	3,287,116	27	3,405,565	29	118,449	3.6	47
Delaware	666,168	46	783,600	45	117,432	17.6	13
Florida	12,937,926	4	15,982,378	4	3,044,452	23.5	7
Georgia	6,478,216	11	8,186,453	10	1,708,237	26.4	6
Hawaii	1,108,229	41	1,211,537	42	103,308	9.3	31
Idaho	1,006,749	42	1,293,953	39	287,204	28.5	5
Illinios	11,430,602	6	12,419,293	5	988,691	8.6	34
Indiana	5,544,159	14	6,080,485	14	536,326	9.7	27
Iowa	2,776,755	30	2,926,324	30	149,569	5.4	43
Kansas	2,477,574	32	2,688,418	32	210,844	8.5	35
Kentucky	3,685,296	23	4,041,769	25	356,473	9.7	28
Louisiana	4,219,973	21	4,468,976	22	249,003	5.9	40
Maine	1,227,928	38	1,274,923	40	46,995	3.8	46
Maryland	4,781,468	19	5,296,486	19	515,018	10.8	23
Massachusetts	6,016,425	13	6,349,097	13	332,672	5.5	41
Michigan	9,295,297	8	9,938,444	8	643,147	6.9	39
Minnesota	4,375,099	20	4,919,479	21	544,380	12.4	21
Mississippi	2,573,216	31	2,844,658	31	271,442	10.5	24
Missouri	5,117,073	15	5,595,211	17	478,138	9.3	30
Montana	799,065	44	902,195	44	103,130	12.9	20
Nebraska	1,578,385	36	1,711,263	38	132,878	8.4	37
Nevada	1,201,833	39	1,998,257	35	796,424	66.3	1
New Hampshire	1,109,252	40	1,235,786	41	126,534	11.4	22
New Jersey	7,730,188	9	8,414,350	9	684,162	8.9	33
New Mexico	1,515,069	37	1,819,046	36	303,977	20.1	12
New York	17,990,455	2	18,976,457	3	986,002	5.5	42
North Carolina	6,628,637	10	8,049,313	11	1,420,676	21.4	9
North Dakota	638,800	47	642,200	47	3,400	0.5	50
Ohio	10,847,115	7	11,353,140	7	506,025	4.7	44
Oklahoma	3,145,585	28	3,450,654	27	305,069	9.7	26
Oregon	2,842,321	29	3,421,399	28	579,078	20.4	11
Pennsylvania	11,881,643	5	12,281,054	6	399,411	3.4	48
Rhode Island	1,003,464	43	1,048,319	43	44,855	4.5	45
South Carolina	3,486,703	25	4,012,012	26	525,309	15.1	15
South Dakota	696,004	45	754,844	46	58,840	8.5	36
Tennessee	4,877,185	17	5,689,283	16	812,098	16.7	14
Texas	16,986,510	3	20,851,820	2	3,865,310	22.8	8
Utah	1,722,850	35	2,233,169	34	510,319	29.6	4
Vermont	562,758	48	608,827	49	46,069	8.2	38
Virginia	6,187,358	12	7,078,515	12	891,157	14.4	16
Washington	4,866,692	18	5,894,121	15	1,027,429	21.1	10
West Virginia	1,793,477	34	1,808,344	37	14,867	0.8	49
Wisconsin	4,891,769	16	5,363,675	18	471,906	9.6	29
Wyoming	453,588	50	493,782	50	40,194	8.9	32

Note: Consistent with the January 1999 U.S. Supreme Court ruling (~~Department of Commerce~~ v. ~~House of Representatives~~, 525 U.S. 316, 119 S. Ct. 765 (1999)), these resident population counts do not reflect the use of statistical sampling to correct for overcounting or undercounting.

Source: U.S. Census Bureau

Table 14
Utah Population Estimates, Net Migration, Births and Deaths

Year	July 1st Population	Percent Change	Increase	Net Migration** (r)	Net Migration as a Percent of Previous Year's Population	Natural Increase (r)	Fiscal Year Births (r)	Fiscal Year Deaths (r)
1940	551,800	---	---	---	---	8,419	13,038	4,619
1941	551,000	-0.14%	-800	-9,631	-1.75%	8,831	13,293	4,462
1942	571,200	3.67%	20,200	10,231	1.86%	9,969	14,357	4,388
1943	640,000	12.04%	68,800	57,284	10.03%	11,516	16,182	4,666
1944	604,700	-5.52%	-35,300	-47,122	-7.36%	11,822	16,536	4,714
1945	589,100	-2.58%	-15,600	-26,992	-4.46%	11,392	15,937	4,545
1946	638,000	8.30%	48,900	36,649	6.22%	12,251	16,955	4,704
1947	636,000	-0.31%	-2,000	-19,178	-3.01%	17,178	21,905	4,727
1948	653,000	2.67%	17,000	943	0.15%	16,057	20,856	4,799
1949	670,800	2.73%	17,800	2,207	0.34%	15,593	20,354	4,761
1950	695,900	3.74%	25,100	8,966	1.34%	16,134	21,027	4,893
1951	706,100	1.47%	10,200	-6,842	-0.98%	17,042	21,801	4,759
1952	723,000	2.39%	16,900	-1,160	-0.16%	18,060	23,116	5,056
1953	739,000	2.21%	16,000	-2,889	-0.40%	18,889	23,573	4,684
1954	750,000	1.49%	11,000	-7,469	-1.01%	18,469	23,439	4,970
1955	783,000	4.40%	33,000	13,484	1.80%	19,516	24,584	5,068
1956	809,000	3.32%	26,000	6,348	0.81%	19,652	24,975	5,323
1957	826,000	2.10%	17,000	-3,139	-0.39%	20,139	25,443	5,304
1958	845,000	2.30%	19,000	-855	-0.10%	19,855	25,760	5,905
1959	870,000	2.96%	25,000	5,259	0.62%	19,741	25,610	5,869
1960	900,000	3.45%	30,000	9,947	1.14%	20,053	26,011	5,958
1961	936,000	4.00%	36,000	15,371	1.71%	20,629	26,560	5,931
1962	958,000	2.35%	22,000	1,817	0.19%	20,183	26,431	6,248
1963	974,000	1.67%	16,000	-3,317	-0.35%	19,317	25,648	6,331
1964	978,000	0.41%	4,000	-13,863	-1.42%	17,863	24,461	6,598
1965	991,000	1.33%	13,000	-3,553	-0.36%	16,553	23,082	6,529
1966	1,009,000	1.82%	18,000	2,810	0.28%	15,190	21,953	6,763
1967	1,019,000	0.99%	10,000	-6,350	-0.63%	16,350	23,030	6,680
1968	1,029,000	0.98%	10,000	-6,029	-0.59%	16,029	22,743	6,714
1969	1,047,000	1.75%	18,000	798	0.08%	17,202	24,033	6,831
1970	1,066,000	1.81%	19,000	612	0.06%	18,388	25,281	6,893
1971	1,101,000	3.28%	35,000	14,816	1.39%	20,184	27,400	7,216
1972	1,135,000	3.09%	34,000	14,096	1.28%	19,904	27,146	7,242
1973	1,169,000	3.00%	34,000	13,960	1.23%	20,040	27,562	7,522
1974	1,197,000	2.40%	28,000	6,621	0.57%	21,379	28,876	7,497
1975	1,234,000	3.09%	37,000	13,947	1.17%	23,053	30,566	7,513
1976	1,272,000	3.08%	38,000	11,611	0.94%	26,389	33,773	7,384
1977	1,316,000	3.46%	44,000	14,924	1.17%	29,076	36,707	7,631
1978	1,364,000	3.65%	48,000	17,420	1.32%	30,580	38,289	7,709
1979	1,416,000	3.81%	52,000	19,668	1.44%	32,332	40,216	7,884
1980	1,474,000	4.10%	58,000	24,486	1.73%	33,514	41,645	8,131
1981	1,515,000	2.78%	41,000	7,612	0.52%	33,388	41,509	8,121
1982	1,558,000	2.84%	43,000	9,662	0.64%	33,338	41,773	8,435
1983	1,595,000	2.37%	37,000	4,914	0.32%	32,086	40,555	8,469
1984	1,622,000	1.69%	27,000	-2,793	-0.18%	29,793	38,643	8,850
1985	1,643,000	1.29%	21,000	-7,714	-0.48%	28,714	37,664	8,950
1986	1,663,000	1.22%	20,000	-8,408	-0.51%	28,408	37,309	8,901
1987	1,678,000	0.90%	15,000	-11,713	-0.70%	26,713	35,631	8,918
1988	1,690,000	0.72%	12,000	-14,557	-0.87%	26,557	35,809	9,252
1989	1,706,000	0.95%	16,000	-10,355	-0.61%	26,355	35,439	9,084
1990	1,729,000	1.35%	23,000	-3,707	-0.22%	26,707	35,830	9,123
1991	1,775,000	2.66%	46,000	19,235	1.11%	26,765	36,194	9,429
1992	1,822,000	2.65%	47,000	19,763	1.11%	27,237	36,796	9,559
1993	1,866,000	2.41%	44,000	17,317	0.95%	26,683	36,738	10,055
1994	1,916,000	2.68%	50,000	22,788	1.22%	27,212	37,623	10,411
1995	1,959,351	2.26%	43,351	14,868	0.78%	28,483	39,064	10,581
1996	2,002,400	2.20%	43,049	13,555	0.69%	29,494	40,495	11,001
1997	2,048,753	2.31%	46,353	15,090	0.75%	31,263	42,512	11,249
1998	2,082,502	1.65%	33,749	1,271	0.06%	32,478	44,126	11,648
1999r	2,121,604	1.88%	39,102	5,304	0.25%	33,798	45,434	11,636

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

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

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

Sources:
Population: Utah Population Estimates Committee
Births: 1939-1949 and 1953-1972- Utah's Vital Statistics Reports, Utah Bureau of Vital Records; 1950-1952, 1973-1996- Birth Certificates held in the Utah Population Database, partially funded by the Huntsman Cancer Institute. 1997- Birth records file, Utah Bureau of Vital Records; 1998-1999 Summary data file, Utah Bureau of Vital Records. Deaths: 1939- Utah's Vital Statistics Reports, Utah Bureau of Vital Records; 1940-1996- Death Certificates held in the Utah Population Database, partially funded by the Huntsman Cancer Institute. 1997- Death records file, Utah Bureau of Vital Records; 1998-1999 Summary data file, Utah Bureau of Vital Records.

Utah Population Estimates by County

District/County	July 1, 1990	July 1, 1991	July 1, 1992	July 1, 1993	July 1, 1994	July 1, 1995	July 1, 1996*	July 1, 1997	July 1, 1998	July 1, 1999 (r)	Average Annual Rate of Change 1990-1999	Percent Change 98 to 99	1999 Percent of Total Population
Bear River	108,750	110,700	113,250	116,000	118,650	120,975	123,403	126,209	128,787	131,067	2.1%	1.8%	6.2%
Box Elder	36,500	37,100	37,500	38,100	38,500	38,910	39,484	40,235	40,927	41,736	1.5%	2.0%	2.0%
Cache	70,500	71,900	74,000	76,100	78,300	80,259	82,098	84,186	86,067	87,498	2.4%	1.7%	4.1%
Rich	1,750	1,700	1,750	1,800	1,850	1,806	1,821	1,788	1,793	1,833	0.5%	2.2%	0.1%
Wasatch Front	1,107,250	1,136,850	1,165,650	1,186,250	1,211,650	1,233,620	1,253,756	1,274,851	1,290,570	1,308,126	1.9%	1.4%	61.7%
Davis	188,000	195,000	201,000	206,000	212,000	216,020	219,644	224,307	229,393	235,298	2.5%	2.6%	11.1%
Morgan	5,550	5,650	5,850	6,150	6,350	6,497	6,693	6,875	7,101	7,261	3.0%	2.3%	0.3%
Weber	159,000	162,000	166,000	169,000	172,000	175,276	178,066	181,045	183,014	186,061	1.8%	1.7%	8.8%
Salt Lake	728,000	747,000	765,000	777,000	792,000	806,280	818,860	830,627	837,860	843,649	1.7%	0.7%	39.8%
Tooele	26,700	27,200	27,800	28,100	29,300	29,547	30,493	31,997	33,202	35,857	3.3%	8.0%	1.7%
Mountainland	291,800	299,700	308,200	321,900	331,900	342,287	354,028	368,403	379,289	393,422	3.4%	3.7%	18.5%
Summit	15,700	17,000	18,400	19,700	21,100	22,367	23,562	24,675	25,669	26,510	6.0%	3.3%	1.2%
Utah	266,000	272,000	279,000	291,000	299,000	307,741	317,881	330,803	340,303	353,202	3.2%	3.8%	16.6%
Wasatch	10,100	10,700	10,800	11,200	11,800	12,179	12,585	12,925	13,317	13,710	3.5%	3.0%	0.6%
Central	52,200	53,750	54,850	55,950	58,150	59,299	60,981	62,563	63,923	64,558	2.4%	1.0%	3.0%
Juab	5,800	6,000	6,150	6,200	6,800	7,149	7,444	7,702	7,973	8,126	3.8%	1.9%	0.4%
Millard	11,300	11,600	11,700	11,700	11,900	11,931	11,958	12,068	12,029	11,954	0.6%	-0.6%	0.6%
Piute	1,250	1,350	1,350	1,350	1,450	1,424	1,508	1,534	1,581	1,643	3.1%	3.9%	0.1%
Sanpete	16,300	16,900	17,500	18,100	18,800	19,240	19,999	20,581	21,268	21,412	3.1%	0.7%	1.0%
Sevier	15,400	15,700	16,000	16,400	16,900	17,257	17,682	18,238	18,612	18,886	2.3%	1.5%	0.9%
Wayne	2,150	2,200	2,150	2,200	2,300	2,298	2,390	2,440	2,460	2,537	1.9%	3.1%	0.1%
Southwestern	83,900	87,600	91,750	97,150	103,650	110,883	116,874	121,992	125,163	129,382	4.9%	3.4%	6.1%
Beaver	4,800	4,850	4,900	5,000	5,150	5,350	5,607	5,742	5,693	5,881	2.3%	3.3%	0.3%
Garfield	3,950	4,100	4,100	4,200	4,200	4,308	4,386	4,525	4,482	4,550	1.6%	1.5%	0.2%
Iron	20,900	21,500	22,400	23,800	25,200	26,866	28,032	29,338	30,495	31,562	4.7%	3.5%	1.5%
Kane	5,150	5,250	5,350	5,450	5,700	5,884	5,957	6,039	6,078	6,147	2.0%	1.1%	0.3%
Washington	49,100	51,900	55,000	58,700	63,400	68,475	72,892	76,348	78,415	81,242	5.8%	3.6%	3.8%
Uintah Basin	35,500	36,600	37,200	37,500	38,950	38,652	39,111	39,792	39,739	40,150	1.4%	1.0%	1.9%
Daggett	700	700	700	700	750	768	803	753	713	737	0.6%	3.4%	0.0%
Duchesne	12,600	12,800	12,900	13,200	13,500	13,549	14,032	14,402	14,256	14,383	1.5%	0.9%	0.7%
Uintah	22,200	23,100	23,600	23,600	24,700	24,335	24,276	24,637	24,770	25,030	1.3%	1.0%	1.2%
Southeastern	49,700	50,300	51,050	51,700	53,050	53,635	54,247	54,943	55,031	54,899	1.1%	-0.2%	2.6%
Carbon	20,200	20,600	20,600	20,700	21,100	21,054	21,420	21,643	21,649	21,420	0.7%	-1.1%	1.0%
Emery	10,300	10,200	10,200	10,400	10,600	10,735	10,811	10,929	10,918	10,862	0.6%	-0.5%	0.5%
Grand	6,600	6,800	7,150	7,500	7,950	8,352	8,801	8,830	8,895	9,061	3.6%	1.9%	0.4%
San Juan	12,600	12,700	13,100	13,100	13,400	13,494	13,215	13,541	13,569	13,556	0.8%	-0.1%	0.6%
State	1,729,000	1,775,000	1,822,000	1,866,000	1,916,000	1,959,351	2,002,400	2,048,753	2,082,502	2,121,604	2.3%	1.9%	

r = revised

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

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

Source: Utah Population Estimates Committee.

Table 16
Total Fertility Rates for Utah and the U.S.

Year	Utah	U.S.	Year	Utah	U.S.
1960	4.30	3.65	1981	3.06	1.81
1961	4.24	3.63	1982	2.99	1.83
1962	4.18	3.47	1983	2.83	1.80
1963	3.87	3.33	1984	2.74	1.81
1964	3.55	3.21	1985	2.69	1.84
1965	3.24	2.91	1986	2.59	1.84
1966	3.17	2.72	1987	2.48	1.87
1967	3.12	2.56	1988	2.52	1.93
1968	3.04	2.46	1989	2.55	2.01
1969	3.09	2.46	1990	2.61	2.08
1970	3.31	2.48	1991	2.59	2.07
1971	3.14	2.27	1992	2.57	2.07
1972	2.88	2.01	1993	2.50	2.05
1973	2.84	1.88	1994	2.49	2.04
1974	2.91	1.84	1995	2.52	2.02
1975	2.96	1.77	1996	2.55	2.03
1976	3.19	1.74	1997	2.61	2.03
1977	3.30	1.79	1998	2.65	2.06
1978	3.25	1.76	1999	2.68	na
1979	3.28	1.81	2000	2.68	na
1980	3.14	1.84			

Note: Utah fertility rates were revised beginning in 1990.

Sources: Eileen Brown, "Fertility in Utah: 1960-1985."
The Governor's Office of Planning and Budget, UPED/CASA.
Ventura, S.J., Martin, J.A., Curtin, S.C., and Mathews, T.J.
Births: Final Data for 1998, NCHS, National Vital Statistics
Report Volume 48, Number 3, March, 2000.

Utah Net In-Migration by State

State	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1985-1999
Alabama	-20	-107	-65	-209	-71	-94	-62	-81	60	136	75	69	-60	-113	-3	-545
Alaska	-72	33	355	130	47	-93	-43	-29	15	128	71	46	24	0	115	727
Arizona	-2,403	-2,544	-3,112	-2,366	-1,112	50	429	199	464	-44	-978	-742	-220	-752	-1,281	-14,412
Arkansas	-25	71	-314	-106	61	29	40	35	-22	16	-17	-64	-67	-15	-151	-529
California	-4,277	-3,821	-5,003	-4,094	-2,109	1,212	4,853	7,884	10,956	12,125	9,265	7,380	5,121	2,518	1,212	43,222
Colorado	-262	-195	-261	-394	-412	25	-87	153	-308	186	-153	-123	-49	-806	-1,152	-3,838
Connecticut	-40	-24	-117	-77	-54	73	81	137	123	150	104	39	80	22	-64	433
Delaware	22	4	-76	-47	-65	20	-1	22	20	-5	13	41	36	-28	-7	-51
Dist. of Col.	-33	-29	-9	-12	-13	-2	-8	-23	-27	1	11	-5	3	-9	-22	-177
Florida	-366	-372	-508	-567	-280	-297	274	249	342	254	246	97	-45	-296	-267	-1,536
Georgia	-146	-189	-349	-160	-102	-51	144	-86	-199	-189	-156	-126	-53	-106	62	-1,706
Hawaii	27	174	3	-2	39	-2	217	180	291	413	146	327	289	293	318	2,713
Idaho	1,620	1,924	2,003	915	251	76	18	-429	9	-186	-270	-248	38	-395	-444	4,882
Illinois	77	95	-135	-97	48	-43	145	98	248	261	393	43	253	249	-15	1,620
Indiana	-40	-28	-12	-226	-105	9	-12	34	66	54	23	-68	40	-108	-79	-452
Iowa	196	99	96	-43	40	-65	-24	-37	-20	-94	-31	-60	-96	-110	-23	-172
Kansas	9	35	-39	-66	79	89	-69	-52	121	67	11	-56	-3	-7	-106	13
Kentucky	-1	-7	-126	-98	2	-82	-64	-25	17	-5	44	-106	-48	-33	-70	-602
Louisiana	18	-7	200	-27	121	56	33	64	192	64	-38	106	45	-13	133	947
Maine	-27	-72	-68	-90	-17	17	38	50	51	130	33	-54	42	0	-11	22
Maryland	-168	-158	-215	-304	-207	102	41	223	139	155	90	125	51	-63	-87	-276
Massachusetts	-160	-112	-251	-307	-182	89	162	283	49	122	141	-58	-65	-116	-217	-622
Michigan	0	-266	-189	-117	-97	-71	29	65	160	84	-62	128	5	-21	-35	-387
Minnesota	-48	-36	-50	-161	-41	-88	154	68	-60	-91	-53	-36	115	-188	-279	-794
Mississippi	-18	-9	-45	31	40	12	-36	-65	38	-42	-7	81	-22	45	-45	-42
Missouri	-110	-205	-214	-171	-153	-60	14	217	-127	-59	-308	-200	-229	-164	-229	-1,998
Montana	236	450	172	85	90	77	-29	-78	-61	-111	-170	7	213	86	-78	889
Nebraska	32	-13	61	-153	-32	-221	-4	2	34	-21	-23	-6	-37	7	-89	-463
Nevada	-423	-800	-1,821	-2,614	-3,103	-2,449	-508	419	837	-71	67	-235	-653	-910	-1,024	-13,288
New Hampshire	-27	-15	-31	-67	-70	62	152	90	110	18	-17	30	-138	-43	-68	-14
New Jersey	-88	-61	-64	-150	-25	99	150	182	290	135	361	55	31	39	-12	942
New Mexico	-244	-444	-187	68	-433	239	68	-45	-386	89	-97	-142	94	269	-174	-1,325
New York	-111	-109	-33	-142	-69	133	256	288	386	303	143	376	255	94	64	1,834
North Carolina	-74	9	-226	-195	-180	95	86	-14	-17	-69	72	-76	-36	-101	-79	-805
North Dakota	71	104	112	92	93	143	100	50	57	97	15	-12	60	25	49	1,056
Ohio	-88	-137	-120	-159	-232	-167	61	10	106	95	-14	-70	48	94	-135	-708
Oklahoma	16	-62	261	141	-41	28	5	-140	62	7	30	-244	-111	-251	-20	-319
Oregon	-162	-162	-449	-809	-790	-864	-397	-87	-406	-152	-217	-584	-504	-350	-789	-6,722
Pennsylvania	50	-128	-238	-323	-12	9	70	73	250	226	41	45	207	45	-69	246
Rhode Island	10	-9	-12	-22	-14	-2	15	27	10	36	-9	4	-9	-44	12	-7
South Carolina	-14	-76	-8	-18	-64	-58	54	94	218	82	33	-50	-47	-42	-19	85
South Dakota	19	-48	11	46	86	52	28	15	-12	3	-62	-3	136	24	-19	276
Tennessee	-78	-109	-257	-184	-107	-25	26	-73	-38	-92	-124	-187	29	-75	0	-1,294
Texas	-934	-773	-201	-395	-423	-295	-109	289	24	187	-93	-269	-49	-711	-738	-4,490
Vermont	0	-10	-37	-68	9	-2	41	74	12	40	30	1	23	23	9	145
Virginia	-239	-251	-317	-408	-197	-188	113	121	161	107	218	235	-2	-261	-409	-1,317
Washington	-550	-818	-968	-1,204	-1,605	-1,801	-806	-585	-53	606	14	109	-367	-950	-510	-9,488
West Virginia	-1	85	-30	-45	5	-38	-29	-16	-15	22	13	-29	27	13	0	-38
Wisconsin	99	52	-83	-47	-20	75	-65	-135	19	-68	-84	-47	-61	-55	-146	-566
Wyoming	350	642	962	375	58	187	27	88	239	-38	96	272	288	54	138	3,738
Foreign	0	-361	-341	-194	272	192	906	1,725	1,728	922	1,038	779	692	680	667	8,705
Total	-8,397	-8,790	-12,345	-15,055	-11,096	-3,808	6,477	11,508	16,153	15,984	9,854	6,495	5,274	-2,556	-6,186	3,512

note: The IRS area-to-area migration data provides an annual indication of migration flows among the states. Although not differing significantly, the state's official estimates provide the best indication of the net flow of migration, while the IRS data provide the only source of gross flows and of the annual origins and destinations of migrants.

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

Rankings of States by Selected Age Groups as a Percent of Total Population: July 1, 1999

	All Ages		Under Age 5			Ages 5-17			Ages 18-64			Ages 65+			
Rank	State	Population	State	Population	Percent of Total	State	Population	Percent of Total	State	Population	Percent of Total	State	Population	Percent of Total	State	Median Age
	United States	272,690,813	United States	18,942,142	6.9	United States	51,257,293	18.8	United States	167,951,353	61.6	United States	34,540,025	12.7	United States	36.5
1	California	33,145,121	Utah	210,441	9.9	Alaska	147,060	23.7	Virginia	4,433,217	64.5	Florida	2,741,849	18.1	Utah	26.7
2	Texas	20,044,141	Texas	1,639,575	8.2	Utah	496,925	23.3	Vermont	381,478	64.3	Pennsylvania	1,898,936	15.8	Alaska	30.9
3	New York	18,196,601	Arizona	385,988	8.1	New Mexico	364,212	20.9	Georgia	4,970,212	63.8	Rhode Island	154,348	15.6	Texas	33.0
4	Florida	15,111,244	Alaska	49,765	8.0	Idaho	257,629	20.6	Colorado	2,582,850	63.7	West Virginia	272,896	15.1	Idaho	33.5
5	Illinois	12,128,370	Nevada	142,984	7.9	Texas	4,079,659	20.4	South Carolina	2,456,435	63.2	Iowa	428,487	14.9	California	33.6
6	Pennsylvania	11,994,016	New Mexico	131,400	7.6	South Dakota	148,251	20.2	Kentucky	2,502,143	63.2	North Dakota	92,383	14.6	Mississippi	33.7
7	Ohio	11,256,654	California	2,499,258	7.5	Wyoming	96,430	20.1	Maryland	3,265,241	63.1	South Dakota	105,442	14.4	Georgia	34.0
8	Michigan	9,863,775	Georgia	580,150	7.4	Louisiana	875,851	20.0	Tenessee	3,461,651	63.1	Connecticut	468,576	14.3	Louisiana	34.1
9	New Jersey	8,143,412	Idaho	92,835	7.4	Minnesota	950,227	19.9	Maine	787,244	62.8	Arkansas	361,342	14.2	Arizona	34.5
10	Georgia	7,788,240	Mississippi	202,435	7.3	Mississippi	550,431	19.9	Delaware	472,953	62.8	Maine	175,357	14.0	New Mexico	34.5
11	North Carolina	7,650,789	Illinois	877,679	7.2	Arizona	948,576	19.9	Washington	3,612,709	62.8	Massachusetts	859,731	13.9	Illinois	35.2
12	Virginia	6,872,912	Louisiana	314,150	7.2	Nebraska	328,998	19.7	Alaska	387,925	62.6	Nebraska	228,286	13.7	Nevada	35.3
13	Massachusetts	6,175,169	Colorado	288,215	7.1	Kansas	514,624	19.4	New Hampshire	752,113	62.6	Hawaii	161,889	13.7	Indiana	35.4
14	Indiana	5,942,901	North Carolina	534,227	7.0	California	6,424,165	19.4	Alabama	2,735,733	62.6	Missouri	745,684	13.6	Kansas	35.4
15	Washington	5,756,361	Arkansas	177,649	7.0	Wisconsin	1,016,446	19.4	West Virginia	1,130,551	62.6	New Jersey	1,108,257	13.6	Minnesota	35.4
16	Tenessee	5,483,535	Indiana	413,675	7.0	Montana	170,759	19.3	Massachusetts	3,846,884	62.3	Oklahoma	448,698	13.4	South Dakota	35.4
17	Missouri	5,468,338	Kansas	184,013	6.9	Oklahoma	649,445	19.3	New York	11,326,045	62.2	New York	2,429,632	13.4	Virginia	35.4
18	Wisconsin	5,250,446	Oklahoma	232,617	6.9	Michigan	1,906,304	19.3	North Carolina	4,754,976	62.2	Kansas	354,079	13.3	Michigan	35.5
19	Maryland	5,171,634	Nebraska	114,802	6.9	Nevada	348,492	19.3	California	20,574,166	62.1	Ohio	1,501,136	13.3	Nebraska	35.5
20	Arizona	4,778,332	South Dakota	49,786	6.8	New Hampshire	230,521	19.2	Wyoming	297,165	62.0	Montana	117,239	13.3	North Carolina	35.5
21	Minnesota	4,775,508	Hawaii	80,387	6.8	Colorado	777,295	19.2	Hawaii	734,268	61.9	Wisconsin	691,409	13.2	South Carolina	35.5
22	Louisiana	4,372,035	Washington	389,936	6.8	North Dakota	120,794	19.1	Oregon	2,053,554	61.9	Arizona	628,633	13.2	Washington	35.5
23	Alabama	4,369,862	Minnesota	321,623	6.7	Washington	1,096,404	19.0	New Jersey	5,031,951	61.8	Oregon	435,099	13.1	Colorado	35.7
24	Colorado	4,056,133	Maryland	346,858	6.7	Illinois	2,303,659	19.0	Indiana	3,670,890	61.8	Delaware	98,135	13.0	Maryland	35.7
25	Kentucky	3,960,825	Tenessee	366,844	6.7	Georgia	1,476,735	19.0	Michigan	6,079,076	61.6	Alabama	567,952	13.0	Oklahoma	35.8
26	South Carolina	3,885,736	New York	1,214,195	6.7	Missouri	1,036,451	19.0	Illinois	7,450,855	61.4	Indiana	743,020	12.5	Delaware	35.9
27	Oklahoma	3,358,044	New Jersey	543,263	6.7	Arkansas	482,575	18.9	Texas	12,308,410	61.4	North Carolina	954,866	12.5	New Hampshire	35.9
28	Oregon	3,316,154	Delaware	50,165	6.7	Indiana	1,115,316	18.8	Ohio	6,911,447	61.4	Kentucky	493,154	12.5	Alabama	36.0
29	Connecticut	3,282,031	Alabama	290,833	6.7	Iowa	536,865	18.7	Nevada	1,110,365	61.4	Tenessee	680,954	12.4	Arkansas	36.0
30	Iowa	2,869,413	Connecticut	218,165	6.6	Ohio	2,103,859	18.7	Montana	541,721	61.4	Michigan	1,223,560	12.4	Wisconsin	36.0
31	Mississippi	2,768,619	Missouri	363,041	6.6	Maryland	962,574	18.6	Louisiana	2,680,576	61.3	Illinois	1,496,177	12.3	Kentucky	36.1
32	Kansas	2,654,052	Michigan	654,835	6.6	Connecticut	610,095	18.6	Wisconsin	3,210,769	61.2	Vermont	72,916	12.3	Missouri	36.1
33	Arkansas	2,551,373	Oregon	219,601	6.6	North Carolina	1,406,720	18.4	Minnesota	2,918,264	61.1	Minnesota	585,394	12.3	Ohio	36.1
34	Utah	2,129,836	Ohio	740,212	6.6	Oregon	607,900	18.3	Missouri	3,323,162	60.8	South Carolina	473,371	12.2	Wyoming	36.1
35	Nevada	1,809,253	Virginia	450,638	6.6	Rhode Island	179,143	18.1	Mississippi	1,680,261	60.7	Mississippi	335,492	12.1	North Dakota	36.2
36	West Virginia	1,806,928	Kentucky	259,093	6.5	South Carolina	702,468	18.1	Idaho	759,207	60.7	New Hampshire	144,585	12.0	Tenessee	36.2
37	New Mexico	1,739,844	South Carolina	253,462	6.5	Vermont	107,310	18.1	Connecticut	1,985,195	60.5	Wyoming	55,630	11.6	New York	36.4
38	Nebraska	1,666,028	Iowa	182,820	6.4	New Jersey	1,459,941	17.9	Pennsylvania	7,242,560	60.4	Maryland	596,961	11.5	Massachusetts	36.5
39	Maine	1,253,040	Massachusetts	392,240	6.4	Pennsylvania	2,140,428	17.8	Oklahoma	2,027,284	60.4	New Mexico	199,974	11.5	Rhode Island	36.6
40	Idaho	1,251,700	Wyoming	30,377	6.3	Kentucky	706,435	17.8	Kansas	1,601,336	60.3	Louisiana	501,458	11.5	Hawaii	36.9
41	New Hampshire	1,201,134	Wisconsin	331,822	6.3	Maine	223,221	17.8	North Dakota	381,191	60.2	Nevada	207,412	11.5	Iowa	36.9
42	Hawaii	1,185,497	Florida	952,374	6.3	Tenessee	974,086	17.8	Rhode Island	595,291	60.1	Washington	657,312	11.4	Oregon	36.9
43	Rhode Island	990,819	Rhode Island	62,037	6.3	Alabama	775,344	17.7	New Mexico	1,044,258	60.0	Idaho	142,029	11.3	Connecticut	37.0
44	Montana	882,779	North Dakota	39,298	6.2	New York	3,226,729	17.7	Iowa	1,721,241	60.0	Virginia	774,885	11.3	New Jersey	37.0
45	Delaware	753,538	New Hampshire	73,915	6.2	Virginia	1,214,172	17.7	Arkansas	1,529,807	60.0	California	3,647,532	11.0	Vermont	37.2
46	South Dakota	733,133	Montana	53,060	6.0	Hawaii	208,953	17.6	Nebraska	993,942	59.7	Texas	2,016,497	10.1	Maine	37.8
47	North Dakota	633,666	Pennsylvania	712,092	5.9	Delaware	132,285	17.6	Arizona	2,815,135	58.9	Colorado	407,773	10.1	Montana	37.8
48	Alaska	619,500	West Virginia	100,758	5.6	Massachusetts	1,076,314	17.4	South Dakota	429,654	58.6	Georgia	761,143	9.8	Pennsylvania	37.9
49	Vermont	593,740	Vermont	32,036	5.4	Florida	2,617,504	17.3	Florida	8,799,517	58.2	Utah	185,603	8.7	Florida	38.7
50	Wyoming	479,602	Maine	67,218	5.4	West Virginia	302,723	16.8	Utah	1,236,867	58.1	Alaska	34,750	5.6	West Virginia	38.9

Note:
Totals may differ in this table from other tables in this report due to different release dates or data sources.

Source: U.S. Bureau of the Census

Table 19
Dependency Ratios for States: July 1, 1999

Rank	State	Pre-School Age per 100 of Working Age	State	School Age per 100 of Working Age	State	Retirement Age per 100 of Working Age	State	Total Non-Working Age per 100 of Working Age
	United States	11.3	United States	30.5	United States	20.6	United States	62.4
1	Utah	17.0	Utah	40.2	Florida	31.2	Utah	72.2
2	Arizona	13.7	Alaska	37.9	Pennsylvania	26.2	Florida	71.7
3	Texas	13.3	New Mexico	34.9	Rhode Island	25.9	South Dakota	70.6
4	Nevada	12.9	South Dakota	34.5	Iowa	24.9	Arizona	69.7
5	Alaska	12.8	Idaho	33.9	South Dakota	24.5	Nebraska	67.6
6	New Mexico	12.6	Arizona	33.7	North Dakota	24.2	Arkansas	66.8
7	Idaho	12.2	Texas	33.1	West Virginia	24.1	Iowa	66.7
8	California	12.1	Nebraska	33.1	Arkansas	23.6	New Mexico	66.6
9	Mississippi	12.0	Mississippi	32.8	Connecticut	23.6	Rhode Island	66.4
10	Illinois	11.8	Louisiana	32.7	Nebraska	23.0	North Dakota	66.2
11	Louisiana	11.7	Minnesota	32.6	Missouri	22.4	Kansas	65.7
12	Georgia	11.7	Wyoming	32.4	Massachusetts	22.3	Oklahoma	65.6
13	Arkansas	11.6	Kansas	32.1	Arizona	22.3	Pennsylvania	65.6
14	South Dakota	11.6	Oklahoma	32.0	Maine	22.3	Connecticut	65.3
15	Nebraska	11.6	North Dakota	31.7	Oklahoma	22.1	Idaho	64.9
16	Kansas	11.5	Wisconsin	31.7	Kansas	22.1	Mississippi	64.8
17	Oklahoma	11.5	Arkansas	31.5	Hawaii	22.0	Missouri	64.6
18	Indiana	11.3	Montana	31.5	New Jersey	22.0	Minnesota	63.6
19	North Carolina	11.2	Nevada	31.4	Ohio	21.7	Wisconsin	63.5
20	Colorado	11.2	Michigan	31.4	Montana	21.6	Louisiana	63.1
21	Minnesota	11.0	California	31.2	Wisconsin	21.5	Montana	63.0
22	Connecticut	11.0	Iowa	31.2	New York	21.5	Nevada	62.9
23	Hawaii	10.9	Missouri	31.2	Oregon	21.2	Ohio	62.9
24	Missouri	10.9	Illinois	30.9	Alabama	20.8	Texas	62.8
25	Florida	10.8	Connecticut	30.7	Delaware	20.7	Illinois	62.8
26	New Jersey	10.8	New Hampshire	30.6	Indiana	20.2	Michigan	62.3
27	Washington	10.8	Ohio	30.4	Michigan	20.1	Indiana	61.9
28	Michigan	10.8	Indiana	30.4	North Carolina	20.1	New Jersey	61.8
29	New York	10.7	Washington	30.3	Illinois	20.1	Oregon	61.5
30	Ohio	10.7	Colorado	30.1	Minnesota	20.1	Hawaii	61.5
31	Oregon	10.7	Rhode Island	30.1	Mississippi	20.0	Wyoming	61.4
32	Alabama	10.6	Florida	29.7	Kentucky	19.7	California	61.1
33	Maryland	10.6	Georgia	29.7	Tenessee	19.7	North Carolina	60.9
34	Iowa	10.6	Oregon	29.6	South Carolina	19.3	New York	60.7
35	Delaware	10.6	North Carolina	29.6	New Hampshire	19.2	Massachusetts	60.5
36	Tenessee	10.6	Pennsylvania	29.6	New Mexico	19.1	West Virginia	59.8
37	Rhode Island	10.4	Maryland	29.5	Vermont	19.1	Alabama	59.7
38	Kentucky	10.4	New Jersey	29.0	Wyoming	18.7	New Hampshire	59.7
39	Wisconsin	10.3	South Carolina	28.6	Idaho	18.7	Alaska	59.7
40	South Carolina	10.3	New York	28.5	Louisiana	18.7	Washington	59.3
41	North Dakota	10.3	Hawaii	28.5	Nevada	18.7	Delaware	59.3
42	Wyoming	10.2	Maine	28.4	Maryland	18.3	Maine	59.2
43	Massachusetts	10.2	Alabama	28.3	Washington	18.2	Tenessee	58.4
44	Virginia	10.2	Kentucky	28.2	California	17.7	Maryland	58.4
45	Pennsylvania	9.8	Tenessee	28.1	Virginia	17.5	Kentucky	58.3
46	New Hampshir	9.8	Vermont	28.1	Texas	16.4	South Carolina	58.2
47	Montana	9.8	Massachusetts	28.0	Colorado	15.8	Colorado	57.0
48	West Virginia	8.9	Delaware	28.0	Georgia	15.3	Georgia	56.7
49	Maine	8.5	Virginia	27.4	Utah	15.0	Vermont	55.6
50	Vermont	8.4	West Virginia	26.8	Alaska	9.0	Virginia	55.0

Source: U.S. Bureau of the Census

Table 20
Race and Hispanic Origin by County: July 1, 1999

County	Total Population	Total White	White Hispanic	White Non-Hispanic	Total Black	Total American Indian & Alaska Native	Total Asian & Pacific Islander	Total Hispanic	% of Total White Non-Hispanic
Beaver	6,006	5,909	220	5,689	10	51	36	236	94.7%
Box Elder	42,782	41,570	2,671	38,899	30	504	678	2,794	90.9%
Cache	87,328	83,242	3,115	80,127	355	657	3,074	3,295	91.8%
Carbon	20,898	20,424	3,226	17,198	115	178	181	3,353	82.3%
Daggett	717	699	17	682	0	11	7	23	95.1%
Davis	239,364	228,544	12,412	216,132	3,591	1,455	5,774	13,697	90.3%
Duchesne	14,759	13,858	486	13,372	21	807	73	606	90.6%
Emery	11,052	10,939	334	10,605	5	53	55	355	96.0%
Garfield	4,286	4,194	50	4,144	3	77	12	61	96.7%
Grand	8,193	7,882	514	7,368	28	238	45	553	89.9%
Iron	29,449	28,282	669	27,613	86	882	199	778	93.8%
Juab	7,794	7,647	133	7,514	6	123	18	147	96.4%
Kane	6,154	6,005	177	5,828	11	97	41	186	94.7%
Millard	12,420	12,041	611	11,430	4	220	155	648	92.0%
Morgan	7,204	7,151	149	7,002	14	11	28	155	97.2%
Piute	1,484	1,472	27	1,445	0	10	2	27	97.4%
Rich	1,918	1,904	36	1,868	3	2	9	40	97.4%
Salt Lake	850,243	801,009	69,451	731,558	9,863	7,726	31,645	75,345	86.0%
San Juan	13,603	6,214	549	5,665	20	7,315	54	667	41.6%
Sanpete	22,059	21,311	1,178	20,133	76	292	380	1,314	91.3%
Sevier	18,645	18,200	492	17,708	15	384	46	525	95.0%
Summit	27,692	27,303	844	26,459	54	134	201	892	95.5%
Tooele	35,801	34,397	5,432	28,965	364	601	439	5,677	80.9%
Uintah	25,959	23,023	996	22,027	16	2,784	136	1,167	84.9%
Utah	346,997	336,810	15,400	321,410	654	2,580	6,953	16,269	92.6%
Wasatch	13,767	13,623	470	13,153	6	102	36	490	95.5%
Washington	85,406	83,300	2,097	81,203	163	1,231	712	2,290	95.1%
Wayne	2,387	2,332	49	2,283	14	39	2	63	95.6%
Weber	185,469	176,378	17,530	158,848	3,954	1,481	3,656	19,046	85.6%
State of Utah	2,129,836	2,025,663	139,335	1,886,328	19,481	30,045	54,647	150,699	88.6%

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

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

Table 21
Housing Units, Households, and Persons Per Household by State: April 1, 1990 and July 1, 1998 (Thousands)

	April 1, 1990				July 1, 1998				1990-98 Percent Change		
State	Total Housing Units	Total Households	Persons per Household	Persons per Household Rank	Total Housing Units	Total Households	Persons per Household	Persons per Household Rank	Total Housing Units	Total Households	Persons per Household
United States	102,262	91,946	2.63		112,499	101,041	2.61		10.0%	9.9%	-0.8%
Alabama	1,670	1,507	2.62	18	1,866	1,663	2.56	22	11.7%	10.4%	-2.3%
Alaska	233	189	2.80	3	248	215	2.78	4	6.4%	13.8%	-0.8%
Arizona	1,659	1,369	2.62	18	2,006	1,762	2.60	15	20.9%	28.7%	-0.7%
Arkansas	1,001	891	2.57	31	1,092	970	2.56	22	9.1%	8.9%	-0.5%
California	11,183	10,381	2.79	4	12,037	11,446	2.79	3	7.6%	10.3%	-0.2%
Colorado	1,477	1,282	2.51	49	1,722	1,561	2.49	43	16.6%	21.8%	-0.7%
Connecticut	1,321	1,230	2.59	26	1,379	1,238	2.57	20	4.4%	0.7%	-0.7%
Delaware	290	247	2.61	21	326	284	2.54	30	12.4%	15.0%	-2.7%
Florida	6,100	5,135	2.46	50	7,007	5,881	2.48	44	14.9%	14.5%	0.8%
Georgia	2,638	2,366	2.66	13	3,184	2,843	2.63	12	20.7%	20.2%	-1.3%
Hawaii	390	356	3.01	2	440	401	2.87	2	12.8%	12.6%	-4.5%
Idaho	413	361	2.73	7	503	448	2.69	7	21.8%	24.1%	-1.5%
Illinois	4,506	4,202	2.65	15	4,777	4,438	2.65	11	6.0%	5.6%	-0.1%
Indiana	2,246	2,065	2.61	21	2,503	2,231	2.57	20	11.4%	8.0%	-1.4%
Iowa	1,144	1,064	2.52	47	1,208	1,103	2.50	41	5.6%	3.7%	-0.6%
Kansas	1,044	945	2.53	41	1,130	999	2.55	26	8.2%	5.7%	0.6%
Kentucky	1,507	1,380	2.60	25	1,664	1,497	2.56	22	10.4%	8.5%	-1.4%
Louisiana	1,716	1,499	2.74	6	1,806	1,599	2.66	10	5.2%	6.7%	-2.9%
Maine	587	465	2.56	34	626	490	2.48	44	6.6%	5.4%	-3.1%
Maryland	1,892	1,749	2.67	12	2,091	1,906	2.63	12	10.5%	9.0%	-1.5%
Massachusetts	2,473	2,247	2.58	29	2,568	2,349	2.52	37	3.8%	4.5%	-2.4%
Michigan	3,848	3,419	2.66	13	4,168	3,693	2.60	15	8.3%	8.0%	-2.1%
Minnesota	1,849	1,648	2.58	29	2,021	1,791	2.58	17	9.3%	8.7%	-0.1%
Mississippi	1,010	911	2.75	5	1,106	997	2.68	7	9.5%	9.4%	-2.4%
Missouri	2,199	1,961	2.53	41	2,394	2,089	2.53	36	8.9%	6.5%	-0.2%
Montana	361	306	2.53	41	383	346	2.47	48	6.1%	13.1%	-2.5%
Nebraska	661	602	2.54	39	711	636	2.54	30	7.6%	5.6%	-0.1%
Nevada	519	466	2.53	41	767	676	2.54	30	47.8%	45.1%	0.6%
New Hampshire	504	411	2.62	18	539	450	2.56	22	6.9%	9.5%	-2.3%
New Jersey	3,075	2,795	2.70	10	3,237	2,957	2.69	7	5.3%	5.8%	-0.5%
New Mexico	632	543	2.74	6	747	632	2.70	6	18.2%	16.4%	-1.4%
New York	7,227	6,639	2.63	16	7,455	6,766	2.61	14	3.2%	1.9%	-0.7%
North Carolina	2,818	2,517	2.54	39	3,367	2,883	2.54	30	19.5%	14.5%	-0.2%
North Dakota	276	241	2.55	36	293	247	2.48	44	6.2%	2.5%	-2.8%
Ohio	4,372	4,088	2.59	26	4,682	4,285	2.55	26	7.1%	4.8%	-1.5%
Oklahoma	1,406	1,206	2.53	41	1,459	1,288	2.52	37	3.8%	6.8%	-0.4%
Oregon	1,194	1,103	2.52	47	1,401	1,286	2.50	41	17.3%	16.6%	-0.6%
Pennsylvania	4,938	4,496	2.57	31	5,229	4,593	2.54	30	5.9%	2.2%	-1.0%
Rhode Island	415	378	2.55	36	431	376	2.53	36	3.9%	-0.5%	-0.9%
South Carolina	1,424	1,258	2.68	11	1,683	1,441	2.58	17	18.2%	14.5%	-3.7%
South Dakota	292	259	2.59	26	322	277	2.55	26	10.3%	6.9%	-1.4%
Tennessee	2,026	1,854	2.56	34	2,318	2,100	2.52	37	14.4%	13.3%	-1.6%
Texas	7,009	6,071	2.73	7	7,808	7,113	2.71	5	11.4%	17.2%	-0.8%
Utah	598	537	3.15	1	731	677	3.06	1	22.2%	26.1%	-2.9%
Vermont	271	211	2.57	31	289	231	2.46	49	6.6%	9.5%	-4.2%
Virginia	2,497	2,292	2.61	21	2,837	2,579	2.55	26	13.6%	12.5%	-2.2%
Washington	2,032	1,872	2.53	41	2,386	2,211	2.52	37	17.4%	18.1%	-0.6%
West Virginia	781	689	2.55	36	794	716	2.48	44	1.7%	3.9%	-2.8%
Wisconsin	2,056	1,822	2.61	21	2,279	1,973	2.58	17	10.8%	8.3%	-1.2%
Wyoming	203	169	2.63	16	213	185	2.54	30	4.9%	9.5%	-3.3%

Note: Numbers may not sum due to rounding.

Source: U.S. Census Bureau

Table 22
U.S. Census Bureau Subcounty Population Estimates

	1990	1999	Percent Change 90-99	AARC 90-99
Beaver County	4,765	6,006	26.0	2.6
Beaver city	2,004	2,433	21.4	2.2
Milford city	1,116	1,295	16.0	1.7
Minersville town	608	850	39.8	3.8
Balance of Beaver County	1,037	1,428	37.7	3.6
Box Elder County	36,485	42,782	17.3	1.8
Bear River City town	700	818	16.9	1.7
Brigham City city	15,641	17,129	9.5	1.0
Corinne city	637	671	5.3	0.6
Deweyville town	313	328	4.8	0.5
Elwood town	561	649	15.7	1.6
Fielding town	428	474	10.7	1.1
Garland city	1,654	1,887	14.1	1.5
Honeyville city	1,112	1,277	14.8	1.5
Howell town	237	267	12.7	1.3
Mantua town	703	743	5.7	0.6
Perry city	1,216	2,401	97.5	7.9
Plymouth town	267	288	7.9	0.8
Portage town	218	209	-4.1	-0.5
Snowville town	251	269	7.2	0.8
Tremonton city	4,317	5,518	27.8	2.8
Willard city	1,298	1,521	17.2	1.8
Balance of Box Elder County	6,932	8,333	20.2	2.1
Cache County	70,183	87,328	24.4	2.5
Amalga town	366	452	23.5	2.4
Clarkston town	634	662	4.4	0.5
Cornish town	204	234	14.7	1.5
Hyde Park city	2,180	2,947	35.2	3.4
Hyrum city	4,944	5,631	13.9	1.5
Lewiston city	1,568	1,580	0.8	0.1
Logan city	32,903	40,778	23.9	2.4
Mendon city	696	760	9.2	1.0
Millville city	1,133	1,475	30.2	3.0
Newton town	659	678	2.9	0.3
Nibley city	1,220	1,849	51.6	4.7
North Logan city	3,964	5,362	35.3	3.4
Paradise town	567	733	29.3	2.9
Providence city	3,323	4,513	35.8	3.5
Richmond city	1,965	2,172	10.5	1.1
River Heights city	1,243	1,492	20.0	2.0
Smithfield city	5,589	6,979	24.9	2.5
Trenton town	425	497	16.9	1.8
Wellsville city	2,262	2,778	22.8	2.3
Balance of Cache County	4,338	5,756	32.7	3.2
Carbon County	20,228	20,898	3.3	0.4
East Carbon city	1,257	1,230	-2.1	-0.2
Helper city	2,270	2,181	-3.9	-0.4
Price city	8,893	9,012	1.3	0.1
Scofield town	43	45	4.7	0.5
Sunnyside city	339	351	3.5	0.4
Wellington city	1,633	1,699	4.0	0.4
Balance of Carbon County	5,793	6,380	10.1	1.1
Daggett County	690	717	3.9	0.4
Manila town	202	216	6.9	0.7
Balance of Daggett County	488	501	2.7	0.3
Davis County	187,941	239,364	27.4	2.7
Bountiful city	38,400	41,169	7.2	0.8
Centerville city	11,536	15,899	37.8	3.6
Clearfield city	21,561	27,075	25.6	2.6
Clinton city	7,961	12,082	51.8	4.7
Farmington city	9,443	11,817	25.1	2.5
Fruit Heights city	3,783	4,774	26.2	2.6
Kaysville city	14,120	19,463	37.8	3.6
Layton city	41,900	56,469	34.8	3.4
North Salt Lake city	6,786	8,692	28.1	2.8
South Weber city	2,853	4,273	49.8	4.6
Sunset city	5,312	5,181	-2.5	-0.3
Syracuse city	4,831	9,575	98.2	7.9
West Bountiful city	4,484	5,107	13.9	1.5
West Point city	3,971	6,033	51.9	4.8
Woods Cross city	5,345	6,007	12.4	1.3
Balance of Davis County	5,655	5,748	1.6	0.2
Duchesne County	12,645	14,759	16.7	1.7
Altamont town	167	197	18.0	1.9
Duchesne city	1,311	1,661	26.7	2.7
Myton city	468	496	6.0	0.6
Roosevelt city	3,959	4,400	11.1	1.2
Tabiona town	120	139	15.8	1.6
Balance of Duchesne County	6,620	7,866	18.8	1.9
Emery County	10,332	11,052	7.0	0.8
Castle Dale city	1,699	1,795	5.7	0.6
Clawson town	151	175	15.9	1.7
Cleveland town	562	602	7.1	0.8
Elmo town	267	350	31.1	3.1
Emery town	300	307	2.3	0.3
Ferron city	1,644	1,698	3.3	0.4
Green River city (pt.)	770	793	3.0	0.3
Huntington city	1,880	2,089	11.1	1.2
Orangeville city	1,472	1,538	4.5	0.5
Balance of Emery County	1,587	1,705	7.4	0.8
Garfield County	3,980	4,286	7.7	0.8
Antimony town	83	78	-6.0	-0.7
Boulder town	126	136	7.9	0.9
Cannonville town	131	130	-0.8	-0.1
Escalante town	818	1,321	61.5	5.5
Hatch town	103	98	-4.9	-0.6
Henrieville town	163	146	-10.4	-1.2
Panguitch city	1,446	1,256	-13.1	-1.6
Tropic town	374	381	1.9	0.2
Balance of Garfield County	736	740	0.5	0.1
Grand County	6,620	8,193	23.8	2.4
Castle Valley town	211	277	31.3	3.1
Green River city (pt.)	122	148	21.3	2.2
Moab city	4,002	4,573	14.3	1.5
Balance of Grand County	2,285	3,195	39.8	3.8

Table 22 (Continued)
U.S. Census Bureau Subcounty Population Estimates

	1990	1999	Percent Change 90-99	AARC 90-99
Iron County	20,789	29,449	41.7	3.9
Brian Head town	109	156	43.1	4.1
Cedar City city	13,530	19,299	42.6	4.0
Enoch city	1,978	3,516	77.8	6.6
Kanarraville town	228	255	11.8	1.3
Paragonah town	305	515	68.9	6.0
Parowan city	1,837	2,008	9.3	1.0
Balance of Iron County	2,802	3,700	32.0	3.1
Juab County	5,817	7,794	34.0	3.3
Eureka city	562	670	19.2	2.0
Levan town	419	595	42.0	4.0
Mona town	602	952	58.1	5.2
Nephi city	3,517	4,635	31.8	3.1
Balance of Juab County	717	942	31.4	3.1
Kane County	5,169	6,154	19.1	2.0
Alton town	80	95	18.8	1.9
Big Water town	315	390	23.8	2.4
Glendale town	282	347	23.0	2.3
Kanab city	3,318	3,943	18.8	1.9
Orderville town	422	444	5.2	0.6
Balance of Kane County	752	935	24.3	2.4
Millard County	11,333	12,420	9.6	1.0
Delta city	2,967	3,132	5.6	0.6
Fillmore city	1,974	2,379	20.5	2.1
Hinckley town	654	730	11.6	1.2
Holden town	364	376	3.3	0.4
Kanosh town	374	390	4.3	0.5
Leamington town	298	307	3.0	0.3
Lynndyl town	130	137	5.4	0.6
Meadow town	238	246	3.4	0.4
Oak City town	587	660	12.4	1.3
Scipio town	291	294	1.0	0.1
Balance of Millard County	3,456	3,769	9.1	1.0
Morgan County	5,528	7,204	30.3	3.0
Morgan city	2,018	2,521	24.9	2.5
Balance of Morgan County	3,510	4,683	33.4	3.3
Piute County	1,277	1,484	16.2	1.7
Circleville town	417	492	18.0	1.9
Junction town	132	149	12.9	1.4
Kingston town	134	158	17.9	1.8
Marysvale town	370	418	13.0	1.4
Balance of Piute County	224	267	19.2	2.0
Rich County	1,725	1,918	11.2	1.2
Garden City town	193	263	36.3	3.5
Laketown town	267	278	4.1	0.4
Randolph city	498	537	7.8	0.8
Woodruff town	140	156	11.4	1.2
Balance of Rich County	627	684	9.1	1.0
Salt Lake County	725,956	850,243	17.1	1.8
Alta town	257	417	62.3	5.5
Bluffdale city	2,159	4,013	85.9	7.1
Draper city (pt.)	7,125	18,713	162.6	11.3
Midvale city	24,417	23,771	-2.6	-0.3
Murray city	31,399	32,449	3.3	0.4
Riverton city	11,237	21,285	89.4	7.4
Salt Lake City city	159,952	171,151	7.0	0.8
Sandy city	76,325	101,853	33.4	3.3
South Jordan city	12,266	28,009	128.3	9.6
South Salt Lake city	10,132	9,773	-3.5	-0.4
Taylorsville city	51,426	55,939	8.8	0.9
West Jordan city	43,028	65,139	51.4	4.7
West Valley City city	86,999	102,718	18.1	1.9
Balance of Salt Lake County	209,234	215,013	2.8	0.3
San Juan County	12,621	13,603	7.8	0.8
Blanding city	3,224	3,600	11.7	1.2
Monticello city	1,806	1,879	4.0	0.4
Balance of San Juan County	7,591	8,124	7.0	0.8
Sanpete County	16,259	22,059	35.7	3.4
Centerfield town	764	1,006	31.7	3.1
Ephraim city	3,411	4,333	27.0	2.7
Fairview city	972	1,159	19.2	2.0
Fayette town	183	244	33.3	3.2
Fountain Green city	606	740	22.1	2.2
Gunnison city	1,312	2,254	71.8	6.2
Manti city	2,260	2,795	23.7	2.4
Mayfield town	448	530	18.3	1.9
Moroni city	1,115	1,839	64.9	5.7
Mount Pleasant city	2,137	2,766	29.4	2.9
Spring City city	720	872	21.1	2.2
Sterling town	195	259	32.8	3.2
Wales town	185	354	91.4	7.5
Balance of Sanpete County	1,951	2,908	49.1	4.5
Sevier County	15,431	18,645	20.8	2.1
Annabella town	485	720	48.5	4.5
Aurora city	911	985	8.1	0.9
Elsinore town	608	654	7.6	0.8
Glenwood town	435	461	6.0	0.6
Joseph town	202	229	13.4	1.4
Koosharem town	266	420	57.9	5.2
Monroe city	1,623	1,823	12.3	1.3
Redmond town	677	727	7.4	0.8
Richfield city	5,664	6,812	20.3	2.1
Salina city	1,942	2,091	7.7	0.8
Sigurd town	359	529	47.4	4.4
Balance of Sevier County	2,259	3,194	41.4	3.9
Summit County	15,518	27,692	78.5	6.6
Coalville city	1,130	1,384	22.5	2.3
Francis town	374	823	120.1	9.2
Henefer town	546	692	26.7	2.7
Kamas city	1,045	1,646	57.5	5.2
Oakley town	610	916	50.2	4.6
Park City city (pt.)	4,484	6,690	49.2	4.5
Balance of Summit County	7,329	15,541	112.0	8.7

Table 22 (Continued)
U.S. Census Bureau Subcounty Population Estimates

	1990	1999	Percent Change 90-99	AARC 90-99
Tooele County	26,601	35,801	34.6	3.4
Grantsville city	4,452	5,787	30.0	3.0
Ophir town	25	35	40.0	3.8
Rush Valley town	330	378	14.5	1.5
Stockton town	429	528	23.1	2.3
Tooele city	13,941	18,460	32.4	3.2
Vernon town	181	206	13.8	1.4
Wendover city	1,091	1,259	15.4	1.6
Balance of Tooele County	6,152	9,148	48.7	4.5
Uintah County	22,211	25,959	16.9	1.7
Ballard town	644	792	23.0	2.3
Naples city	1,337	1,534	14.7	1.5
Vernal city	6,621	7,500	13.3	1.4
Balance of Uintah County	13,609	16,133	18.5	1.9
Utah County	263,590	346,997	31.6	3.1
Alpine city	3,513	5,743	63.5	5.6
American Fork city	15,884	18,893	18.9	1.9
Cedar Fort town	277	327	18.1	1.9
Cedar Hills town	959	3,348	249.1	14.9
Eagle Mountain town	30	519	1630.0	37.3
Elk Ridge town	799	1,696	112.3	8.7
Genola town	824	974	18.2	1.9
Goshen town	578	695	20.2	2.1
Highland city	5,039	5,795	15.0	1.6
Lehi city	8,677	16,878	94.5	7.7
Lindon city	3,860	7,071	83.2	7.0
Mapleton city	3,556	4,319	21.5	2.2
Orem city	67,538	82,965	22.8	2.3
Payson city	9,768	11,222	14.9	1.6
Pleasant Grove city	13,927	21,457	54.1	4.9
Provo city	87,136	110,690	27.0	2.7
Salem city	2,687	3,441	28.1	2.8
Santaquin city	2,522	3,539	40.3	3.8
Spanish Fork city	11,396	17,252	51.4	4.7
Springville city	14,567	17,282	18.6	1.9
Vineyard town	146	156	6.8	0.7
Woodland Hills town	303	1,459	381.5	19.1
Balance of Utah County	9,604	11,276	17.4	1.8
Wasatch County	10,089	13,767	36.5	3.5
Charleston town	358	463	29.3	2.9
Heber city	4,839	6,603	36.5	3.5
Midway city	1,554	2,400	54.4	4.9
Park City city (pt.)	0	24	NA	NA
Wallsburg town	265	342	29.1	2.9
Balance of Wasatch County	3,073	3,935	28.1	2.8
Washington County	48,560	85,406	75.9	6.5
Enterprise city	939	1,689	79.9	6.7
Hildale town	1,325	2,320	75.1	6.4
Hurricane city	4,014	7,540	87.8	7.3
Ivins town	1,639	4,795	192.6	12.7
La Verkin city	1,782	3,488	95.7	7.7
Leeds town	256	321	25.4	2.5
New Harmony town	94	157	67.0	5.9
Rockville town	182	238	30.8	3.0
St. George city	28,754	47,994	66.9	5.9
Santa Clara city	2,323	4,574	96.9	7.8
Springdale town	277	346	24.9	2.5
Toquerville town	514	814	58.4	5.2
Virgin town	250	312	24.8	2.5
Washington city	4,149	7,108	71.3	6.2
Balance of Washington County	2,062	3,710	79.9	6.7
Wayne County	2,177	2,387	9.6	1.0
Bicknell town	331	308	-6.9	-0.8
Loa town	461	448	-2.8	-0.3
Lyman town	198	227	14.6	1.5
Torrey town	122	142	16.4	1.7
Balance of Wayne County	1,065	1,262	18.5	1.9
Weber County	158,330	185,469	17.1	1.8
Farr West city	2,177	2,719	24.9	2.5
Harrisville city	2,988	3,666	22.7	2.3
Huntsville town	564	656	16.3	1.7
North Ogden city	11,452	14,782	29.1	2.9
Ogden city	64,271	68,210	6.1	0.7
Plain City city	2,683	3,371	25.6	2.6
Pleasant View city	3,653	5,097	39.5	3.8
Riverdale city	6,413	7,693	20.0	2.0
Roy city	24,948	32,012	28.3	2.8
South Ogden city	12,180	14,341	17.7	1.8
Uintah town	829	1,183	42.7	4.0
Washington Terrace city	8,210	8,647	5.3	0.6
West Haven city	2,134	3,236	51.6	4.7
Balance of Weber County	15,828	19,856	25.4	2.6
State Total	1,722,850	2,129,836	23.6	2.4

Notes:

1. The Utah Population Estimates Committee estimated the 1999 population of the following municipalities: Hanksville, 318; Herriman, 1,250; Holladay,15,456; Marriot-Slaterville, 1,518; Rocky Ridge, 348; Saratoga Springs, 719; South Salt Lake, 18,822; and West Jordan, 76,839. Population totals for these cities will affect the Balance of the County estimates in their respective counties.

2. (pt.) indicates that the city crosses county boundaries, only part of the population is found within the specified county.

3. AARC is the average annual rate of change.

4. Estimates are for April 1, 1990 and July 1, 1999.

5. Totals may differ in this table from other tables in this report due to different release dates or data sources.

Source: U.S. Census Bureau

Employment, Wages, Labor Force

Overview

Utah's employment growth rate increased slightly in 2000. Expansion in the number of non-farm jobs, at 2.6%, drifted up from the 1999 rate of 2.4%. In 2000, Utah added 27,100 net new jobs. The unemployment rate, at 3.3%, fell from 1999's rate of 3.7%. The average annual wage increase for Utah's non-farm jobs in 2000 was $28,900, up 5.1% year-over.

2000 Summary

Economic Growth Remains Moderate. Utah's non-farm employers added 27,100 net new jobs in 2000, a growth rate of 2.6%. For the past three years, job growth has been stable but slightly slower than the long-term average. Similarly, the unemployment rate has remained largely unchanged for seven years. In 2000, it averaged 3.3%, down from 1999's rate of 3.7%. An average of 36,000 individuals were out of work in 2000, 4,500 fewer than in 1999.

Job Growth by Industry. The 2000 rate of job growth in Utah's major industrial divisions ranged from -1% in manufacturing to 6% in services. Industrial diversity, where Utah ranks 13th among states, is one of the factors enabling Utah's economy to consistently prosper.

Construction. The year 2000 marks the end of a record-breaking 11-year expansion in Utah's construction industry. Over that period, the number of construction jobs nearly tripled. However, there was no net gain for 2000. Residential building slowed slightly, but many large nonresidential projects, including a major reconstruction of I-15 through the Salt Lake Valley, while ongoing, are scheduled for completion in 2001.

Manufacturing. During most of the 1990s, Utah's manufacturing jobs expanded rapidly, gaining 26% from 1991 to 1998. By contrast, the U.S. gain was only 2%. However, in both 1999 and 2000, about 1,200 jobs (-0.9%) were trimmed from manufacturing payrolls, which is in line with the U.S. experience.

Transportation/Communications/Utilities. The transportation/communications/utilities division added 1,400 net new jobs in 2000 for a growth rate of 2.3%. This is a slight improvement over 1999's expansion of 1.7%. Only communications exhibited growth; the other industries were largely stagnant.

Trade. The trade division's job growth has slowed dramatically from its breakneck 7% pace of 1994 and 1995. Creation of 3,800 jobs in 2000, a growth rate of 1.5%, is similar to the 1999 achievement. Robust expansion in this division is often followed by sluggish growth as new businesses seek to sustain their viability in the face of a slowing economy and fierce competition. Wholesale and retail trade both grew at about the same pace.

Finance/Insurance/Real Estate. In 2000, the general economic slowdown impacted each of the component industries of the finance/insurance/real estate division. Its employment growth slowed to 700, a 1.2% expansion.

Services. The 16,700 new service division jobs in 2000 comprise over 60% of Utah's net job gain. The year's growth rate of 5.7% reflects an acceleration from 1999's still rapid 4.7%. Computer services saw double-digit expansion of nearly 3,000 jobs. Most other industries registered at least moderate growth, but health services was less than 2%.

Mining. Although the data show that Utah's mining employment increased by 200 (3%) in 2000, cutbacks in coal mining in the last half of the year have dropped employment back to 7,800, the 1999 level. Oil and gas extraction activities added jobs early in 2000, while metal mining remains stable.

Public Sector (government). The modest employment expansion recently typical of government was disrupted in 2000 as hundreds of temporary federal employees were working on the 2000 Census. As a result, federal job growth jumped to around 4%. However, state and local government expansion remained in the 2% range. Total government thus grew by about 5,500 jobs, a 3.1% increase.

Wages on the Upswing. In 2000, Utah's average annual nonagricultural pay was $28,900—up 5.1% from the 1999 average, which increased by 3.8%. This is the sixth year in a row that average wage increases in Utah have outpaced increases in inflation, as measured by the U.S. Consumer Price Index (CPI-U). Since the early 1980s, growth in wages for Utahns covered under unemployment insurance laws lagged far behind national wage increases. Utah annual pay, as a percentage of U.S. annual pay, has declined from a high of 96.3% in 1981 to a low of 83.7% in 1999.

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

Major Employers. With about 21,000 employees, the State of Utah ranks as the largest employer. Six of the next eight top employers provide educational services. Brigham Young University, Hill Air Force Base, and the University of Utah (including the University Hospital) each have roughly 16,000 employees. Convergys, a multi-county telemarketing company employs roughly 8,500 employees. Granite, Jordan, and Davis school districts and Utah State University each have between 6,500 and 8,000 workers. Smith's Food King rounds out Utah's top ten largest employers. The U.S. Postal Service and the Internal Revenue Service, with 6,000 and 4,000 jobs, respectively, are prominent employers. Salt Lake County government, other major retail chains, IHC (a large health-care organization), additional large school districts and hospitals, Delta Airlines, Cordant Technologies (Thiokol Corp.), United Parcel Service, U.S. West Communications, and Icon Health and Fitness each also occupy a strong presence in Utah's economy.

Labor Force Composition. An average of 72% of Utah's civilian, noninstitutionalized population over the age of 15 participated in the labor force in 1999. This rate ranks significantly higher than the national average of 67%. Both Utah women and men take part in the labor market at higher rates than their national counterparts.

One reason for Utah's high labor force participation is its young population. Moreover, Utah's teenagers and young adults are much more likely to work than their U.S. peers. In addition, Utah's population

age 55 and older accounts for a relatively small share of its adult population, and these older people are also more likely to work than their U.S. peers. Other factors are: 1) Utah's large families and lower than average wages may influence families to have more than one wage earner, and 2) jobs are readily available.

Roughly 97.5% of Utah workers are employed in nonagricultural industries. Agriculture thus accounts for about 2.5%. Of the nonagricultural workers, 7% are self-employed, private household, or unpaid family workers. Thus, about 90% of employed people are nonagricultural wage and salaried workers.

Unemployment. About 12,000 (30%) of Utah's 40,000 unemployed in 1999 had lost their jobs, compared to 13,500 (34%) in 1998. Job leavers numbered about the same–roughly 7,000 each year. Re-entrants increased by nearly 1,000, numbering 17,500 (44%) of the unemployed in 1999. Of course, Utah's strong economy enables an unknown number of people to move directly from out of the labor force to employment without a period of unemployment. About 3,000 unemployed workers were new entrants to the labor force in 1999.

Occupational Composition of Utah Jobs. Occupational estimates and projections are produced for some 700 specific job titles. These are summarized, for 2000 and 2005, into eight job categories. The largest category, both in terms of employment and the number of job titles, is the production, operating, and maintenance group. Over 25% of all employment in Utah is accounted for by this category. These jobs are commonly called "blue collar" and contain all the skilled crafts along with many semi-skilled and unskilled occupations. The professional job group makes up about 18% of all employment. These occupations require training at a Bachelor's degree or higher. Accountants, engineers, and teachers are examples of titles in this group. Sales, clerical, and service job categories each claim a 13% to 15% share of the employment pie. The managerial and administrative group represents about 7% of total employment; the technical and agriculture-related categories are 4% and 3% respectively.

The Measure of Demand–Job Openings. The growth of employment in an occupation provides only a portion of the true measure of labor demand in the labor market. Job openings also result from the need to replace workers who leave current employment positions for another occupation or who leave the labor force. These two components comprise the demand for an occupation.

There will be about 64,000 job openings in Utah each year through 2005. Nearly one-half of the openings will occur due to growth in the economy, the remainder due to replacement of existing workers. This will result in an 11.4% employment increase for the five-year period.

The professional/paraprofessional job category will provide the largest number–12,600 job openings each year, followed closely by the sales, production/operating/maintenance, and service occupational groups. These four categories will account for three out of every four job vacancies. The clerical group will contribute about 7,800, or 12% of the total, with the technical group adding 3,000 and the agricultural group about 1,900 vacancies.

Utah Jobs and Educational/Training Requirements. Of the roughly 154,000 new jobs that will occur between 2000 and 2005, about 28% will require a Bachelor's degree or higher. About 22% of all jobs still require a Bachelor's degree or higher. Those new jobs that call for associate degrees or applied technology training will account for about 12% of the total, while another 8% of total jobs will need work-related experience. On-the-job training (including some formal classroom time) of one year or longer will account for about 3% of the total new positions; jobs classified as moderate term (from one month to one year) on-the-job training add up to 14%. The largest group of all, containing semi-skilled and unskilled jobs (those that require less than a month of training), will claim 35% of all new jobs.

Significant Issues

2002 Olympic Winter Games. As the year 2001 progresses, the Northern Utah economy will be dominated by final preparations for the 2002 Olympic Winter Games. Thousands of visitors and temporary workers will begin to arrive as the year closes. As service-related businesses, including new hotels, begin to ramp up, spot labor shortages may occur. But, for the vast majority of Utah's labor force, it will be "business as usual" during the two or three months of Olympics excitement.

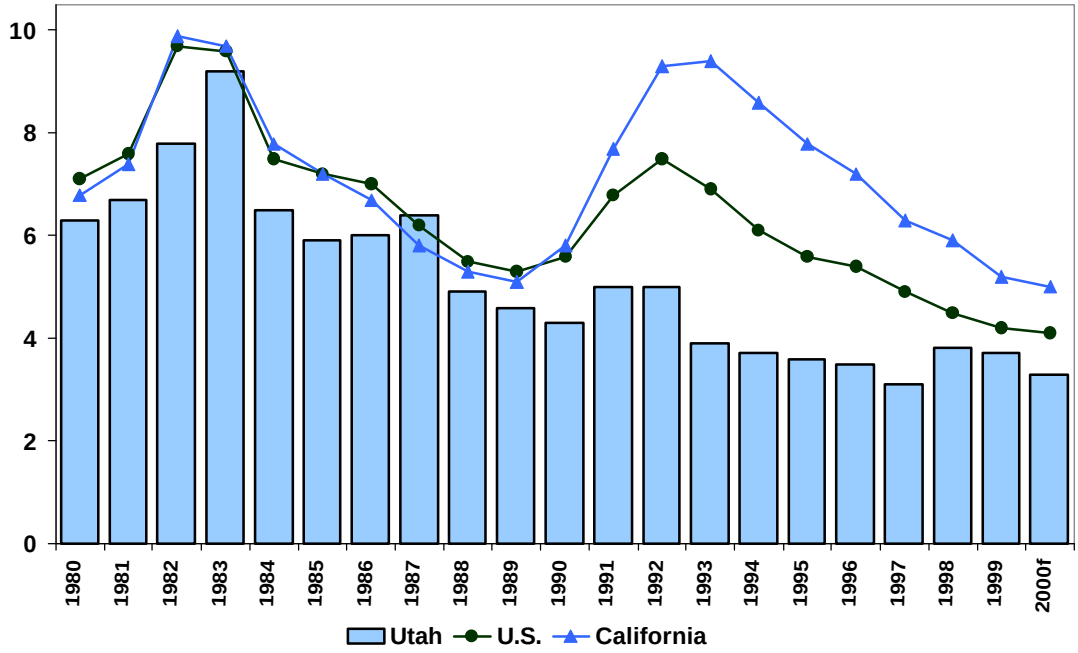
Construction Employment Cutbacks. Several major construction projects will be completed in 2001. Most notable is the reconstruction of I-15 through Salt Lake County. There is some concern that the loss of several thousand construction jobs within a few months will negatively impact the economy in a substantial manner. This could be compounded in the Spring of 2002 as thousands of Olympic-related jobs end. Thus, a moderate economic slowdown is anticipated for 2002.

National Economic Downturn. The issue with the largest potential for impacting the Utah economy is the possibility of a national economic downturn. Although Utah has a history of sidestepping or even prospering from these types of events, the Beehive State's economy is increasingly tied to the U.S. economy. Many of Utah's industries are vulnerable if their national or regional links are impacted. The severity, duration, and focus of a U.S. downturn are all variables that will affect the potential impact on Utah.

Conclusion

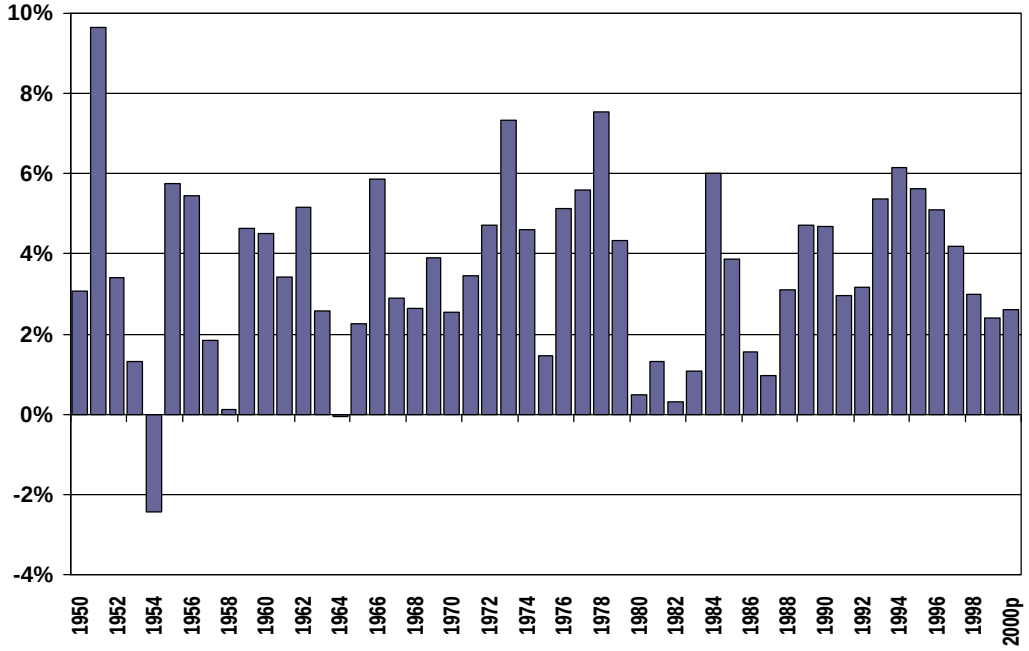
Utah's economy has achieved an orderly transition from robust growth to maintenance growth, but it is still thriving. Most industries are holding their own. Unemployment is stable and low. Moreover, wage increases continue to outpace inflation.

Figure 12
Unemployment Rates for Utah, California, and the U.S.



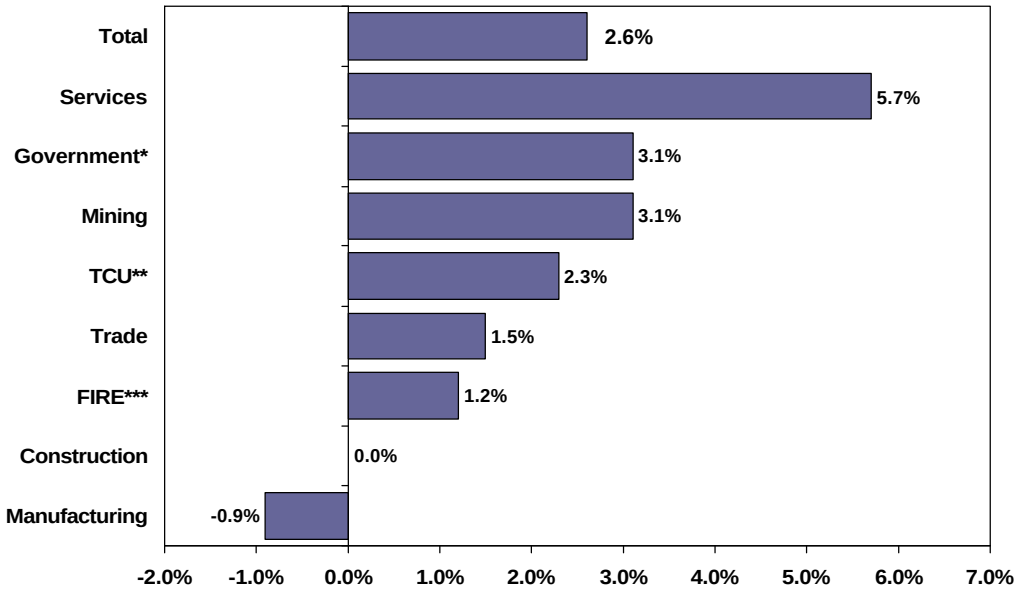
Sources: Utah Department of Workforce Services, Regional Financial Associates, WEFA, Council of Economic Advisors

Figure 13
Utah Nonagricultural Employment--Annual Percent Change: 1950 to 2000



Source: Utah Department of Workforce Services

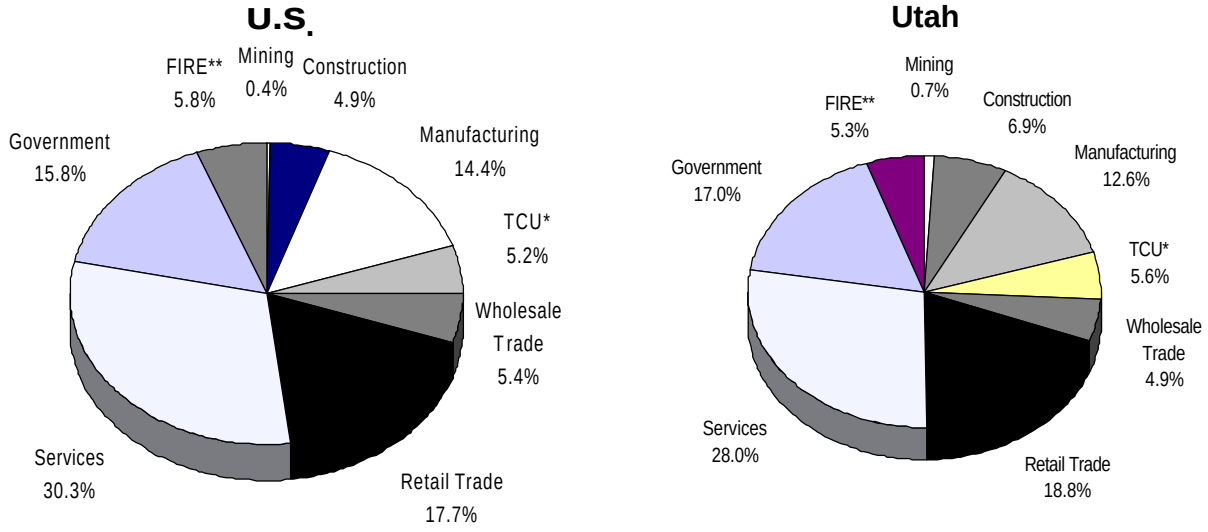
Figure 14
Percent Change in Utah Employment by Industry: 1999 to 2000



*Government employment in 2000 was temporarily bolstered by the hiring of Census 2000 workers.
**Transportation, Communication and Utilities
***Finance, Insurance and Real Estate

Source: Utah Department of Workforce Services

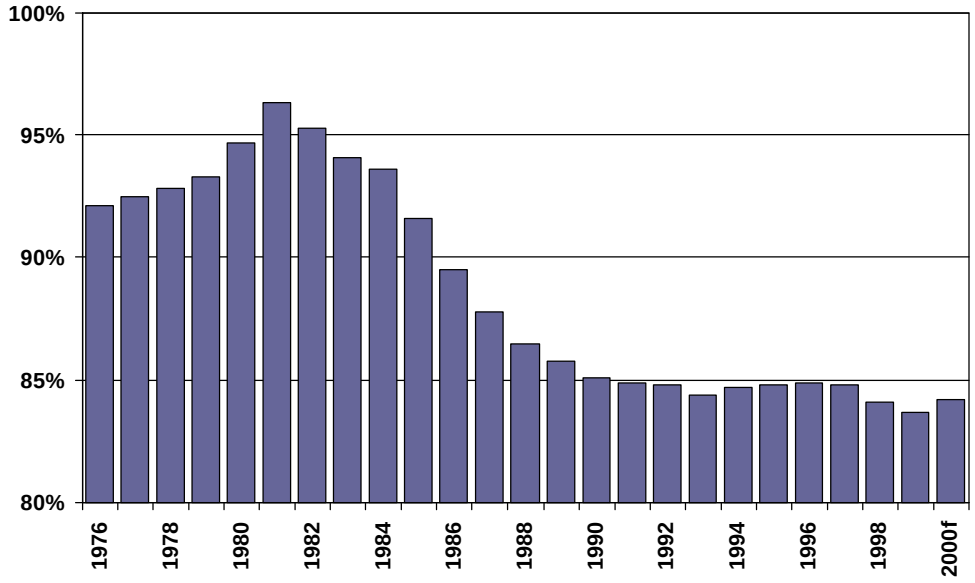
Figure 15
Utah and U.S. Nonagricultural Employment by Industry: 1999



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

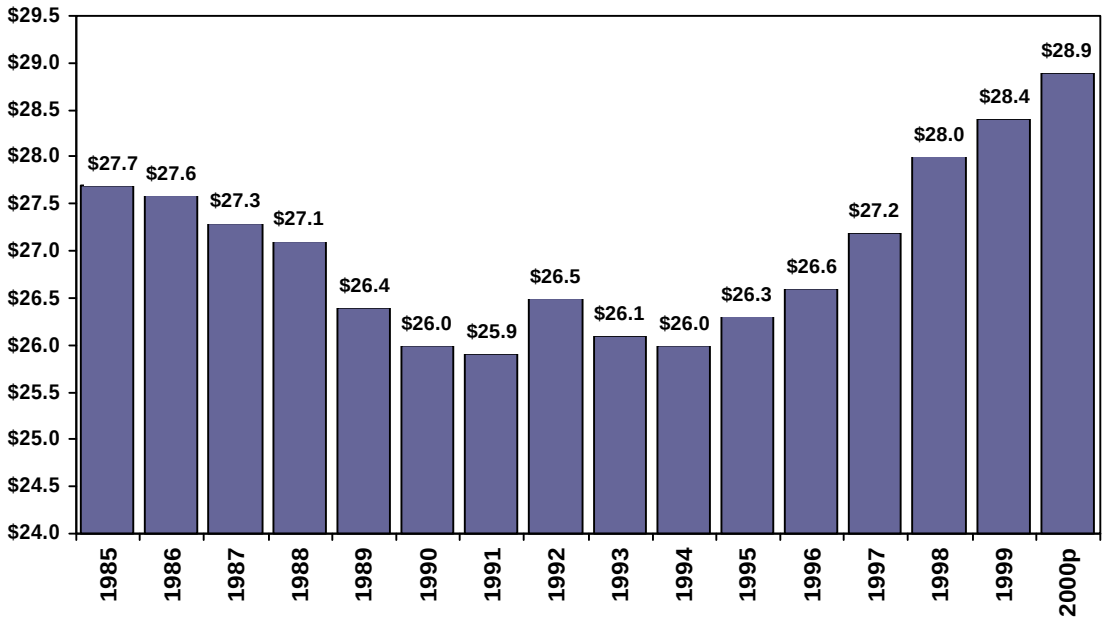
Source: Utah Department of Workforce Services

Figure 16
Utah Average Annual Pay as a Percent of U.S.



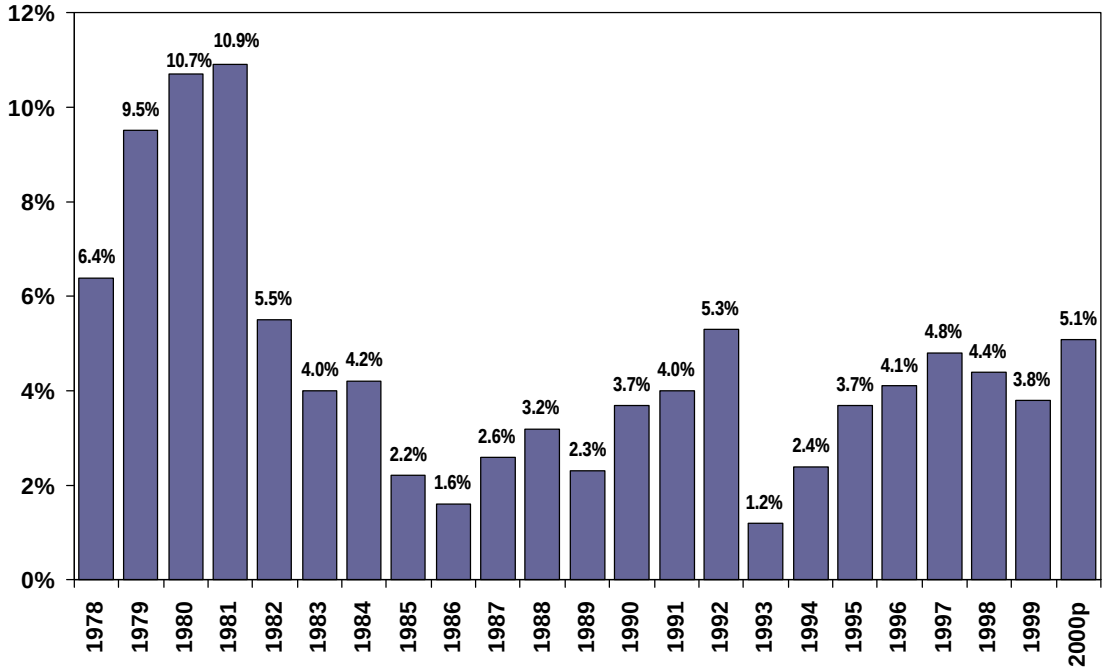
Note: For workers covered by unemployment insurance
Source: Bureau of Labor Statistics

Figure 17
Utah Nonagricultural Average Annual Wages--Inflation-Adjusted to Year 2000 Dollars (Thousands)



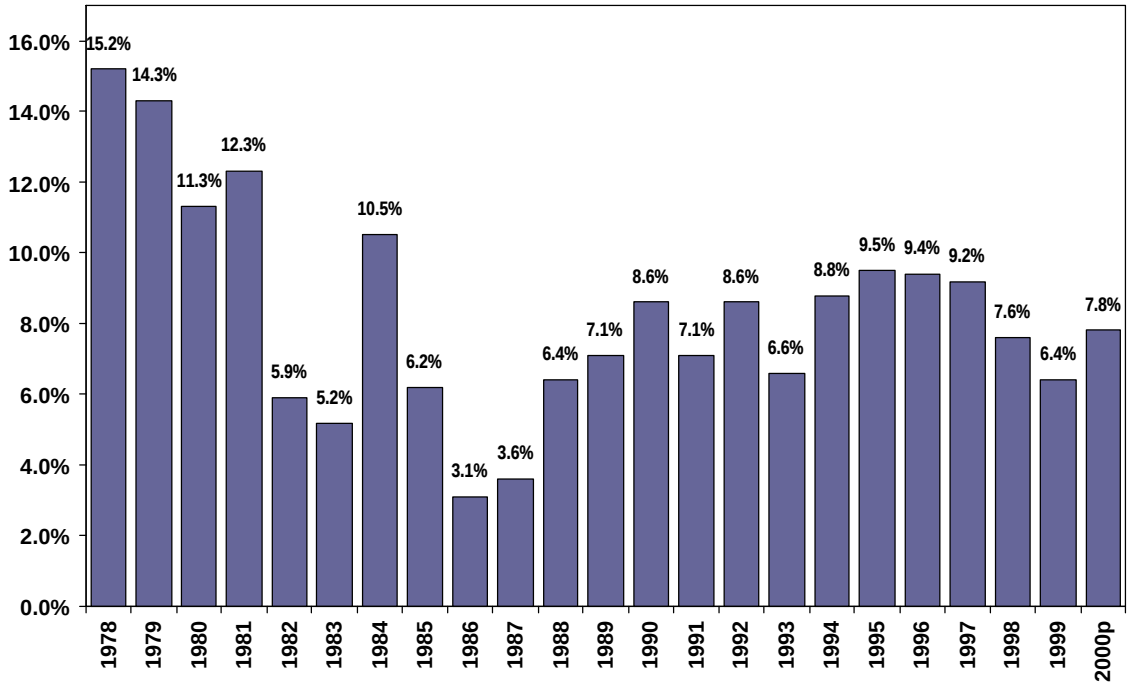
Source: Utah Department of Workforce Services

Figure 18
Growth Rates for Utah Average Annual Pay: Percent Change



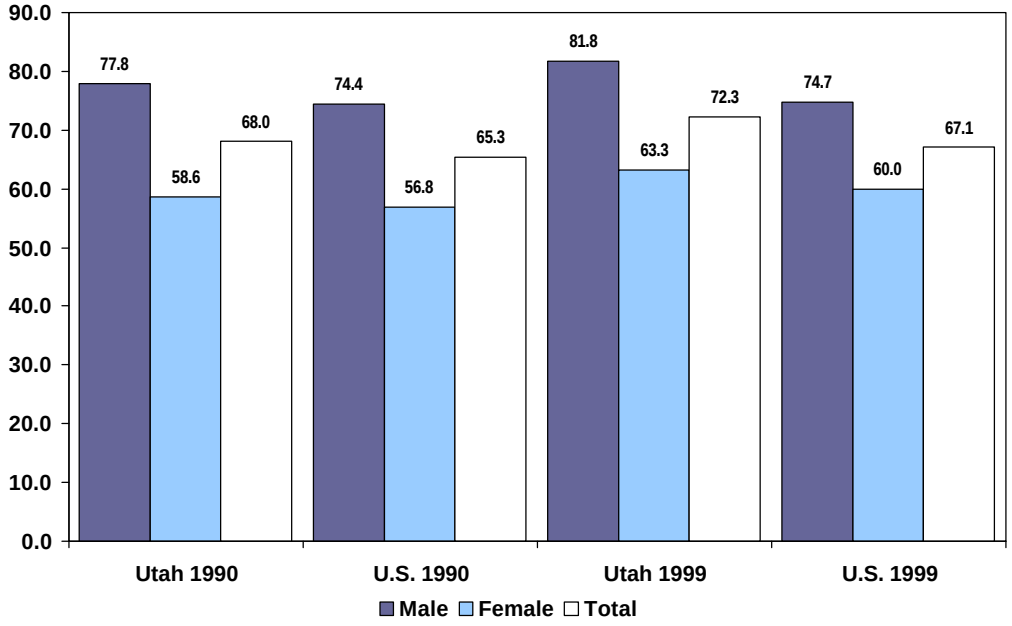
Source: Utah Department of Workforce Services, Council of Economic Advisors

Figure 19
Growth Rates for Utah Total Nonagricultural Wages and Salaries: Percent Change



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

Figure 20
Utah and U.S. Civilian Labor Force Participation Rates: Persons 16 years and Older



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

Table 23
Utah Nonagricultural Payroll Employment, Industry Percent of Total, and Unemployment Rates

	Total Employment			Industry Percent of Total								
Year	Number	Percent Change	Increase	Mining	Constru.	Manufact.	Trans. Comm. Pub.Util.	Trade	Fin.Ins.& Real Est.	Services	Govt.	Unemployment Rates
1940	115,000	4.6	5,100	9.7	3.7	15.5	14.1	23.6	3.2	11.1	19.3	na
1941	131,800	14.6	16,800	9.0	7.1	15.3	13.6	22.3	3.0	10.2	19.9	na
1942	170,800	29.6	39,000	7.6	12.3	18.1	11.8	18.3	2.3	8.4	21.1	na
1943	189,400	10.9	18,600	7.0	12.4	18.1	11.8	16.6	2.2	7.4	24.7	na
1944	173,100	-8.6	-16,300	7.2	5.7	14.8	13.1	18.2	2.3	8.2	30.7	na
1945	168,800	-2.5	-4,300	6.7	3.3	14.3	13.7	19.1	2.5	9.0	31.5	na
1946	168,500	-0.2	-300	5.9	4.5	13.5	13.4	22.8	3.0	10.9	26.3	na
1947	178,000	5.6	9,500	7.5	5.1	15.4	12.4	23.1	3.1	11.1	22.4	na
1948	183,400	3.0	5,400	7.0	6.1	15.6	11.8	22.8	3.1	10.8	22.8	na
1949	183,500	0.1	100	7.1	5.9	15.7	11.6	22.7	3.3	10.7	23.2	na
1950	189,153	3.1	5,653	6.6	6.4	15.7	11.3	22.4	3.4	10.9	23.3	5.5
1951	207,386	9.6	18,233	6.5	6.2	15.7	10.6	21.4	3.2	10.1	26.2	3.3
1952	214,409	3.4	7,023	6.4	5.5	15.1	10.8	21.6	3.3	10.1	27.2	3.2
1953	217,194	1.3	2,785	6.4	5.2	15.7	10.8	22.1	3.5	10.4	25.9	3.3
1954	211,864	-2.5	-5,330	6.3	5.4	15.6	10.6	22.5	3.9	10.8	25.0	5.2
1955	224,007	5.7	12,143	6.5	6.4	15.9	10.3	22.1	4.1	10.8	24.0	4.1
1956	236,225	5.5	12,218	6.7	6.6	16.1	9.7	22.0	4.0	10.8	23.2	3.4
1957	240,577	1.8	4,352	6.9	6.2	16.6	9.6	22.1	4.0	11.1	23.4	3.7
1958	240,816	0.1	239	6.0	6.2	16.3	9.3	22.2	4.2	11.6	24.2	5.3
1959	251,940	4.6	11,124	5.1	6.2	17.0	8.9	22.4	4.3	12.0	23.9	4.6
1960	263,307	4.5	11,367	5.4	5.6	18.1	8.5	22.3	4.3	12.2	23.6	4.8
1961	272,355	3.4	9,048	5.2	5.7	18.5	8.1	22.0	4.2	12.4	23.9	5.3
1962	286,382	5.2	14,027	4.7	6.2	18.9	7.7	21.9	4.2	12.4	23.9	4.9
1963	293,758	2.6	7,376	4.1	6.0	18.9	7.4	22.1	4.2	12.9	24.4	5.4
1964	293,576	-0.1	-182	3.7	5.8	17.9	7.4	22.3	4.3	13.4	25.1	6.0
1965	300,164	2.2	6,588	4.0	5.3	16.7	7.2	22.3	4.3	13.8	26.5	6.1
1966	317,771	5.9	17,607	3.8	4.9	16.1	6.9	21.8	4.1	13.9	28.5	4.9
1967	326,953	2.9	9,182	3.2	4.1	15.6	7.0	21.7	3.9	14.5	30.0	5.2
1968	335,527	2.6	8,574	3.3	4.1	15.5	6.9	21.9	4.0	15.0	29.4	5.4
1969	348,612	3.9	13,085	3.7	4.0	15.7	6.6	22.1	4.1	15.3	28.6	5.2
1970	357,435	2.5	8,823	3.6	4.1	15.7	6.5	22.2	4.2	15.8	28.0	6.1
1971	369,836	3.5	12,401	3.3	4.7	15.3	6.3	22.4	4.2	15.9	27.9	6.6
1972	387,271	4.7	17,435	3.1	5.4	15.6	6.2	23.3	4.4	16.3	27.2	6.3
1973	415,641	7.3	28,370	3.0	5.7	15.7	6.1	23.4	4.4	16.3	25.4	5.8
1974	434,793	4.6	19,152	3.1	5.6	16.2	6.1	23.3	4.5	16.3	24.9	6.1
1975	441,082	1.4	6,289	3.0	5.5	15.3	6.1	23.7	4.5	16.9	25.0	6.5
1976	463,658	5.1	22,576	3.0	6.0	15.3	6.1	24.2	4.4	16.9	24.2	5.7
1977	489,580	5.6	25,922	3.0	6.5	15.2	6.0	24.1	4.6	17.0	23.7	5.3
1978	526,400	7.5	36,820	3.0	6.6	15.2	6.0	24.1	4.6	17.4	23.0	3.8
1979	549,242	4.3	22,842	3.2	6.5	15.8	6.1	23.5	4.7	17.7	22.4	4.3
1980	551,889	0.5	2,647	3.4	5.7	15.9	6.2	23.3	4.7	18.2	22.7	6.3
1981	559,184	1.3	7,295	3.6	5.1	16.0	6.2	23.4	4.7	18.7	22.3	6.7
1982	560,981	0.3	1,797	3.2	4.8	15.3	6.3	23.5	4.7	19.6	22.5	7.8
1983	566,991	1.1	6,010	2.5	5.1	15.1	6.3	23.5	4.9	19.8	22.7	9.2
1984	601,068	6.0	34,077	2.1	5.8	15.6	6.1	23.4	4.9	20.1	21.9	6.5
1985	624,387	3.9	23,319	1.6	5.7	15.1	5.9	23.7	5.0	21.0	22.1	5.9
1986	634,138	1.6	9,751	1.2	5.1	14.5	5.9	24.0	5.2	21.7	22.3	6.0
1987	640,298	1.0	6,160	1.2	4.2	14.4	5.9	23.8	5.3	23.0	22.1	6.4
1988	660,075	3.1	19,777	1.2	3.8	15.0	6.0	23.7	5.1	23.6	21.6	4.9
1989	691,244	4.7	31,169	1.2	3.7	14.9	5.9	24.1	4.8	24.2	21.2	4.6
1990	723,629	4.7	32,385	1.2	3.8	14.8	5.8	23.8	4.7	25.0	20.8	4.3
1991	745,114	3.0	21,485	1.2	4.2	14.2	5.7	24.0	4.8	25.3	20.7	5.0
1992	768,602	3.2	23,488	1.1	4.5	13.8	5.7	24.0	4.9	25.6	20.4	5.0
1993	809,731	5.4	41,129	1.0	4.9	13.6	5.8	23.6	5.1	26.2	19.7	3.9
1994	859,626	6.2	49,895	1.0	5.6	13.6	5.7	23.9	5.3	26.1	18.8	3.7
1995	907,886	5.6	48,260	0.9	6.0	13.6	5.7	24.2	5.3	26.2	18.0	3.6
1996	954,183	5.1	46,297	0.8	6.3	13.5	5.7	24.1	5.3	26.8	17.4	3.5
1997	993,999	4.2	39,816	0.8	6.5	13.4	5.6	24.0	5.3	27.1	17.3	3.1
1998	1,023,480	3.0	29,461	0.8	6.7	13.0	5.7	23.8	5.4	27.4	17.2	3.8
1999	1,048,498	2.4	25,018	0.7	6.9	12.6	5.7	23.7	5.4	28.0	17.0	3.7
2000p	1,075,600	2.6	27,102	0.7	6.7	12.2	5.7	23.4	5.3	28.8	17.1	3.3

p = preliminary
na = not available

Source: Utah Department of Workforce Services, Workforce Information.

Utah Nonagricultural Payroll Employment by County and Major Industry: 1999

County	Mining	Construction	Manufacturing	Transportation, Communications & Public Utilities	Trade	Finance, Insurance & Real Estate	Services & Misc.	Government	1999 Total	1998 Total	1998-99 Percent Change
State Total	7,762	72,214	132,203	59,411	248,212	56,637	293,506	178,553	1,048,498	1,023,480	2.4%
Beaver	31	117	104	178	502	41	252	616	1,841	1,830	0.6%
Box Elder	32	1,028	8,417	443	3,531	382	1,976	2,286	18,095	18,945	-4.5%
Cache	2	2,374	10,185	1,022	7,819	984	8,941	9,844	41,171	40,238	2.3%
Carbon	925	334	416	524	2,257	181	2,274	2,298	9,209	9,178	0.3%
Daggett	0	29	2	37	46	0	103	220	437	409	6.8%
Davis	77	6,918	10,531	3,055	20,805	3,036	17,314	20,498	82,234	80,165	2.6%
Duchesne	448	245	169	473	977	104	557	1,630	4,603	4,793	-4.0%
Emery	839	306	24	638	483	45	429	899	3,663	3,792	-3.4%
Garfield	14	56	150	169	307	22	923	563	2,204	2,050	7.5%
Grand	71	388	62	114	1,547	85	1,274	782	4,323	4,056	6.6%
Iron	63	937	1,810	351	3,156	455	3,190	3,655	13,617	13,307	2.3%
Juab	56	115	331	23	715	34	584	622	2,480	2,468	0.5%
Kane	0	115	406	24	675	53	769	655	2,697	2,700	-0.1%
Millard	107	77	189	589	933	61	595	1,045	3,596	3,597	0.0%
Morgan	0	271	252	14	497	33	86	369	1,522	1,560	-2.4%
Piute	0	2	3	46	33	6	11	135	236	226	4.4%
Rich	0	36	7	11	100	39	150	204	547	530	3.2%
Salt Lake	2,781	34,639	58,841	41,430	126,119	40,134	151,608	75,777	531,329	519,238	2.3%
San Juan	363	318	223	211	697	42	948	1,531	4,333	4,230	2.4%
Sanpete	9	384	1,090	289	1,309	155	989	2,367	6,592	6,507	1.3%
Sevier	334	403	632	649	1,942	135	1,402	1,574	7,071	6,840	3.4%
Summit	76	1,222	639	387	4,466	1,056	4,786	1,926	14,558	14,348	1.5%
Tooele	41	696	1,488	1,275	1,936	275	1,786	3,340	10,837	10,604	2.2%
Uintah	1,232	523	242	524	2,100	167	2,131	1,839	8,758	8,523	2.8%
Utah	49	10,270	18,208	2,444	34,152	4,494	57,679	19,428	146,724	141,535	3.7%
Wasatch	11	641	321	166	1,380	115	1,128	924	4,686	4,104	14.2%
Washington	171	3,822	2,400	1,630	9,833	1,244	8,120	4,694	31,914	30,421	4.9%
Wayne	0	84	30	24	240	11	315	287	991	972	2.0%
Weber	30	5,864	15,031	2,671	19,655	3,248	23,186	18,545	88,230	86,314	2.2%

Source: Utah Department of Workforce Services.

Utah Nonagricultural Payroll Wages by County and Major Industry: 1999

County	Mining	Construction	Manufacturing	Transportation Communications & Public Utilities	Trade	Finance, Insurance & Real Estate	Services & Misc.	Government	1999 Total	1998 Total	1998-99 Percent Change
State Total	358,068,240	2,046,385,556	4,433,713,775	2,181,963,530	5,185,081,184	1,960,881,106	7,627,190,183	5,034,448,170	28,827,731,744	27,104,869,202	6.4%
Beaver	726,826	2,282,736	2,037,237	9,209,112	4,838,705	711,373	3,636,735	13,841,768	37,284,492	36,926,292	1.0%
Box Elder	982,288	27,089,131	358,470,555	12,613,419	57,946,399	8,697,906	32,028,231	58,260,330	556,088,259	587,127,895	-5.3%
Cache	16,260	53,068,994	275,304,971	28,578,421	103,647,188	23,968,810	169,499,546	225,955,067	880,039,257	817,582,697	7.6%
Carbon	54,085,910	9,784,553	12,262,474	22,570,943	36,087,435	3,915,088	43,741,438	49,613,657	232,061,498	226,683,001	2.4%
Daggett	0	851,986	26,400	1,026,175	406,953	0	2,259,998	6,015,171	10,586,683	8,985,695	17.8%
Davis	2,530,951	193,948,854	336,463,438	88,483,719	384,691,784	74,290,036	380,933,404	665,289,523	2,126,631,709	2,008,008,224	5.9%
Duchesne	17,472,138	5,163,334	4,935,200	15,622,336	13,215,571	1,865,880	8,667,477	34,814,618	101,756,554	106,713,331	-4.6%
Emery	41,046,325	10,379,786	521,179	33,593,184	4,554,568	814,338	7,384,461	21,565,244	119,859,085	120,264,744	-0.3%
Garfield	514,301	945,868	2,782,585	4,959,169	2,900,340	419,211	13,008,721	13,676,469	39,206,664	36,658,313	7.0%
Grand	2,717,897	9,815,509	795,602	4,199,394	20,699,921	1,378,496	22,340,322	20,026,720	81,973,861	72,853,788	12.5%
Iron	1,785,647	17,838,561	45,107,580	12,605,061	45,677,131	10,049,523	49,200,885	80,902,466	263,166,854	249,430,299	5.5%
Juab	1,663,860	2,097,960	11,169,163	555,998	7,924,362	757,421	13,455,606	11,606,716	49,231,086	47,644,169	3.3%
Kane	0	2,087,776	8,150,015	666,172	7,442,633	918,005	10,749,561	14,801,728	44,815,890	43,895,183	2.1%
Millard	4,177,691	1,320,508	4,686,733	29,324,486	9,806,892	1,188,889	10,902,382	24,938,447	86,346,028	85,180,145	1.4%
Morgan	0	6,586,665	8,300,136	483,777	11,103,942	699,614	1,202,821	8,190,120	36,567,075	36,446,159	0.3%
Piute	0	8,187	19,730	1,047,518	220,685	94,006	161,172	2,942,907	4,494,205	4,061,279	10.7%
Rich	0	542,594	104,696	292,740	993,076	403,107	1,528,500	4,253,206	8,117,919	7,807,200	4.0%
Salt Lake	143,163,011	1,099,456,863	2,063,201,755	1,563,346,208	3,176,610,203	1,524,831,284	4,274,568,414	2,307,110,659	16,152,288,397	15,160,255,193	6.5%
San Juan	11,595,677	8,472,947	5,718,605	4,231,377	11,477,218	714,170	14,083,133	36,673,878	92,967,005	87,495,528	6.3%
Sanpete	257,271	7,219,483	19,438,407	8,458,503	12,980,963	3,297,914	14,499,811	46,938,049	113,090,401	106,607,188	6.1%
Sevier	14,378,020	7,145,137	14,915,285	21,566,122	26,325,635	3,326,584	23,087,917	36,844,386	147,589,086	139,340,043	5.9%
Summit	3,778,465	33,576,464	23,468,662	10,924,213	74,721,024	36,828,723	117,454,065	47,925,782	348,677,398	332,819,546	4.8%
Tooele	2,693,501	19,572,078	51,185,804	57,831,867	26,318,908	6,062,681	45,286,748	111,843,336	320,794,923	313,025,846	2.5%
Uintah	46,496,598	12,000,642	4,336,541	18,663,311	33,009,739	3,385,569	35,956,805	47,363,502	201,212,707	194,403,604	3.5%
Utah	1,230,114	257,537,488	552,413,676	87,166,601	595,703,824	123,271,041	1,594,727,269	489,234,039	3,701,284,052	3,397,652,387	8.9%
Wasatch	206,755	14,249,238	8,000,785	5,023,647	19,952,772	2,531,368	21,813,616	23,192,517	94,970,698	78,062,427	21.7%
Washington	5,360,528	84,071,569	60,414,493	48,119,205	161,213,457	30,246,617	167,346,732	123,257,142	680,029,743	630,431,316	7.9%
Wayne	0	1,546,455	452,631	518,699	2,180,986	144,471	5,963,010	6,540,958	17,347,210	16,382,373	5.9%
Weber	1,188,206	157,724,190	559,029,437	90,282,153	332,428,870	96,068,981	541,701,403	500,829,765	2,279,253,005	2,152,125,337	5.9%

Note: Totals differ in this table from other tables due to different release dates or data sources.

Source: Utah Department of Workforce Services.

Utah Average Monthly Wage by Industry

Industry	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total Nonagricultural Jobs	1,501	1,549	1,585	1,644	1,710	1,801	1,823	1,867	1,936	2,016	2,114	2,207	2,291
Mining	2,708	2,820	2,905	2,976	3,002	3,217	3,283	3,318	3,484	3,662	3,796	3,855	3,845
Construction	1,665	1,742	1,799	1,843	1,917	1,878	1,875	1,934	2,042	2,092	2,202	2,267	2,362
Manufacturing	1,896	1,968	2,009	2,066	2,125	2,246	2,250	2,302	2,384	2,509	2,618	2,699	2,795
Trans., Comm., & Pub. Util.	2,175	2,270	2,355	2,424	2,552	2,613	2,643	2,699	2,703	2,757	2,885	2,948	3,061
Trade	1,063	1,103	1,133	1,173	1,231	1,264	1,288	1,351	1,414	1,484	1,569	1,654	1,741
Finance, Ins., & Real Estate	1,641	1,702	1,760	1,818	1,907	2,092	2,177	2,169	2,303	2,467	2,648	2,873	2,885
Services	1,315	1,350	1,385	1,458	1,534	1,682	1,690	1,717	1,789	1,852	1,940	2,053	2,166
Government	1,597	1,625	1,663	1,735	1,805	1,891	1,922	1,983	2,054	2,140	2,223	2,292	2,350

Industry	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
Total Nonagricultural Jobs	3.2	2.3	3.7	4.0	5.3	1.2	2.4	3.7	4.1	4.8	4.4	3.8
Mining	4.1	3.0	2.4	0.9	7.2	2.1	1.1	5.0	5.1	3.7	1.6	-0.3
Construction	4.6	3.3	2.4	4.0	-2.0	-0.2	3.1	5.6	2.4	5.3	3.0	4.2
Manufacturing	3.8	2.1	2.8	2.9	5.7	0.2	2.3	3.6	5.2	4.3	3.1	3.5
Trans., Comm., & Pub. Util.	4.4	3.7	2.9	5.3	2.4	1.1	2.1	0.1	2.0	4.6	2.2	3.8
Trade	3.8	2.7	3.5	4.9	2.7	1.9	4.9	4.7	5.0	5.7	5.4	5.2
Finance, Ins., & Real Estate	3.7	3.4	3.3	4.9	9.7	4.1	-0.4	6.2	7.1	7.3	8.5	0.4
Services	2.7	2.6	5.3	5.2	9.6	0.5	1.6	4.2	3.5	4.8	5.8	5.5
Government	1.8	2.3	4.3	4.0	4.8	1.6	3.2	3.6	4.2	3.9	3.1	2.5

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

Utah Population, Labor Force, Nonagricultural Jobs and Wages

						Percentage change			
	1996	1997	1998	1999	2000p	96-97	97-98	98-99	99-00
Total Population	2,002,000	2,049,000	2,082,500	2,121,600	2,155,900	2.3	1.6	1.9	1.6
Civilian Labor Force	1,012,000	1,040,000	1,062,700	1,083,900	1,098,000	2.8	2.2	2.0	1.3
Employed Persons	976,800	1,007,700	1,022,800	1,043,400	1,062,000	3.2	1.5	2.0	1.8
Unemployed Persons	35,200	32,300	39,900	40,500	36,000	-8.2	23.5	1.5	-11.1
Unemployment Rate	3.5	3.1	3.8	3.7	3.3	-	-	-	-
U.S. Rate	5.4	4.9	4.5	4.2	4.1	-	-	-	-
Total Nonfarm Jobs	954,182	993,999	1,023,480	1,048,498	1,075,600	4.2	3.0	2.4	2.6
Mining	7,929	8,297	8,047	7,762	8,000	4.6	-3.0	-3.5	3.1
Construction	60,283	64,470	68,252	72,214	72,200	6.9	5.9	5.8	0.0
Manufacturing	129,177	132,853	133,405	132,203	131,000	2.8	0.4	-0.9	-0.9
Durable	86,433	88,305	87,937	88,171	-	2.2	-0.4	0.3	-
Nondurable	42,744	44,548	45,468	44,032	-	4.2	2.1	-3.2	-
Trans.,Comm.,Utilities	54,045	55,994	58,443	59,411	60,800	3.6	4.4	1.7	2.3
Trade	230,229	238,294	244,045	248,212	252,000	3.5	2.4	1.7	1.5
Wholesale	48,234	49,069	50,226	50,943	-	1.7	2.4	1.4	-
Retail	181,995	189,225	193,819	197,269	-	4.0	2.4	1.8	-
Finance,Insur.,Real Estate	50,539	52,577	55,265	56,637	57,300	4.0	5.1	2.5	1.2
Services	255,509	269,678	280,376	293,506	310,200	5.5	4.0	4.7	5.7
Government	166,471	171,836	175,647	178,553	184,100	3.2	2.2	1.7	3.1
Federal	30,937	31,296	30,849	31,162	-	1.2	-1.4	1.0	-
State	51,883	53,356	55,319	55,870	-	2.8	3.7	1.0	-
Local	83,651	87,184	89,479	91,521	-	4.2	2.6	2.3	-
Goods-producing	197,389	205,620	209,704	212,179	211,200	4.2	2.0	1.2	-0.5
Service-producing	756,793	788,379	813,776	836,319	864,400	4.2	3.2	2.8	3.4
Percent Svc.-producing	79.3%	79.3%	79.5%	79.8%	80.4%				
Total Nonag Wages (million	$23,089	$25,215	$27,105	$28,828	$31,080	9.2	7.6	6.4	7.8
Average Annual Wage	$24,198	$25,367	$26,483	$27,495	$28,896	4.8	4.4	3.8	5.1
Average Monthly Wage	$2,016	$2,114	$2,207	$2,291	$2,408	4.8	4.4	3.8	5.1

p = preliminary

Source: Utah Department of Workforce Services.

Table 28
Utah's Civilian Labor Force and Components by Planning District and County: 1999

District/County	Civilian Labor Force	Total Employed	Total Unemployed	Unemployment Rate
State Total	1,083,912	1,043,414	40,498	3.7
Bear River	63,491	61,393	2,098	3.3
Box Elder	18,470	17,612	858	4.6
Cache	44,065	42,860	1,205	2.7
Rich	956	921	35	3.7
Wasatch Front	708,795	683,275	25,520	3.6
North	220,679	211,942	8,738	4.0
Davis	117,954	113,871	4,083	3.5
Morgan	3,491	3,348	143	4.1
Weber	99,235	94,723	4,512	4.5
South	488,116	471,333	16,783	3.4
Salt Lake	476,322	460,196	16,126	3.4
Tooele	11,794	11,137	657	5.6
Mountainland	183,557	177,401	6,156	3.4
Summit	14,253	13,559	694	4.9
Utah	163,077	157,929	5,148	3.2
Wasatch	6,227	5,913	314	5.0
Central	26,908	25,578	1,330	4.9
Juab	3,594	3,416	178	5.0
Millard	4,463	4,263	200	4.5
Piute	537	504	33	6.1
Sanpete	8,827	8,342	485	5.5
Sevier	8,068	7,718	350	4.3
Wayne	1,419	1,335	84	5.9
Southwestern	60,281	57,947	2,334	3.9
Beaver	2,338	2,247	91	3.9
Garfield	2,698	2,474	224	8.3
Iron	14,883	14,336	547	3.7
Kane	2,695	2,588	107	4.0
Washington	37,667	36,302	1,365	3.6
Uintah Basin	16,960	15,619	1,341	7.9
Daggett	417	401	16	3.8
Duchesne	5,881	5,326	555	9.4
Uintah	10,662	9,892	770	7.2
Southeastern	23,921	22,202	1,719	7.2
Carbon	9,710	9,028	682	7.0
Emery	3,961	3,670	291	7.3
Grand	5,330	4,973	357	6.7
San Juan	4,920	4,531	389	7.9
Salt Lake-Ogden MSA	693,510	668,790	24,720	3.6

Note: Numbers have been left unrounded for convenience rather than to denote accuracy.

Source: Utah Department of Workforce Services, Workforce Information, 2/18/00.

Table 29
Utah's Largest Nonagricultural Employers: December 1999

Firm Name	Business	Approximate Employment
State of Utah	State Government	21,500
Brigham Young University	Higher Education	16,500
Hill Air Force Base	Military Installation	16,500
University of Utah (Incl. Hospital)	Higher Education	16,000
Convergys	Telemarketing	8,500
Granite School District	Public Education	8,000
Jordan School District	Public Education	8,000
Utah State University	Higher Education	6,500
Davis County School District	Public Education	6,500
Smith's Food King	Food Stores	6,500
U.S. Postal Service	Mail Distribution	6,000
Autoliv ASP (Morton Int'l)	Mfg. Vehicle Parts	5,500
Salt Lake County	Local Government	5,500
Wal-Mart Stores	Department Stores	5,500
Albertson's	Food Stores	5,000
Alpine School District	Public Education	5,000
Delta Airlines	Air Transportation	4,500
Novus (Discover Card)	Consumer Loans	4,500
Internal Revenue Service	Federal Government	4,000
LDS Hospital	Hospital	4,000
IHC Hospitals (partial)	Hospitals and Clinics	4,000
Salt Lake City School District	Public Education	4,000
ZCMI	Department Stores	4,000
United Parcel Service	Courier Service	3,500
Cordant Technologies (Thiokol Corp.)	Aerospace Equipment Mfg.	3,500
Weber County School District	Public Education	3,500
U.S. West Communications	Telephone Service/Communications	3,000
Icon Health & Fitness	Mfg. Exercise Equipment	3,000
Salt Lake Community College	Higher Education	3,000
Salt Lake City Corporation	Local Government	3,000
Novell	Computer Software	3,000
Zions First National Bank	Banking	2,500
K-Mart Corporation	Department Stores	2,500
Weber State University	Higher Education	2,500
Utah Valley Regional Medical Center	Hospital	2,500
J.C. Penney Company	Department Stores	2,500
Kelly Services	Temporary Employment Placement	2,500
Utah Valley State College	Higher Education	2,500
PacificCorp (Utah Power)	Electric Power Generation and Distrib	2,500
First Security Bank	Banking	2,500
Kennecott Minerals	Copper Mining and Smelting	2,500
McKay-Dee Hospital	Hospital	2,000
Nebo School District	Public Education	2,000
Provo City School District	Public Education	2,000
Super Target Stores	Department Stores	2,000
Primary Children's Medical Center	Hospital	2,000
Unibase Data Entry	Data Entry	2,000
Geneva Steel	Steel Manufacturing	2,000
Shopko Stores	Department Stores	2,000
Washington County School District	Public Education	2,000
Fred Meyer Stores	Department Stores	2,000
C R England & Sons	Trucking	2,000
RC Willey Home Furniture	Home Furnishings Stores	2,000
Macey's Inc.	Food Stores	2,000

Source: Utah Department of Workforce Services.

Table 30
Utah Employment and Job Opening Summary by Major Occupational Category

	Employment		Annual Average Job Openings				
	2000	2005	Total	Due to Growth	Due to Replacement	% Distribution 2000	% Change 2000-05
Total - All Categories	1,353,800	1,508,200	63,900	30,890	33,010	100.0	11.4
Managerial & Administrative	98,900	111,100	4,000	2,430	1,570	7.3	12.3
Professional & Paraprofessional	239,300	280,800	12,600	8,290	4,310	17.7	17.3
Technical	51,200	60,500	3,000	1,860	1,140	3.8	18.2
Sales & Related	199,000	228,600	12,100	5,940	6,160	14.7	14.9
Clerical & Administrative Support	203,100	220,700	7,800	3,520	4,280	15.0	8.7
Service	174,500	199,400	11,200	4,990	6,210	12.9	14.3
Agriculture, Forestry, & Fishing	40,300	43,600	1,900	660	1,240	3.0	8.2
Production, Operating, & Maintenance	347,500	363,500	11,300	3,200	8,100	25.7	4.6

Note: Totals differ in this table from other tables due to different release dates or data sources.

Source: Utah Department of Workforce Services, Economic Data Collection and Analysis, 10/2000.

Employment Status of Utah's Population, Class of Worker, and Reason for Unemployment

	1997		1998		1999			Percent Change	
	Number	Percent Distribution	Number	Percent Distribution	Number	Percent Distribution	U.S. Distribution	1997-98	1998-99
Employment Status of Civilian Noninstitutional Population									
Population Age 16 and Over	1,450,000	100.0	1,477,000	100.0	1,500,000	100.0	100.0	1.9	1.6
Civilian Labor Force	1,040,000	71.7	1,062,700	71.9	1,084,000	72.3	67.1	2.2	2.0
Participation Rate	71.7	--	71.9	--	72.3	--	--	0.3	
Total Employed Persons	1,007,700	69.5	1,022,800	69.2	1,043,000	69.5	64.3	1.5	2.0
Unemployed	32,300	2.2	39,900	2.7	40,000	2.7	2.8	23.5	0.3
Rate	3.1	--	3.8	--	3.7	--	4.2	--	--
Not in Labor Force	410,000	28.3	414,300	28.1	416,000	27.7	32.9	1.0	0.4
Class of Worker of Employed Persons									
Total Employed Persons	1,007,700	100.0	1,022,800	100.0	1,043,000	100.0	100.0	1.5	2.0
Total Nonagricultural Workers	984,300	97.7	998,200	97.6	1,024,200	98.2	97.5	1.4	2.6
Wage and Salaried	910,600	90.4	924,600	90.4	952,200	91.3	89.8	1.5	3.0
Self Employed, Private									
Household, Unpaid Family	73,700	7.3	73,600	7.2	72,000	6.9	7.6	-0.1	-2.2
Total Agricultural Workers	23,400	2.3	24,600	2.4	18,800	1.8	2.5	5.1	-23.6
Reason for Unemployment									
Total Unemployed Persons	32,300	100.0	39,900	100.0	40,000	100.0	100.0	23.5	0.3
Job Losers	9,300	28.8	13,500	33.8	12,000	30.0	44.6	45.2	-11.1
Job Leavers	6,500	20.1	6,900	17.3	7,500	18.8	13.3	6.2	8.7
Re-entrants	14,900	46.1	16,800	42.1	17,500	43.7	34.1	12.8	4.2
New Entrants	1,600	5.0	2,700	6.8	3,000	7.5	8.0	68.8	11.1

Note: Totals differ in this table from other tables due to different release dates or data sources.

Source: U.S. Bureau of Labor Statistics, Geographic Profile of Employment and Unemployment, 1997, 1998, 1999; unpublished tabulations.

Personal Income

Overview

Utah's 2000 total personal income of $53.1 billion is up 7.1% from the 1999 total.[1] This is slightly faster than the U.S. growth of 6.4%. Utah's 2000 per capita income is forecasted at $24,536, an increase of 5.4% over the 1999 estimate. Utah's 1999 per capita income ranks 41st among the states. It is 81.6% of the U.S. average, a significant improvement from 75.3% in 1989.

2000 Summary

Utah's 2000 total personal income (TPI) is forecasted at $53.1 billion, up 7.1% from the 1999 total, which increased 5.9% from the 1998 level. Utah's 2000 TPI grew slightly faster than the forecasted national TPI growth of 6.4%, which is up from the 1998-1999 growth of 5.4%. The relative strength of Utah's economy is reflected in these TPI growth comparisons.

Per capita personal income (PCI) is an area's annual total personal income divided by the total population as of July 1 of that year. Utah's 2000 PCI is $24,536, an increase of 5.4% over the 1999 estimate. From 1989 to 1999, Utah's percentage of the national PCI has increased over 6 points (from 75.3% to 81.6%).

Significant Issues

Composition of Total Personal Income. The largest single component of total personal income is "earnings by place of work." This portion consists of the total earnings from farm and non-farm industries, including contributions for social insurance. In 1999, Utahns' earnings by place of work reached $38.0 billion, representing 77% of TPI. Less than 10% of this figure was proprietors' income, while over 90% was wages, salaries, and other labor income. Non-farm earnings ($37.8 billion) was over 99% of total earnings; farm income comprised less than 1%. Private sector non-farm earnings accounted for 82% of non-farm earnings, while earnings from public (government) industries made up 18%. Although earnings from government employment have been declining as a share of Utah's total earnings, it is still relatively more important than the U.S. share (18% to 16%, respectively).

The other components of TPI are dividends, interest, rent (DIR), and transfer payments. In 1999, DIR amounted to $8.7 billion, and transfer payments were $5.0 billion. Some of the major differences between the economic compositions of Utah and the U.S. lie in these two parameters. Perhaps the most significant is that Utah transfer payments comprise a much smaller share of TPI than the national figure (10% versus 13%). DIR is also relatively smaller. Thus, Utahns must rely to a greater extent on earnings. The problem with this is that Utah's average wage is only 83.7% (in 1999) of the U.S. average. Due to these two factors, Utah's TPI is relatively lower than the national total personal income.

The industrial composition of Utah's TPI has changed in recent years. In 1980, prior to the last two recessions, goods-producing industries (mining, construction, manufacturing) generated over 30% of Utah's total earnings. By 1999 that share had dropped to 22%. Similarly, 23% of U.S. earnings are from goods-producing jobs.

Four major industry sectors generate over three-fourths of Utah's total earnings. Services is the leader, providing 28% of earnings; government (including military) pays 18%. Trade (wholesale plus retail) accounts for roughly 16% of Utah's total earnings, while manufacturing has slipped to 13%. Transportation/communications/utilities, construction, and finance/insurance/real estate are all between 7% and 8%, while mining and agriculture/agricultural services each generate 1% of earnings.

Per Capita Personal Income. Utah's 1999 per capita personal income of $23,288 ranked 41st among the 50 states and the District of Colombia, an improvement over the ranking of 42nd in 1998. During the 1970s, Utah's PCI ranged between 83% and 85% of the United States' PCI. However, from 1977 to 1989, this parameter dropped 10 percentage points--from 85.3% to 75.3%. From 1989 to 1997, gradual improvements in this comparison occurred. But the progress stopped there: 1998 and 1999 are just under 82%.

County Personal and Per Capita Income. Four of Utah's 29 counties posted double-digit 1998 to 1999 growth in total personal income, about the same as the 1997 and 1998 achievements. This rapid TPI county growth is generally tied to rapid increases in nonagricultural wages, which is the largest component of total personal income. On the other end of the scale, seven counties suffered TPI expansion one-half or less of the state rate. This typically occurs because of the slow growth of non-farm jobs.

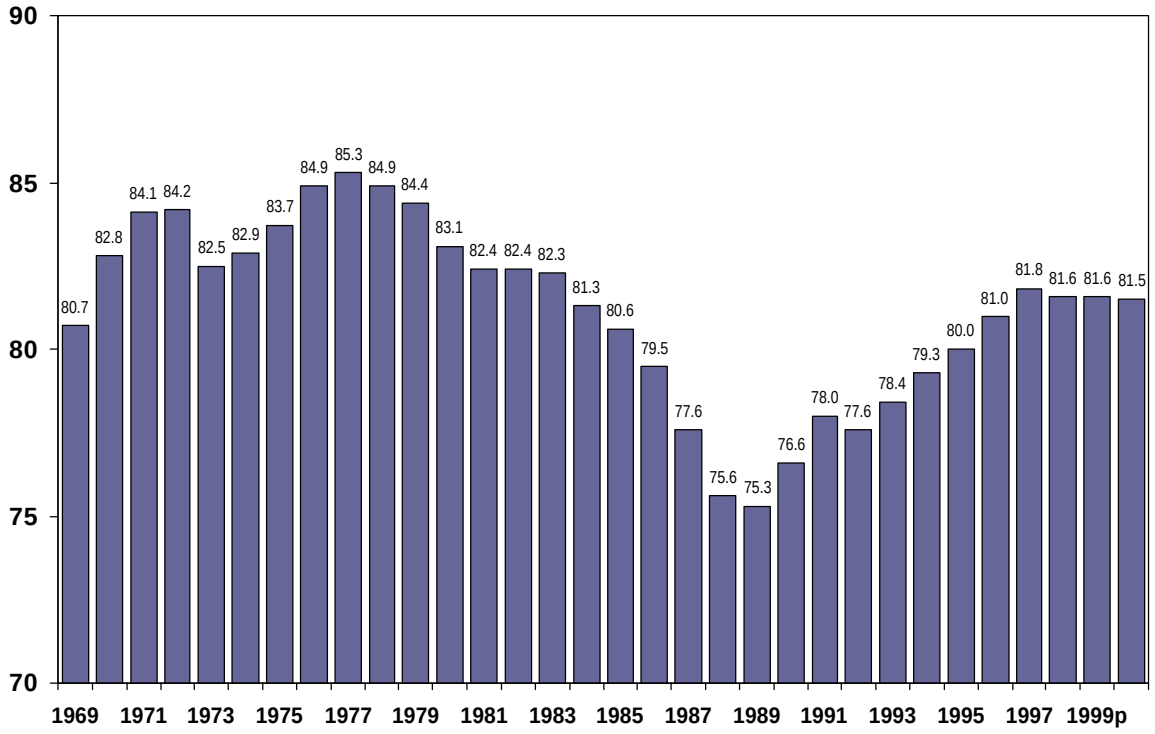
Only two counties, Summit and Salt Lake, have 1999 PCI estimates higher than the state average. Summit County's $39,900 is the highest in Utah, exceeding the state average by 71%. San Juan County's PCI estimate of $13,600 is the lowest among counties and only 58% of the state average. The 1999 per capita income of the United States, at $28,542, is higher than that of all of Utah's counties except Summit.

Conclusion

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

[1] Total Personal Income is defined as all income received by all residents of an area.

Figure 21
Utah Per Capita Personal Income as a Percent of U.S.



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

Components of Utah's Total Personal Income

Components	Millions of Dollars 1997(r)	1998(r)	1999(p)	Percentage Change 97-98	98-99	1999 Percentage Distribution Utah	U.S.	Industry Distribution Utah	U.S.
Personal income	$43,696	$46,831	$49,600	7.2	5.9	100.0	100.0		
Earnings by place of work	33,342	35,745	38,017	7.2	6.4	76.6	72.3		
less: Personal contrb. for social insurance	1,938	2,054	2,198	6.0	7.0	4.4	4.3		
plus: Adjustment for residence	19	23	30	23.0	31.5	0.1	0.0		
equals: Net earnings by place of residence	31,422	33,714	35,849	7.3	6.3	72.3	68.0		
plus: Dividends, interest, and rent	7,579	8,241	8,711	8.7	5.7	17.6	19.0		
plus: Transfer payments	4,695	4,875	5,040	3.8	3.4	10.2	13.1		
Components of earnings	33,342	35,745	38,017	7.2	6.4	76.6	72.3		
Wage and salary disbursements	26,653	28,610	30,451	7.3	6.4	61.4	57.4		
Other labor income	3,320	3,431	3,561	3.3	3.8	7.2	6.4		
Proprietors' income 8/	3,368	3,704	4,005	10.0	8.1	8.1	8.5		
Farm proprietors' income	89	142	168	59.2	18.2	0.3	0.3		
Nonfarm proprietors' income	3,279	3,562	3,837	8.6	7.7	7.7	8.2		
Earnings by industry	33,342	35,745	38,017	7.2	6.4	76.6	72.3	100.0	100.0
Farm earnings	185	240	264	29.9	10.1	0.5	0.6	0.7	0.8
Nonfarm earnings	33,157	35,505	37,753	7.1	6.3	76.1	71.8	99.3	99.2
Private earnings	26,942	28,981	30,924	7.6	6.7	62.3	60.3	81.3	83.4
Ag. services, forestry, fishing & other	127	140	154	9.8	9.9	0.3	0.5	0.4	0.7
Mining	437	432	418	-1.2	-3.3	0.8	0.6	1.1	0.8
Construction	2,512	2,746	3,006	9.3	9.4	6.1	4.2	7.9	5.8
Manufacturing	4,717	4,865	4,988	3.1	2.5	10.1	11.6	13.1	16.1
Durable goods	3,324	3,415	3,525	2.7	3.2	7.1	7.3	9.3	10.1
Nondurable goods	1,394	1,450	1,464	4.0	0.9	3.0	4.4	3.9	6.0
Transportation and public utilities	2,481	2,610	2,743	5.2	5.1	5.5	4.9	7.2	6.7
Wholesale trade	1,851	2,031	2,160	9.7	6.4	4.4	4.5	5.7	6.2
Retail trade	3,504	3,721	3,990	6.2	7.2	8.0	6.5	10.5	8.9
Finance, insurance, and real estate	2,506	2,798	2,931	11.6	4.8	5.9	6.6	7.7	9.1
Services	8,807	9,639	10,536	9.4	9.3	21.2	20.9	27.7	28.9
Government and government enterprises	6,215	6,524	6,829	5.0	4.7	13.8	11.5	18.0	15.8
Federal, civilian	1,661	1,699	1,787	2.3	5.2	3.6	2.3	4.7	3.2
Military	377	378	393	0.4	3.9	0.8	0.9	1.0	1.3
State and local	4,177	4,447	4,649	6.5	4.5	9.4	8.2	12.2	11.4
Population (thousands)	2,065	2,101	2,130	1.7	1.4				
Per capita personal income (dollars)	21,156	22,294	23,288	5.4	4.5				

r = revised
p= preliminary

Note: The source of the population estimates is the U.S. Bureau of the Census and differs slightly from Utah Population Estimates Committee numbers.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, September 2000.

Table 33
Personal and Per Capita Income--Utah and U.S.

	Total Personal Income (millions of dollars)		Annual Growth Rates		Per Capita Personal Income (dollars)		
Year	Utah	U.S.	Utah	U.S.	Utah	U.S.	Utah as % of U.S.
1960	$1,832	$409,617	6.9	4.4	$2,035	$2,276	89.4
1961	1,958	427,094	6.9	4.3	2,091	2,334	89.6
1962	2,137	454,486	9.1	6.4	2,230	2,447	91.1
1963	2,221	477,521	4.0	5.1	2,281	2,534	90.0
1964	2,334	511,831	5.1	7.2	2,386	2,679	89.1
1965	2,472	553,074	5.9	8.1	2,494	2,859	87.2
1966	2,629	601,119	6.3	8.7	2,605	3,075	84.7
1967	2,773	644,282	5.5	7.2	2,721	3,264	83.4
1968	2,984	707,542	7.6	9.8	2,900	3,550	81.7
1969	3,249	774,262	8.9	9.4	3,103	3,846	80.7
1970	3,614	834,455	11.2	7.8	3,391	4,095	82.8
1971	4,026	899,249	11.4	7.8	3,658	4,348	84.1
1972	4,514	988,362	12.1	9.9	3,979	4,723	84.2
1973	5,057	1,107,992	12.0	12.1	4,326	5,242	82.5
1974	5,686	1,220,181	12.4	10.1	4,743	5,720	82.9
1975	6,355	1,326,214	11.8	8.7	5,150	6,155	83.7
1976	7,302	1,469,752	14.9	10.8	5,739	6,756	84.9
1977	8,331	1,630,901	14.1	11.0	6,328	7,421	85.3
1978	9,606	1,841,340	15.3	12.9	7,041	8,291	84.9
1979	11,026	2,072,839	14.8	12.6	7,786	9,230	84.4
1980	12,464	2,313,921	13.0	11.6	8,464	10,183	83.1
1981	14,078	2,588,335	13.0	11.9	9,290	11,280	82.4
1982	15,282	2,756,954	8.5	6.5	9,807	11,901	82.4
1983	16,481	2,935,040	7.8	6.5	10,333	12,554	82.3
1984	18,223	3,260,064	10.6	11.1	11,233	13,824	81.3
1985	19,462	3,498,662	6.8	7.3	11,846	14,705	80.6
1986	20,367	3,697,359	4.6	5.7	12,248	15,397	79.5
1987	21,208	3,945,515	4.1	6.7	12,638	16,284	77.6
1988	22,225	4,255,000	4.8	7.8	13,156	17,403	75.6
1989	23,843	4,582,429	7.3	7.7	13,977	18,566	75.3
1990	25,939	4,885,525	8.8	6.6	14,996	19,584	76.6
1991	27,750	5,065,416	7.0	3.7	15,661	20,089	78.0
1992	29,788	5,376,622	7.3	6.1	16,354	21,082	77.6
1993	31,950	5,598,446	7.3	4.1	17,031	21,718	78.4
1994	34,579	5,878,362	8.2	5.0	17,912	22,581	79.3
1995	37,278	6,192,235	7.8	5.3	18,858	23,562	80.0
1996	40,354	6,538,103	8.3	5.6	19,955	24,651	81.0
1997	43,696	6,928,762	8.3	6.0	21,156	25,874	81.8
1998	46,831	7,383,687	7.2	6.6	22,294	27,322	81.6
1999(p)	49,600	7,783,152	5.9	5.4	23,288	28,542	81.6
2000(f)	53,100	8,281,000	7.1	6.4	24,536	30,124	81.5

p = preliminary
f = forecast

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

Table 34
Total Personal Income by District and County

	Millions of Dollars				Percentage Change		
	1996(r)	1997(p)	1998(f)	1999(f)	96-97	97-98	98-99
State Total	$40,354.1	$43,770.3	$46,717.0	$49,600.0	8.5	6.7	6.2
Bear River	2,168.4	2,331.2	2,484.6	2,534.0	7.5	6.6	2.0
Box Elder	779.3	837.0	895.6	837.8	7.4	7.0	-6.4
Cache	1,363.1	1,466.0	1,560.2	1,666.1	7.5	6.4	6.8
Rich	25.9	28.2	28.8	30.0	8.6	2.4	4.1
Wasatch Front	27,664.5	30,014.2	31,946.1	33,880.5	8.5	6.4	6.1
North	8,030.4	8,688.4	9,256.7	9,692.6	8.2	6.5	4.7
Davis	4,280.0	4,693.1	5,046.5	5,250.3	9.7	7.5	4.0
Morgan	117.3	125.6	134.1	129.7	7.1	6.8	-3.2
Weber	3,633.1	3,869.8	4,076.2	4,312.6	6.5	5.3	5.8
South	19,634.2	21,325.8	22,689.4	24,187.9	8.6	6.4	6.6
Salt Lake	19,130.2	20,771.9	22,078.7	23,568.1	8.6	6.3	6.7
Tooele	503.9	554.0	610.7	619.8	9.9	10.2	1.5
Mountainland	6,365.2	6,890.2	7,447.0	8,111.9	8.2	8.1	8.9
Summit	850.4	972.7	1,062.4	1,104.9	14.4	9.2	4.0
Utah	5,285.3	5,661.8	6,103.2	6,668.0	7.1	7.8	9.3
Wasatch	229.5	255.6	281.4	339.0	11.4	10.1	20.5
Central	865.0	917.8	973.0	1,013.4	6.1	6.0	4.1
Juab	101.3	107.2	113.1	119.7	5.9	5.5	5.8
Millard	180.9	185.3	193.2	189.2	2.4	4.3	-2.1
Piute	18.8	18.9	20.3	22.7	0.7	7.5	11.8
Sanpete	264.2	281.7	302.0	320.4	6.6	7.2	6.1
Sevier	265.4	287.8	303.7	319.1	8.4	5.5	5.1
Wayne	34.5	36.9	40.6	42.3	6.8	10.2	4.2
Southwestern	1,929.6	2,137.5	2,310.2	2,464.1	10.8	8.1	6.7
Beaver	84.3	92.3	98.6	97.4	9.5	6.8	-1.2
Garfield	66.7	72.3	75.5	80.0	8.4	4.4	6.0
Iron	404.0	457.8	491.8	515.6	13.3	7.4	4.8
Kane	107.2	118.8	128.1	133.6	10.9	7.8	4.3
Washington	1,267.5	1,396.3	1,516.2	1,637.5	10.2	8.6	8.0
Uintah Basin	538.8	596.3	627.5	631.4	10.7	5.2	0.6
Daggett	12.3	12.4	12.8	14.7	0.5	3.5	15.0
Duchesne	201.7	223.1	236.6	226.0	10.6	6.0	-4.5
Uintah	324.8	360.9	378.1	390.7	11.1	4.8	3.3
Southeastern	822.6	883.1	928.6	964.8	7.4	5.2	3.9
Carbon	376.1	403.4	418.9	430.1	7.2	3.9	2.7
Emery	158.7	173.1	179.3	173.7	9.1	3.6	-3.1
Grand	135.0	145.3	157.4	175.4	7.6	8.3	11.4
San Juan	152.8	161.4	173.0	185.6	5.6	7.2	7.3
Salt Lake - Ogden MSA	27,043.3	29,334.7	31,201.3	33,130.9	8.5	6.4	6.2
U.S. percentage change					6.0	6.6	5.4

r = revised
p = preliminary
f = forecast

* Totals differ in this table from other tables due to different release dates or data sources.

Sources: 1996-1998: U.S. Dept. of Commerce, BEA, June 2000.
1999: Utah Department of Workforce Services, LMI, November 2000.

Table 35
Per Capita Income by District and County

County/MCD	1996(r)	1997(r)	1998(p)	1999(f)	Percentage Change 96-97	97-98	98-99	1999 Percent of State Average
State Total	$19,955	$21,192	$22,240	$23,288	6.2	4.9	4.7	100
Bear River	17,157	18,114	18,964	19,200	5.6	4.7	1.2	82
Box Elder	19,445	20,378	21,359	19,600	4.8	4.8	-8.2	84
Cache	16,140	17,086	17,887	19,100	5.9	4.7	6.8	82
Rich	14,008	15,480	15,526	15,700	10.5	0.3	1.1	67
Wasatch Front	21,856	23,277	24,502	25,700	6.5	5.3	4.9	110
North	19,692	20,873	21,810	22,400	6.0	4.5	2.7	96
Davis	19,320	20,668	21,603	21,900	7.0	4.5	1.4	94
Morgan	17,251	18,183	19,066	18,000	5.4	4.9	-5.6	77
Weber	20,244	21,229	22,178	23,300	4.9	4.5	5.1	100
South	22,884	24,423	25,801	27,300	6.7	5.6	5.8	117
Salt Lake	23,108	24,679	26,100	27,700	6.8	5.8	6.1	119
Tooele	16,739	17,585	18,244	17,300	5.1	3.7	-5.2	74
Mountainland	17,783	18,733	19,599	20,900	5.3	4.6	6.6	90
Summit	34,718	37,916	39,645	39,900	9.2	4.6	0.6	171
Utah	16,456	17,189	17,956	19,200	4.5	4.5	6.9	82
Wasatch	18,686	20,025	21,199	24,600	7.2	5.9	16.0	106
Central	14,234	14,752	15,282	15,600	3.6	3.6	2.1	67
Juab	14,375	14,777	14,883	15,400	2.8	0.7	3.5	66
Millard	14,855	15,096	15,734	15,200	1.6	4.2	-3.4	65
Piute	13,116	13,485	14,428	15,300	2.8	7.0	6.0	66
Sanpete	13,105	13,508	13,989	14,500	3.1	3.6	3.7	62
Sevier	15,094	15,958	16,474	17,100	5.7	3.2	3.8	73
Wayne	14,517	15,412	17,231	17,700	6.2	11.8	2.7	76
Southwestern	16,246	17,331	18,124	18,800	6.7	4.6	3.7	81
Beaver	14,798	15,739	16,705	16,200	6.4	6.1	-3.0	70
Garfield	16,075	17,188	17,589	18,700	6.9	2.3	6.3	80
Iron	14,970	16,480	17,090	17,500	10.1	3.7	2.4	75
Kane	17,826	19,554	20,600	21,700	9.7	5.3	5.3	93
Washington	16,693	17,584	18,428	19,200	5.3	4.8	4.2	82
Uintah Basin	13,573	14,746	15,353	15,200	8.6	4.1	-1.0	65
Daggett	16,107	16,537	17,734	20,500	2.7	7.2	15.6	88
Duchesne	14,401	15,644	16,301	15,300	8.6	4.2	-6.1	66
Uintah	13,030	14,190	14,749	15,000	8.9	3.9	1.7	64
Southeastern	15,545	16,519	17,278	18,000	6.3	4.6	4.2	77
Carbon	18,157	19,293	19,930	20,600	6.3	3.3	3.4	88
Emery	14,895	15,877	16,276	15,700	6.6	2.5	-3.5	67
Grand	16,799	17,933	19,505	21,400	6.8	8.8	9.7	92
San Juan	11,306	11,910	12,685	13,600	5.3	6.5	7.2	58
Salt Lake - Ogden MSA	22,007	23,448	24,698	26,000	6.5	5.3	5.3	112
United States	24,651	25,874	27,322	28,542	5.0	5.6	4.5	123

r = revised
p = preliminary
f = forecast

Sources: 1996-1998: U.S. Dept. of Commerce, BEA, June 2000.
1999: Utah Department of Workforce Services, LMI, November 2000.

Gross State Product

Overview

Gross State Product (GSP) is the market value of final goods and services produced in a state. It is the regional counterpart to the national Gross Domestic Product (GDP). Conceptually, GSP is gross output less intermediate inputs. The Bureau of Economic Analysis (BEA) has recently released estimates for 1998, showing Utah's real GSP to be $58,076 billion.

Estimates of Real and Nominal GSP

GSP is a measure of production, as distinguished from income or spending. It is the sum of the value added by each industry in the state's economy and is expressed in dollars. Changes in nominal (current dollar) GSP from one year to the next result from quantity changes in production and product price changes. BEA attempts to separate these by calculating real (constant dollar) GSP, which theoretically holds prices constant.

Changes in real gross product for an industry reflect changes in the quantity of output, not the price of the product in the market. In order to calculate real GSP, price indices are constructed to account for the inflationary or deflationary prices. There are alternative approaches to the construction of price indices, and these have significant implications for the measurement of prices and quantity over time. When price indices are used to adjust current dollar GSP, the result is real GSP.

BEA has historically used a fixed weight approach to calculate real GSP. Observed relative prices in a base year are assumed constant over time. This introduces what is called "substitution bias," and tends to understate real growth in rapidly growing industries and overstate it in slower growth industries.

An alternative is a chain-type index that reduces substitution bias but introduces additional complexities in interpretation and use.[1] The most recent BEA estimates include current dollar GSP, and real GSP measured in chained 1996 dollars. But because of the problems mentioned earlier, real GSP measured in fixed weight 1996 dollars has not been included in the measurement.

Current Dollar GSP

Utah's current dollar GSP is estimated by BEA to be $56.062 billion in 1997 and $59.624 billion in 1998.

Real GSP

Utah's real GSP (measured in chain-weighted 1996 dollars) has been increasing since 1986. BEA estimates real GSP for Utah to be $55.137 billion in 1997 and $58.076 billion in 1998.

GSP Trends

For years, the growth in Utah's GSP has surpassed that of the nation. In fact, Utah experienced the fastest GSP growth rate of any state in the nation from 1994 to 1998. Utah ranked number one in the nation with a four-year growth rate of 28.2%, compared to the national average of 14.7%. This trend continues when considering a longer time span. In the period from 1979 to 1998 Utah ranked 7th in the nation in GSP growth. In that twenty-year period Utah experienced a 91.6% change in GSP, compared to 55.6% growth nationally.[2]

Significant Issues

In June of 1999 the Bureau of Economic Analysis made several major improvements in the way it estimates GSP. The revisions were centered in the manufacturing and financial service industries. As a result, 1996 manufacturing gross product was revised upward 13% for Utah, and the state as a whole is more productive than previously estimated.

Another important change in GSP has to do with a 1999 reclassification of how GDP, or Gross Domestic Product is calculated. Before the reclassification, software purchases were counted as an expense; they are now classified as an investment. Expenses are not included in the figuring of GDP, but investments are. Consequently, software sales, which are growing much faster than the economy as a whole, are now factored into the GDP figures.

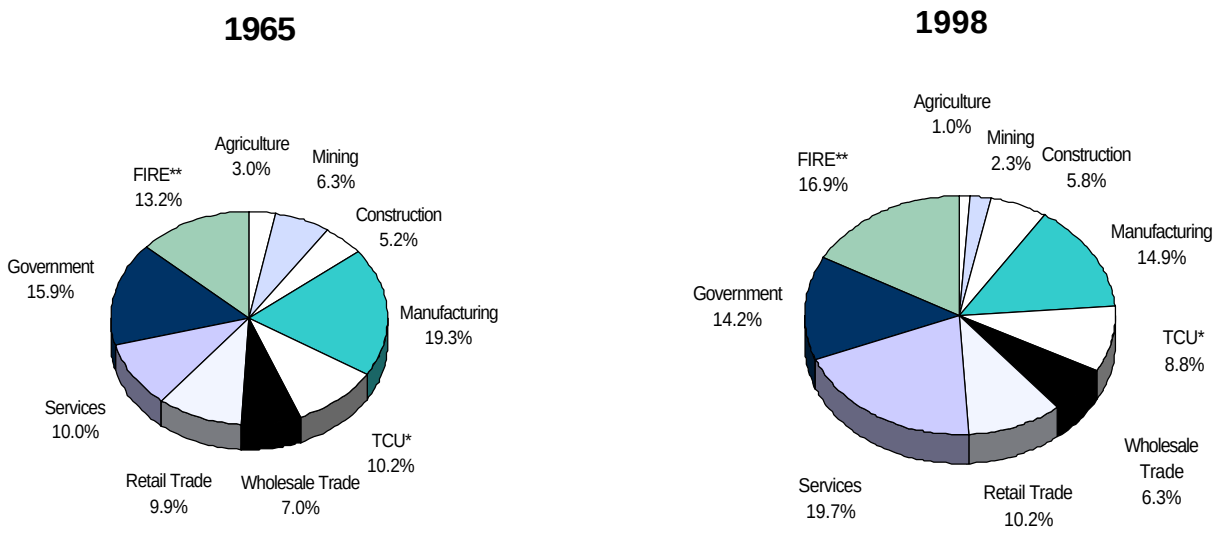
Conclusion

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

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

[2] Kathleen O'Leary Morgan and Scott E. Morgan, "Gross State Product," State Statistical Trends, Volume 3, Number 4 (October 2000): 13-17.

Figure 22
Utah Gross State Product--Percent Share by Industry

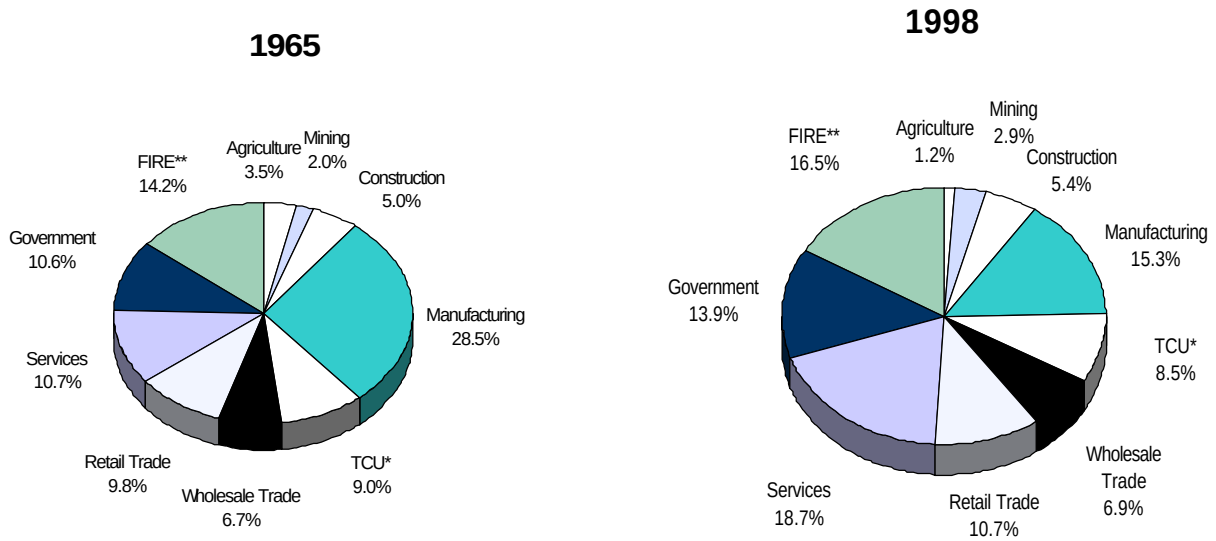


*Transportation, Communication and Utilities

**Finance, Insurance and Real Estate

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

Figure 23
U.S. Gross Domestic Product--Percent Share by Industry



*Transportation, Communication and Utilities

**Finance, Insurance and Real Estate

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

Table 36
Utah Gross State Product by Industry (Millions of Current Dollars): Selected Years

Industry	1986	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Gross State Product	24,453	31,325	33,626	35,632	38,407	42,295	46,424	51,631	56,062	59,624
Private Industries	20,214	25,750	27,615	29,333	31,820	35,445	39,141	43,998	47,992	51,139
Agriculture, forestry, and fisheries	336	469	442	504	539	497	478	525	558	585
Farms	278	394	358	407	427	380	346	372	390	404
Agricultural services, forestry and fisheries	58	75	84	97	112	117	132	153	168	180
Mining	1,001	1,534	1,363	1,211	1,362	1,414	1,544	1,599	1,584	1,352
Metal mining	142	382	382	370	500	541	694	611	537	289
Coal mining	255	210	256	247	245	255	256	326	254	273
Oil and Gas	583	858	639	536	598	588	559	627	748	722
Nonmetalic minerals	22	84	86	59	19	30	36	35	45	68
Construction	1,271	1,268	1,429	1,560	1,775	2,237	2,579	2,911	3,200	3,436
Manufacturing	3,472	4,638	5,050	5,114	5,247	5,915	6,681	8,115	8,610	8,863
Durable goods	2,382	3,216	3,413	3,350	3,327	3,826	4,434	5,186	5,495	5,660
Lumber and wood	73	146	149	107	134	173	176	186	195	192
Furniture and fixtures	73	80	98	97	105	126	133	152	173	195
Stone, clay, and glass products	199	129	115	141	148	190	226	234	267	311
Primary metals	95	508	570	428	525	616	720	661	663	655
Fabricated metals	210	294	291	325	345	408	425	478	521	568
Industrial machinery	749	446	419	444	418	399	570	1,306	1,379	1,483
Electronic equipment	287	400	418	436	279	385	341	348	363	333
Motor vehicles	47	129	151	214	318	425	639	495	527	529
Other transportation equipment	500	696	730	698	577	594	586	591	652	629
Instruments and related	59	199	257	263	232	222	312	362	355	372
Misc. manufacturing services	91	188	215	197	247	287	305	374	401	393
Electronic equipment + instruments	345	599	675	699	510	607	653	709	717	704
Nondurable goods	1,090	1,423	1,637	1,764	1,920	2,089	2,247	2,929	3,114	3,202
Food & kindred products	381	384	477	525	516	490	576	597	666	649
Tobacco products	0	0	0	0	0	0	0	0	0	0
Textile mill products	3	25	24	15	16	16	20	16	14	20
Apparel and other textile products	81	66	71	94	88	88	74	79	70	67
Paper products	62	91	89	83	156	212	228	301	296	322
Printing and publishing	264	300	299	341	358	430	413	505	545	576
Chemicals	118	207	294	255	260	351	448	891	946	990
Petroleum products	137	253	285	358	426	388	346	359	381	368
Rubber & plastics	43	95	97	92	98	111	138	176	192	206
Leather products	1	1	2	2	3	2	5	4	4	4
Transportation, communications, and utilities	2,735	3,123	3,203	3,247	3,639	4,012	4,363	4,578	5,001	5,257
Transportation	1,047	1,393	1,434	1,530	1,711	1,880	2,036	2,139	2,389	2,544
Railroad transportation	277	216	241	263	236	256	272	266	273	240
Local and interurban	26	21	23	26	27	28	31	35	40	44
Trucking and warehousing	436	589	611	650	700	782	839	905	996	1,068
Water transportation	2	1	1	1	1	1	2	2	4	5
Transportation by air	233	479	464	484	621	707	784	812	953	1,049
Pipelines, except natural gas	29	17	17	19	23	23	20	19	18	22
Transportation services	45	70	77	86	103	82	89	101	107	116
Communications	612	689	714	744	826	904	995	1,064	1,188	1,275
Electric, gas, and sanitary	1,075	1,042	1,055	973	1,102	1,229	1,332	1,375	1,423	1,438
Wholesale trade	1,607	1,878	2,092	2,121	2,310	2,640	2,890	3,191	3,439	3,734
Retail trade	2,538	2,919	3,139	3,548	3,822	4,399	4,870	5,249	5,808	6,103
Finance, insurance, and real estate	3,395	4,111	4,520	4,989	5,437	5,906	6,660	7,941	9,007	10,062
Depository institutions	498	845	971	1,081	1,014	1,065	1,262	2,113	2,638	2,990
Nondepository institution	131	119	140	185	294	309	358	428	588	901
Security brokers	70	83	82	81	104	117	127	194	205	204
Insurance carriers	150	227	277	303	411	431	523	555	636	650
Insurance agents	103	175	201	207	238	281	306	335	344	339
Real estate	2,341	2,647	2,841	3,095	3,280	3,662	4,050	4,331	4,591	4,898
Holding and investment	103	15	8	37	97	41	34	(16)	5	80
Depository + Nondepository	629	964	1,111	1,266	1,308	1,373	1,620	2,541	3,226	3,891
Services	3,859	5,809	6,375	7,039	7,689	8,426	9,075	9,888	10,786	11,747
Hotels and lodging	190	240	268	284	311	334	357	397	453	503
Personal services	158	205	211	232	266	304	279	291	308	322
Business services	690	1,103	1,287	1,565	1,739	1,961	2,158	2,448	2,775	3,146
Auto repair and parking	253	315	326	352	385	445	506	546	592	652
Misc. repair services	99	124	115	116	128	141	156	168	174	192
Motion pictures	86	70	68	85	115	110	160	174	165	164
Amusement and recreation	134	185	208	250	239	268	303	348	393	429
Health services	1,007	1,623	1,800	1,996	2,149	2,268	2,380	2,587	2,746	2,902
Legal services	207	284	308	311	336	359	398	369	414	469
Educational services	224	328	355	352	378	422	434	449	476	496
Social services	56	99	115	131	157	174	192	220	250	275
Other services	276	614	652	700	777	879	986	1,088	1,209	1,334
Membership organizations	460	591	635	633	676	728	729	765	792	819
Private households	21	28	27	30	33	34	37	38	39	45
Business services + Other services	965	1,717	1,939	2,265	2,516	2,840	3,144	3,537	3,984	4,479
Government	4,239	5,575	6,011	6,299	6,587	6,849	7,283	7,634	8,070	8,485
Federal civilian	1,491	1,771	1,905	1,997	1,997	1,942	2,039	2,009	2,066	2,142
Federal military	368	439	466	485	476	473	476	502	503	510
State and local	2,380	3,365	3,639	3,817	4,113	4,434	4,769	5,123	5,500	5,833

Source: U.S. Bureau of Economic Analysis

Table 37
Utah Real Gross State Product by Industry (Millions of Chained 1996 Dollars): Selected Years

Industry	1986	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Gross State Product	32,384	36,293	37,742	39,006	40,976	44,040	47,105	51,631	55,137	58,076
Private Industries	26,023	29,297	30,653	31,846	33,757	36,765	39,623	43,998	47,255	50,025
Agriculture, forestry, and fisheries	421	502	515	587	610	572	538	525	617	671
Farms	342	417	419	484	498	456	405	372	457	508
Agricultural services, forestry and fisheries	85	90	101	110	118	121	135	153	162	168
Mining	943	1,338	1,324	1,236	1,509	1,531	1,563	1,599	1,640	1,701
Metal mining	154	323	380	392	603	551	587	611	597	413
Coal mining	123	134	171	173	197	218	240	326	266	300
Oil and Gas	697	862	720	632	725	764	715	627	728	886
Nonmetalic minerals	25	87	88	61	20	31	35	35	43	66
Construction	1,681	1,482	1,651	1,808	1,991	2,415	2,662	2,911	3,071	3,157
Manufacturing	4,042	4,997	5,281	5,268	5,321	5,911	6,691	8,115	8,613	8,878
Durable goods	2,626	3,430	3,561	3,432	3,371	3,812	4,410	5,186	5,604	5,941
Lumber and wood	119	204	203	131	138	169	173	186	187	184
Furniture and fixtures	97	93	110	108	117	135	141	152	169	184
Stone, clay, and glass products	222	150	129	159	162	200	230	234	263	293
Primary metals	120	513	612	472	592	654	674	661	661	664
Fabricated metals	255	322	306	338	356	424	443	478	513	539
Industrial machinery	536	353	330	361	356	352	535	1,306	1,526	1,872
Electronic equipment	172	259	274	297	196	285	299	348	398	439
Motor vehicles	70	187	195	250	347	443	671	495	530	529
Other transportation equipment	656	871	859	772	620	625	607	591	644	609
Instruments and related	94	279	337	324	274	255	348	362	328	313
Misc. manufacturing services	114	217	234	207	252	292	314	374	394	375
Electronic equipment + instruments	307	541	600	621	454	551	645	709	723	740
Nondurable goods	1,425	1,565	1,719	1,835	1,950	2,099	2,279	2,929	3,012	2,953
Food & kindred products	506	437	513	552	549	501	633	597	639	604
Tobacco products	0	0	0	0	0	0	0	0	0	0
Textile mill products	3	25	24	15	16	17	21	16	14	19
Apparel and other textile products	91	71	73	95	87	88	76	79	70	65
Paper products	88	106	108	100	202	260	202	301	322	325
Printing and publishing	455	423	390	417	412	478	455	505	517	518
Chemicals	174	247	333	284	280	368	440	891	944	933
Petroleum products	126	183	198	267	296	291	321	359	312	294
Rubber & plastics	42	95	95	90	97	111	141	176	196	201
Leather products	1	1	2	2	3	3	5	4	4	4
Transportation, communications, and utilities	2,802	3,292	3,316	3,325	3,620	3,954	4,276	4,578	4,892	4,957
Transportation	1,005	1,389	1,414	1,520	1,650	1,825	1,948	2,139	2,322	2,313
Railroad transportation	205	198	229	254	225	243	262	266	270	225
Local and interurban	41	30	28	29	30	31	33	35	40	42
Trucking and warehousing	442	578	618	661	699	772	817	905	976	969
Water transportation	2	1	1	1	1	1	1	2	4	5
Transportation by air	228	495	444	474	571	675	729	812	908	934
Pipelines, except natural gas	29	18	19	21	25	24	18	19	19	23
Transportation services	62	75	78	84	101	80	88	101	104	115
Communications	632	722	743	768	843	904	995	1,064	1,174	1,265
Electric, gas, and sanitary	1,209	1,196	1,171	1,038	1,129	1,224	1,334	1,375	1,396	1,381
Wholesale trade	1,935	1,972	2,203	2,276	2,417	2,653	2,789	3,191	3,541	4,039
Retail trade	3,233	3,217	3,324	3,664	3,847	4,375	4,830	5,249	5,849	6,211
Finance, insurance, and real estate	5,071	5,148	5,403	5,711	6,038	6,369	6,901	7,941	8,630	9,557
Depository institutions	873	1,203	1,235	1,236	1,180	1,209	1,346	2,113	2,352	2,662
Nondepository institution	196	134	152	199	311	314	350	428	634	1,005
Security brokers	63	82	81	76	97	114	125	194	217	237
Insurance carriers	399	394	456	454	542	528	565	555	589	589
Insurance agents	242	286	326	297	289	320	324	335	328	311
Real estate	3,131	3,036	3,167	3,411	3,515	3,830	4,148	4,331	4,509	4,719
Holding and investment	203	28	15	54	138	59	42	(16)	4	54
Depository + Nondepository	1,079	1,325	1,377	1,430	1,495	1,525	1,699	2,541	2,974	3,609
Services	5,982	7,334	7,639	8,017	8,463	9,017	9,384	9,888	10,408	10,878
Hotels and lodging	279	286	300	311	329	344	363	397	425	420
Personal services	235	251	245	261	288	319	287	291	297	303
Business services	902	1,305	1,477	1,737	1,895	2,118	2,244	2,448	2,688	2,919
Auto repair and parking	377	387	382	396	416	466	512	546	570	604
Misc. repair services	162	179	157	143	145	156	169	168	165	169
Motion pictures	126	84	77	96	129	119	169	174	161	158
Amusement and recreation	196	228	243	285	264	286	314	348	381	402
Health services	1,827	2,185	2,256	2,338	2,383	2,401	2,441	2,587	2,672	2,735
Legal services	358	373	381	363	374	386	414	369	396	431
Educational services	358	418	427	405	422	455	456	449	457	455
Social services	88	125	136	147	172	186	200	220	240	249
Other services	432	787	794	788	860	945	1,013	1,088	1,167	1,251
Membership organizations	636	716	747	718	751	801	764	765	752	740
Private households	28	34	31	34	36	37	39	38	38	43
Business services + Other services	1,343	2,086	2,268	2,525	2,755	3,063	3,257	3,537	3,855	4,170
Government	6,425	7,054	7,133	7,195	7,241	7,285	7,487	7,634	7,883	8,057
Federal civilian	2,424	2,391	2,326	2,365	2,257	2,117	2,098	2,009	2,029	2,063
Federal military	492	534	546	529	519	512	505	502	493	492
State and local	3,546	4,147	4,272	4,314	4,473	4,660	4,884	5,123	5,361	5,501

Note: Real GSP data by industry for Utah is not available from the Bureau of Economic Analysis before 1986.

Source: U.S. Bureau of Economic Analysis

Gross Taxable Sales

Overview

In 2000, taxable sales will grow 7.3%. This is higher than 1998 taxable sales growth,[1] which rose 6.8% and betters 1999 growth of 4.7%. Following four years of 10% to 12% yearly growth rates, taxable sales slowed down a bit in 1997, rising less than 4%. Lower non-farm wage growth and declining construction values will slow down taxable sales to 5.7% growth in 2001. Taxable sales can be dissected into three major components:

1) Retail Trade at $17.5 billion, which represents about 54% of taxable sales, will grow 6% in 2000, slightly better than the two 5.3% gains in 1998 and 1999.

2) Taxable Business Investment and Utility Sales at $8.5 billion, represents 26% of taxable sales, rebounded from 1% growth in 1999 to nearly 8% in 2000.

3) Taxable Services, which will grow to $4.7 billion in 2000 and represent almost 15% of taxable sales, improved to 8% in 2000.

Retail Trade

Retail trade sales rose in double-digits four out of the five times between 1992 and 1996. An end to the economic boom came in 1997 when retail trade sales slowed down to a 3.3% growth rate. Retail trade sales growth improved to 5.3% in 1998 and 1999 and will grow 6% in 2000. Smaller gains in non-farm wages and salaries, in addition to lower construction values, translate into 5% retail trade growth in 2001.

Retail Durable Goods. Retail durable goods are classified vis-à-vis the general definition of items that last three years or more into three broad sectors: building and garden stores, furniture stores and motor vehicle dealers. The first two sectors are usually impacted by the change in the value of residential construction permits. A 2% decline in residential construction values in 2000 suggests that these two sectors would be soft. Building and garden store sales will drop 1% in 2000 and furniture store sales will rise only 2%. Expect weak sales here in 2001 especially if residential construction values continue to decline, especially if they decline 7%. In contrast, motor vehicle dealer sales are growing in line with non-farm wage growth - probably about 7% in 2000, slightly better than the near 7% gains in 1998 and 1999. New car dealer sales were particularly strong, increasing more than 10% in the first-three quarters of 2000. Non-gasoline, taxable sales at gasoline service stations were up 18% over the same period in 2000. Sales by boat, motorcycle and RV dealers were flat or slightly negative compared to 1999. Motor vehicle sales will slow to 6% in 2001.

Retail Nondurable Goods. Nondurable goods sold by retailers are classified into the following sectors: general merchandise, food, apparel, eating and drinking and miscellaneous shopping goods stores. At $11.2 billion in 2000, these nondurable retail sales represent about one third of all taxable sales. In 2000, nondurable retail sales should grow nearly 8%, in contrast to the 4% gain in durable goods sectors. General merchandise and eating and drinking store sales will grow about 8% in 2000. Food store sales, which typically grow less than average due to high competition and smaller price gains, will increase 5% in 2000. Apparel store sales will be up about 3%, following a flat 1999, possibly due to general merchandise store efforts to compete in this area. Miscellaneous shopping goods store sales will grow 12% in 2000. In the year 2001, the nondurable retail outlook for the sum of the above sectors will be 1% less than 2000, due primarily to lower non-farm wage growth. Falling construction values, which lower sales at furniture and building and garden stores, have a slightly positive impact on nondurable retail sales as consumers substitute hard goods for nondurables such as clothes, cameras and jewelry.

Business Investment and Utility Sales

This category includes taxable business to business (B2B) purchases of supplies and equipment and business to consumer (B2C) sales of utilities and some final sales at wholesale trade stores. In 2000, these sectors will comprise more than 26% of all taxable sales and include goods producing sectors of agriculture, mining and manufacturing, as well as service producing sectors like transportation, communication, public utilities and wholesale trade. In six out of eight years between 1991 and 1998 taxable sales in these sectors rose more than 10%. But, following the near 10% gain in 1998 they rose only 1.4% in 1999. Back-to-back 9% gains nationally in business fixed investment in 1999 and 2000 propelled business investment purchases in Utah to an 8% gain in 2000. Despite a fall-off in U.S. fixed investment in 2001, Utah's B2B taxable purchases are expected to rise nearly 9% in 2001. The 9% may be on the high side given the expected 7% decline in residential construction and a 15% drop in nonresidential construction values. What may propel Utah business to dodge the bullet would be the length of the lag between construction permit values and actual equipment purchases. Another positive development may well be the continued growth in B2B sales, which have outperformed forecaster expectations in the past five years. Also in the short-run, higher oil and natural gas prices have sent mining purchases up 77% in 2000 and electricity and (natural) gas sales up nearly 8%. The 30% colder weather will also keep utility bills up this winter. Finally on the positive side, sales of wireless communication devices and charges are still growing at double-digit rates.

Taxable Services

Taxable services, which rose at near break-neck speeds in the economic expansion between 1990 and 1996, slowed down to less than 4% growth in 1997. In 1998, taxable service growth went back on the fast track by growing almost 11%. But in 1999 slower tourist-related sales brought down taxable-services growth to less than 6%. Improving tourism and surges in B2B sales in the business service sector have turned up the growth in overall services to 8% in 2000. Growth here will fall back to the 6% range in 2001 as non-farm wage growth and B2B investment slide a percent or two. Preparation for the Olympics in 2001 will bolster this sector somewhat, especially in business and hotel services sectors.

Sales Forecast and Other Public Policy Issues

Several issues affect this very important tax base for Utah state and local governments. In some cases the impacts are not independent of each other. The manner in which these issues are resolved may affect how taxable sales are reported or if they are reported at all.

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

1. **Gasoline Price Increases.** Recent increases in the price of gasoline mean that an increasing share of consumer budgets have been spent on non-sales taxable gasoline instead of on taxable items. This assumes that gasoline purchases are inelastic in the short-run as consumers tend not to change commuting patterns very quickly. This may have shifted $196 million out of taxable sales to non-taxable sales in fiscal year 1999-2000, amounting to about $9 million less in state sales taxes. For FY 2000-2001, the shift will be about $236 million, costing the state about $11 million.

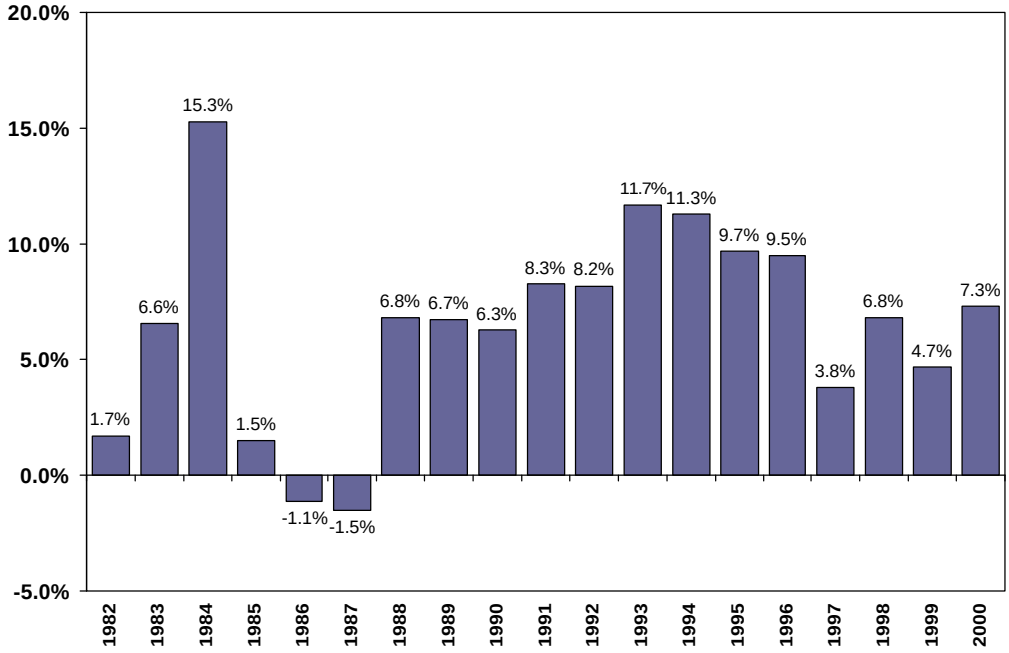
2. **Internet Sales.** Given the fact that surveys put Utahns in the top ten Internet users and PC purchasers, the inability to tax remote sales is a big issue with respect to the sales tax base. Dr. William Fox, et al. from University of Tennessee estimated last year that Internet sales would cost Utah about $85 million in state sales taxes by 2003. Based on that number, the current cost to Utah will be about 2% of sales taxes or about $30 million in fiscal year 2001. Recent estimates by other sources, including the U.S. Department of Commerce, led to reductions in the future growth rate of Internet sales to about of 1% (between $12 million and $21 million) for fiscal year 2001.[2]

3. **2002 Winter Olympics.** Preparation for the Olympics will bring in thousands of business people, from contractors to media people. They will be spending money on Utah goods and services in calendar year 2001 and may push up the forecast by about 0.5%.

4. **North American Industry Classification System (NAICS).** The President's Office of Management and Budget, as well as all federal government agencies, have adopted a new, updated classification system which parallels systems in Mexico and Canada. Reporting taxable sales under the NAICS system will be possible by late 2001. With over 150 new industry classifications, some of which are new technology driven sectors, the distribution of taxable sales under NAICS will give the reports better definition. Comparisons to the 1980s and 1990s will be difficult, if not impossible.

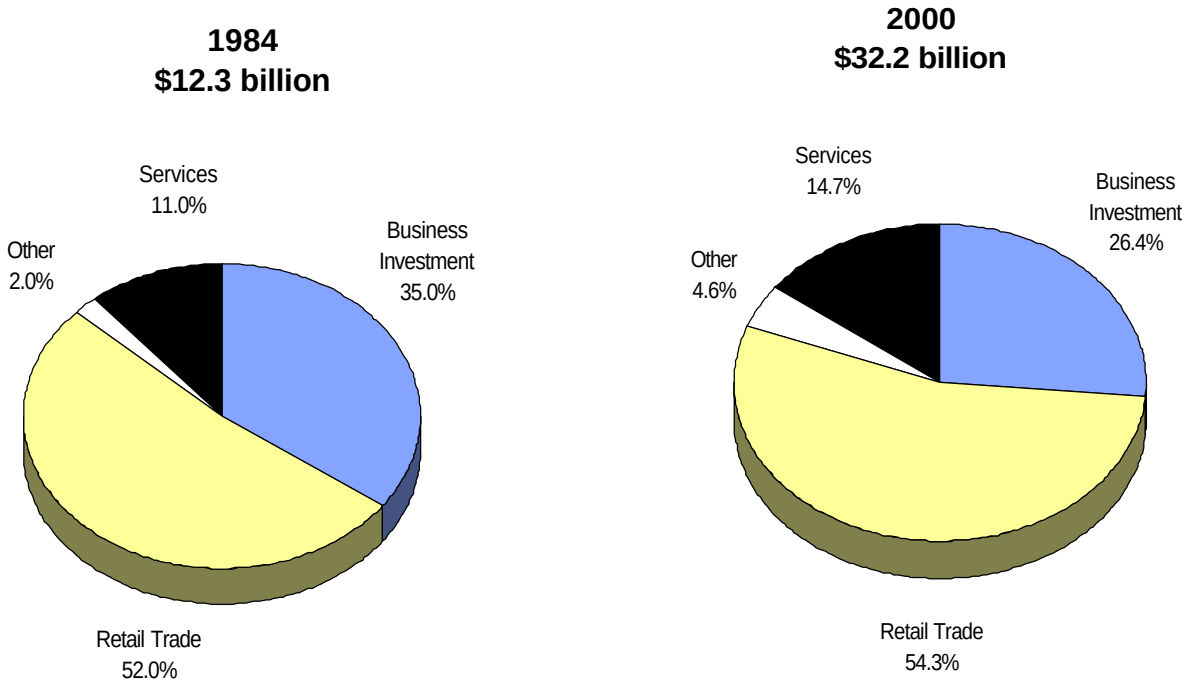
[2] Commerce reported that for the third quarter of 2000 Internet B2C retail sales amounted to 0.78% of total retail sales. Applying this rate to FY2001 taxable sales forecasts of $32.9 billion at 4.75% yields $12.2 million. Fox estimates that only 52.5% of this would be taxable, so the retail sales tax impact would be only $6.4 million. But since 30% of Fox's impact were B2B purchases, the FY2001 total taxable sales impact in Utah will range between $12.8 million ($6.4 million / .50) and $21.3 million ($6.4 million / .30).

Figure 24
Annual Percent Change in Gross Taxable Sales



Source: Utah State Tax Commission

Figure 25
Shares of Utah's Sales Tax Base--Four Major Sectors



Source: Utah State Tax Commission

Table 38
Utah Gross Taxable Sales by Component

Calendar Year	Retail Sales	Business Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1981	$4,901	$3,821	$919	$217	$9,857
1982	5,200	3,513	1,062	244	$10,020
1983	5,638	3,648	1,138	262	$10,686
1984	6,401	4,254	1,385	284	$12,324
1985	6,708	4,122	1,379	304	$12,513
1986	7,010	3,689	1,414	265	$12,378
1987	6,951	3,398	1,587	252	$12,188
1988	7,346	3,684	1,718	269	$13,017
1989	8,048	3,675	1,849	320	$13,892
1990	8,407	3,874	1,829	664	$14,774
1991	8,918	4,355	2,040	685	$15,998
1992	9,860	4,342	2,223	888	$17,313
1993	10,994	4,956	2,499	892	$19,341
1994	12,097	5,609	2,802	1,019	$21,527
1995	13,080	6,231	3,205	1,093	$23,609
1996	14,404	6,878	3,594	968	$25,844
1997	14,873	7,044	3,724	1,188	$26,829
1998	15,657	7,729	4,122	1,137	$28,646
1999	16,493	7,839	4,351	1,316	$29,999
2000(e)	17,490	8,501	4,716	1,473	$32,180

Calendar Year	Retail Sales	Business Investment Purchases	Taxable Services	All Other	Total Gross Taxable Sales
1982	6.1%	-8.0%	15.6%	12.6%	1.7%
1983	8.4%	3.8%	7.2%	7.4%	6.6%
1984	13.5%	16.6%	21.7%	8.5%	15.3%
1985	4.8%	-3.1%	-0.4%	7.0%	1.5%
1986	4.5%	-10.5%	2.5%	-12.7%	-1.1%
1987	-0.8%	-7.9%	12.3%	-5.0%	-1.5%
1988	5.7%	8.4%	8.2%	6.7%	6.8%
1989	9.6%	-0.2%	7.6%	18.8%	6.7%
1990	4.5%	5.4%	-1.1%	107.8%	6.3%
1991	6.1%	12.4%	11.6%	3.2%	8.3%
1992	10.6%	-0.3%	9.0%	29.6%	8.2%
1993	11.5%	14.1%	12.4%	0.5%	11.7%
1994	10.0%	13.2%	12.1%	14.2%	11.3%
1995	8.1%	11.1%	14.4%	7.2%	9.7%
1996	10.1%	10.4%	12.1%	-11.4%	9.5%
1997	3.3%	2.4%	3.6%	22.7%	3.8%
1998	5.3%	9.7%	10.7%	-4.2%	6.8%
1999	5.3%	1.4%	5.5%	15.7%	4.7%
2000(e)	6.0%	8.4%	8.4%	11.9%	7.3%

e= estimate

Source: Utah State Tax Commission

Gross Taxable Retail Sales and Annual Percent Change by Sector

	Dollar Amounts (Millions)											Avg. Annual Percent Change
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000(e)	1990-99
Retail Trade	8,407	8,918	9,860	10,994	12,097	13,080	14,404	14,874	15,657	16,494	17,490	
		6.1%	10.6%	11.5%	10.0%	8.1%	10.1%	3.3%	5.3%	5.3%	6.0%	7.8%
Nondurables	5,757	6,144	6,657	7,140	7,656	8,295	9,047	9,482	10,006	10,492	11,241	
		6.7%	8.3%	7.3%	7.2%	8.3%	9.1%	4.8%	5.5%	4.9%	7.1%	6.9%
General Merchandise	1362	1484	1619	1717	1816	2033	2256	2328	2463	2619	2829	
		9.0%	9.1%	6.1%	5.8%	12.0%	11.0%	3.2%	5.8%	6.3%	8.0%	7.5%
Apparel	415	452	506	581	591	614	665	693	757	760	783	
		8.9%	11.9%	14.8%	1.7%	3.9%	8.3%	4.2%	9.3%	0.4%	3.0%	7.0%
Food Stores	2161	2226	2374	2496	2677	2784	3050	3258	3381	3493	3657	
		3.0%	6.6%	5.1%	7.3%	4.0%	9.5%	6.8%	3.8%	3.3%	4.7%	5.5%
Eating and Drinking	861	935	1025	1140	1234	1349	1473	1554	1677	1815	1951	
		8.6%	9.6%	11.2%	8.2%	9.3%	9.2%	5.5%	7.9%	8.2%	7.5%	8.6%
Miscellaneous Shopping Goods	958	1047	1133	1206	1338	1515	1603	1649	1728	1805	2022	
		9.3%	8.2%	6.4%	10.9%	13.2%	5.8%	2.9%	4.8%	4.5%	12.0%	7.3%
Durables	2,650	2,774	3,203	3,854	4,441	4,785	5,357	5,392	5,651	6,002	6,249	
		4.7%	15.5%	20.3%	15.2%	7.7%	12.0%	0.7%	4.8%	6.2%	4.1%	9.5%
Motor Vehicles	1577	1591	1783	2140	2331	2431	2710	2775	2965	3175	3404	
		0.9%	12.1%	20.0%	8.9%	4.3%	11.5%	2.4%	6.8%	7.1%	7.2%	8.1%
Building & Garden	575	630	764	941	1160	1241	1337	1310	1351	1476	1464	
		9.6%	21.3%	23.2%	23.3%	7.0%	7.7%	-2.0%	3.1%	9.3%	-0.8%	11.0%
Furniture & Home Furnishings	498	553	656	773	950	1112	1310	1307	1335	1351	1381	
		11.0%	18.6%	17.8%	22.9%	17.1%	17.8%	-0.2%	2.1%	1.2%	2.2%	11.7%
Business Investment	3,874	4,355	4,342	4,956	5,609	6,231	6,878	7,044	7,730	7,839	8,501	
		12.4%	-0.3%	14.1%	13.2%	11.1%	10.4%	2.4%	9.7%	1.4%	8.4%	8.1%
Agriculture, Forestry & Fishing	10	10	13	23	19	13	17	26	22	27	29	
		0.0%	30.4%	72.9%	-17.4%	-31.6%	33.8%	48.3%	-13.2%	20.5%	7.0%	11.4%
Mining	150	186	153	142	149	176	174	245	259	180	319	
		24.0%	-17.7%	-7.2%	4.9%	18.1%	-0.9%	40.7%	5.6%	-30.5%	77.4%	2.0%
Construction	203	207	228	247	290	343	371	389	400	422	405	
		2.0%	10.1%	8.3%	17.4%	18.3%	8.1%	4.8%	3.0%	5.5%	-4.0%	8.5%
Manufacturing	889	936	1000	1083	1155	1368	1513	1464	1601	1540	1562	
		5.3%	6.8%	8.3%	6.6%	18.4%	10.6%	-3.2%	9.3%	-3.8%	1.4%	6.3%
Transportation, Comm. & Public Utilities	1351	1644	1407	1552	1657	1776	1935	2062	2291	2392	2670	
		21.7%	-14.4%	10.3%	6.8%	7.2%	8.9%	6.6%	11.1%	4.4%	11.6%	6.6%
Wholesale Trade	1271	1372	1541	1909	2339	2555	2869	2858	3157	3278	3516	
		7.9%	12.3%	23.9%	22.5%	9.2%	12.3%	-0.4%	10.5%	3.8%	7.3%	11.1%
Services	1,829	2,040	2,223	2,499	2,802	3,206	3,594	3,724	4,122	4,350	4,716	
		11.5%	9.0%	12.4%	12.1%	14.4%	12.1%	3.6%	10.7%	5.5%	8.4%	10.1%
Hotels & Lodging	307	351	373	400	423	473	528	557	551	556	586	
		14.3%	6.3%	7.2%	5.8%	11.8%	11.6%	5.5%	-1.1%	0.9%	5.4%	6.8%
Amusement & Recreation	194	228	256	303	378	451	495	544	572	650	704	
		17.5%	12.3%	18.4%	24.8%	19.4%	9.6%	9.9%	5.2%	13.6%	8.3%	14.4%
Personal	91	99	110	130	146	167	178	177	185	190	199	
		8.8%	11.1%	18.2%	12.3%	14.4%	6.5%	-0.2%	4.3%	2.7%	4.8%	8.5%
Health	76	68	77	85	84	91	90	92	88	86	90	
		-10.5%	13.2%	10.4%	-1.2%	8.0%	-1.2%	2.5%	-4.1%	-2.3%	4.7%	1.4%
Education, Legal & Social	111	126	137	144	160	175	194	167	195	207	230	
		13.5%	8.7%	5.1%	11.1%	9.6%	10.6%	-13.8%	16.7%	6.2%	11.1%	7.2%
Auto Rental & Repairs	525	572	601	677	763	901	1012	1073	1160	1169	1256	
		9.0%	5.1%	12.6%	12.7%	18.1%	12.2%	6.1%	8.1%	0.8%	7.4%	9.3%
Business	446	502	564	625	645	711	780	775	948	1042	1188	
		12.6%	12.4%	10.8%	3.2%	10.2%	9.7%	-0.6%	22.3%	9.9%	14.0%	9.9%
Finance Insurance & Real Estate	79	94	105	135	203	236	318	339	423	450	463	
		19.0%	11.7%	28.6%	50.4%	16.2%	34.9%	6.5%	24.9%	6.4%	2.9%	21.3%
All Other	664	685	888	892	1,019	1,092	968	1,188	1,137	1,316	1473	
		3.2%	29.6%	0.5%	14.2%	7.2%	-11.4%	22.7%	-4.2%	15.7%	12.0%	7.9%
Grand Total Taxable Sales	14,774	15,998	17,313	19,341	21,527	23,609	25,844	26,829	28,646	29,999	32,180	
		8.3%	8.2%	11.7%	11.3%	9.7%	9.5%	3.8%	6.8%	4.7%	7.3%	8.2%

e = estimate

Source: Utah State Tax Commission

Gross Taxable Sales by County

County	1994	1995	1996	1997	1998	1999	2000(e)	Avg. Growth 1994-1999
Beaver	34,626,306	36,412,579	41,936,668	45,761,964	54,028,444	56,796,599	59,699,000	10.4%
Box Elder	270,086,492	255,311,338	313,399,510	341,801,574	378,656,784	392,554,576	388,947,000	7.8%
Cache	592,265,682	643,424,439	700,827,166	738,962,198	815,747,488	877,516,245	904,095,000	8.2%
Carbon	243,379,366	246,727,509	270,180,228	302,766,134	350,262,447	344,787,306	344,562,000	7.2%
Daggett	16,367,912	8,026,924	9,433,030	8,931,045	10,152,206	11,083,920	12,747,000	-7.5%
Davis	1,628,953,240	1,792,686,798	1,948,114,497	2,082,404,482	2,333,000,552	2,501,488,171	2,614,189,000	9.0%
Duchesne	91,128,287	92,152,625	103,539,767	138,833,857	148,993,949	113,995,306	146,423,000	4.6%
Emery	68,117,764	59,567,320	63,933,988	85,273,673	108,296,650	86,178,899	78,904,000	4.8%
Garfield	46,588,854	53,989,631	59,463,916	64,208,586	67,964,766	71,530,129	74,457,000	9.0%
Grand	98,898,658	123,463,929	125,597,997	136,682,724	143,307,479	167,663,347	171,102,000	11.1%
Iron	269,104,272	296,098,117	328,599,441	334,517,242	358,583,543	403,990,858	418,870,000	8.5%
Juab	41,049,378	44,498,957	52,093,322	58,330,085	61,049,366	67,800,309	76,519,000	10.6%
Kane	68,713,093	79,603,840	85,348,929	91,571,511	92,767,501	99,972,386	110,048,000	7.8%
Millard	80,606,243	84,805,492	86,426,974	102,956,430	102,324,784	108,565,176	113,452,000	6.1%
Morgan	28,204,835	32,975,103	36,673,879	34,597,815	43,190,274	52,752,568	55,388,000	13.3%
Piute	4,153,237	5,737,337	5,549,494	4,647,900	5,197,828	5,556,641	5,875,000	6.0%
Rich	11,515,077	10,252,664	10,848,221	12,425,163	14,599,275	15,593,403	16,022,000	6.3%
Salt Lake	10,526,443,225	11,456,330,532	12,495,049,840	13,279,889,848	14,480,792,082	15,032,355,344	16,295,176,000	7.4%
San Juan	65,840,801	73,747,605	83,951,301	79,420,183	102,358,862	96,128,945	85,083,000	7.9%
Sanpete	84,773,473	93,422,662	101,273,513	109,374,363	117,860,224	125,822,688	136,788,000	8.2%
Sevier	155,308,506	167,792,163	171,174,291	179,499,588	247,516,691	212,472,805	220,332,000	6.5%
Summit	424,263,835	481,055,880	532,065,605	585,960,819	631,299,089	685,939,692	731,852,000	10.1%
Tooele	189,412,717	204,822,816	229,458,354	247,597,886	282,754,708	306,930,181	334,327,000	10.1%
Uintah	225,274,014	238,265,849	249,885,277	300,310,299	335,704,139	331,526,601	426,790,000	8.0%
Utah	2,485,729,203	2,729,006,721	3,018,664,563	3,263,562,889	3,670,050,662	3,938,892,458	4,243,572,000	9.6%
Wasatch	77,853,975	91,141,976	104,349,093	118,482,941	136,583,244	155,799,341	175,448,000	14.9%
Washington	790,641,230	876,072,647	954,639,002	994,050,920	1,066,865,802	1,159,452,168	1,230,880,000	8.0%
Wayne	14,979,670	17,293,540	17,770,582	18,566,025	22,689,627	23,000,106	24,370,000	9.0%
Weber	1,716,143,480	1,871,898,257	2,039,495,130	2,151,273,281	2,264,121,035	2,375,445,131	2,504,083,000	6.7%
Subtotal	20,350,422,825	22,166,585,250	24,239,743,578	25,912,661,425	28,446,719,501	29,821,591,299	32,000,000,000	7.9%
Out-of-State Use Tax	1,176,245,745	1,442,191,794	1,604,193,876	916,001,490	200,035,296	176,949,414	180,000,000	-31.5%
Grand Total	$21,526,668,570	$23,608,777,044	$25,843,937,454	$26,828,662,915	$28,646,754,797	$29,998,540,713	$32,180,000,000	6.9%

e = estimate

Source: Utah State Tax Commission.

Tax Collections

Overview

Utah experienced a strong year of revenue growth in fiscal year 2000. Tax collections are expected to remain healthy into fiscal year 2001, in part due to preparations for hosting the 2002 Winter Olympic Games. Current condition highlights include the following:

- General and School Fund revenues grew $314.1 million in fiscal year 2000, the largest inflation-adjusted revenue growth since fiscal year 1984.
- The explosive revenue growth in fiscal year 2000 was due to a $50 million inheritance tax windfall, exercised stock options, and strong growth in capital gains.
- Final income tax payments (non-withholding) grew $55.7 million in fiscal year 2000 after declining $7.6 million in the prior fiscal year.
- The year-end revenue surplus also exploded in fiscal year 2000 to $113.4 million, up from $7.4 million in fiscal year 1999, and well above the $41.4 million average for fiscal years 1983 to 2000.
- Fiscal year 2000 showed the strongest growth in tax collections over the past twenty years when revenues are adjusted not only for inflation, but also for windfalls, and tax rate and base changes.
- Income tax collections continued to surpass sales tax collections in fiscal year 2000 for the 3rd year in a row.
- Cumulative tax collections, excluding "bracket creep," are $1.173 billion lower than they would otherwise have been due to tax reductions authorized during the past seven legislative sessions.
- Inflation-adjusted General and School Fund revenues should increase moderately (by $166.0 million) in fiscal year 2001, due to moderate growth in sales, severance, corporate and individual income tax collections.

Inflation-Adjusted Revenue Growth

Combined General and School Fund revenues grew $314.1 million in fiscal year 2000. After adjusting for inflation, this is the largest single-year growth in revenue since 1984. Inflation-adjusted revenue growth in 1984 was $345.6 million. Fiscal year 1984 was a unique year of both tax increases and revenue windfalls. Collections that year included a one-time $61.5 million sales and severance tax acceleration of payments windfall, a sales tax rate increase from 4.0% to 4.6%, and a corporate tax rate increase from 4.0% to 5.0%.

Fiscal year 2000 revenue growth, like fiscal year 1984, included a sizable windfall. Unlike fiscal year 1984, however, it did not include any tax increases. Growth in fiscal year 2000 was due primarily to a $50 million windfall in the inheritance tax, exercised stock options, and strong growth in capital gains. This growth came after four years of declining revenue growth. Inflation-adjusted revenue growth dropped from $269.3 million in fiscal year 1995, to $133.6 million growth in fiscal year 1999. Since no major tax cut occurred in fiscal year 1999, most of the revenue decrease in growth that year was due to slower capital gains and economic activity.

Inflation-Adjusted Surpluses

The size of the inflation-adjusted General and School Fund year-end surplus also slowed from $65.5 million in fiscal year 1995 to $7.4 million in fiscal year 1999. This year-end surplus exploded to $113.4 million in fiscal year 2000 for reasons mentioned above. By comparison, year-end surpluses over the past eighteen years (fiscal year 1983 to fiscal year 2000) have averaged $41.4 million. For budgeting purposes, year-end surpluses are the beginning revenue balance for the start of the next fiscal year and are considered one-time money.

Windfall, Inflation, and Tax Rate and Base-Adjusted Revenue Growth

It is important to note that if revenues are adjusted not only for inflation, but also for windfalls and tax rate and base changes, fiscal year 2000 (and not fiscal year 1984) becomes the strongest year for revenue growth in the past twenty years. Inflation, windfall, and tax rate and base-adjusted revenue collections for fiscal years 1994 to 1998 came in above the average growth (of $157.9 million) for the past twenty years. These collections dropped below average in fiscal year 1999 (to $139.1 million), but sprung back strongly in fiscal year 2000 (to $264.9 million).

Since these revenues are adjusted for tax changes and windfalls, the underlying reason for this volatility is due to changes in income tax final payments. Final payments are all non-withholding income tax collections net of refunds. Final payments come from volatile capital gains, entrepreneurial profits, partnership income, and other income distributions. For example, actual final payments grew $44.8 million in fiscal year 1998, declined $7.6 million in fiscal year 1999, and then grew $55.7 million in fiscal year 2000. That is a swing in revenues of $63.3 million between fiscal years 1999 and 2000.

Income Tax Continues Its Preeminence

Income taxes were larger than sales taxes in fiscal year 2000 for the 3rd year in a row. Prior to fiscal year 1998, the sales tax made up the largest portion of state government's unrestricted revenues. In fiscal year 2000 income tax collections were 42.1% of total unrestricted revenue collections, whereas sales tax collections were only 34.9% of the total. Income taxes were only 34.4% of the total as recently as 1990 (when sales taxes were 37.8% of the total). This reversal in tax preeminence during the 1990s is due to sales tax rate reductions, stronger historic growth in sales tax-exempt services industries than in taxable goods industries, increased sales tax exemptions, income tax bracket creep, increased use of stock options, strong stock market capital gains realizations, and the transfer of unrestricted general fund monies to restricted accounts.

Tax Reductions

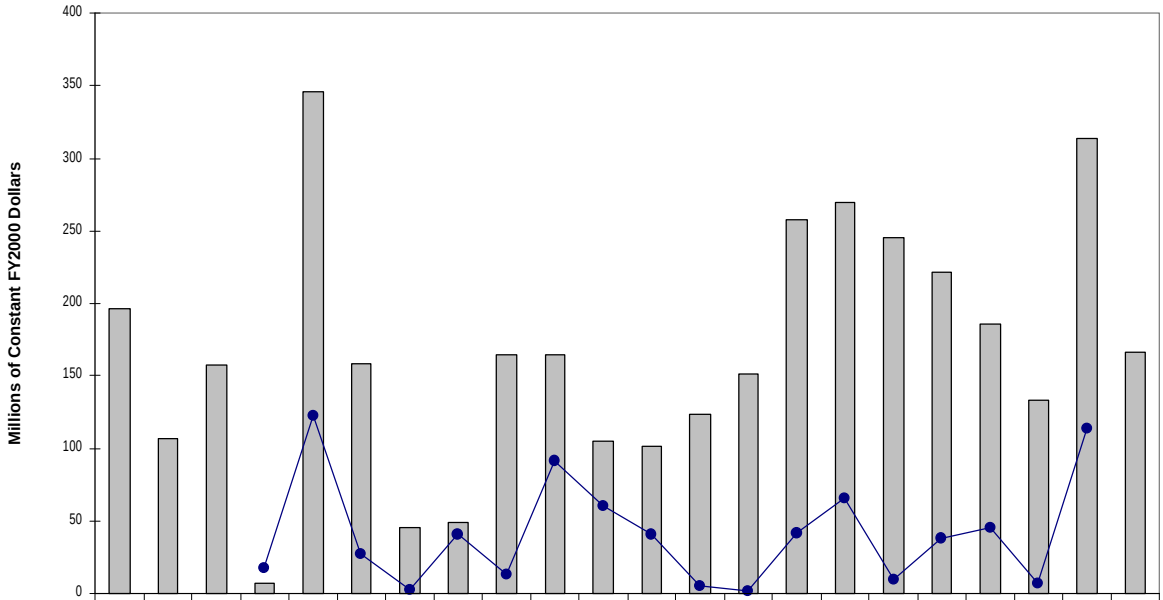
Tax collections in Utah experienced a net reduction of $219.9 million (on an annualized basis) due to statutory changes that occurred during the past seven legislative sessions. The cumulative reduction in taxes authorized in these sessions for fiscal year 1995 through fiscal year 2001 is $1.173 billion. Nonetheless, an individual taxpayer may actually be paying more in taxes now than six years ago. This is because non-state government taxes may have increased, and/or an individual's income, spending, or property values may have increased. More income or spending, or greater property values, can result in higher taxes even at lower tax rates. There were 576 taxing entities other than state government in Utah in 1999.

Bracket Creep. The net reduction in tax collections does not, however, account for income tax increases due to "bracket creep." Bracket creep has occurred in Utah since 1973 (the year in which the current brackets were established). Around $3.9 million per year is currently raised from income tax bracket creep. The cumulative "bracket creep" effect from fiscal year 1995 to fiscal year 2001 is a tax increase of $109.2 million. Thus, the net reduction in state government taxes over this period including "bracket creep" is $1.064 billion. Tax increases due to "bracket creep" have been lessened in the 1990's due to lower inflation (than in the 1970's and 1980's) and because most taxpayers (62.3 percent) have "creeped" into the top income tax bracket.

Fiscal Year 2001 Outlook

Inflation-adjusted General and School Fund revenues should increase moderately (by $166.0 million) in fiscal year 2001, due to moderate growth in sales, severance, corporate and individual income tax collections. Corporate tax collections declined in fiscal year 2000 (due to high refunds) but are expected to rebound in fiscal year 2001 due to healthy growth in profits. General and School Fund revenue growth in fiscal year 2001 will surpass the inflation-adjusted $157.9 million average growth over the last twenty years.

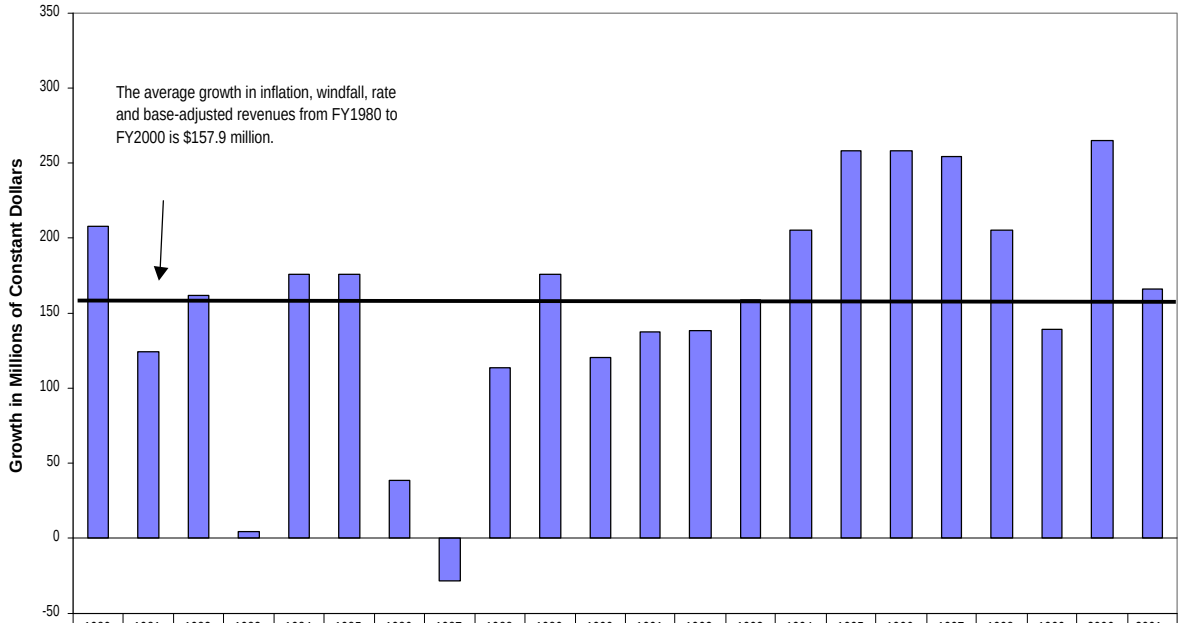
Figure 26
Inflation-Adjusted Revenue Growth and Surpluses for Combined General and School Fund Revenues



	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001e
Growth	196.7	106.3	157.0	7.1	345.6	158.1	45.6	48.8	164.6	164.6	105.1	101.0	123.6	151.5	258.2	269.3	245.0	221.1	185.9	133.6	314.1	166.0
Surplus	NA	NA	NA	18.1	122.7	27.6	2.6	40.4	13.1	91.2	60.4	40.8	5.7	2.0	41.6	65.5	9.7	38.4	45.3	7.4	113.4	NA

Fiscal Years

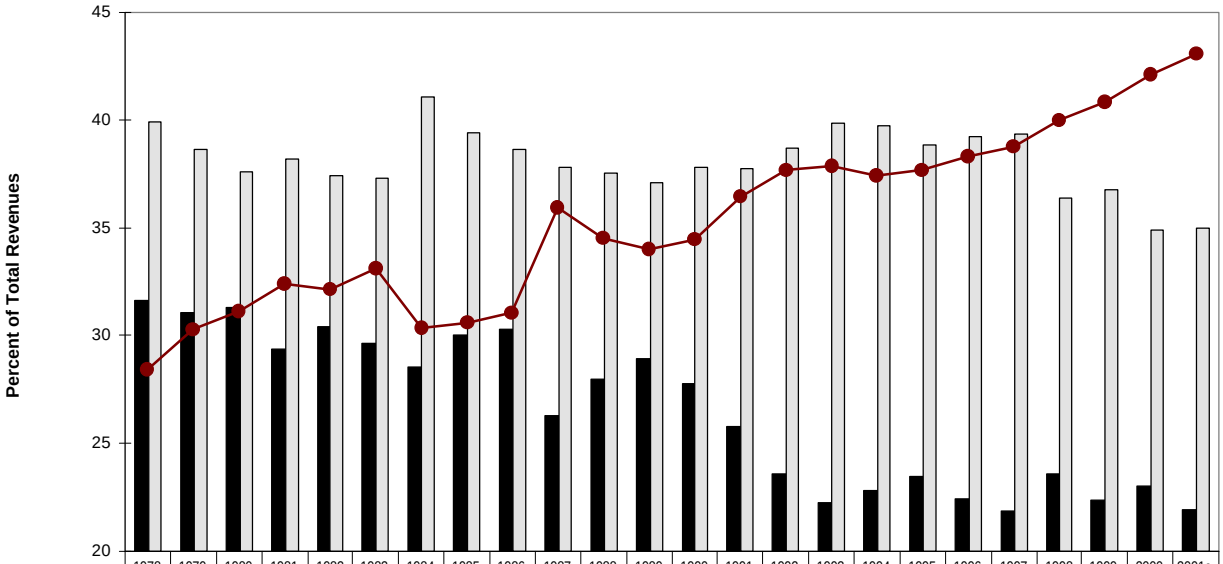
Figure 27
Inflation, Windfall, Rate and Base-Adjusted Revenue Growth in Combined General and School Fund Revenues



	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001e
Millions	207.6	124.3	161.3	4.1	175.8	176.1	38.8	-28.2	113.4	175.5	120.7	137.4	138.4	159.1	205.6	258.5	258.2	254.2	205.6	139.1	264.9	166.0

Fiscal Years

Figure 28
Sales Tax, Income Tax, and All Other Unrestricted Revenues as a Percent of Total State Unrestricted Revenues*



	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001e
Others	31.6	31.1	31.3	29.4	30.4	29.7	28.6	30.0	30.3	26.3	28.0	28.9	27.8	25.8	23.6	22.3	22.8	23.5	22.5	21.8	23.6	22.4	23.0	21.9
Sales	39.9	38.7	37.6	38.2	37.4	37.3	41.1	39.4	38.6	37.8	37.5	37.1	37.8	37.8	38.7	39.8	39.7	38.8	39.2	39.4	36.4	36.8	34.9	35.0
Income	28.4	30.3	31.1	32.4	32.2	33.1	30.3	30.6	31.1	35.9	34.5	34.0	34.4	36.4	37.7	37.9	37.4	37.7	38.3	38.8	40.0	40.8	42.1	43.1

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

Table 41
State Tax and Fee Changes (Over $200,000) Enacted in the 1994 through 2000 Regular and Special Legislative Sessions (A)(B)(C)

Bill Number and Effective Year	Bill Subject	Tax & Fee Changes	Cumulative to FY2001
FY 1995			
H.B. 145 (1994 Session)	Sales Tax Exemption - Replacement Parts for Steel Mills	($516,700)	
H.B. 162 (1994 Session)	Sales Tax - Repeal of Flood Tax Authorization	(23,600,000)	
H.B. 205 (1994 Session)	Tax Credit for Low-Income Housing	(226,600)	
Various Bills (1994 Session)	Sales Tax Exemptions Repealed	10,713,500	
S.B. 9 (1994 Session)	Property Tax Rate & Residence Exemption Changes	(8,500,000)	
S.B. 191 (1994 Session)	Treatment of Admission and User Fees	3,290,000	
	Subtotal FY 1995	**($18,839,800)**	**($131,878,600)**
FY 1996			
Various Bills (1995 Session)	Sales Tax Exemptions Authorized	($3,613,000)	
S.B. 254 (1995 Session)	Gross Receipts Taxes	9,400,000	
S.B. 56 and 254 (1995 Session)	Property Taxes (1)	(141,440,833)	
S.B. 56 and 254 (1995 Session)	Income Taxes (1)	4,500,000	
	Subtotal FY 1996	**($131,153,833)**	**($786,922,998)**
FY 1997			
S.B. 56 and 254 (1995 Session)	Property Taxes (Restricted to New Growth, 1995 Session) (1)	($8,703,800)	
H.B. 274 (1995 Session)	Additional Sales Tax on Construction Projects (1995 Session)	(2,000,000)	
H.B. 58 (1996 Regular Session)	Driving Under the Influence -- Repeat Offenders (2)	258,000	
Various Bills (1996 Session)	Reinstate Sales Tax Exemptions	(1,188,300)	
H.B. 349 (1996 Regular Session)	Gross Receipts Taxes - Modifications (3)	(4,750,000)	
H.B. 404 (1996 Regular Session)	Income Tax - Health Care Insurance Deduction (4)	(4,000,000)	
H.B. 405 (1996 Regular Session)	Minimum School Program Act (Property Taxes)	(30,000,000)	
H.B. 405 (1996 Regular Session)	Income Taxes (1)	1,500,000	
H.B. 3001 (1996 November Session)	Sales Tax - Manufacturing Exemption Modifications (1996 November Session) (5)	(8,700,000)	
S.B. 195 (1996 Regular Session)	Income Tax - Credit for Disabled Education Costs	(750,000)	
S.B. 237 (1996 Regular Session)	Income Tax Rate Reductions (6)	(41,000,000)	
S.B. 275 (1996 Regular Session)	Sales Tax - Ski Exemption (7)	(338,000)	
H.B. 27 (1997 Session)	Cigarettes Tax Increase and Regulation (8)	462,000	
	Subtotal FY 1997	**($99,210,100)**	**($496,050,500)**
FY 1998			
S.B. 239 (1996 Regular Session)	Tax Credits for Rural Economic Resettlement Zones (Tax Credits)	($275,000)	
H.B. 3001 (1996 November Session)	Additional Sales Tax - Manufacturing Exemption Modifications (1996 November Session) (5)	(8,700,000)	
S.B. 161 (1997 Session)	Motor Vehicle Compliance With Insurance, Registration, And Sales Tax Requirements	870,000	
S.B. 252 (1997 Session)	Collection of Fuel Tax (9)	10,000,000	
S.B. 253 (1997 Session)	Fuels Taxes, and Repeal of Environmental Surcharge on Petroleum (10)	63,250,000	
S.B. 253 (1997 Session)	Sales Tax Reduction (10)	(34,300,000)	
H.B. 27 (1997 Session)	Cigarettes Tax Increase and Regulation (8)	21,800,000	
H.B. 111 (1997 Session)	Transportation Corridor Funding (11)	4,300,000	
H.B. 225 (1997 Session)	Assessment on Workers' Compensation (12)	6,100,000	
H.B. 359 (1997 Session)	Endangered Species Mitigation Fund (13)	400,000	
H.B. 414 (1997 Session)	Registration Fee on Vehicles (14)	16,500,000	
	Subtotals FY 1998	**$79,945,000**	**$319,780,000**
FY 1999			
H.B. 3001 (1996 November Session)	Additional Sales Tax - Manufacturing Exemption Modifications (1996 November Session) (5)	($11,200,000)	
S.B. 252 (1997 Session)	Additional Collection of Fuel Tax	300,000	
H.B. 154 (1997 Session)	Property Tax Circuit Breaker	(215,000)	
H.B. 414 (1997 Session)	Additional Registration Fee on Vehicles	495,000	
S.B. 34 (1998 Session)	Sales Tax Exemption for Higher Education Athletic Events (15)	(402,000)	
	Subtotals FY 1999	**($11,022,000)**	**($33,066,000)**
FY 2000			
H.B. 58 (1998 Session)	Oil and Gas Severance Tax Amendments (16)	($900,000)	
S.B. 47 (1998 Session)	Research Tax Credit (17)	(3,200,000)	
S.B. 185 (1998 Session)	Sales and Use Tax Exemption Amendments and Study (18)	5,600,000	
S.B. 220 (1998 Session)	Research and Development Credit for Machinery and Equipment (19)	(2,000,000)	
H.B. 396 (1999 Session)	Sales and Use Tax Exemption for Steel Mills	(617,500)	
S.B. 19 (1999 Session)	Sales and Use Tax Exemption for Hearing Aids and Accessories	(311,000)	
S.B. 69 (1999 Session)	Manufacturing Sales and Use Tax Exemption (20)	(5,600,000)	
S.B. 150 (1999 Session)	Utilitites in Highway Rights-of-Way (21)	1,600,000	
	Subtotals FY 2000	**($5,428,500)**	**($10,857,000)**
FY 2001			
H.B. 25 (1999 Session)	Income Tax Deduction for Health Care Insurance (22)	($1,770,000)	
S.B. 62 (1999 Session)	Individual Income Tax Credits for At-Home Parents	($500,000)	
H.B. 345 (2000 Session)	Unemployment Insurance Amendments (23)	($26,500,000)	
S.B. 15 (2000 Session)	Use of Tobacco Settlement Revenues (24)	($5,500,000)	
	Subtotals FY 2001	**($34,270,000)**	**($34,270,000)**
Grand Total for Taxes and Fees FY 1995 to FY 2001 (A)(B)(C)		**($219,979,233)**	**($1,173,265,098)**

*See next page for footnotes

Table 41 (Continued)
State Tax and Fee Changes (Over $200,000) Enacted in the 1994 through 2000 Regular and Special Legislative Sessions (A)(B)(C)

FOOTNOTES:
(A) This table is not adjusted for tax increases due to income tax "bracket creep." The most recent fiscal note estimate for indexing income taxes for inflation is $3.9 million (fiscal note from the 2000 General Session). If $3.9 million per year is raised in each fiscal year 1995 to 2001 from income tax bracket creep, the cumulative effect over the 7 years is increased collections of $109.2 million. Tax increases due to "bracket creep" have been lessened in the 1990's due to lower inflation (than in the 1970's and 1980's) and because most taxpayers (62.3%) have "creeped" into the top income tax bracket.
B) This table is not adjusted for inflation. Only fiscal notes for state tax and fee increases or decreases greater than or equal to $200,000 are listed. Changes in local taxes are excluded. Extentions of exiting laws are excluded. For example, SB76 (1999 Session) extended the sales tax exemption for pollution equipment at a cost of $6,000,000; and, S.B. 79 (1999 Session) extended the sales tax exemption for manufactured homes at a cost of $1,000,000.
(C) This table does NOT include shifts within the total state budget due to earmarking or other diversions. For example, H.B. 393 (1996 Session) reduces General Fund sales tax revenues by $36 million beginning in FY1998 in order to earmark sales taxes to local water and local transportation projects; but, total budget sales taxes were not reduced by this bill. H.B. 413 (Sales Tax Revenues to Transportation Funding, 1997 Session) diverts $4,200,000 in FY 2001 in sales tax revenues currently earmarked for the Olympics to roads. Finally, H.B. 350 (1999 Session) diverts $4,800,000 in School Land Permanent Fund interest from the Uniform School Fund to local school districts.
(1) In 1995 the Legislature and Tax Commission increased the residential exemption from 32% to 45%, decreased the basic school rate from .00422 to .00264, and reduced the state assessing and collecting rate from .0003 to .000281. The 1995 Legislature also restricted the growth in taxable valuations to new growth only, effective in fiscal year 1997. In 1996 the Legislature further ordered the Tax Commission to reduce the basic school rate to a level sufficient to generate a $30 million tax cut. Income tax collections will increase due to lower property tax deductions on income tax forms.
(2) Increased fines and surcharges.
(3) Effective January 1, 1996, reduced gross receipts tax rates 53% to benefit electric utilities.
(4) Effective January 1, 1996, allows 60% of health care insurance, not already deductible against federal taxes, to be deducted against state taxes owed.
(5) As of July 1996 (FY97) 30% of the exemption is allowed, as of July 1997 60% is allowed, and as of July 1998 100% is allowed. The original fiscal note for FY99 was $28.6 million. The Tax Commission subsequently ruled that parts (in addition to equipment) were eligible for the exemption which raised the fiscal note for FY99 to $71.3 million. In November 1996 a special session of the legislature meet to modify the law in order to restore the fiscal note to
$28.6 million in FY99.
(6) Reduced effective income tax rates as of January 1, 1996. Reduced top rate from 7.2% to 7.0% on taxable incomes over $7,500. The minimum income tax rate will be reduced from 2.55% to 2.3%.
(7) This is a consensus estimate. The Fiscal Analyst's estimate is $65,000.
(8) Increases the cigarette tax 25 cents per pack. FY1997 fiscal impact is from stocking up of inventories in order to partially avoid the July 1, 1997 tax increase.
(9) Changes the point of collection for the diesel fuels tax from dealers to refineries.
(10) Raises the diesel and gasoline tax 5 cents a gallon and reduces the sales tax by 1/8th cent. Enactment of this bill will generate $63,250,000 in increased revenue to the Transportation Fund due to the increase in the diesel and gas tax and the ½ cent diversion from underground storage tanks to highways. There will be a decrease in General Fund sales taxes of $34,300,000. The net tax change from this bill is $28,950,000.
(11) Implements a 2.5% tax on rental cars to pay for transportation corridors.
(12) Permits the Department of Workforce Services to impose an assessment related to the Employers' Reinsurance Fund.
(13) Creates an Endangered Species Mitigation Fund and imposes a royalty tax on brine shrimp harvesting.
(14) Increases the vehicle registration fee by $10 and trucking fees by about 10%. This restricted money goes into the Centennial Highway Trust Fund.
(15) Amounts paid for admission to an athletic event at an institution of higher education that is subject to the provisions of Title IX are exempt from sales and use tax.
(16) Extends the repeal date for a tax credit for workover credits and recompletions of oil wells.
(17) Gives a 6% tax credit for qualified research activities conducted in the state.
(18) Reduces the sales tax exemption for machinery and equipment from 100% in FY1999 to 80% in FY2000. After July 1, 1999, vendors shall collect sales tax on 20% of the sales price of normal operating replacements.
(19) Gives a 6% individual or corporate income tax credit on the purchase price of machinery, equipment or both.
(20) Reinstates the manufacturing sales tax exemption on replacement parts at 100%. S.B. 185 (1998 Session) had previously reduced this exemption to 80%.
(21) Permit fees and compensation paid into the Transportation Fund for access to rights-of-way on Interstate Highways by telecommunication companies.
(22) Increases income tax deduction for amounts paid for health care insurance from 60% to 100% of amounts not deducted from federal taxes.
(23) Changes in the reserve rate and calculation method will produce a tax reduction for all employers paying this insurance at the contributory rate. Taxes (income to the Employment Compensation Fund) will be reduced by $26,500,000 per year beginning in fiscal year 2001. The reserve fund was reduced from 22 to 18 months.
(24) The hospital assessment tax was repealed in fiscal year 2001. This was a tax rate on hospital gross revenues, as well as $0.9 for each surgery performed. The tax rate was adjusted quarterly so that no more than $5.5 million annually was collected.

Cash Collection Unrestricted Revenues (Millions of Current Dollars): FY 1985 to FY 2000

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
General Fund (GF)																
Sales and Use Tax	555.4	558.6	559.0	617.6	667.4	707.4	740.3	802.4	881.9	978.2	1,055.1	1,162.5	1,252.1	1,251.8	1,316.4	1,369.6
Liquor Profits	18.9	19.0	17.2	15.9	16.0	16.6	17.6	16.6	18.1	17.9	20.1	22.2	24.3	26.3	26.9	28.7
Insurance Premiums	22.3	26.1	27.8	28.2	26.4	30.0	27.8	30.2	34.0	38.2	40.9	40.1	43.1	44.6	47.7	52.2
Beer, Cigarette, and Tobacco	21.3	21.1	24.0	29.2	30.7	30.2	31.0	34.6	34.3	36.4	37.7	37.8	41.2	53.2	60.0	58.0
Severance Taxes	46.9	43.8	21.5	29.2	28.1	30.1	31.0	18.2	19.3	18.9	21.4	20.4	23.8	23.0	13.1	23.0
Inheritance Tax	4.8	4.7	2.3	3.4	9.8	7.6	4.8	4.0	7.6	8.2	25.0	8.3	10.3	25.4	8.2	64.6
Investment Income	14.4	12.0	3.8	10.7	19.2	17.9	11.0	7.0	4.4	6.4	12.3	16.8	16.3	15.7	15.0	19.5
Other	23.4	22.2	24.7	26.5	27.4	32.6	33.9	27.7	26.0	30.0	32.9	37.2	34.9	40.8	38.3	41.0
Circuit Breaker Credits	-2.2	-1.5	-1.2	-1.2	-1.4	-3.4	-3.5	-4.1	-4.2	-4.5	-4.7	-4.6	-4.4	-4.5	-5.3	-4.4
Subtotal GF	705.1	706.0	679.1	759.6	823.7	869.1	894.0	936.5	1,021.4	1,129.7	1,240.6	1,340.6	1,441.6	1,476.2	1,520.4	1,652.2
School Fund (SF)																
Individual Income Tax	435.5	454.3	533.3	569.9	615.6	647.6	717.6	784.4	842.3	925.3	1,026.9	1,139.1	1,237.3	1,377.5	1,463.9	1,654.9
Corporate Franchise Tax	65.9	84.0	68.9	78.8	93.0	99.7	87.8	80.9	79.5	121.1	153.5	168.4	182.9	189.1	184.3	179.6
School Land Income	18.4	11.2	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Permanent Fund Interest	0.0	0.0	0.0	2.1	3.1	4.5	4.6	4.7	6.5	4.4	4.9	3.2	3.5	2.5	6.8	2.4
Gross Receipts Tax	0.0	0.0	0.5	4.5	2.8	4.2	3.7	3.6	4.5	4.1	4.4	8.4	9.1	7.2	7.9	7.3
Other	9.8	11.2	12.3	9.9	13.7	11.2	12.9	16.4	5.5	6.9	8.4	8.5	4.8	7.1	7.6	8.5
Subtotal SF	529.6	560.8	623.0	665.1	728.3	767.2	826.5	890.0	938.2	1,061.8	1,198.0	1,327.5	1,437.6	1,583.3	1,670.5	1,852.8
Transportation Fund (TF)																
Motor Fuel Tax	89.3	92.2	100.0	129.4	131.2	132.5	131.1	136.4	141.3	150.4	155.5	163.2	168.4	217.7	224.7	237.6
Special Fuel Tax	17.8	19.4	20.6	27.6	29.3	29.1	36.8	33.4	35.6	36.2	40.7	43.7	46.2	72.4	73.7	76.6
Other	33.8	34.7	34.8	35.5	36.9	38.7	39.6	44.6	47.3	49.6	52.6	54.3	52.6	54.8	58.5	65.0
Subtotal TF	140.9	146.2	155.4	192.4	197.4	200.3	207.4	214.3	224.2	236.2	248.7	261.2	267.3	344.9	356.9	379.1
Mineral Lease Payments	34.2	32.6	22.4	28.8	50.8	34.9	32.4	32.5	30.3	33.3	29.1	34.7	34.1	33.5	31.5	39.6
TOTAL	1,409.8	1,445.6	1,479.9	1,645.9	1,800.2	1,871.4	1,960.3	2,073.4	2,214.1	2,461.0	2,716.4	2,964.0	3,180.6	3,437.9	3,579.2	3,923.7

Sources: Comprehensive Annual Reports, Division of Finance; Utah State Tax Commission Annual Reports; Governor's Office of Planning and Budget.

Cash Collection Unrestricted Revenues (Current Dollar Percent Changes): FY 1985 to FY 2000

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
General Fund (GF)																
Sales and Use Tax	na	0.6	0.1	10.5	8.1	6.0	4.6	8.4	9.9	10.9	7.9	10.2	7.7	0.0	5.2	4.0
Liquor Profits	na	0.7	-9.6	-7.3	0.4	3.9	5.8	-5.5	9.3	-1.3	12.2	10.3	9.7	8.2	2.3	6.6
Insurance Premiums	na	17.1	6.5	1.7	-6.4	13.7	-7.2	8.4	12.7	12.3	7.3	-2.0	7.4	3.4	7.1	9.3
Beer, Cigarette, and Tobacco	na	-1.2	14.0	21.6	5.3	-1.8	2.7	11.5	-0.9	6.3	3.4	0.3	9.0	29.2	12.8	-3.3
Severance Taxes	na	-6.6	-50.8	35.3	-3.5	7.0	3.1	-41.5	6.1	-2.0	13.4	-4.9	16.8	-3.2	-43.3	76.3
Inheritance Tax	na	-1.3	-50.9	48.5	183.6	-22.3	-36.6	-17.4	91.9	7.4	204.8	-66.6	23.5	147.2	-67.6	683.7
Investment Income	na	-16.3	-68.1	178.6	80.0	-7.0	-38.8	-36.1	-37.8	46.2	93.4	36.5	-2.8	-3.6	-4.5	29.9
Other	na	-5.0	11.0	7.2	3.7	18.8	4.2	-18.4	-6.0	15.3	9.6	12.9	-6.1	16.8	-6.1	7.1
Circuit Breaker Credits	na	-32.9	-16.4	-7.2	21.2	140.9	4.5	15.8	2.9	7.0	5.7	-1.7	-4.4	1.8	17.0	-17.4
Subtotal GF	na	0.1	-3.8	11.9	8.4	5.5	2.9	4.8	9.1	10.6	9.8	8.1	7.5	2.4	3.0	8.7
School Fund (SF)																
Individual Income Tax	na	4.3	17.4	6.9	8.0	5.2	10.8	9.3	7.4	9.9	11.0	10.9	8.6	11.3	6.3	13.1
Corporate Franchise Tax	na	27.5	-18.0	14.4	18.0	7.2	-12.0	-7.8	-1.8	52.3	26.8	9.7	8.6	3.4	-2.5	-2.5
School Land Income	na	-39.0	-29.3	na	na	na	na	na	na	na	na	na	na	na	na	na
Permanent Fund Interest	na	na	na	na	49.9	45.8	1.3	2.8	37.5	-32.0	10.9	-35.5	9.8	-29.4	178.0	-64.9
Gross Receipts Tax	na	na	na	782.0	-37.4	48.3	-11.7	-2.9	25.9	-8.4	6.3	90.3	8.6	-20.8	10.3	-7.4
Other	na	15.2	9.7	-20.2	39.6	-18.6	15.1	27.1	-66.4	25.9	20.7	1.3	-42.7	45.9	7.1	11.9
Subtotal SF	na	5.9	11.1	6.8	9.5	5.3	7.7	7.7	5.4	13.2	12.8	10.8	8.3	10.1	5.5	10.9
Transportation Fund (TF)																
Motor Fuel Tax	na	3.2	8.5	29.4	1.4	1.0	-1.1	4.0	3.6	6.4	3.4	5.0	3.2	29.3	3.2	5.7
Special Fuel Tax	na	8.9	6.5	33.6	6.4	-0.7	26.4	-9.2	6.5	1.8	12.3	7.6	5.7	56.7	1.8	3.9
Other	na	2.6	0.5	2.0	3.8	4.9	2.3	12.7	6.1	4.8	6.1	3.1	-3.0	4.1	6.7	11.1
Subtotal TF	na	3.7	6.3	23.8	2.6	1.4	3.6	3.3	4.6	5.4	5.3	5.0	2.3	29.0	3.5	6.2
Mineral Lease Payments	na	-4.7	-31.3	28.8	76.2	-31.2	-7.3	0.5	-6.9	10.1	-12.8	19.5	-1.8	-1.8	-6.1	26.0
TOTAL	na	2.5	2.4	11.2	9.4	4.0	4.7	5.8	6.8	11.2	10.4	9.1	7.3	8.1	4.1	9.6
Average Annual Growth Rates	na	2.5	2.5	5.3	6.3	5.8	5.6	5.7	5.8	6.4	6.8	7.0	7.0	7.1	6.9	7.1

Sources: Comprehensive Annual Reports, Division of Finance; Utah State Tax Commission Annual Reports; Governor's Office of Planning and Budget.

International Merchandise Exports

Overview

Utah's exports will not show significant growth during 2000. From 1995 through 2000, Utah's exports remained constant around $3.6 billion. If the Asian economies were as strong today as they were in the early 1990s, Utah's exports would likely be well over $4.0 billion. Since 1995, the share of Utah's exports to Asia (mostly coal, copper, equipment, and chemicals) has fallen from about 40% to under 30% for the first three quarters of 2000. Over the long term, economic globalization will spur both trade and growth. In the short term, however, Utah's exports will not be a force for growth.

2000 Summary

Value of Utah's Merchandise Exports. Utah ranked 34th among the states in the value of merchandise exports during the first three quarters of 2000. Relative to the first three quarters of 1999, exports have increased for 46 states. For the nation as a whole, year to date exports in 2000 are up 13.9% compared to 1999. While Utah's $2.6 billion in exports year-to-date in 2000 are near record, Utah's exports are still less than 4% of California's $88.7 billion. As the leading state, California accounted for almost one-sixth of the nation's $576.0 billion year-to-date exports during 1999. With $76.3 billion in exports, second place Texas is not far behind California, but at $31.5 billion, third place New York has less than half California's exports. Though small relative to the leading states, Utah still has twenty times the merchandise exports of the Virgin Islands, which rank last.

Although the merchandise export data prior to 1996 are not strictly comparable with the data after 1996, Utah has become more integrated into the world economy since 1988, when the data first became available. Between 1988 and 2000, Utah's merchandise exports increased from $943 million to $3.5 billion, or more than 270%.

Utah's Merchandise Exports by Industry. During the first three quarters of 2000, exports of primary metal products (copper and steel) were $632 million, or almost one-fourth of the total. Other major export products include transportation equipment ($493 million, or 19%), electronic machinery ($288 million, or 11%), industrial machinery ($256 million, or 10%), instruments ($200 million, or 8%), processed food ($147 million, or 6%), chemicals ($130 million, or 6%), and coal ($89 million, or 3%).

Destination of Utah's Merchandise Exports. Utah's largest markets for merchandise exports are in Europe, Canada, and East Asia. Year-to-date through third quarter 2000, the top five destination countries for Utah's merchandise exports accounted for $1.7 billion of the $2.6 billion total, or about two-thirds, while the top ten accounted for $2.0 billion, or almost four-fifths.

Significant Issues

Asia. Although the Asian economies appear to be growing, Utah's exports to Asia are about half what they were in 1995. During the last half of the 1990s, exports to non-Asian countries grew at a healthy pace, allowing the overall level of exports to remain constant at $3.6 billion. Without the growth in exports to non-Asian countries, exports would have fallen. If growth in Asia picks up then Utah could see an export boom. Without a pick up in Asia, Utah's export sector will continue restructuring and ultimately be in a position to grow without Asia as the primary market.

Limitations of Data. The export data presented have been generated by the U.S. Census Bureau's Foreign Trade Division in cooperation with the U.S. Customs Service, and have been adjusted by the Massachusetts Institute for Social and Economic Research (MISER). There are two main reasons why this data series, called "Origin of Movement," may substantially underestimate the magnitude of Utah exports.

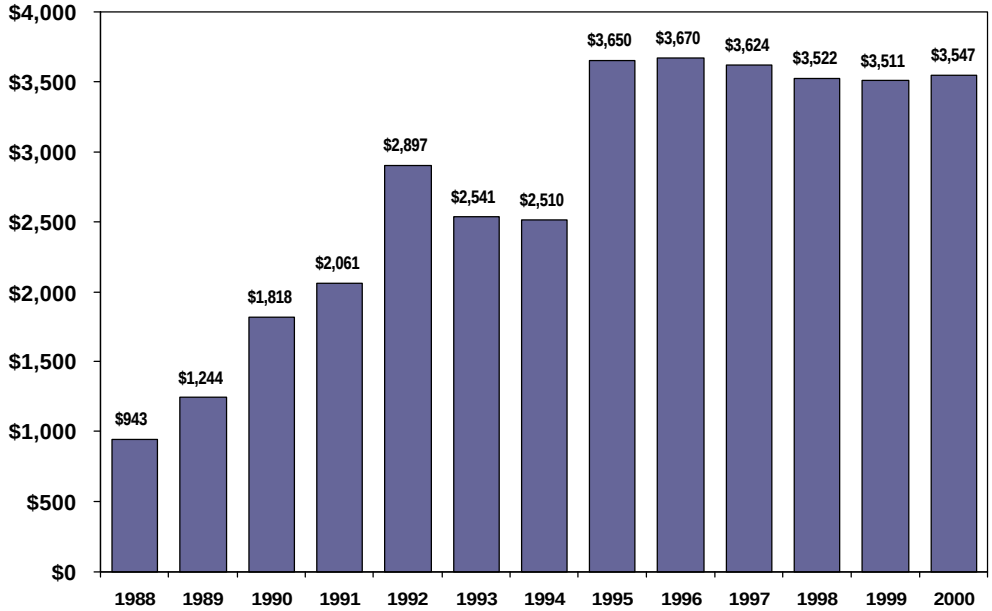
First, the data series is designed to measure the transportation origin of exports, and accounts for the value of merchandise exports but not service exports. This means that exports of business services (such as financial services or computer software), educational services (such as international students paying tuition to purchase Utah education), tourist services (such as purchases made by international travelers in Utah), and other services sold in international markets are not included in the value of these exports.

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

Conclusion

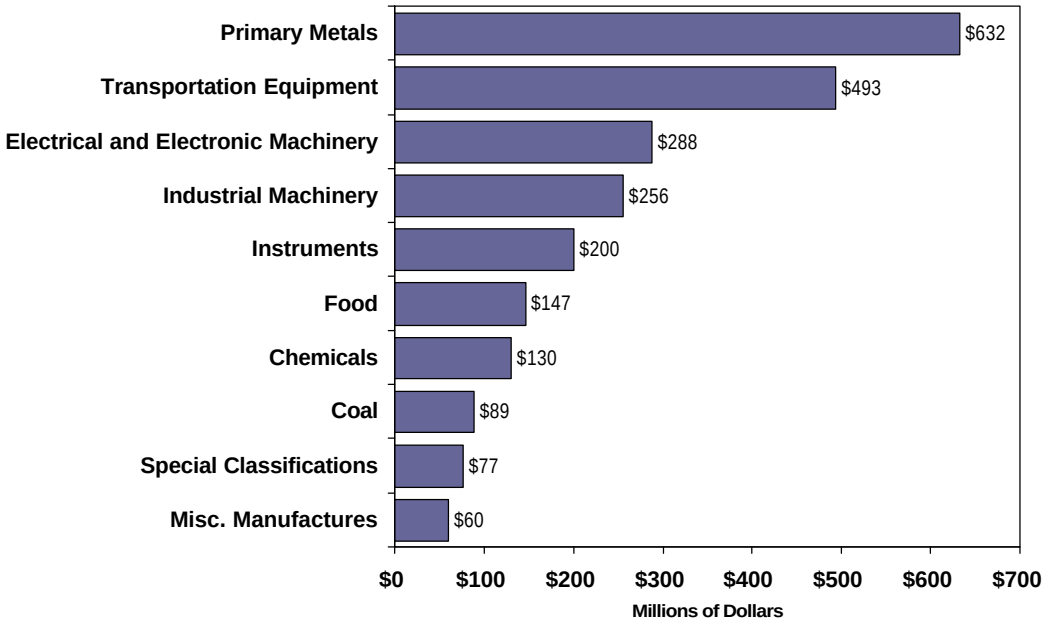
Utah's exports remained in the range of $3.6 billion during 2000. While Asia is a major export market, unless its economies grow more rapidly, it will no longer be a primary force for Utah's export growth. Economic globalization will create new markets for Utah's exports, thereby increasing export growth.

Figure 29
Utah Merchandise Exports



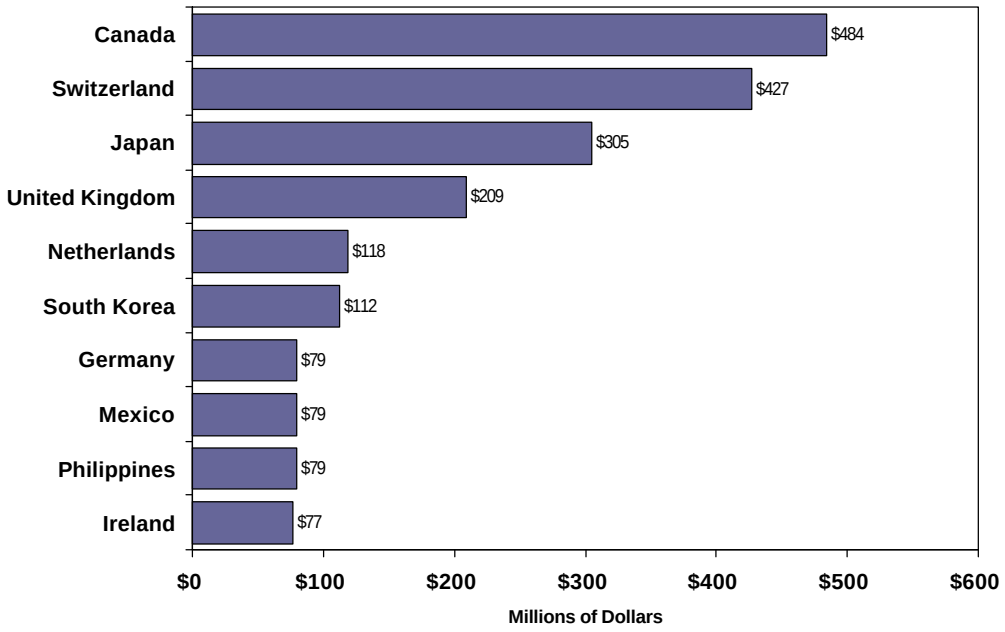
Source: U.S. Census Bureau, Massachusetts Institute for Social and Economic Resea
Note: 2000 exports estimated

Figure 30
Utah Merchandise Exports by Selected Industry: Year-to-Date Third Quarter 2000



Source: U.S. Bureau of the Census, Massachusetts Institute for Social and Economic Research
Note: Data is for January 1 through September 1, 2000.

Figure 31
Utah Merchandise Exports to Selected Countries: Year-To-Date Third Quarter 2000



Source: U.S. Bureau of the Census, Massachusetts Institute for Social and Economic Research
Note: Data is for January 1 through September 1, 2000.

Utah Merchandise Exports by Country (Millions of Dollars)

	Annual								Year to Date Third Quarter			
	1992	1993	1994	1995	1996	1997	1998	1999	1999	2000	Percent Change	2000 Percent of Total
Canada	361.4	362.1	360.7	410.6	429.0	523.4	516.1	602.8	444.7	483.7	8.8%	18.3%
Switzerland	28.9	244.6	98.3	155.8	97.2	95.6	466.2	411.8	248.5	427.3	71.9%	16.2%
Japan	315.3	313.6	353.4	555.6	677.3	586.0	453.9	428.3	328.5	304.5	-7.3%	11.5%
United Kingdom	450.7	79.7	63.4	459.8	584.0	880.9	841.2	801.7	632.1	209.3	-66.9%	7.9%
Netherlands	69.2	145.8	119.2	87.8	136.4	124.5	106.8	128.2	99.6	118.1	18.5%	4.5%
South Korea	114.5	63.5	94.5	167.6	282.9	128.9	58.6	80.0	54.1	112.3	107.5%	4.3%
Germany	103.2	166.3	197.8	201.1	180.4	156.1	92.8	79.9	58.7	79.3	35.0%	3.0%
Mexico	26.6	51.3	112.4	71.7	74.5	94.9	84.3	86.0	60.4	78.7	30.2%	3.0%
Philippines	27.5	28.0	32.8	66.8	61.4	98.3	115.1	80.0	60.1	78.6	30.7%	3.0%
Ireland	7.5	16.5	22.3	24.8	24.9	50.2	54.0	66.2	48.3	77.3	59.8%	2.9%
Belgium	25.5	34.2	85.1	134.1	53.3	77.4	46.9	54.9	42.2	60.6	43.4%	2.3%
Taiwan	421.1	380.3	203.3	274.6	184.3	111.4	51.2	33.5	26.7	52.1	94.6%	2.0%
Australia	42.5	31.6	29.6	37.0	41.3	37.0	49.7	49.2	34.7	45.9	32.0%	1.7%
Hong Kong	417.5	224.0	463.7	267.6	101.4	49.7	31.6	42.5	31.3	43.1	37.7%	1.6%
Singapore	68.3	50.9	27.5	89.0	111.8	67.1	40.4	46.4	35.1	37.4	6.5%	1.4%
France	23.3	19.5	21.9	282.2	52.8	48.9	45.2	59.9	48.1	36.6	-23.9%	1.4%
Italy	20.3	12.6	13.0	17.3	29.6	53.0	29.1	48.7	40.2	36.0	-10.3%	1.4%
Malaysia	37.6	66.9	14.8	9.6	26.6	60.4	72.9	49.3	41.0	34.4	-16.3%	1.3%
Brazil	2.1	7.7	8.3	6.4	28.8	17.7	16.8	25.9	16.5	29.0	75.9%	1.1%
China	49.7	87.5	17.2	33.1	36.6	28.3	37.3	19.0	13.2	25.1	90.2%	1.0%
Turkey	39.8	22.4	2.5	0.0	1.3	4.5	9.1	20.0	15.7	24.8	57.7%	0.9%
United Arab Emirates	2.1	2.6	2.1	0.5	1.9	9.0	13.2	24.9	23.7	15.2	-35.7%	0.6%
Thailand	104.2	71.5	51.7	72.1	57.9	81.7	54.5	24.7	20.4	13.2	-35.5%	0.5%
Spain	27.3	8.6	6.3	6.7	26.1	17.5	21.8	16.0	12.6	12.8	1.4%	0.5%
Sweden	6.0	5.0	6.8	3.9	15.6	23.8	25.8	7.1	5.3	9.8	84.9%	0.4%
Israel	5.0	6.6	3.4	8.6	8.4	11.4	10.7	9.1	6.9	7.5	9.1%	0.3%
India	1.4	4.1	2.2	7.2	4.3	9.1	5.1	5.9	4.8	7.4	52.9%	0.3%
Chile	12.2	17.8	18.0	69.0	49.6	38.0	23.1	6.4	5.2	6.3	22.1%	0.2%
Denmark	2.5	2.8	3.8	0.5	2.6	3.7	3.5	14.9	12.4	6.3	-49.2%	0.2%
New Zealand	7.9	6.5	7.8	3.4	9.7	14.2	11.2	11.1	9.1	5.7	-37.5%	0.2%
Saudi Arabia	7.5	4.7	3.0	2.7	0.0	2.4	5.7	3.1	2.5	4.5	80.2%	0.2%
Norway	4.7	4.3	3.7	2.9	4.9	4.3	6.4	3.9	3.0	4.0	36.2%	0.2%
South Africa	3.9	3.6	2.9	1.4	11.0	8.1	5.8	4.2	2.9	3.4	15.1%	0.1%
Peru	0.0	2.1	4.5	1.3	3.7	4.9	4.3	2.8	2.3	3.2	40.4%	0.1%
Austria	4.2	5.0	5.0	1.0	4.3	4.9	4.6	5.5	4.7	3.0	-35.9%	0.1%
Dominican Republic	0.0	1.2	2.5	7.6	13.2	4.0	3.1	2.5	1.7	2.7	63.1%	0.1%
Russian Federation	6.6	4.4	2.6	9.1	2.5	6.6	2.6	1.4	1.1	2.6	137.3%	0.1%
Colombia	1.0	2.8	5.5	10.7	4.4	4.6	4.6	4.5	3.5	2.5	-28.8%	0.1%
Venezuela	3.7	2.5	2.5	0.9	3.0	6.9	4.8	4.3	3.6	2.4	-31.7%	0.1%
Indonesia	4.6	5.5	6.4	8.5	12.2	8.9	4.2	3.1	1.7	1.7	-2.6%	0.1%
Exports to The World, Outside U.S.	2,897.5	2,540.5	2,510.5	3,649.8	3,564.0	3,624.3	3,522.1	3,510.6	-	-	1.3%	
Exports to Non-Asia	1,294.6	1,217.3	1,215.6	2,068.2	1,970.3	2,366.6	2,552.8	2,654.6	-647.0	-748.1	15.6%	
Exports to Asia	1,602.8	1,323.3	1,294.9	1,581.6	1,593.8	1,257.7	969.3	856.0	647.0	748.1	15.6%	
Share of Exports to Non-Asia	44.7%	47.9%	48.4%	56.7%	55.3%	65.3%	72.5%	75.6%	75.2%	71.6%	-4.7%	
Share of Exports to Asia	55.3%	52.1%	51.6%	43.3%	44.7%	34.7%	27.5%	32.2%	24.8%	28.4%	14.2%	

Note:
1. Third quarter year to date (YTD) exports for 1997 and 1998 are based on exports from January 1 through September 30.

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

Table 45
U.S. Merchandise Exports by State (Millions of Dollars)

		Annual						Year to Date Third Quarter			
Rank	State	1994	1995	1996	1997	1998	1999	1999	2000	Percent Change	State as a Percent of 2000 Total
26	Alabama	4,654	5,407	5,849	6,702	7,036	6,852	5,147	5,812	12.9%	1.0%
36	Alaska	2,639	3,000	3,125	2,979	2,070	2,744	2,101	2,139	1.8%	0.4%
16	Arizona	9,033	10,222	11,378	14,920	12,240	12,853	9,462	11,684	23.5%	2.0%
38	Arkansas	1,894	2,245	2,245	2,576	2,546	2,413	1,721	2,058	19.6%	0.4%
1	California	81,190	96,573	103,254	109,537	104,968	107,449	77,813	94,540	21.5%	16.4%
28	Colorado	4,574	5,237	5,332	5,602	5,718	6,408	4,719	5,125	8.6%	0.9%
25	Connecticut	6,389	6,545	6,829	7,784	8,112	7,878	5,779	6,205	7.4%	1.1%
43	Delaware	1,767	1,701	1,841	2,316	2,395	2,445	1,784	1,793	0.5%	0.3%
47	District Of Columbia	690	312	367	612	385	452	320	725	126.3%	0.1%
7	Florida	20,514	23,671	24,664	27,600	28,677	27,842	20,895	22,405	7.2%	3.9%
15	Georgia	10,029	12,400	12,551	14,689	14,984	15,094	11,197	11,956	6.8%	2.1%
52	Hawaii	396	352	308	367	302	298	218	336	54.6%	0.1%
33	Idaho	1,613	1,973	1,708	1,808	1,640	2,368	1,689	2,641	56.4%	0.5%
6	Illinois	21,980	25,573	26,773	29,186	31,544	31,960	23,374	24,955	6.8%	4.3%
14	Indiana	9,261	11,628	12,039	13,136	13,403	13,970	10,297	12,349	19.9%	2.1%
30	Iowa	3,571	4,353	4,884	5,676	5,355	4,466	3,307	3,649	10.4%	0.6%
29	Kansas	3,370	3,854	4,197	4,738	4,446	5,162	3,787	4,019	6.1%	0.7%
23	Kentucky	5,399	5,948	7,050	8,695	8,838	9,662	6,899	7,330	6.3%	1.3%
13	Louisiana	15,560	21,059	23,358	20,645	18,373	17,187	12,488	13,320	6.7%	2.3%
44	Maine	1,205	1,487	1,512	1,880	1,966	2,168	1,632	1,428	-12.5%	0.2%
31	Maryland	5,841	6,216	5,924	5,999	5,308	4,434	3,211	3,632	13.1%	0.6%
9	Massachusetts	13,065	15,065	15,999	18,028	17,191	18,190	13,235	16,216	22.5%	2.8%
4	Michigan	28,497	28,431	29,771	34,776	31,438	33,520	24,798	27,295	10.1%	4.7%
21	Minnesota	7,856	8,830	9,776	10,460	9,913	10,153	7,407	8,003	8.1%	1.4%
37	Mississippi	2,033	2,774	2,994	2,714	2,542	2,471	1,774	2,126	19.9%	0.4%
27	Missouri	4,040	4,373	6,405	7,348	6,412	6,597	4,793	5,217	8.8%	0.9%
50	Montana	360	392	469	564	450	456	304	409	34.5%	0.1%
39	Nebraska	1,788	2,024	2,139	2,208	2,219	2,324	1,680	2,051	22.0%	0.4%
45	Nevada	694	827	1,395	1,164	761	1,155	818	1,100	34.5%	0.2%
41	New Hampshire	1,147	1,449	1,643	1,750	1,916	2,140	1,595	1,837	15.1%	0.3%
11	New Jersey	13,073	13,833	14,821	16,902	17,250	16,998	12,540	15,098	20.4%	2.6%
40	New Mexico	570	457	1,013	1,877	1,976	3,392	2,734	2,026	-25.9%	0.4%
3	New York	34,011	37,089	38,372	41,726	41,561	40,534	28,787	34,475	19.8%	6.0%
12	North Carolina	14,060	16,820	17,635	18,257	17,217	16,432	12,035	14,257	18.5%	2.5%
49	North Dakota	528	578	756	837	800	747	566	484	-14.6%	0.1%
8	Ohio	21,649	23,764	25,052	27,201	27,057	26,914	19,969	20,937	4.8%	3.6%
35	Oklahoma	2,423	2,426	2,627	3,031	3,096	3,305	2,563	2,541	-0.9%	0.4%
19	Oregon	7,247	9,436	9,773	10,069	9,842	11,445	8,160	9,261	13.5%	1.6%
10	Pennsylvania	13,611	15,207	16,090	17,926	17,667	17,776	13,024	15,466	18.7%	2.7%
22	Puerto Rico	NA	5,195	5,593	6,057	6,742	8,883	6,699	7,628	13.9%	1.3%
46	Rhode Island	1,049	1,028	1,011	1,198	1,209	1,222	906	950	4.9%	0.2%
24	South Carolina	6,014	7,315	7,512	8,455	8,575	7,891	5,905	6,832	15.7%	1.2%
48	South Dakota	338	438	477	557	478	528	359	536	49.6%	0.1%
18	Tennessee	7,686	8,828	8,974	10,221	10,542	10,798	7,858	9,356	19.1%	1.6%
2	Texas	59,972	68,819	74,001	84,309	86,853	90,988	64,948	82,662	27.3%	14.4%
53	U.S. Virgin Islands	NA	240	214	265	105	183	126	162	28.8%	0.0%
34	Utah	2,510	3,650	3,670	3,624	3,522	3,511	2,604	2,637	1.3%	0.5%
32	Vermont	2,980	3,456	3,527	4,097	3,933	4,314	3,188	3,297	3.4%	0.6%
17	Virginia	11,343	12,906	13,529	14,148	13,642	12,547	9,432	9,393	-0.4%	1.6%
5	Washington	26,149	24,847	28,856	36,047	41,759	40,236	29,660	25,126	-15.3%	4.4%
42	West Virginia	1,741	2,201	2,357	2,524	2,290	2,045	1,492	1,801	20.7%	0.3%
20	Wisconsin	8,744	10,149	10,657	11,198	10,664	10,525	7,694	8,337	8.3%	1.4%
51	Wyoming	378	426	529	612	544	497	355	389	9.7%	0.1%
	Total	507,125	583,031	622,827	687,598	680,474	692,821	505,849	576,008	13.9%	

Notes:
1. Third quarter year to date (YTD) exports for 1998 and 1999 are based on exports from January 1 through September 30.
2. State export rank is based on third quarter YTD exports for 1999.

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

Table 46
Utah Merchandise Exports by Industry (Thousands of Dollars)

Industrial Code	Industry	Annual 1990	1991	1992	1993	1994	1995	1996
1	Agricultural Products	1,864.1	1,477.2	1,057.6	2,900.1	4,229.1	1,992.7	6,126.3
2	Livestock and Livestock Products	153.6	98.4	173.8	486.4	87.4	576.2	194.6
8	Forestry Products	52.5	5.0	74.2	23.3	43.3	48.6	61.2
9	Fishing, Hunting, and Trapping	572.0	732.4	334.7	1,279.3	1,097.7	2,583.2	6,010.2
10	Metallic Ores and Concentrates	209,220.6	196,613.3	282,205.1	224,861.2	283,769.2	424,845.9	218,327.4
12	Bituminous Coal and Lignite	64,021.2	84,073.2	78,485.8	81,193.1	81,921.4	132,691.5	193,172.5
13	Crude Petroleum and Natural Gas	0.0	2.6	0.0	0.0	0.0	7.4	10.8
14	Nonmetallic Minerals, Except Fuels	5,166.0	7,833.0	11,766.7	8,153.6	8,962.7	10,174.5	9,914.4
20	Food and Kindred Products	57,903.5	54,963.2	60,006.5	74,419.4	72,801.8	136,959.4	138,575.6
22	Textile Mill Products	2,162.2	1,644.9	1,590.6	2,107.2	2,836.0	3,062.3	2,127.0
23	Apparel and Related Products	3,368.5	4,969.3	7,538.9	6,276.2	8,154.2	13,427.0	14,844.8
24	Lumber and Wood Products, Except Furniture	1,687.3	947.0	3,098.8	917.0	894.3	1,976.9	2,139.9
25	Furniture and Fixtures	1,806.4	2,964.6	6,742.7	3,766.4	2,845.8	3,630.1	6,729.6
26	Paper and Allied Products	12,563.5	6,650.0	3,175.0	9,241.3	3,184.0	3,794.4	5,470.7
27	Printing, Publishing, and Allied Products	34,539.9	19,731.5	22,619.8	26,359.0	26,808.8	30,323.8	38,585.1
28	Chemicals and Allied Products	66,567.4	60,072.8	94,803.4	98,883.0	157,377.4	148,209.9	210,758.8
29	Petroleum Refining and Related Products	3,925.5	758.8	289.5	454.7	108.4	253.4	319.7
30	Rubber and Misc. Plastic Products	9,675.8	23,318.5	8,724.5	11,544.2	14,732.0	30,061.9	27,580.8
31	Leather and Leather Products	1,404.0	2,413.5	3,902.0	2,709.8	3,965.3	4,905.8	6,054.0
32	Stone, Clay, Glass, and Concrete Products	3,676.3	3,552.2	5,477.2	8,610.1	4,702.8	4,780.2	5,858.7
33	Primary Metal Products	322,645.9	616,094.1	1,313,756.9	931,868.6	915,393.7	1,252,373.5	1,097,705.7
34	Fabricated Metal Products, Except Mach./Tran.	36,721.2	65,105.2	62,682.0	51,831.0	38,392.7	106,340.8	96,508.8
35	Industrial Machinery, Except Electrical	202,848.0	195,040.1	153,313.0	214,509.6	204,532.0	308,919.6	427,352.7
36	Electrical/Electronic Machinery, Equip., and Supplies	446,497.0	402,726.3	325,596.4	329,298.6	228,041.7	323,976.5	368,227.1
37	Transportation Equipment	144,321.3	140,653.5	277,191.4	253,965.1	214,563.0	248,791.5	393,312.8
38	Instruments and Related Products	128,715.6	109,561.9	111,647.5	124,175.8	141,979.5	156,699.0	191,855.8
39	Misc. Manufactured Commodities	22,642.4	31,033.1	39,975.9	47,299.8	67,586.0	77,294.2	78,697.3
91	Scrap and Waste	20,099.5	14,665.8	8,700.7	12,598.5	10,622.1	208,184.3	86,135.2
92	Used or Second-Hand Merchandise	4,653.4	2,871.5	1,001.9	1,871.5	1,608.1	4,594.5	3,754.1
	Special Classification Provisions	8,970.8	10,668.3	11,526.6	8,937.7	9,225.4	8,317.9	33,988.0
	Total	1,818,445.4	2,061,241.3	2,897,458.8	2,540,541.4	2,510,465.8	3,649,796.8	3,670,399.6

Industrial Code	Industry	Annual 1997	1998	1999	Year to Date Third Quarter 1999	2000	Percent Change	Industry as a Percent of 2000 Total
1	Agricultural Products	20,386.1	20,020.4	19,663.3	14,462.7	19,147.3	32.4%	0.7%
2	Livestock and Livestock Products	360.9	349.5	457.2	426.9	293.9	-31.2%	0.0%
8	Forestry Products	463.1	450.2	566.3	396.6	396.6	0.0%	0.0%
9	Fishing, Hunting, and Trapping	7,232.6	852.7	449.4	435.0	1,063.1	144.4%	0.0%
10	Metallic Ores and Concentrates	208,140.4	51,161.2	27,364.5	20,520.8	36,760.5	79.1%	1.4%
12	Bituminous Coal and Lignite	139,330.4	141,536.2	118,438.0	74,545.0	88,830.0	19.2%	3.4%
13	Crude Petroleum and Natural Gas	13.5	0.0	0.0	0.0	0.0		0.0%
14	Nonmetallic Minerals, Except Fuels	10,072.3	8,110.7	7,741.7	5,659.8	12,083.9	113.5%	0.5%
20	Food and Kindred Products	159,524.7	157,052.5	160,789.2	119,719.0	146,579.5	22.4%	5.6%
22	Textile Mill Products	4,479.2	3,686.1	4,534.1	3,659.3	6,908.4	88.8%	0.3%
23	Apparel and Related Products	8,025.5	6,056.1	10,247.0	7,923.3	6,537.9	-17.5%	0.2%
24	Lumber and Wood Products, Except Furniture	1,485.9	1,443.2	2,129.7	1,369.5	4,344.9	217.3%	0.2%
25	Furniture and Fixtures	5,000.9	6,520.7	7,863.0	5,494.4	10,856.6	97.6%	0.4%
26	Paper and Allied Products	8,797.3	12,174.9	40,236.1	29,587.1	35,690.0	20.6%	1.4%
27	Printing, Publishing, and Allied Products	38,583.5	25,156.6	27,709.0	18,157.9	19,360.8	6.6%	0.7%
28	Chemicals and Allied Products	230,667.0	219,190.3	162,816.4	122,690.8	130,040.9	6.0%	4.9%
29	Petroleum Refining and Related Products	98.4	1,780.1	2,129.2	1,690.4	154.7	-90.8%	0.0%
30	Rubber and Misc. Plastic Products	43,735.5	32,979.1	40,391.3	28,882.3	50,052.9	73.3%	1.9%
31	Leather and Leather Products	6,169.1	8,339.4	17,556.4	13,390.6	8,351.1	-37.6%	0.3%
32	Stone, Clay, Glass, and Concrete Products	8,777.1	7,652.1	11,013.3	7,403.0	9,309.1	25.7%	0.4%
33	Primary Metal Products	1,102,071.9	1,286,250.6	1,163,371.2	853,905.0	632,364.2	-25.9%	24.0%
34	Fabricated Metal Products, Except Mach./Tran.	70,850.4	59,990.3	47,958.5	39,309.8	37,351.7	-5.0%	1.4%
35	Industrial Machinery, Except Electrical	305,923.7	262,917.9	301,319.5	227,338.3	256,086.8	12.6%	9.7%
36	Electrical/Electronic Machinery, Equip., and Supplies	412,868.0	451,126.9	377,666.2	299,565.6	287,571.8	-4.0%	10.9%
37	Transportation Equipment	455,364.3	428,365.0	534,487.9	394,525.8	493,266.7	25.0%	18.7%
38	Instruments and Related Products	218,379.7	202,120.0	254,522.4	189,809.4	199,715.4	5.2%	7.6%
39	Misc. Manufactured Commodities	107,277.8	83,639.3	77,620.0	52,401.9	60,094.1	14.7%	2.3%
91	Scrap and Waste	6,895.7	3,737.8	4,565.8	3,264.7	4,346.4	33.1%	0.2%
92	Used or Second-Hand Merchandise	6,527.4	4,841.5	3,520.1	1,910.9	2,723.9	42.5%	0.1%
	Special Classification Provisions	36,819.4	34,577.9	83,500.2	65,938.5	77,072.2	16.9%	2.9%
	Total	3,624,321.7	3,522,079.0	3,510,626.9	2,604,384.1	2,637,355.3	1.3%	100.0%

Note:
1. Third quarter year to date (YTD) exports for 1998 and 1999 are based on exports from January 1 through September 30.

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

Utah Merchandise Exports to Top Ten Purchasing Countries by Industry during First Three Quarters of 1999 (Thousands of Dollars)

Industry Code	Industry	Canada	Germany	Ireland	Japan	Mexico	Netherlands	Philippines	South Korea	Switzerland	United Kingdom
1	Agricultural Products	633	0	0	919	0	0	0	626	0	28
2	Livestock and Livestock Products	0	0	0	0	0	0	0	0	0	0
8	Forestry Products	293	0	0	0	0	0	0	0	0	0
9	Fishing, Hunting, and Trapping	0	0	0	0	0	0	0	0	0	67
10	Metallic Ores and Concentrates	6,151	0	0	0	0	11,424	0	0	0	0
12	Bituminous Coal and Lignite	0	0	0	80,302	0	0	0	0	0	0
13	Crude Petroleum and Natural Gas	0	0	0	0	0	0	0	0	0	0
14	Nonmetallic Minerals, Except Fuels	1,354	567	0	4,106	258	376	0	294	0	1,139
20	Food and Kindred Products	25,424	113	15	35,426	10,116	2,215	278	10,074	0	2,299
22	Textile Mill Products	834	0	0	0	4,254	0	0	102	0	107
23	Apparel and Related Products	895	262	0	749	1,859	0	0	0	55	337
24	Lumber and Wood Products, Except Furniture	472	0	0	267	23	0	0	0	0	0
25	Furniture and Fixtures	5,878	229	0	269	399	0	0	0	0	170
26	Paper and Allied Products	32,107	27	52	700	1,111	282	18	24	0	69
27	Printing, Publishing, and Allied Products	5,622	777	0	374	1,669	120	1,141	0	170	761
28	Chemicals and Allied Products	35,411	3,096	0	36,403	1,607	3,596	244	5,301	317	4,225
29	Petroleum Refining and Related Products	0	0	0	0	0	0	0	0	0	0
30	Rubber and Misc. Plastic Products	9,468	201	3,641	3,107	3,147	1,307	0	477	0	944
31	Leather and Leather Products	1,444	63	1,886	1,767	945	132	0	0	0	66
32	Stone, Clay, Glass, and Concrete Products	1,687	480	0	1,072	268	298	933	131	0	1,632
33	Primary Metal Products	39,214	1,117	2,343	10,103	654	0	0	31	417,841	119,635
34	Fabricated Metal Products, Except Mach./Tran.	12,359	295	0	3,312	1,237	0	256	296	297	2,803
35	Industrial Machinery, Except Electrical	45,123	4,495	50,964	9,258	11,485	7,163	450	3,990	325	17,117
36	Electrical/Electronic Machinery, Equip., and Supplies	34,198	23,634	11,256	8,428	13,157	5,194	70,766	13,398	2,720	25,358
37	Transportation Equipment	166,187	23,687	1,712	64,145	16,865	60,653	2,783	69,502	1,332	14,181
38	Instruments and Related Products	28,387	12,591	4,486	32,907	2,337	16,864	1,541	5,113	2,952	9,600
39	Misc. Manufactured Commodities	16,786	3,247	212	5,913	1,362	3,256	81	2,055	1,209	4,389
91	Scrap and Waste	0	0	0	161	1,586	0	0	146	0	0
92	Used or Second-Hand Merchandise	347	0	0	965	0	0	0	0	0	0
	Special Classification Provisions	13,454	4,372	709	3,867	4,355	5,176	77	773	47	4,330
	Total	483,728	79,253	77,276	304,519	78,693	118,055	78,567	112,333	427,263	209,255

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

Price Inflation and Cost of Living

Overview

Inflation increased in 2000 to 3.4%, compared to 2.2% in 1999, as measured by the CPI-U. The gross domestic product chain-type price deflator increased 2.1% in 2000. The cost of living index in selected Utah cities remained near the national average. The second quarter 2000 composite index (national average equals 100) for cities in Utah was: Salt Lake City[1], 102.5; Provo-Orem, 101.0; Cedar City, 93.8; St. George, 95.8; and Logan, 96.6.

2000 Summary

Consumer Price Index. Due to another year of strong economic growth, a fully employed economy, and rising wages, the national rate of inflation increased moderately in 2000. The Consumer Price Index (CPI-U) is estimated to have increased by 3.4% in 2000, measured on an annual average basis, compared with 2.2% in 1999, and 1.6% in 1998. The recent run up in inflation is mostly due to higher energy prices.

Gross Domestic Product Deflators. In 2000 the Gross Domestic Product (GDP) chain-type implicit price deflator is estimated to increase 2.1% compared with 1.5% in 1999. The GDP personal consumption deflator in 2000 is expected to rise approximately 2.5% compared with 1.8% in 1999. Beginning in 1996, the Real Gross Domestic Product was reported using a chain-weighted inflation index. Under this method, the composition of economic output (the weighting) is updated each year.

Utah Cost of Living. The American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index is prepared quarterly and includes comparative data for approximately 270 urban areas. The index consists of price comparisons for a single point in time, and does not measure inflation or price changes over time.

The cost of consumer goods and services in the urban areas is measured and compared with a national average of 100. The composite index is based on six components: grocery items, housing, utilities, transportation, health care, and miscellaneous goods and services.

The first quarter 2000 composite index for Salt Lake City was 102.5, slightly higher than the national average for the period. Other Utah cities, included in the second quarter survey, were Cedar City (93.8), Logan (96.6), Provo-Orem (101.0), and St. George (95.8).

2001 Outlook

The national Consumer Price Index for Urban Consumers (CPI-U) in 2001 is forecast to increase 2.7%, slower than the 3.4% increase in 2000. This is due to expected lower energy prices in 2001.

Significant Issues

Energy Prices. Soaring global energy prices have been substantial in slowing the U.S. economy and remain a concern as the economy enters 2001. Crude oil is trading at $35 a barrel, which is three times higher than 1999 levels, and is the highest oil price since the Persian Gulf War. High oil prices are due primarily to OPEC's reluctance to raise production quotas, which are currently lower than prevailing 1997-1999 quotas.

Natural gas price increases are due to increased demand as utility companies focus their growth in clearer natural gas burning generation facilities. Currently at $6.5 per mbtu (million british thermal units), natural gas prices are at a record high, and more than double the price of one year ago.

Labor Market. The tight labor market over the last year has slowed business expansion and keeps inflation hawks watching for upward pressure on wages to bleed into the aggregate inflation numbers. Of chief concern is how labor market pressures will translate into inflation as businesses raise wages to compete for limited labor supply. While there is concern regarding the short-term effect on inflation, the labor market is beginning to relax as unemployment insurance claims begin to rise, help wanted advertising declines, and private-payroll growth slows.

Federal Reserve. In mid-1999 the Federal Reserve Board of Governors began engineering a soft landing for the U.S. economy. This lead to a series of rate increases, the last one in May of 2000, bringing the federal funds rate to 6.5%. Although the Federal Reserve has not raised rates since May, it has continued to show an anti-inflationary bias and a willingness to further raise rates.

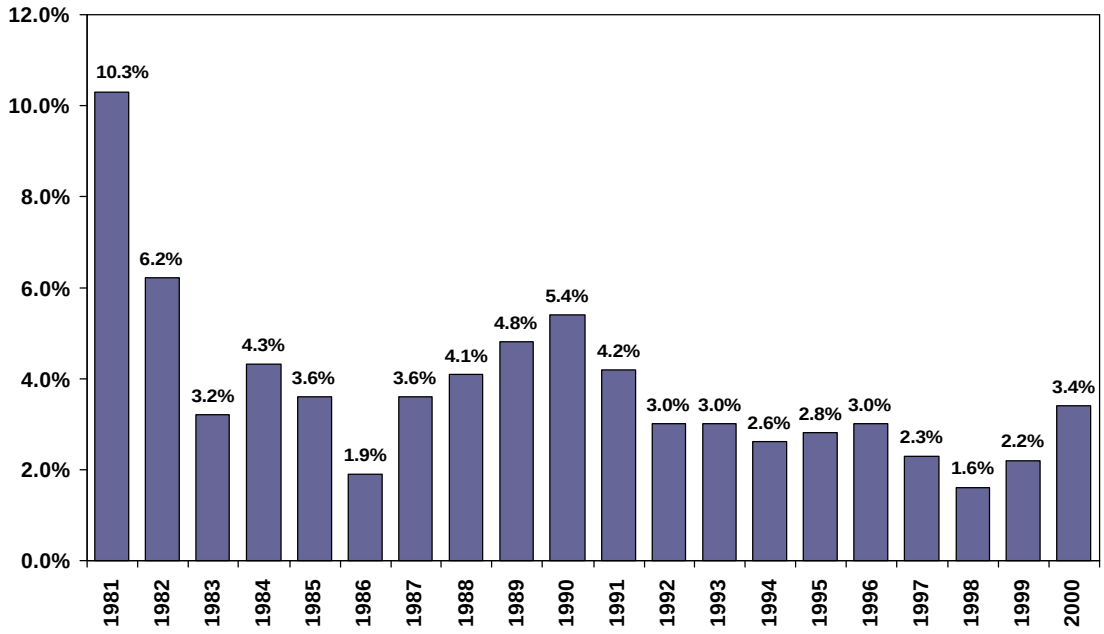
In recent weeks however, the Federal Reserve has signaled a move toward a more neutral policy. The policy shift is due to mixed signs from the economy. The manufacturing industry has been slowing over the past year and shows signs of potential trouble caused by a tight bond market and a strong dollar amid high interest rates. A skeptical bond market with its current high yields is couching the manufacturing industries ability to find financing in order to expand. Construction figures show no signs of slowing and Middle East troubles show potential for triggering U.S. inflation.

Conclusion

Although inflation throughout much of the 1990s has been relatively low, increased pressures from the energy sector and a tight labor market present a situation in which increased inflation is a possibility in the near future. But, because of the concern about a slowing U.S. economy, the Federal Reserve has taken a neutral stance on raising interest rates.

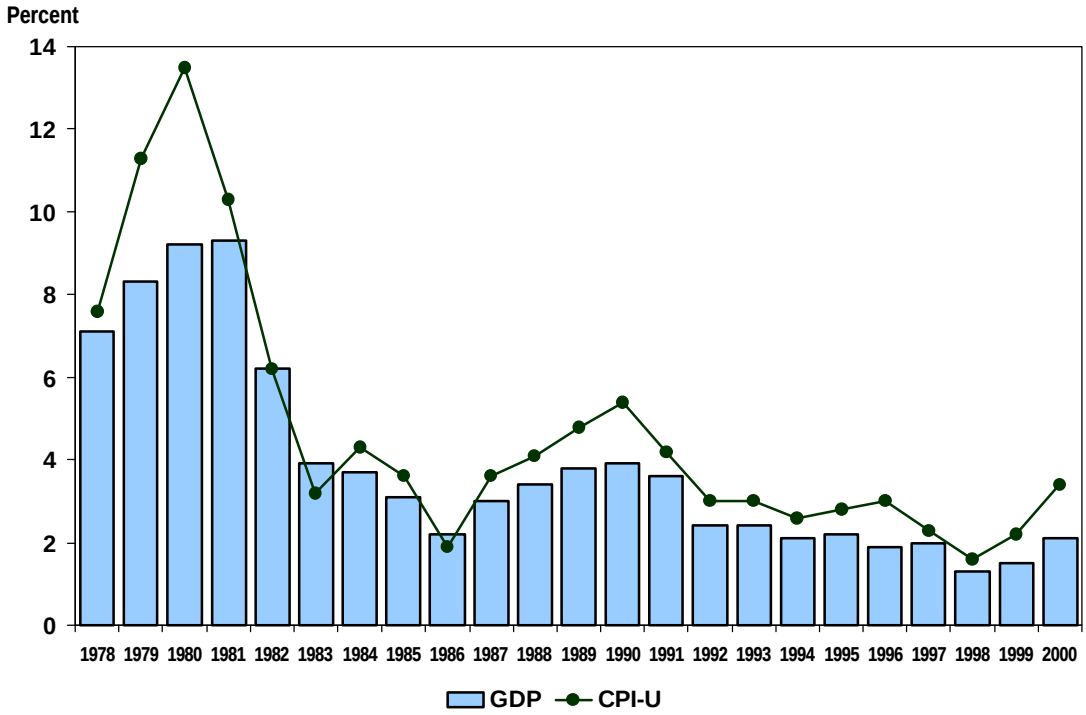
[1] The cost of living data for Salt Lake City are for first quarter 2000; second quarter 2000 data were not published.

Figure 32
U.S. Consumer Price Index (CPI-U): Average Annual Percent Change



Source: U.S. Bureau of Labor Statistics

Figure 33
CPI-U and GDP Deflator Inflation



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

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

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg. Index	Dec-Dec	Annual Avg. Percent Change
1959	29	28.9	28.9	29	29	29.1	29.2	29.2	29.3	29.4	29.4	29.4	29.1		
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	30.0	30.1	30.1	30.2	30.2	30.2	30.3	30.3	30.4	30.4	30.4	30.4	30.2	1.3	1.0
1963	30.4	30.4	30.5	30.5	30.5	30.6	30.7	30.7	30.7	30.8	30.8	30.9	30.6	1.6	1.3
1964	30.9	30.9	30.9	30.9	30.9	31.0	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	32.9	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	37.5	37.7	36.7	6.2	5.5
1970	37.8	38.0	38.2	38.5	38.6	38.8	39.0	39.0	39.2	39.4	39.6	39.8	38.8	5.6	5.7
1971	39.8	39.9	40.0	40.1	40.3	40.6	40.7	40.8	40.8	40.9	40.9	41.1	40.5	3.3	4.4
1972	41.1	41.3	41.4	41.5	41.6	41.7	41.9	42.0	42.1	42.3	42.4	42.5	41.8	3.4	3.2
1973	42.6	42.9	43.3	43.6	43.9	44.2	44.3	45.1	45.2	45.6	45.9	46.2	44.4	8.7	6.2
1974	46.6	47.2	47.8	48.0	48.6	49.0	49.4	50.0	50.6	51.1	51.5	51.9	49.3	12.3	11.0
1975	52.1	52.5	52.7	52.9	53.2	53.6	54.2	54.3	54.6	54.9	55.3	55.5	53.8	6.9	9.1
1976	55.6	55.8	55.9	56.1	56.5	56.8	57.1	57.4	57.6	57.9	58.0	58.2	56.9	4.9	5.8
1977	58.5	59.1	59.5	60.0	60.3	60.7	61.0	61.2	61.4	61.6	61.9	62.1	60.6	6.7	6.5
1978	62.5	62.9	63.4	63.9	64.5	65.2	65.7	66.0	66.5	67.1	67.4	67.7	65.2	9.0	7.6
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7	72.6	13.3	11.3
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3	82.4	12.5	13.5
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0	90.9	8.9	10.3
1982	94.3	94.6	94.5	94.9	95.8	97.0	97.5	97.7	97.9	98.2	98.0	97.6	96.5	3.8	6.2
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3	99.6	3.8	3.2
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	103.9	3.9	4.3
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	107.6	3.8	3.6
1986	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.6	1.1	1.9
1987	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	113.6	4.4	3.6
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5	118.3	4.4	4.1
1989	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1	124.0	4.6	4.8
1990	127.4	128.0	128.7	128.9	129.2	129.9	130.4	131.6	132.7	133.5	133.8	133.8	130.7	6.1	5.4
1991	134.6	134.8	135.0	135.2	135.6	136.0	136.2	136.6	137.2	137.4	137.8	137.9	136.2	3.1	4.2
1992	138.1	138.6	139.3	139.5	139.7	140.2	140.5	140.9	141.3	141.8	142.0	141.9	140.3	2.9	3.0
1993	142.6	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8	144.5	2.7	3.0
1994	146.2	146.7	147.2	147.4	147.5	148.0	148.4	149.0	149.4	149.5	149.7	149.7	148.2	2.7	2.6
1995	150.3	150.9	151.4	151.9	152.2	152.5	152.5	152.9	153.2	153.7	153.6	153.5	152.4	2.5	2.8
1996	154.4	154.9	155.7	156.3	156.6	156.7	157.0	157.3	157.8	158.3	158.6	158.6	156.9	3.3	3.0
1997	159.1	159.6	160.0	160.2	160.1	160.3	160.5	160.8	161.2	161.6	161.5	161.3	160.5	1.7	2.3
1998	161.6	161.9	162.2	162.5	162.8	163.0	163.2	163.4	163.6	164.0	164.0	163.9	163.0	1.6	1.6
1999	164.3	164.5	165.0	166.2	166.2	166.2	166.7	167.1	167.9	168.2	168.3	168.3	166.6	2.7	2.2
2000	168.8(r)	169.8(r)	171.2(r)	171.3(r)	171.5(r)	172.4(r)	172.8(r)	172.8(r)	173.7	174.0	174.1	174.0(e)	172.2(e)	3.4(e)	3.4(e)

r = revised
e = estimate

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

Table 49
Gross Domestic Product Price Deflators: 1996=100

Year	Gross Domestic Product (Chain-Type) Deflator	Change from Previous Year	Personal Consumption Expenditures (Chain-Type) Deflator	Change from Previous Year
1970	29.1	5.3%	28.0	4.7%
1971	30.5	5.1	29.2	4.3
1972	31.8	4.2	30.2	3.5
1973	33.6	5.6	31.9	5.4
1974	36.6	8.9	35.1	10.3
1975	40.0	9.4	38.0	8.2
1976	42.3	5.6	40.1	5.4
1977	45.0	6.5	42.7	6.6
1978	48.2	7.1	45.8	7.1
1979	52.2	8.3	49.8	8.8
1980	57.1	9.2	55.2	10.8
1981	62.4	9.3	60.1	8.8
1982	66.3	6.2	63.5	5.7
1983	68.9	3.9	66.2	4.3
1984	71.4	3.7	68.6	3.7
1985	73.7	3.1	71.0	3.4
1986	75.3	2.2	72.7	2.4
1987	77.6	3.0	75.5	3.8
1988	80.2	3.4	78.4	3.9
1989	83.3	3.8	81.9	4.4
1990	86.5	3.9	85.6	4.6
1991	89.7	3.6	88.9	3.8
1992	91.9	2.4	91.6	3.0
1993	94.1	2.4	93.8	2.4
1994	96.0	2.1	95.7	2.0
1995	98.1	2.2	97.9	2.3
1996	100.0	1.9	100.0	2.1
1997	102.0	2.0	101.9	1.9
1998	103.2	1.3	103.0	1.1
1999	104.8	1.5	104.9	1.8
2000(e)	107.0	2.1	107.5	2.5

e = estimate

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

Table 50
American Chamber of Commerce Researchers Association (ACCRA)
Cost of Living Comparisons for Selected Metropolitan Areas: Second Quarter 2000

Component Index Weights:	100% Composite Index	16% Grocery Items	28% Housing	8% Utilities	10% Trans-portation	5% Health Care	33% Misc. Goods & Services
U.S. Average	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Utah Areas							
Salt Lake City*	102.5	114.0	103.2	76.1	102.3	105.7	102.2
Cedar City (Nonmetro)	93.8	107.5	77.7	78.9	103.6	93.0	101.7
Logan (Nonmetro)	96.6	102.3	96.1	83.3	103.5	88.7	96.7
Provo-Orem	101.0	113.9	97.4	79.5	108.4	91.7	102.1
St. George (Nonmetro)	95.8	108.4	85.2	75.6	106.0	97.2	100.4
Western Areas							
Phoenix AZ	101.4	104.7	100.8	98.5	110.2	113.3	96.4
Los Angeles CA	148.1	113.0	238.7	117.7	116.2	125.6	108.6
Denver CO	107.4	109.6	118.7	85.1	107.2	127.4	99.1
Boise ID	98.8	96.2	105.4	77.9	101.9	108.9	97.2
Las Vegas NV	102.8	112.5	95.3	86.5	120.7	129.7	99.0
Albuquerque NM	101.2	106.8	101.4	94.8	96.6	98.3	101.7
Portland OR	109.1	107.4	118.2	80.4	114.1	124.1	105.3
Tacoma WA	106.7	110.6	111.6	67.4	108.8	122.9	107.1
Cheyenne WY	95.9	103.5	90.3	86.2	95.3	102.8	98.5
Other Areas							
Fairbanks AK	121.5	112.6	109.2	204.6	114.3	164.6	111.9
Philadelphia PA	120.8	105.0	147.2	129.4	115.8	99.3	108.7
Atlanta GA	104.1	103.5	113.6	99.4	102.0	105.8	97.7
Boston MA	131.3	112.3	176.5	128.8	109.8	130.4	109.5
Columbus OH	103.0	100.5	112.5	108.3	98.9	97.1	97.0
St. Louis MO	98.8	96.4	95.9	100.8	98.6	105.0	101.2
Dallas TX	99.6	98.6	100.0	105.6	106.3	96.3	96.8

* These data are for first quarter 2000; second quarter 2000 data were not published.

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

Regional / National Comparisons

Overview

For more than a decade the Mountain Division states have experience sustained and strong economic growth. The eight mountain states show population, employment, average annual pay, and per capita personal income growth rates above national averages. Among the mountain states, Utah ranked above the national average in population, employment, and personal income growth rates for the 1990s and while Utah's growth rates have been slowing, Utah remains economically healthy as 2001 begins.

Population Growth

The Mountain Division population growth is a little more than twice as fast as seen nationally. Between 1998 and 1999, the mountain states grew by 1.9%, while the nation grew by only 0.9%. The mountain region's 1999 population of 17.1 million, amounts to 6.3% of the nation's population. For the five years of 1994 to 1999, the population of the mountain states grew by an annual average rate of 2.3%. The Mountain Division had five of the six fastest growing states in the nation for this five-year period. Nevada was the fastest growing state in the nation with an annual average population growth rate of 4.4%. Arizona came in second at 2.9%, Colorado ranked third at 2.1%, Utah fifth and Idaho sixth with 2.0% each. New Mexico, which grew at an annual average rate of 1.0%, also grew at a rate just above the national average. On average population growth is slowest in Montana and Wyoming at 0.6% and 0.2% respectively from 1994 to1999.

Personal Income Growth

Total personal income for the mountain region grew by an annual average rate of 7.5% between 1994 and 1999. This is faster than the national average of 5.8% for the same period and shows that the mountain region is still doing much better than the nation. The mountain region took the four top spots in personal income growth for the 50 states. Nevada lead the nation with a average 5-year personal income growth rate of 9.4%, Colorado came in second with an average rate of 8.3%, Arizona came in third at 8.0%, and Utah fourth with a rate of 7.5%. Idaho personal income also grew well at 6.0%, placing it fifteenth in the nation. New Mexico grew somewhat below the national rate at 5.1% per year. Wyoming and Montana, had personal income growth rates below the national average for the five-year period. Wyoming had an average growth rate of 4.9% and Montana at 4.6%. The mountain states, with a total personal income of $452.7 billion in 1999, accounted for 5.8% of the nation's total personal income of $7.8 trillion.

For the five-year period of 1994-1999, the mountain states had a per capita personal income growth rate of 5.1% per year. This is above the national rate of growth of 4.8% for the same period. Three states accounted for the region's higher than average rate of growth -- Colorado at 6.1%, Utah at 5.4%, and Arizona at 5.0%. These rates of growth ranked these three states first, seventh and 17th respectively among the 50 states. The rest of the mountain states all had per capita personal income growth rates below the national average. From 1994 to 1999, Idaho had the slowest per capita personal income growth per year in the region of just 3.9%.

The mountain states had an average per capita personal income of $26,434 in 1999. This is 92.6% of the national average of $28,542. Only two mountain states had a per capita personal income above the national average. Colorado had the highest per capita personal income of the eight mountain states at $31,546, 110.5% of the national average. This placed the state seventh nationally. Nevada had a per capita personal income of $31,022 in 1999, 108.7% of the national average, ranking it 10th nationally. No other mountain state was in the top half of the 50 states in per capita personal income. Wyoming ranked 29th at $26,396, Arizona ranked 36th at $25,189, Utah ranked 41st at $23,288, Idaho came in at 46th with per capita income of $22,835, Montana ranked 48th at $22,019, and New Mexico came in at 49th with a per capita income of $21,853.

Median Household Income Growth

There are significant household income differences among the eight mountain states. Median household income among the mountain states for the three-year average of 1997-99 ranked from fifth in the nation to 48th. Colorado had the highest median household income of the mountain states at $46,950 or 118.4% of the national average and placing it fifth in the nation. Utah ranked eighth in the nation, with a median household income of $45,257, or 114.1% of the national average for the 3-year average. Nevada claimed a median household income of $40,882 or 103.1% of the nation and ranked 18th among the states. No other mountain state ranked in the top 30 in median household income. Two mountain states ranked quite low. New Mexico, with a median household income of $31,981 ranked 47th and Montana with a median household income of $31,280, ranked 48th.

Average Annual Pay

The most complete measure of relative wages is average annual pay for all workers covered by unemployment insurance programs. From 1994 to 1999, this measurement of wage growth for the mountain states averaged 4.5% per year compared to 4.3% for the U.S.. Mountain state's wages increased from 89.5% of the U.S. average in 1994 to 90.3% by 1999. Growth rates above the national average show the strength of the regional economy relative to that of the nation's. Colorado ranked first among the mountain states and 11th in the nation with an annual average pay of $34,192 in 1999. Nevada, with an average annual pay of $31,213, ranked second among the mountain states and 20th in the nation. Arizona ranked 23rd nationally with $30,523 average pay. No other mountain state ranked in the top 25 among the states in average annual pay. Utah ranked 33rd with an annual average pay of $27,884. Following Utah were New Mexico with an average annual pay of $26,270 (41st), Idaho with an annual average pay of $26,042 (42nd), Wyoming with an annual average pay of $25,639 (45th) and last, Montana with an average annual pay of $23,253 (50th).

Nonagricultural Payrolls

Between 1994 and 1999, the mountain states had an average annual employment growth rate of 4.1%. This compares quite favorably to the 2.4% average annual employment growth rate for the nation. Five of the eight mountain states experienced an employment growth rate above that of the nation. In fact, the mountain states took the top four spots among the 50 states in employment growth rates. Nevada took top honors with an average annual employment growth rate of 5.9%, for the five-year period. Arizona ranked second among the states with an employment growth rate of 5.0%, Utah ranked third at 4.1%, and Colorado fourth with an employment growth rate of 4.0%. Idaho ranked eighth at 3.2% average per year.

Despite the overall impressive growth rates of the mountain states relative to the nation over the last five years, there are clear signs that the economies of the mountain states have slowed. Recent U.S. Department of Labor data shows that from November 1999 to November 2000 every mountain state except Wyoming has experienced slower employment growth rates over the past year than they had experienced for the five years of 1994-99.

The mountain state's unemployment rate of 4.2% for 1999 was the same as the national average. The preliminary unemployment rate (not seasonally adjusted) for November 2000 of 3.5% compares to 3.8% for the nation. Nevertheless, there is substantial divergence among the mountain states in unemployment rates. In 1999, Colorado and Utah had the lowest unemployment rates of the mountain states at 2.9% and 3.7% respectively. Arizona and Nevada had the next best unemployment rates among the mountain states with a rate of 4.4% each. Wyoming ranked fifth best in 1999 among the mountain states with an unemployment rate of 4.9%. New Mexico had the highest unemployment rate in the region at 5.6%.

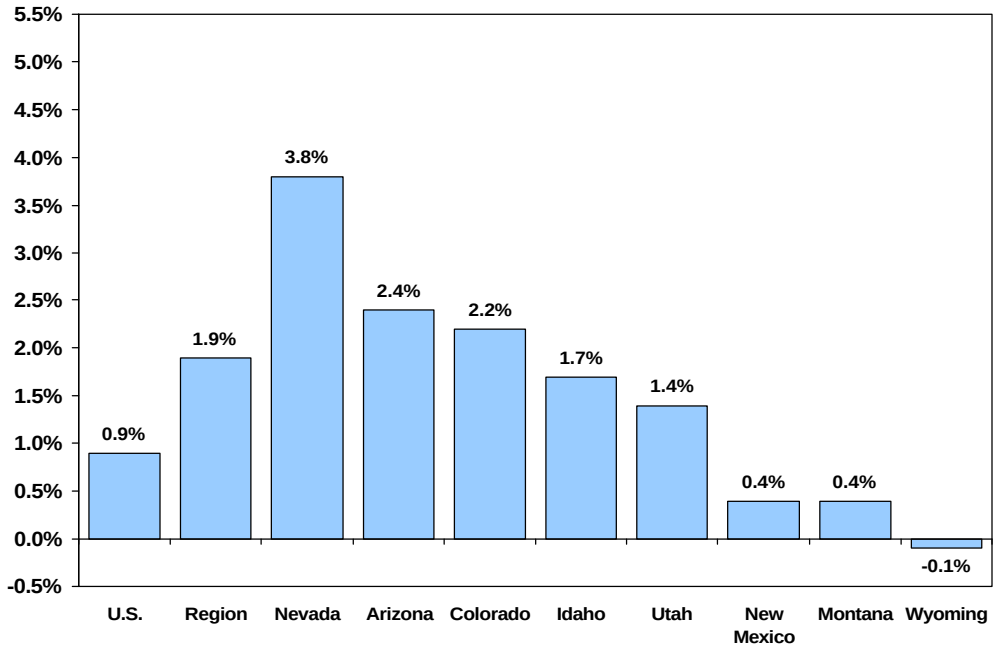
Poverty Rates

For the 1997 to 1999 three-year average, the mountain states had a poverty rate of 12.7%, slightly above the national average of 12.6%. As with median household income, there is a substantial spread among the eight mountain states in poverty rates. Using the three-year average for 1997-99, the mountain states ranged from a low of 7.9% in Utah to a high of 20.8% in New Mexico. Utah's low rate placed it as the second lowest poverty rate in the nation. Following Utah, was Colorado with a poverty rate of 8.6%, placing the state eighth in the nation. Nevada and Wyoming also had a poverty rates below the national average. At 11.0%, Nevada ranked 22nd in the nation and Wyoming ranked 29th with 11.9% poverty. The other four mountain states had poverty rates above the national average.

Conclusion

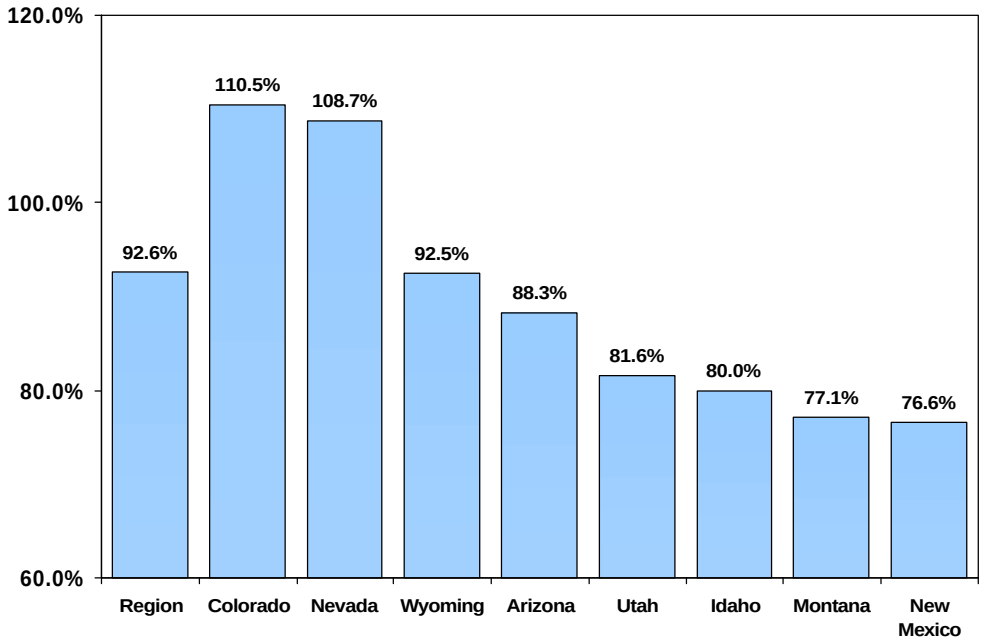
The national economy has been slowing down, particularly during the later half of 2000. From 1994 to 1999 the nation's employment growth rate was on average 2.4%. From November 1999 to November 2000, it has slowed to 1.7%. Most mountain states also reflect somewhat slower growth rates in employment, population, and income than were experienced during the rapid growth of the mid-1990's. Mountain Division states, however, continue to the enjoy the benefits of the long lasting regional and national economic expansion of the 1990's. As 2001 begins the question nationally and regionally is whether a "soft landing" of the economy will be achieved. Economic conditions in the mountain states have been vibrant and strong for more than a decade, outperforming most other regions of the U.S. economy and effectively moving forward in the New Economy.

Figure 34
Population Growth Rates--U.S. and Mountain Division States: 1998-1999



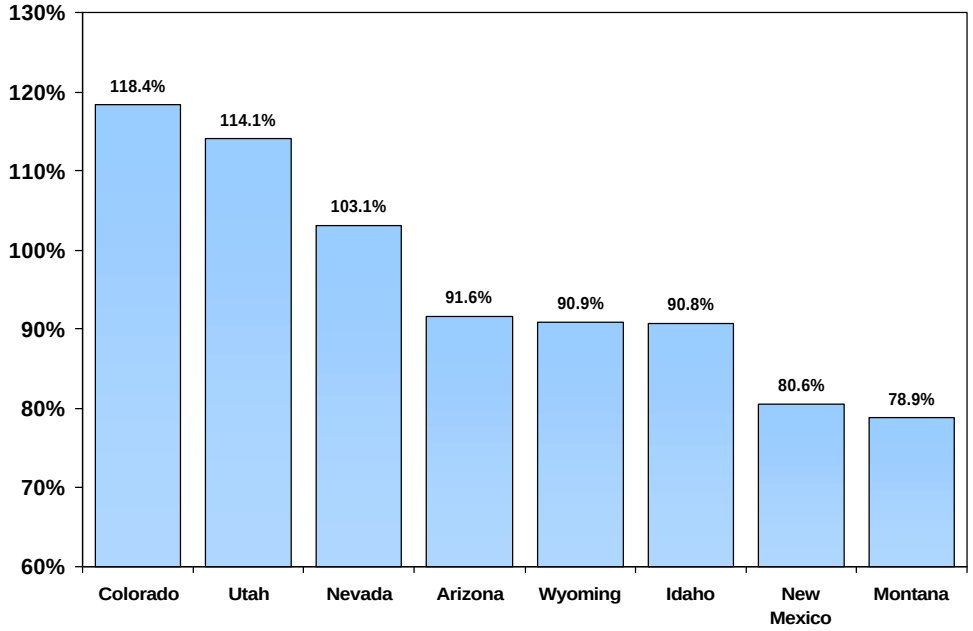
Source: U.S. Census Bureau

Figure 35
Per Capita Income as a Percent of U.S.--Mountain Division States: 1999



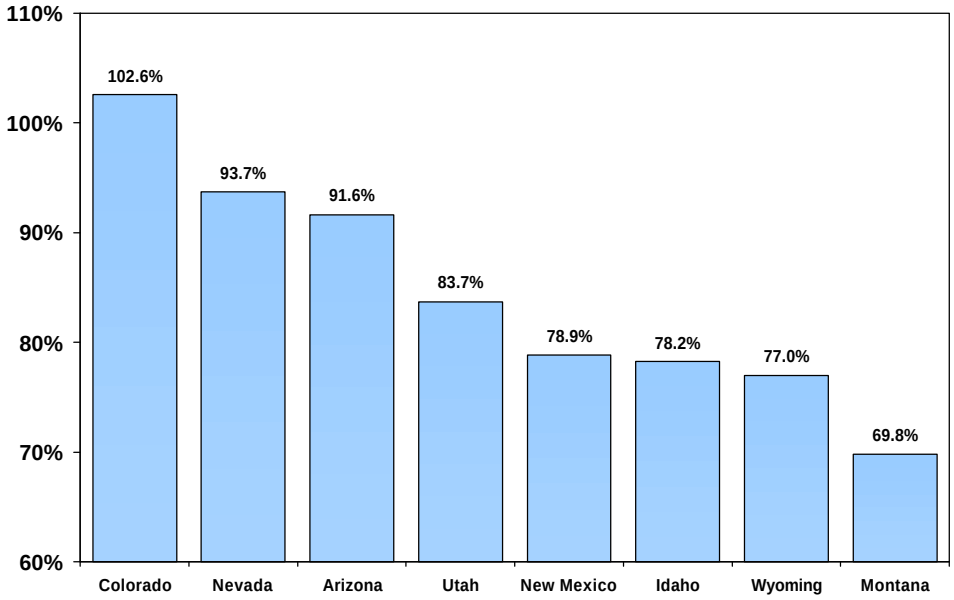
Source: U.S. Bureau of Economic Analysis

Figure 36
Median Household Income as a Percent of U.S.--Mountain Division States: 1997-1999 Three-Year Average



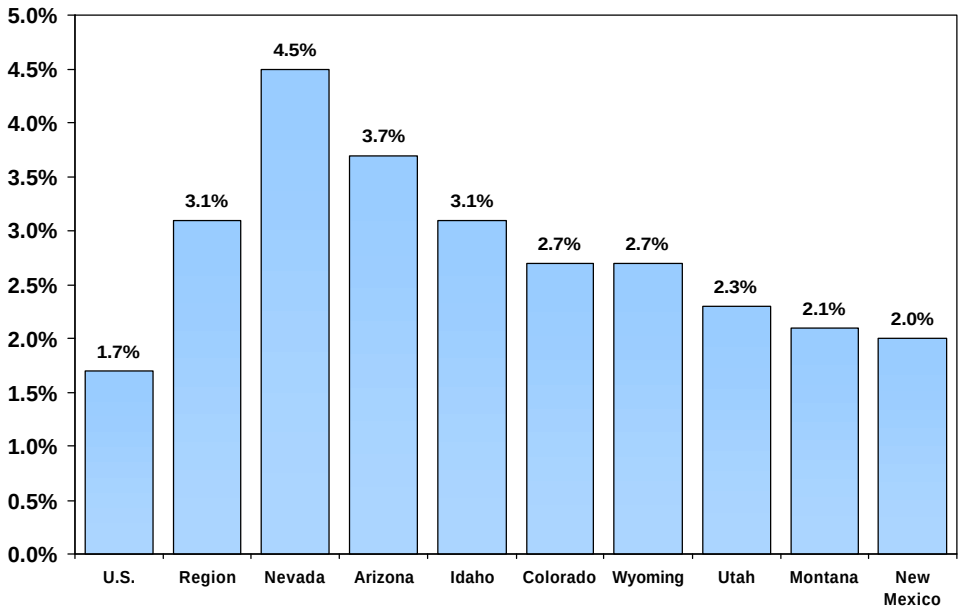
Source: U.S. Bureau of the Census

Figure 37
Average Annual Pay as a Percent of U.S.--Mountain Division States: 1999*



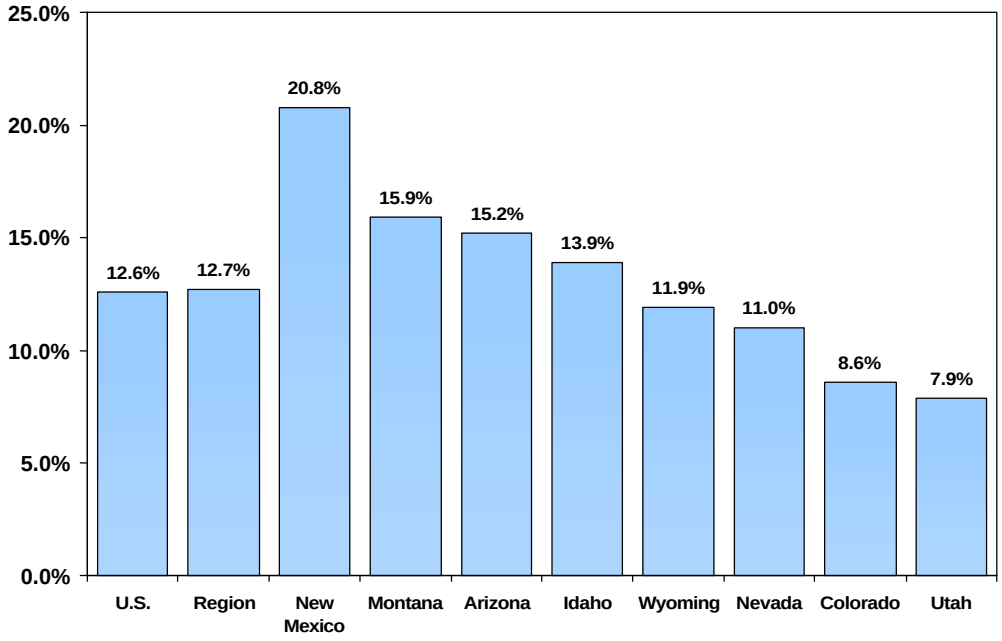
*For workers covered by unemployment insurance
Source: U.S. Bureau of Labor Statistics

Figure 38
Nonagricultural Employment Growth--U.S. and Mountain Division States: November 1999 to November 2000



Source: U.S. Bureau of Labor Statistics

Figure 39
Percent of Persons in Poverty: Three-Year Average 1997 to 1999



Source: U.S. Bureau of the Census

Table 51
Population and Households--U.S., Mountain Division, and States

Division/State	Population (July 1 Estimates) 1994 (thousands)	1998 (thousands)	1999 (thousands)	Rates of Population Change: Avg. Ann. Growth Rate 1994-99	Percent Change 1998-99	Households (July 1 Estimates) 1998 (thousands)	Persons per Household	Rankings: Rank by Population 1999	Rank by Avg. Ann. Growth Rate 1994-99	Rank by Percent Change 1998-99	Rank by Persons per Household 1998
United States	260,327	270,248	272,691	0.9%	0.9%	101,041	2.61				
Mountain States	15,307	16,805	17,127	2.3%	1.9%	6,287	2.62				
Arizona	4,148	4,667	4,778	2.9%	2.4%	1,762	2.6	20	2	2	16
Colorado	3,654	3,969	4,056	2.1%	2.2%	1,561	2.49	24	3	3	44
Idaho	1,135	1,231	1,252	2.0%	1.7%	448	2.69	40	6	5	7
Montana	855	880	883	0.6%	0.4%	346	2.47	44	28	36	49
Nevada	1,456	1,744	1,809	4.4%	3.8%	676	2.54	35	1	1	35
New Mexico	1,653	1,734	1,740	1.0%	0.4%	632	2.7	37	17	37	6
Utah	1,930	2,101	2,130	2.0%	1.4%	677	3.06	34	5	8	1
Wyoming	475	480	480	0.2%	-0.1%	185	2.54	51	44	47	33
Other States											
Alabama	4,233	4,351	4,370	0.6%	0.4%	1,663	2.56	23	29	35	22
Alaska	601	615	620	0.6%	0.7%	215	2.78	48	30	20	4
Arkansas	2,451	2,538	2,551	0.8%	0.5%	970	2.56	33	20	30	25
California	31,317	32,683	33,145	1.1%	1.4%	11,446	2.79	1	16	7	3
Connecticut	3,268	3,273	3,282	0.1%	0.3%	1,238	2.57	29	45	42	21
Delaware	708	744	754	1.2%	1.3%	284	2.54	45	12	12	32
D.C.	565	521	519	-1.7%	-0.5%	225	2.15	50	51	50	51
Florida	13,962	14,908	15,111	1.6%	1.4%	5,881	2.48	4	9	10	45
Georgia	7,046	7,637	7,788	2.0%	2.0%	2,843	2.63	10	4	4	12
Hawaii	1,174	1,190	1,185	0.2%	-0.4%	401	2.87	42	43	49	2
Illinois	11,805	12,070	12,128	0.5%	0.5%	4,438	2.65	5	35	32	11
Indiana	5,746	5,908	5,943	0.7%	0.6%	2,231	2.57	14	26	23	20
Iowa	2,829	2,861	2,869	0.3%	0.3%	1,103	2.5	30	39	41	43
Kansas	2,569	2,639	2,654	0.7%	0.6%	999	2.55	32	27	25	27
Kentucky	3,823	3,934	3,961	0.7%	0.7%	1,497	2.56	25	23	21	24
Louisiana	4,307	4,363	4,372	0.3%	0.2%	1,599	2.66	22	38	43	10
Maine	1,238	1,248	1,253	0.2%	0.4%	490	2.48	39	42	34	46
Maryland	4,985	5,130	5,172	0.7%	0.8%	1,906	2.63	19	22	19	13
Massachusetts	6,031	6,144	6,175	0.5%	0.5%	2,349	2.52	13	37	31	38
Michigan	9,584	9,820	9,864	0.6%	0.4%	3,693	2.6	8	32	33	15
Minnesota	4,566	4,726	4,776	0.9%	1.0%	1,791	2.58	21	19	17	18
Mississippi	2,663	2,751	2,769	0.8%	0.6%	997	2.68	31	21	22	9
Missouri	5,281	5,438	5,468	0.7%	0.6%	2,089	2.53	17	24	26	36
Nebraska	1,622	1,661	1,666	0.5%	0.3%	636	2.54	38	34	39	30
New Hampshire	1,133	1,186	1,201	1.2%	1.3%	450	2.56	41	14	11	23
New Jersey	7,919	8,096	8,143	0.6%	0.6%	2,957	2.69	9	33	24	8
New York	18,157	18,159	18,197	0.0%	0.2%	6,766	2.61	3	46	44	14
North Carolina	7,061	7,546	7,651	1.6%	1.4%	2,883	2.54	11	8	9	31
North Dakota	640	638	634	-0.2%	-0.6%	247	2.48	47	50	51	48
Ohio	11,111	11,238	11,257	0.3%	0.2%	4,285	2.55	7	41	45	29
Oklahoma	3,246	3,339	3,358	0.7%	0.6%	1,288	2.52	27	25	27	40
Oregon	3,087	3,282	3,316	1.4%	1.0%	1,286	2.5	28	11	16	42
Pennsylvania	12,043	12,002	11,994	-0.1%	-0.1%	4,593	2.54	6	48	46	34
Rhode Island	993	988	991	-0.1%	0.3%	376	2.53	43	47	40	37
South Carolina	3,666	3,840	3,886	1.2%	1.2%	1,441	2.58	26	15	15	19
South Dakota	723	731	733	0.3%	0.3%	277	2.55	46	40	38	28
Tennessee	5,163	5,433	5,484	1.2%	0.9%	2,100	2.52	16	13	18	39
Texas	18,338	19,712	20,044	1.8%	1.7%	7,113	2.71	2	7	6	5
Vermont	579	591	594	0.5%	0.5%	231	2.46	49	36	29	50
Virginia	6,537	6,789	6,873	1.0%	1.2%	2,579	2.55	12	18	13	26
Washington	5,335	5,688	5,756	1.5%	1.2%	2,211	2.52	15	10	14	41
West Virginia	1,818	1,812	1,807	-0.1%	-0.3%	716	2.48	36	49	48	47
Wisconsin	5,096	5,222	5,250	0.6%	0.5%	1,973	2.58	18	31	28	17

Source: U.S. Bureau of the Census.

Table 52
Total Personal Income--U.S., Mountain Division, and States

Division/State	Total Personal Income 1994 (millions)	Total Personal Income 1998 (millions)	Total Personal Income 1999 (millions)	Rates of Total Personal Income Change: Avg. Ann. Growth Rate 1994-99	Rates of Total Personal Income Change: Percent Change 1998-99	Total Personal Income (saar): 2nd Quarter 1999 (millions)	Total Personal Income (saar): 2nd Quarter 2000 (millions)	Total Personal Income (saar): Percent Change 1999-00	Rankings: Rank by Total Personal Income 1999	Rankings: Rank by Avg. Ann. Growth Rate 1994-99	Rankings: Rank by Percent Change 1998-99	Rankings: Rank by Percent Change (saar) 1999-00
United States	5,878,362	7,383,687	7,783,152	5.8%	5.4%	7,722,844	8,237,804	6.7%				
Mountain States	314,853	424,374	452,743	7.5%	6.7%	449,744	483,502	7.5%				
Arizona	82,014	112,635	120,360	8.0%	6.9%	119,868	128,754	7.4%	23	3	6	11
Colorado	85,860	118,514	127,955	8.3%	8.0%	126,648	137,563	8.6%	22	2	2	5
Idaho	21,399	26,986	28,582	6.0%	5.9%	28,360	30,530	7.7%	43	15	11	10
Montana	15,499	18,755	19,438	4.6%	3.6%	19,477	20,370	4.6%	46	43	43	45
Nevada	35,878	51,976	56,127	9.4%	8.0%	55,632	60,212	8.2%	34	1	1	6
New Mexico	29,670	36,712	38,020	5.1%	3.6%	37,925	39,826	5.0%	37	35	45	40
Utah	34,579	46,831	49,600	7.5%	5.9%	49,289	52,898	7.3%	35	4	12	12
Wyoming	9,954	11,966	12,660	4.9%	5.8%	12,545	13,349	6.4%	51	38	14	19
Other States												
Alabama	79,832	96,257	100,452	4.7%	4.4%	100,082	103,936	3.9%	24	42	38	51
Alaska	15,168	17,167	17,704	3.1%	3.1%	17,608	18,822	6.9%	48	49	48	13
Arkansas	43,498	53,962	56,752	5.5%	5.2%	56,659	59,358	4.8%	33	23	25	43
California	735,104	924,253	991,382	6.2%	7.3%	980,950	1,073,562	9.4%	1	12	4	1
Connecticut	99,788	122,564	128,983	5.3%	5.2%	127,915	134,448	5.1%	21	30	21	39
Delaware	17,378	22,003	23,192	5.9%	5.4%	22,879	24,245	6.0%	44	17	18	23
D.C.	18,499	19,665	20,686	2.3%	5.2%	20,535	21,402	4.2%	45	50	23	48
Florida	311,909	401,474	419,792	6.1%	4.6%	417,831	441,593	5.7%	4	14	33	32
Georgia	149,165	199,576	212,929	7.4%	6.7%	211,262	228,147	8.0%	11	5	7	7
Hawaii	29,740	31,815	32,653	1.9%	2.6%	32,480	33,810	4.1%	40	51	49	49
Illinois	288,509	361,775	377,744	5.5%	4.4%	375,960	397,364	5.7%	5	22	37	31
Indiana	121,537	148,767	155,365	5.0%	4.4%	154,259	162,567	5.4%	16	36	35	37
Iowa	57,999	71,080	73,499	4.9%	3.4%	72,790	76,993	5.8%	30	40	46	28
Kansas	54,857	67,780	71,194	5.4%	5.0%	70,429	74,341	5.6%	31	27	26	34
Kentucky	70,781	87,945	92,036	5.4%	4.7%	91,322	96,664	5.8%	26	25	32	25
Louisiana	80,872	97,516	99,887	4.3%	2.4%	99,707	103,633	3.9%	25	46	50	50
Maine	24,174	29,353	30,828	5.0%	5.0%	30,624	32,277	5.4%	41	37	28	36
Maryland	129,849	158,264	167,895	5.3%	6.1%	166,527	176,220	5.8%	15	29	10	26
Massachusetts	161,886	205,189	219,533	6.3%	7.0%	216,394	236,822	9.4%	10	10	5	2
Michigan	219,121	263,252	277,296	4.8%	5.3%	275,989	294,633	6.8%	9	41	20	15
Minnesota	107,152	139,442	147,050	6.5%	5.5%	146,146	155,535	6.4%	17	9	17	18
Mississippi	44,077	55,063	57,278	5.4%	4.0%	56,913	59,346	4.3%	32	26	40	47
Missouri	112,314	138,128	144,235	5.1%	4.4%	143,515	151,295	5.4%	18	34	36	35
Nebraska	34,325	42,949	45,065	5.6%	4.9%	44,656	47,221	5.7%	36	19	31	29
New Hampshire	26,990	35,194	37,372	6.7%	6.2%	36,945	40,301	9.1%	39	8	9	4
New Jersey	220,817	277,757	289,503	5.6%	4.2%	286,897	303,131	5.7%	8	21	39	33
New York	478,586	585,372	616,678	5.2%	5.3%	610,755	646,079	5.8%	2	32	19	27
North Carolina	147,793	192,070	198,943	6.1%	3.6%	198,615	212,142	6.8%	13	13	44	14
North Dakota	12,177	14,521	14,773	3.9%	1.7%	14,765	15,469	4.8%	50	47	51	42
Ohio	245,156	294,027	305,643	4.5%	4.0%	303,911	320,033	5.3%	7	44	42	38
Oklahoma	60,800	74,133	77,077	4.9%	4.0%	76,670	80,349	4.8%	29	39	41	41
Oregon	66,130	85,197	89,614	6.3%	5.2%	88,863	95,711	7.7%	28	11	24	9
Pennsylvania	275,337	328,364	343,088	4.5%	4.5%	341,195	356,907	4.6%	6	45	34	44
Rhode Island	22,612	27,667	29,107	5.2%	5.2%	28,795	30,695	6.6%	42	33	22	16
South Carolina	68,511	86,560	91,490	6.0%	5.7%	90,876	96,593	6.3%	27	16	15	21
South Dakota	14,177	17,391	18,361	5.3%	5.6%	18,290	19,428	6.2%	47	28	16	22
Tennessee	106,855	133,514	140,234	5.6%	5.0%	139,372	148,258	6.4%	20	20	27	20
Texas	377,583	508,636	538,345	7.4%	5.8%	534,575	576,303	7.8%	3	6	13	8
Vermont	11,898	14,648	15,371	5.3%	4.9%	15,293	16,190	5.9%	49	31	29	24
Virginia	154,982	192,429	204,736	5.7%	6.4%	202,302	215,382	6.5%	12	18	8	17
Washington	123,337	162,855	174,948	7.2%	7.4%	171,126	186,846	9.2%	14	7	3	3
West Virginia	31,666	36,679	37,884	3.7%	3.3%	37,656	39,297	4.4%	38	48	47	46
Wisconsin	110,570	137,056	143,811	5.4%	4.9%	142,767	150,955	5.7%	19	24	30	30

saar = seasonally adjusted annual rate.

Source: U.S. Bureau of Economic Analysis.

Table 53
Per Capita Personal Income--U.S., Mountain Division, and States

Division/State	Per Capita Personal Income 1994	Per Capita Personal Income 1998	Per Capita Personal Income 1999	Rates of Per Capita Personal Income Change: Avg. Ann. Grwth Rate 1994-99	Rates of Per Capita Personal Income Change: Percent Change 1998-99	Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1994	Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1998	Per Capita Personal Income as a Percent of U.S. Per Capita Personal Income 1999	Rankings: Rank by Per Capita Personal Income 1999	Rankings: Rank by Average Annual Grwth Rate 1994-99	Rankings: Rank by Percent Change 1998-99
United States	22,581	27,322	28,542	4.8%	4.5%	100.0%	100.0%	100.0%			
Mountain States	20,569	25,253	26,434	5.1%	4.7%	91.1%	92.4%	92.6%			
Arizona	19,774	24,133	25,189	5.0%	4.4%	87.6%	88.3%	88.3%	36	17	24
Colorado	23,498	29,860	31,546	6.1%	5.6%	104.1%	109.3%	110.5%	7	1	6
Idaho	18,846	21,923	22,835	3.9%	4.2%	83.5%	80.2%	80.0%	46	48	27
Montana	18,129	21,324	22,019	4.0%	3.3%	80.3%	78.0%	77.1%	48	47	43
Nevada	24,635	29,806	31,022	4.7%	4.1%	109.1%	109.1%	108.7%	10	24	31
New Mexico	17,946	21,178	21,853	4.0%	3.2%	79.5%	77.5%	76.6%	49	44	44
Utah	17,912	22,294	23,288	5.4%	4.5%	79.3%	81.6%	81.6%	41	7	20
Wyoming	20,957	24,927	26,396	4.7%	5.9%	92.8%	91.2%	92.5%	29	23	3
Other States											
Alabama	18,860	22,123	22,987	4.0%	3.9%	83.5%	81.0%	80.5%	43	43	35
Alaska	25,253	27,904	28,577	2.5%	2.4%	111.8%	102.1%	100.1%	18	50	48
Arkansas	17,750	21,260	22,244	4.6%	4.6%	78.6%	77.8%	77.9%	47	29	15
California	23,473	28,280	29,910	5.0%	5.8%	104.0%	103.5%	104.8%	14	16	4
Connecticut	30,532	37,452	39,300	5.2%	4.9%	135.2%	137.1%	137.7%	2	10	11
Delaware	24,530	29,571	30,778	4.6%	4.1%	108.6%	108.2%	107.8%	12	28	30
D.C.	32,743	37,714	39,858	4.0%	5.7%	145.0%	138.0%	139.6%	1	45	5
Florida	22,340	26,930	27,780	4.5%	3.2%	98.9%	98.6%	97.3%	20	34	45
Georgia	21,170	26,134	27,340	5.2%	4.6%	93.8%	95.7%	95.8%	23	8	16
Hawaii	25,335	26,725	27,544	1.7%	3.1%	112.2%	97.8%	96.5%	21	51	47
Illinois	24,440	29,974	31,145	5.0%	3.9%	108.2%	109.7%	109.1%	8	15	34
Indiana	21,153	25,182	26,143	4.3%	3.8%	93.7%	92.2%	91.6%	31	37	37
Iowa	20,498	24,844	25,615	4.6%	3.1%	90.8%	90.9%	89.7%	34	32	46
Kansas	21,352	25,687	26,824	4.7%	4.4%	94.6%	94.0%	94.0%	28	26	22
Kentucky	18,514	22,353	23,237	4.6%	4.0%	82.0%	81.8%	81.4%	42	27	33
Louisiana	18,779	22,352	22,847	4.0%	2.2%	83.2%	81.8%	80.0%	45	46	50
Maine	19,531	23,529	24,603	4.7%	4.6%	86.5%	86.1%	86.2%	38	21	18
Maryland	26,046	30,850	32,465	4.5%	5.2%	115.3%	112.9%	113.7%	6	33	8
Massachusetts	26,841	33,394	35,551	5.8%	6.5%	118.9%	122.2%	124.6%	4	2	1
Michigan	22,862	26,807	28,113	4.2%	4.9%	101.2%	98.1%	98.5%	19	40	13
Minnesota	23,467	29,503	30,793	5.6%	4.4%	103.9%	108.0%	107.9%	11	4	25
Mississippi	16,549	20,013	20,688	4.6%	3.4%	73.3%	73.2%	72.5%	51	31	42
Missouri	21,267	25,403	26,376	4.4%	3.8%	94.2%	93.0%	92.4%	30	36	36
Nebraska	21,168	25,861	27,049	5.0%	4.6%	93.7%	94.7%	94.8%	25	12	17
New Hampshire	23,820	29,679	31,114	5.5%	4.8%	105.5%	108.6%	109.0%	9	5	14
New Jersey	27,885	34,310	35,551	5.0%	3.6%	123.5%	125.6%	124.6%	3	14	39
New York	26,359	32,236	33,890	5.2%	5.1%	116.7%	118.0%	118.7%	5	11	9
North Carolina	20,931	25,454	26,003	4.4%	2.2%	92.7%	93.2%	91.1%	32	35	51
North Dakota	19,033	22,767	23,313	4.1%	2.4%	84.3%	83.3%	81.7%	40	42	49
Ohio	22,063	26,164	27,152	4.2%	3.8%	97.7%	95.8%	95.1%	24	39	38
Oklahoma	18,730	22,199	22,953	4.2%	3.4%	82.9%	81.2%	80.4%	44	41	41
Oregon	21,421	25,958	27,023	4.8%	4.1%	94.9%	95.0%	94.7%	26	19	28
Pennsylvania	22,864	27,358	28,605	4.6%	4.6%	101.3%	100.1%	100.2%	17	30	19
Rhode Island	22,762	28,012	29,377	5.2%	4.9%	100.8%	102.5%	102.9%	16	9	12
South Carolina	18,686	22,544	23,545	4.7%	4.4%	82.8%	82.5%	82.5%	39	20	21
South Dakota	19,607	23,797	25,045	5.0%	5.2%	86.8%	87.1%	87.7%	37	13	7
Tennessee	20,696	24,576	25,574	4.3%	4.1%	91.7%	89.9%	89.6%	35	38	32
Texas	20,590	25,803	26,858	5.5%	4.1%	91.2%	94.4%	94.1%	27	6	29
Vermont	20,553	24,803	25,889	4.7%	4.4%	91.0%	90.8%	90.7%	33	22	23
Virginia	23,709	28,343	29,789	4.7%	5.1%	105.0%	103.7%	104.4%	15	25	10
Washington	23,119	28,632	30,392	5.6%	6.1%	102.4%	104.8%	106.5%	13	3	2
West Virginia	17,413	20,246	20,966	3.8%	3.6%	77.1%	74.1%	73.5%	50	49	40
Wisconsin	21,699	26,245	27,390	4.8%	4.4%	96.1%	96.1%	96.0%	22	18	26

Source: U.S. Bureau of Economic Analysis.

Table 54
Median Income of Households--U.S., Mountain Division, and States

	Median Income of Households (1999 Dollars)				Median Income of Households (1999 Dollars) Two-year Moving Average*					Median Income of Households Three-year Average* (1999 Dollars)			
	1994	1998	1999		1997-1998	1998-1999				1997-1999			
	Amount	Amount	Amount	Standard Error	Amount	Amount	Standard Error	Two-year Average Difference	Pct. Chg.	Amount	Standard Error	Amount Rank	As a % of the U.S.
United States	36,270	39,744	40,816	192	39,078	40,280	176	1,202	3.1%	39,657	143		100.0%
Mountain States													
Arizona	35,178	37,909	37,119	1,206	35,947	37,514	1,023	1,567	4.4%	36,337	895	34	91.6%
Colorado	42,530	47,628	48,346	1,490	46,252	47,987	1,074	1,735	3.8%	46,950	1,067	5	118.4%
Idaho	35,451	37,490	35,906	1,405	36,082	36,698	1,038	616	1.7%	36,023	902	36	90.8%
Montana	31,062	32,274	31,244	961	31,298	31,759	872	461	1.5%	31,280	776	48	78.9%
Nevada	40,325	40,634	41,680	1,880	40,483	41,157	1,299	674	1.7%	40,882	1,098	18	103.1%
New Mexico	30,245	32,240	32,475	1,761	31,735	32,358	1,314	623	2.0%	31,981	1,030	47	80.6%
Utah	40,150	45,277	46,094	1,631	44,839	45,686	1,249	847	1.9%	45,257	1,130	8	114.1%
Wyoming	37,255	36,029	37,395	1,298	35,361	36,712	1,086	1,351	3.8%	36,039	964	35	90.9%
Other States													
Alabama	30,573	37,067	36,213	1,185	35,110	36,640	1,037	1,530	4.4%	35,478	980	37	89.5%
Alaska	51,000	51,812	51,509	2,198	50,815	51,661	1,795	846	1.7%	51,046	1,357	1	128.7%
Arkansas	28,739	28,276	29,762	1,062	27,716	29,019	924	1,303	4.7%	28,398	806	51	71.6%
California	39,718	41,838	43,744	697	41,521	42,791	530	1,270	3.1%	42,262	505	17	106.6%
Connecticut	46,199	47,535	50,798	2,333	46,596	49,167	2,108	2,571	5.5%	47,997	1,702	4	121.0%
Delaware	40,327	42,374	46,839	2,318	43,522	44,607	1,695	1,085	2.5%	44,627	1,444	11	112.5%
Dist. of C.	33,855	34,171	38,686	1,625	33,621	36,429	1,221	2,808	8.4%	35,309	940	39	89.0%
Florida	32,931	35,680	35,876	641	34,684	35,778	587	1,094	3.2%	35,081	480	41	88.5%
Georgia	35,374	39,519	39,433	1,382	38,788	39,476	1,064	688	1.8%	39,003	832	24	98.4%
Hawaii	47,501	41,729	44,373	1,750	42,110	43,051	1,724	941	2.2%	42,864	1,352	16	108.1%
Illinois	39,437	44,132	46,392	1,029	43,492	45,262	943	1,770	4.1%	44,459	740	12	112.1%
Indiana	31,317	40,608	40,929	1,721	40,488	40,769	1,374	281	0.7%	40,635	1,078	19	102.5%
Iowa	37,186	37,837	41,238	1,125	36,452	39,538	967	3,086	8.5%	38,047	860	28	95.9%
Kansas	31,838	37,522	37,476	2,123	37,690	37,499	1,557	-191	-0.5%	37,618	1,267	29	94.9%
Kentucky	29,897	37,053	33,901	1,497	35,888	35,477	1,249	-411	-1.1%	35,226	1,109	40	88.8%
Louisiana	28,864	32,436	32,695	1,255	33,480	32,566	1,219	-914	-2.7%	33,218	1,078	45	83.8%
Maine	34,080	36,427	38,932	1,328	35,223	37,680	989	2,457	7.0%	36,459	866	33	91.9%
Maryland	44,065	51,121	52,310	2,212	49,790	51,716	1,816	1,926	3.9%	50,630	1,411	2	127.7%
Massachusetts	45,528	43,280	44,192	2,088	43,450	43,736	1,681	286	0.7%	43,697	1,307	13	110.2%
Michigan	39,665	42,745	46,238	1,031	41,480	44,492	809	3,012	7.3%	43,066	722	14	108.6%
Minnesota	37,821	48,984	47,240	1,565	46,583	48,112	1,540	1,529	3.3%	46,802	1,261	6	118.0%
Mississippi	28,554	29,763	32,540	1,402	29,673	31,152	1,064	1,479	5.0%	30,628	931	49	77.2%
Missouri	33,938	41,089	41,466	1,231	39,516	41,278	1,304	1,762	4.5%	40,166	1,258	21	101.3%
Nebraska	35,741	37,217	38,787	1,380	36,614	38,002	1,219	1,388	3.8%	37,338	1,065	30	94.2%
New Hampshire	39,621	45,951	46,167	1,963	44,254	46,059	1,590	1,805	4.1%	44,891	1,296	9	113.2%
New Jersey	47,529	50,926	49,930	1,390	50,386	50,428	1,174	42	0.1%	50,234	1,012	3	126.7%
New York	35,859	38,220	40,058	882	37,690	39,139	689	1,449	3.8%	38,479	547	27	97.0%
North Carolina	33,853	36,630	37,340	1,016	36,916	36,985	847	69	0.2%	37,057	705	32	93.4%
North Dakota	31,789	30,973	32,877	1,349	31,919	31,925	1,050	6	0.0%	32,238	919	46	81.3%
Ohio	35,810	39,785	39,617	986	38,646	39,701	1,082	1,055	2.7%	38,970	856	25	98.3%
Oklahoma	30,342	34,472	32,919	1,559	33,508	33,696	1,161	188	0.6%	33,311	910	44	84.0%
Oregon	35,361	39,930	40,713	1,242	39,297	40,322	1,336	1,025	2.6%	39,769	1,208	22	100.3%
Pennsylvania	36,047	39,877	37,995	1,207	39,410	38,936	950	-474	-1.2%	38,938	773	26	98.2%
Rhode Island	35,892	41,585	42,936	2,012	38,852	42,261	1,953	3,409	8.8%	40,213	1,668	20	101.4%
South Carolina	33,552	34,002	36,563	1,746	34,783	35,283	1,273	500	1.4%	35,376	1,097	38	89.2%
South Dakota	33,425	33,510	35,982	917	32,167	34,746	803	2,579	8.0%	33,438	734	43	84.3%
Tennessee	32,195	34,844	36,536	1,326	33,322	35,690	1,094	2,368	7.1%	34,393	948	42	86.7%
Texas	34,573	36,573	38,978	1,025	36,491	37,776	706	1,285	3.5%	37,320	602	31	94.1%
Vermont	40,247	40,242	41,630	1,422	38,314	40,936	1,253	2,622	6.8%	39,419	1,132	23	99.4%
Virginia	42,321	44,312	45,750	1,787	44,451	45,031	1,661	580	1.3%	44,884	1,414	10	113.2%
Washington	37,696	48,468	45,639	2,027	47,362	47,054	1,422	-308	-0.7%	46,788	1,203	7	118.0%
West Virginia	26,490	27,294	29,433	1,140	27,914	28,364	802	450	1.6%	28,420	760	50	71.7%
Wisconsin	39,782	42,240	45,825	1,883	41,670	44,033	1,318	2,363	5.7%	43,055	1,025	15	108.6%

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

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

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

Source: 1999 March Current Population Survey, U.S. Bureau of the Census, Median Household Income by State.

Table 55
Average Annual Pay For All Workers Covered by Unemployment Insurance: U.S., Mountain Division, and States

Division/State	Average Annual Pay 1994	Average Annual Pay 1998	Average Annual Pay 1999	Rates of Change for Average Annual Pay: Avg. Ann. Grwth Rate 1994-99	Rates of Change for Average Annual Pay: Percent Change 1998-99	Average Annual Pay as a Percent of U.S. Average Annual Pay 1994	Average Annual Pay as a Percent of U.S. Average Annual Pay 1998	Average Annual Pay as a Percent of U.S. Average Annual Pay 1999	Rankings: Rank by Average Annual Pay 1999	Rankings: Rank by Avg. Ann. Grwth Rate 1994-99	Rankings: Rank by Percent Change 1998-99
United States	26,939	31,945	33,313	4.3%	4.3%	100.0%	100.0%	100.0%			
Mountain States	24,110	28,800	30,073	4.5%	4.4%	89.5%	90.2%	90.3%			
Arizona	24,276	29,322	30,523	4.7%	4.1%	90.1%	91.8%	91.6%	23	11	23
Colorado	26,155	32,248	34,192	5.5%	6.0%	97.1%	100.9%	102.6%	11	2	11
Idaho	21,938	24,868	26,042	3.5%	4.7%	81.4%	77.8%	78.2%	42	42	42
Montana	20,218	22,648	23,253	2.8%	2.7%	75.1%	70.9%	69.8%	50	47	50
Nevada	25,700	30,203	31,213	4.0%	3.3%	95.4%	94.5%	93.7%	20	27	20
New Mexico	22,351	25,711	26,270	3.3%	2.2%	83.0%	80.5%	78.9%	41	43	41
Utah	22,811	26,873	27,884	4.1%	3.8%	84.7%	84.1%	83.7%	33	23	33
Wyoming	22,054	24,725	25,639	3.1%	3.7%	81.9%	77.4%	77.0%	45	45	45
Other States											
Alabama	23,616	27,042	28,069	3.5%	3.8%	87.7%	84.7%	84.3%	31	41	31
Alaska	32,657	33,847	34,034	0.8%	0.6%	121.2%	106.0%	102.2%	12	50	12
Arkansas	20,898	24,425	25,371	4.0%	3.9%	77.6%	76.5%	76.2%	46	29	46
California	29,878	35,348	37,564	4.7%	6.3%	110.9%	110.7%	112.8%	5	12	5
Connecticut	33,811	40,895	42,653	4.8%	4.3%	125.5%	128.0%	128.0%	2	8	2
Delaware	27,952	33,969	35,102	4.7%	3.3%	103.8%	106.3%	105.4%	9	13	9
D.C.	40,919	48,462	50,742	4.4%	4.7%	151.9%	151.7%	152.3%	1	17	1
Florida	23,918	28,184	28,911	3.9%	2.6%	88.8%	88.2%	86.8%	30	33	30
Georgia	25,313	30,856	32,339	5.0%	4.8%	94.0%	96.6%	97.1%	17	4	17
Hawaii	26,746	29,036	29,771	2.2%	2.5%	99.3%	90.9%	89.4%	26	49	26
Illinois	29,107	34,715	36,279	4.5%	4.5%	108.0%	108.7%	108.9%	6	15	6
Indiana	24,908	29,108	30,027	3.8%	3.2%	92.5%	91.1%	90.1%	24	35	24
Iowa	22,189	26,026	26,939	4.0%	3.5%	82.4%	81.5%	80.9%	38	28	38
Kansas	22,907	26,845	28,029	4.1%	4.4%	85.0%	84.0%	84.1%	32	22	32
Kentucky	22,747	26,697	27,748	4.1%	3.9%	84.4%	83.6%	83.3%	34	24	34
Louisiana	23,178	26,910	27,221	3.3%	1.2%	86.0%	84.2%	81.7%	36	44	36
Maine	22,389	25,875	26,887	3.7%	3.9%	83.1%	81.0%	80.7%	39	38	39
Maryland	28,416	33,301	34,472	3.9%	3.5%	105.5%	104.2%	103.5%	10	31	10
Massachusetts	31,024	37,774	40,331	5.4%	6.8%	115.2%	118.2%	121.1%	4	3	4
Michigan	29,541	34,521	35,734	3.9%	3.5%	109.7%	108.1%	107.3%	8	32	8
Minnesota	26,422	32,075	33,487	4.9%	4.4%	98.1%	100.4%	100.5%	13	6	13
Mississippi	20,382	23,822	24,392	3.7%	2.4%	75.7%	74.6%	73.2%	47	39	47
Missouri	24,628	28,907	29,958	4.0%	3.6%	91.4%	90.5%	89.9%	25	26	25
Nebraska	21,500	25,539	26,633	4.4%	4.3%	79.8%	79.9%	79.9%	40	18	40
New Hampshire	25,555	30,944	32,139	4.7%	3.9%	94.9%	96.9%	96.5%	18	10	18
New Jersey	33,439	39,516	na	na	na	124.1%	123.7%	na	na	na	na
New York	33,439	40,684	42,133	4.7%	3.6%	124.1%	127.4%	126.5%	3	9	3
North Carolina	23,460	28,176	29,453	4.7%	4.5%	87.1%	88.2%	88.4%	29	14	29
North Dakota	19,893	22,990	23,753	3.6%	3.3%	73.8%	72.0%	71.3%	49	40	49
Ohio	26,134	30,392	31,396	3.7%	3.3%	97.0%	95.1%	94.2%	19	37	19
Oklahoma	22,293	25,122	25,748	2.9%	2.5%	82.8%	78.6%	77.3%	44	46	44
Oregon	24,780	29,544	30,867	4.5%	4.5%	92.0%	92.5%	92.7%	22	16	22
Pennsylvania	26,950	31,584	32,694	3.9%	3.5%	100.0%	98.9%	98.1%	16	30	16
Rhode Island	25,454	30,156	31,177	4.1%	3.4%	94.5%	94.4%	93.6%	21	20	21
South Carolina	22,477	26,161	27,124	3.8%	3.7%	83.4%	81.9%	81.4%	37	34	37
South Dakota	19,255	22,751	23,765	4.3%	4.5%	71.5%	71.2%	71.3%	48	19	48
Tennessee	24,106	28,462	29,518	4.1%	3.7%	89.5%	89.1%	88.6%	28	21	28
Texas	25,959	31,515	32,895	4.8%	4.4%	96.4%	98.7%	98.7%	15	7	15
Vermont	22,964	26,611	27,595	3.7%	3.7%	85.2%	83.3%	82.8%	35	36	35
Virginia	26,035	31,373	33,015	4.9%	5.2%	96.6%	98.2%	99.1%	14	5	14
Washington	26,362	33,076	35,736	6.3%	8.0%	97.9%	103.5%	107.3%	7	1	7
West Virginia	22,959	25,276	26,008	2.5%	2.9%	85.2%	79.1%	78.1%	43	48	43
Wisconsin	24,324	28,531	29,597	4.0%	3.7%	90.3%	89.3%	88.8%	27	25	27

Source: U.S. Bureau of Labor Statistics.

Table 56
Employees on Nonagricultural Payrolls--U.S., Mountain Division, and States

Division/State	Employees on Nonagricultural Payrolls 1994 (thousands)	1998 (thousands)	1999 (thousands)	Rates of Change for Employees on Nonagricultural Payrolls: Avg. Ann. Grwth Rate 1994-99	Percent Change 1998-99	Employees on Nonagricultural Payrolls (not seasonally adjusted): November 1999 (thousands)	November 2000 (thousands)	Percent Change 1999-00	Rankings: Rank by Employees on Nonag. Payrolls 1999	Rank by Average Annual Grwth Rate 1994-99	Rank by Percent Change 1998-99	Rank by Percent Change (unadjust.) 1999-2000
United States	114,163	125,865	128,786	2.4%	2.3%	130,839.0	133,003.0	1.7%				
Mountain States	6,721	7,924	8,212	4.1%	3.6%	8,398.4	8,654.7	3.1%				
Arizona	1,692	2,075	2,160	5.0%	4.1%	2,223.3	2,305.3	3.7%	20	2	2	3
Colorado	1,756	2,057	2,134	4.0%	3.7%	2,173.7	2,231.6	2.7%	21	4	4	8
Idaho	461	522	540	3.2%	3.4%	553.4	570.4	3.1%	42	8	6	5
Montana	340	373	381	2.3%	2.3%	388.0	396.0	2.1%	46	22	20	14
Nevada	738	926	985	5.9%	6.4%	1,015.6	1,061.1	4.5%	34	1	1	1
New Mexico	657	720	730	2.1%	1.4%	738.6	753.4	2.0%	37	27	37	15
Utah	860	1,023	1,050	4.1%	2.6%	1,072.5	1,097.2	2.3%	33	3	15	11
Wyoming	217	228	233	1.4%	1.8%	233.3	239.7	2.7%	51	46	25	6
Other States												
Alabama	1,759	1,898	1,924	1.8%	1.4%	1,950.9	1,956.8	0.3%	22	39	39	47
Alaska	259	275	278	1.4%	0.9%	270.7	275.4	1.7%	50	47	47	24
Arkansas	1,034	1,122	1,142	2.0%	1.8%	1,160.4	1,186.4	2.2%	32	29	28	12
California	12,160	13,596	13,972	2.8%	2.8%	14,235.5	14,680.4	3.1%	1	13	9	4
Connecticut	1,544	1,643	1,672	1.6%	1.7%	1,700.8	1,718.5	1.0%	26	42	30	35
Delaware	356	400	412	2.9%	2.8%	418.8	426.3	1.8%	45	9	8	22
D.C.	659	614	616	-1.3%	0.4%	621.6	627.4	0.9%	39	51	51	37
Florida	5,799	6,637	6,877	3.5%	3.6%	7,035.4	7,303.9	3.8%	4	6	5	2
Georgia	3,266	3,741	3,890	3.6%	4.0%	3,976.8	4,035.5	1.5%	8	5	3	30
Hawaii	536	531	534	-0.1%	0.5%	540.8	551.0	1.9%	43	50	49	20
Illinois	793	822	832	1.0%	1.2%	6,039.5	6,086.7	0.8%	36	49	42	40
Indiana	2,713	2,917	2,968	1.8%	1.7%	3,019.8	3,030.8	0.4%	13	37	29	46
Iowa	1,320	1,443	1,467	2.1%	1.7%	1,485.2	1,516.9	2.1%	28	26	33	13
Kansas	1,166	1,312	1,327	2.6%	1.1%	1,347.9	1,374.8	2.0%	30	17	46	16
Kentucky	1,597	1,753	1,795	2.4%	2.4%	1,826.1	1,858.6	1.8%	25	20	19	23
Louisiana	1,722	1,890	1,898	2.0%	0.4%	1,923.3	1,932.6	0.5%	23	32	50	45
Maine	532	569	586	2.0%	2.9%	600.3	610.2	1.6%	41	33	7	29
Maryland	2,146	2,324	2,382	2.1%	2.5%	2,428.8	2,485.4	2.3%	19	28	16	10
Massachusetts	2,904	3,179	3,236	2.2%	1.8%	3,290.3	3,346.4	1.7%	12	25	27	26
Michigan	4,147	4,510	4,562	1.9%	1.2%	4,627.6	4,656.9	0.6%	7	35	45	42
Minnesota	2,310	2,555	2,609	2.5%	2.1%	2,652.9	2,697.6	1.7%	18	19	22	27
Mississippi	1,056	1,134	1,155	1.8%	1.9%	1,166.3	1,152.7	-1.2%	31	38	24	51
Missouri	2,471	2,684	2,725	2.0%	1.5%	2,770.1	2,805.9	1.3%	15	31	34	33
Nebraska	796	876	891	2.3%	1.7%	903.9	895.3	-1.0%	35	23	32	50
New Hampshire	523	589	605	2.9%	2.6%	611.8	617.2	0.9%	40	10	12	38
New Jersey	3,553	3,801	3,866	1.7%	1.7%	3,918.5	3,974.1	1.4%	10	41	31	31
New York	7,831	8,237	8,454	1.5%	2.6%	8,616.3	8,779.8	1.9%	3	43	14	18
North Carolina	3,359	3,774	3,866	2.9%	2.4%	3,930.6	3,962.4	0.8%	9	12	17	39
North Dakota	295	320	323	1.9%	1.2%	329.4	329.0	-0.1%	48	36	43	49
Ohio	5,076	5,482	5,548	1.8%	1.2%	5,628.3	5,662.3	0.6%	6	40	44	44
Oklahoma	1,280	1,441	1,462	2.7%	1.4%	1,481.9	1,506.8	1.7%	29	15	36	28
Oregon	1,363	1,552	1,572	2.9%	1.3%	1,605.1	1,616.4	0.7%	27	11	41	41
Pennsylvania	5,192	5,495	5,577	1.4%	1.5%	5,654.2	5,660.9	0.1%	5	45	35	48
Rhode Island	434	458	464	1.4%	1.4%	475.8	482.2	1.3%	44	48	38	32
South Carolina	1,607	1,783	1,833	2.7%	2.8%	1,854.3	1,899.7	2.4%	24	16	10	9
South Dakota	332	363	373	2.4%	2.7%	378.3	380.6	0.6%	47	21	11	43
Tennessee	2,423	2,639	2,674	2.0%	1.4%	2,714.7	2,740.2	0.9%	16	30	40	36
Texas	7,751	8,940	9,155	3.4%	2.4%	9,303.5	9,557.8	2.7%	2	7	18	7
Vermont	264	285	290	1.9%	1.9%	294.1	299.6	1.9%	49	34	23	21
Virginia	3,004	3,320	3,408	2.6%	2.6%	3,465.6	3,533.9	2.0%	11	18	13	17
Washington	2,304	2,595	2,643	2.8%	1.8%	2,687.4	2,738.2	1.9%	17	14	26	19
West Virginia	675	719	726	1.5%	0.9%	735.6	744.8	1.3%	38	44	48	34
Wisconsin	2,491	2,718	2,777	2.2%	2.2%	2,817.8	2,866.7	1.7%	14	24	21	25

Note: This data varies slightly from data reported by the State of Utah Department of Workforce Services.

Source: U.S. Bureau of Labor Statistics.

Table 57
Unemployment Rates--U.S., Mountain Division, and States

Division/State	Unemployment Rate 1994	Unemployment Rate 1998	Unemployment Rate 1999	Unemployment Rate Percent Change 1994-99	Unemployment Rate Percent Change 1998-99	Unemployment Rate (not seasonally adjusted) October 1999	Unemployment Rate (not seasonally adjusted) October 2000(p)	Rankings by Unemployment Rate 1994	Rankings by Unemployment Rate 1998	Rankings by Unemployment Rate 1999	Rankings by Unemployment Rate (unadjust.) 1999	Rankings by Unemployment Rate (unadjust.) 2000(p)
United States	6.1%	4.5%	4.2%	0.3%	4.1%	4.1%	3.8%					
Mountain States	5.3%	4.4%	4.2%	0.2%	3.8%	3.9%	3.6%					
Arizona	6.4%	4.1%	4.4%	-0.3%	4.2%	3.7%	3.7%	14	32	23	30	25
Colorado	4.2%	3.8%	2.9%	0.9%	2.7%	3.3%	2.6%	45	34	45	33	41
Idaho	5.6%	5.0%	5.2%	-0.2%	3.9%	4.4%	4.3%	25	13	10	15	12
Montana	5.1%	5.6%	5.2%	0.4%	4.5%	5.6%	4.8%	34	10	7	6	7
Nevada	6.2%	4.3%	4.4%	-0.1%	4.2%	3.1%	3.9%	18	26	22	38	20
New Mexico	6.3%	6.2%	5.6%	0.6%	5.3%	6.0%	5.5%	16	4	6	2	4
Utah	3.7%	3.8%	3.7%	0.1%	3.2%	3.2%	2.7%	49	35	32	37	39
Wyoming	5.3%	4.8%	4.9%	-0.1%	4.1%	4.5%	4.1%	30	16	13	14	15
Other States												
Alabama	6.0%	4.2%	4.8%	-0.6%	5.0%	3.9%	4.2%	20	30	14	28	14
Alaska	7.8%	5.8%	6.4%	-0.6%	5.7%	5.5%	5.8%	5	6	2	7	2
Arkansas	5.3%	5.5%	4.5%	1.0%	3.7%	4.9%	3.9%	31	11	20	12	22
California	8.6%	5.9%	5.2%	0.7%	4.7%	5.7%	4.6%	2	5	9	5	9
Connecticut	5.6%	3.4%	3.2%	0.2%	3.0%	2.9%	2.6%	26	40	40	42	42
Delaware	4.9%	3.8%	3.5%	0.3%	3.3%	3.0%	2.9%	37	37	34	40	36
D.C.	8.2%	8.8%	6.3%	2.5%	5.6%	8.0%	5.7%	3	1	3	1	3
Florida	6.6%	4.3%	3.9%	0.4%	3.9%	4.2%	4.0%	11	25	30	18	19
Georgia	5.2%	4.2%	4.0%	0.2%	3.9%	3.8%	3.4%	33	28	28	29	29
Hawaii	6.1%	6.2%	5.6%	0.6%	5.2%	5.9%	5.2%	19	3	5	3	5
Illinois	5.7%	4.5%	4.3%	0.2%	3.9%	4.1%	3.9%	24	23	24	23	21
Indiana	4.9%	3.1%	3.0%	0.1%	2.7%	2.8%	2.8%	36	45	44	44	38
Iowa	3.7%	2.8%	2.5%	0.3%	1.8%	2.5%	2.0%	48	49	51	49	51
Kansas	5.3%	3.8%	3.0%	0.8%	2.9%	3.7%	3.3%	32	36	43	31	32
Kentucky	5.4%	4.6%	4.5%	0.1%	4.2%	4.1%	3.7%	28	20	19	22	26
Louisiana	8.0%	5.7%	5.1%	0.6%	4.7%	4.9%	4.4%	4	7	11	10	10
Maine	7.4%	4.4%	4.1%	0.3%	3.3%	4.2%	3.6%	6	24	26	19	27
Maryland	5.1%	4.6%	3.5%	1.1%	3.2%	4.0%	3.1%	35	21	33	25	33
Massachusetts	6.0%	3.3%	3.2%	0.1%	2.9%	2.7%	2.8%	21	43	38	45	37
Michigan	5.9%	3.9%	3.8%	0.1%	3.1%	3.3%	3.3%	22	33	31	34	31
Minnesota	4.0%	2.5%	2.8%	-0.3%	2.3%	2.1%	2.1%	46	51	48	51	50
Mississippi	6.6%	5.4%	5.1%	0.3%	5.1%	4.4%	3.8%	10	12	12	16	24
Missouri	4.9%	4.2%	3.4%	0.8%	2.4%	3.2%	2.3%	39	31	37	35	48
Nebraska	2.9%	2.7%	2.9%	-0.2%	2.6%	2.3%	2.2%	51	50	46	50	49
New Hampshire	4.6%	2.9%	2.7%	0.2%	2.2%	2.9%	2.7%	43	48	50	43	40
New Jersey	6.8%	4.6%	4.6%	0.0%	4.2%	4.2%	4.0%	9	19	16	20	17
New York	6.9%	5.6%	5.2%	0.4%	4.9%	5.2%	4.8%	8	8	8	9	8
North Carolina	4.4%	3.5%	3.2%	0.3%	3.1%	3.1%	3.1%	44	39	39	39	34
North Dakota	3.9%	3.2%	3.4%	-0.2%	2.4%	2.6%	2.6%	47	44	35	48	43
Ohio	5.5%	4.3%	4.3%	0.0%	3.9%	4.0%	3.9%	27	27	25	24	23
Oklahoma	5.8%	4.5%	3.4%	1.1%	3.1%	4.1%	2.9%	23	22	36	21	35
Oregon	5.4%	5.6%	5.7%	-0.1%	4.8%	5.4%	4.9%	29	9	4	8	6
Pennsylvania	6.2%	4.6%	4.4%	0.2%	3.9%	4.2%	4.0%	17	18	21	17	16
Rhode Island	7.1%	4.9%	4.1%	0.8%	4.1%	3.9%	3.4%	7	14	27	26	30
South Carolina	6.3%	3.8%	4.5%	-0.7%	4.9%	3.6%	4.3%	15	38	18	32	11
South Dakota	3.3%	2.9%	2.9%	0.0%	2.2%	2.6%	2.4%	50	47	47	47	47
Tennessee	4.8%	4.2%	4.0%	0.2%	3.7%	3.9%	3.5%	40	29	29	27	28
Texas	6.4%	4.8%	4.6%	0.2%	4.3%	4.6%	4.2%	12	17	17	13	13
Vermont	4.7%	3.4%	3.0%	0.4%	2.6%	2.9%	2.5%	41	41	41	41	46
Virginia	4.9%	2.9%	2.8%	0.1%	2.7%	2.7%	2.6%	38	46	49	46	44
Washington	6.4%	4.8%	4.7%	0.1%	4.2%	4.9%	4.0%	13	15	15	11	18
West Virginia	8.9%	6.6%	6.6%	0.0%	5.8%	5.8%	6.1%	1	2	1	4	1
Wisconsin	4.7%	3.4%	3.0%	0.4%	2.5%	3.2%	2.5%	42	42	42	36	45

(p)=preliminary

Source: U.S. Bureau of Labor Statistics.

Table 58
Percent of People in Poverty--U.S., Mountain Division, and States

	Percent of Persons in Poverty				Percent of Persons in Poverty Two-year Moving Average*				Percent of Persons in Poverty Three-year Average*		
	1994	1998	1999		1997-1998	1998-1999			1997-1999		
	Amount	Amount	Amount	Standard Error	Amount	Amount	Standard Error	Two-year Average Difference	Amount	Standard Error	Amount Rank
United States	14.5	12.7	11.8	0.3	13	12.3	0.17	-0.7	12.6	0.15	
Mountain States	12.6	13.3	11.5	na	13.4	12.4	na	-1	12.7	na	
Arizona	15.9	16.6	12.0	1.5	16.9	14.3	1.35	-2.6	15.2	1.2	41
Colorado	9.0	9.2	8.3	1.3	8.7	8.7	1.17	0	8.6	1	8
Idaho	12.0	13.0	13.9	1.6	13.8	13.5	1.37	-0.3	13.9	1.19	39
Montana	11.5	16.6	15.6	1.8	16.1	16.1	1.49	0	15.9	1.28	45
Nevada	11.1	10.6	11.3	1.5	10.8	10.9	1.31	0.1	11	1.14	22
New Mexico	21.1	20.4	20.7	2.0	20.8	20.5	1.65	-0.3	20.8	1.42	51
Utah	8.0	9.0	5.7	1.1	8.9	7.3	1.01	-1.6	7.9	0.91	2
Wyoming	9.3	10.6	11.6	1.6	12.1	11.1	1.36	-1	11.9	1.19	29
Other States											
Alabama	16.4	14.5	15.1	1.7	15.1	14.8	1.49	-0.3	15.1	1.29	40
Alaska	10.2	9.4	7.6	1.3	9.1	8.5	1.17	-0.6	8.6	1.01	7
Arkansas	15.3	14.7	14.7	1.7	17.2	14.7	1.48	-2.5	16.4	1.31	46
California	17.9	15.4	13.8	0.7	16	14.6	0.6	-1.4	15.3	0.53	42
Connecticut	10.8	9.5	7.1	1.4	9	8.3	1.31	-0.7	8.4	1.14	4
Delaware	8.3	10.3	10.4	1.7	10	10.3	1.41	0.3	10.1	1.2	15
Dist. of C.	21.2	22.3	14.9	2.0	22	18.6	1.87	-3.4	19.7	1.65	50
Florida	14.9	13.1	12.4	0.9	13.7	12.8	0.74	-0.9	13.3	0.65	34
Georgia	14.0	13.5	12.9	1.5	14	13.2	1.25	-0.8	13.7	1.09	36
Hawaii	8.7	10.9	10.9	1.7	12.4	10.9	1.46	-1.5	11.9	1.3	28
Illinois	12.4	10.1	9.9	0.9	10.6	10	0.75	-0.6	10.4	0.65	18
Indiana	13.7	9.4	6.7	1.2	9.1	8	1.14	-1.1	8.3	1	3
Iowa	10.7	9.1	7.5	1.3	9.3	8.3	1.2	-1	8.7	1.05	9
Kansas	14.9	9.6	12.2	1.7	9.6	10.9	1.34	1.3	10.5	1.13	19
Kentucky	18.5	13.5	12.1	1.6	14.7	12.8	1.41	-1.9	13.8	1.25	37
Louisiana	25.7	19.1	19.2	1.9	17.7	19.1	1.6	1.4	18.2	1.35	49
Maine	9.4	10.4	10.6	1.7	10.2	10.5	1.44	0.3	10.4	1.23	17
Maryland	10.7	7.2	7.3	1.4	7.8	7.2	1.18	-0.6	7.6	1.03	1
Massachusetts	9.7	8.7	11.7	1.2	10.4	10.2	0.95	-0.2	10.9	0.83	21
Michigan	14.1	11.0	9.7	0.9	10.6	10.3	0.8	-0.3	10.3	0.69	16
Minnesota	11.7	10.3	7.2	1.3	10	8.8	1.18	-1.2	9.1	1.03	11
Mississippi	19.9	17.6	16.1	1.8	17.1	16.9	1.56	-0.2	16.8	1.34	48
Missouri	15.6	9.8	11.6	1.6	10.8	10.7	1.35	-0.1	11.1	1.17	24
Nebraska	8.8	12.3	10.9	1.6	11.1	11.6	1.39	0.5	11	1.17	23
New Hampshire	7.7	9.8	7.7	1.5	9.4	8.8	1.36	-0.6	8.9	1.19	10
New Jersey	9.2	8.6	7.8	0.9	8.9	8.2	0.76	-0.7	8.5	0.66	6
New York	17.0	16.7	14.1	0.8	16.6	15.4	0.69	-1.2	15.7	0.6	44
North Carolina	14.2	14.0	13.5	1.2	12.7	13.8	1.06	1.1	13	0.89	31
North Dakota	10.4	15.1	13.0	1.8	14.4	14.1	1.52	-0.3	13.9	1.3	38
Ohio	14.1	11.2	12.0	1.0	11.1	11.6	0.84	0.5	11.4	0.71	26
Oklahoma	16.7	14.1	12.7	1.6	13.9	13.4	1.4	-0.5	13.5	1.2	35
Oregon	11.8	15.0	12.6	1.7	13.3	13.8	1.51	0.5	13.1	1.28	32
Pennsylvania	12.5	11.3	9.4	0.9	11.2	10.3	0.75	-0.9	10.6	0.65	20
Rhode Island	10.3	11.6	9.9	1.7	12.2	10.7	1.49	-1.5	11.4	1.32	25
South Carolina	13.8	13.7	11.7	1.7	13.4	12.7	1.48	-0.7	12.8	1.28	30
South Dakota	14.5	10.8	7.7	1.3	13.7	9.3	1.23	-4.4	11.7	1.16	27
Tennessee	14.6	13.4	11.9	1.6	13.9	12.7	1.42	-1.2	13.2	1.24	33
Texas	19.1	15.1	15.0	0.9	15.9	15	0.76	-0.9	15.6	0.67	43
Vermont	7.6	9.9	9.7	1.7	9.6	9.8	1.41	0.2	9.6	1.21	13
Virginia	10.7	8.8	7.9	1.3	10.8	8.4	1.13	-2.4	9.8	1.03	14
Washington	11.7	8.9	9.5	1.5	9.1	9.2	1.27	0.1	9.2	1.09	12
West Virginia	18.6	17.8	15.7	1.8	17.1	16.8	1.53	-0.3	16.7	1.31	47
Wisconsin	9.0	8.8	8.6	1.4	8.5	8.7	1.18	0.2	8.5	1.01	5

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

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

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

Source: March Current Population Survey, U.S. Census Bureau, Poverty in the United States: 1999.

Social Indicators

Overview

Quality of life and social well-being are subjective and overlapping notions. However, the fact that quality of life and economic performance are intertwined is irrefutable. Preparations for the approaching 2002 Olympic Winter Games continue to boost Utah's economy. The persistent economic growth generally enhances quality of life improvements in the state. For example, Utah's violent crime rate has decreased substantially, poverty rates remain low while median household income remains high, educational attainment remains high, and Utah's birth rate continues to be the highest among states. Utah ranked sixth in the nation on the indicators of child well-being. Education was identified by Utahns as the most important issue facing the state, and as a growing concern in 2000. For the first year since 1995, growth concerns dropped to the second most important issue in Utah.

Utah Quality of Life Information

Education is a Growing Concern to Utahns. The Utah Consumer Survey, a quarterly survey conducted by Valley Research, Inc., provides valuable information about consumer sentiment and Utah demographic characteristics. The survey has been administered for several years and allows comparisons over time. The most recent survey was released in October 2000. Interviews were conducted by telephone with 525 randomly selected adults throughout Utah. The survey report details the answers given by respondents. One of the questions asked is "What is the most important issue facing Utah today?" Before 2000, growth had been identified as the most important issue facing Utah in 15 of the last 16 quarterly surveys. However, in October 2000, education was the main issue concerning Utahns, continuing a trend beginning in April 2000. Among those concerned about education, general concerns, the lack of funding, and large class sizes were the most frequently mentioned concerns. Although second in importance, growth continues to be a concern among Utahns. The pace of land development and rising population were the most frequently mentioned concerns.

Utah's Children are Utah's Future. The Annie E. Casey Foundation tracks indicators of child well-being by state that are published in the 2000 Kids Count Data Book. A state's National Composite Rank is determined by the sum of a state's standing on each of 10 measures of the condition of children arranged in order from best (1) to worst (51). The Foundation's indicators are: percent low birth weight babies; infant mortality rate; child death rate; rate of teen deaths by accident, homicide, and suicide; teen birth rate; percent of teens who are high school dropouts; percent of teens not attending school and not working; percent of children living with parents who do not have full-time, year-round employment; percent of children in poverty; and percent of families with children headed by a single parent. According to the Foundation's National Composite Rank, Utah ranked sixth among states in the nation.

Current Data on Social Well-Being

Crime. Statistics for 1999 from the FBI's uniform crime reports show the rate of violent crimes (murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault) per 100,000 persons to be 275.5 in Utah. This is a 12.3% decrease from the 1998 violent crime rate. Only eleven states had lower rates than Utah. Utah's rate continues to be significantly lower than the U.S. rate of 524.7.

Education. In 1999, Utah had the fourth highest percentage of persons age 25 and over with at least a high school degree (91.0%). Utah is ranked 11th for the percentage with a Bachelor's degree or higher (27.9%).

Home Ownership. Home ownership rates for 1999 show that Utah has the 9th highest percent of home owners at 74.7%. The rate for the nation is 66.8%. The lowest rates were in D.C., New York, California, and Hawaii.

Vital Statistics and Health. Utah's unique age structure impacts its ranking among other states on many vital statistics. Utah continues to have the highest percentage of the population under 18 years of age (33.2% in 1999) in the nation and the lowest median age (26.7 in 1999). Utah also has the second lowest percentage of the population age 65 and over (8.7% in 1999). The vital statistics, excluding health insurance coverage, are from the National Center for Health Statistics.

Births. The birth rate in 1999 is estimated to be the highest of all states at 21.7 births per 1,000 people. Texas had the second highest rate at 17.3. The U.S. rate is 14.5.

Deaths. The overall death rate in Utah was 5.6 per 1,000 people in 1998, second lowest of the states. The age-adjusted rate was 4.1 per 1,000 and was also favorable among states, ranking third lowest.[1] The infant mortality rate (deaths to infants less than one year-old per 1,000 live births) was 5.8 in Utah in 1997. Only five states had lower rates. Utah ranks second among states, behind Alaska, for the lowest death rate from heart disease and cancer. Utah's death rate per 100,000 people in 1997 from heart disease was 146.0 and 103.6 from cancer. The death rate per 100,000 people in the U.S. in 1997 from heart disease was 271.6 and 201.6 from cancer.

Health Insurance Coverage. The Bureau of the Census estimated that approximately 13.8% of the Utah population was without health insurance coverage (a three-year average for 1997-1999). Utah ranked 24th among states. The U.S. average is 16.0%.

Poverty. Utah has the second lowest poverty rate among states in the nation and its median household income remains high. Statistics from the Current Population Survey show 7.9% of the population was in poverty in Utah for the 1997-1999 three-year average.[2] Only one state had a lower poverty rate (Maryland, 7.6%). In the U.S., it is estimated that 12.6% of the population was in poverty.

Public Assistance. There were approximately 29,000 recipients of Temporary Assistance to Needy Families (TANF) in 1999. Utah ranked 12th lowest among states. Approximately 88,000 people in Utah received benefits from the Federal Food Stamp Program which dispersed $73 million worth of benefits in 1999. Utah ranked 13th highest in the number of people and the amount of benefits for the Food Stamp Program.

[1] At time of printing, the overall and age-adjusted death rates for 1999 had not been released by the National Center for Health Statistics. These numbers are currently scheduled for release in January 2001. Due to the late release, overall and age-adjusted rates for 1998 have been republished in this report.

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

Table 59
Social Indicators: Crime, Education, and Home Ownership

	CRIME				EDUCATION				HOME OWNERSHIP	
					Educational Attainment, Persons 25 Years Old and Over, 1999:					
	Violent Crime* per 100,000 People 1999 (1)		Child Abuse Children that are Subject of an Investigation 1998 (2)		High School or Higher (3)		Bachelor's Degree or Higher (3)		Home Ownership Rates 1999 (3)	
	Rate	Rank	Number	Rank	Percent	Rank	Percent	Rank	Percent	Rank
U.S.	524.7	–	2,972,862	–	83.4	–	25.2	–	66.8	–
Alabama	490.2	30	35,912	26	81.1	38	21.8	36	74.8	7
Alaska	631.5	42	11,326	42	92.8	1	25.5	21	66.4	38
Arizona	551.2	36	60,610	16	83.1	33	24.2	25	66.3	39
Arkansas	425.2	28	29,572	29	78.9	45	17.3	51	65.6	40
California	627.2	41	413,372	1	80.4	42	27.1	13	55.7	49
Colorado	340.5	18	39,141	24	90.4	6	38.7	2	68.1	33
Connecticut	345.6	19	40,905	23	83.7	31	33.5	4	69.1	31
Delaware	734.0	46	9,693	45	84.5	30	24.0	26	71.6	17
District of Colombia	1,627.7	51	9,862	44	82.8	35	42.1	1	40.0	51
Florida	854.0	50	186,967	3	82.7	36	21.6	38	67.6	34
Georgia	534.0	33	74,180	12	80.7	41	21.5	39	71.3	19
Hawaii	235.0	8	63,568	14	88.0	13	26.2	18	56.6	48
Idaho	244.9	9	26,682	34	84.8	28	20.8	42	70.3	26
Illinois	732.5	44	110,658	8	85.4	24	25.6	19	67.1	36
Indiana	374.6	22	102,155	9	82.9	34	18.4	48	72.9	12
Iowa	280.0	13	28,072	30	89.7	7	21.7	37	73.9	10
Kansas	382.8	25	26,751	33	87.6	14	26.5	17	67.5	35
Kentucky	300.6	15	63,439	15	78.2	48	19.8	46	73.9	11
Louisiana	732.7	45	45,318	22	78.3	47	20.7	43	66.8	37
Maine	112.2	3	9,030	46	88.9	10	22.9	33	77.4	1
Maryland	743.4	47	55,964	18	84.7	29	34.7	3	69.6	30
Massachusetts	551.0	35	52,899	19	85.1	25	31.0	7	60.3	47
Michigan	574.9	39	156,425	5	85.5	23	21.3	40	76.5	3
Minnesota	274.0	11	24,844	35	91.1	3	32.0	5	76.1	4
Mississippi	349.3	20	32,404	27	78.0	50	19.2	47	74.9	6
Missouri	500.2	31	75,178	11	85.0	26	23.0	32	72.9	13
Montana	206.5	6	19,004	39	88.8	11	24.0	26	70.6	25
Nebraska	430.2	29	14,641	40	89.3	8	20.4	44	70.9	21
Nevada	570.0	38	23,229	36	86.4	19	20.2	45	63.7	44
New Hampshire	96.5	2	8,974	47	86.5	18	27.2	12	70.2	27
New Jersey	411.9	26	75,988	10	87.4	15	30.5	8	64.5	42
New Mexico	834.5	48	13,403	41	80.9	39	24.5	23	72.6	14
New York	588.8	40	240,655	2	81.9	37	26.9	14	52.8	50
North Carolina	542.1	34	125,862	7	79.8	43	23.9	28	71.7	16
North Dakota	66.9	1	7,098	48	84.9	27	22.3	34	70.1	28
Ohio	316.4	17	135,628	6	86.1	21	25.5	21	70.7	23
Oklahoma	508.2	32	60,340	17	83.5	32	23.7	30	71.5	18
Oregon	374.9	23	27,680	31	86.2	20	26.8	15	64.3	43
Pennsylvania	420.5	27	22,589	37	86.1	21	23.9	28	75.2	5
Rhode Island	286.6	14	9,863	43	80.9	39	26.8	15	60.6	46
South Carolina	847.1	49	38,238	25	78.6	46	20.9	41	77.1	2
South Dakota	167.4	5	5,313	49	88.7	12	25.6	19	70.7	24
Tennessee	694.9	43	32,286	28	79.1	44	17.7	50	71.9	15
Texas	560.3	37	172,718	4	78.2	48	24.4	24	62.9	45
Utah	275.5	12	27,222	32	91.0	4	27.9	11	74.7	9
Vermont	113.8	4	1,973	51	89.3	8	28.3	10	69.1	32
Virginia	314.7	16	49,026	20	87.3	16	31.6	6	71.2	20
Washington	377.3	24	47,281	21	91.2	2	28.6	9	64.8	41
West Virginia	350.6	21	64,483	13	75.1	51	17.9	49	74.8	8
Wisconsin	245.9	10	22,232	38	86.8	17	23.6	31	70.9	22
Wyoming	232.3	7	2,209	50	90.7	5	22.3	34	69.8	29

Note: Rank is most favorable value to least favorable. When states share the same rank, the next lower rank is omitted.
* Violent crimes are offenses of murder, forcible rape, robbery, and aggravated assault.

Sources: (1) Federal Bureau of Investigation, "Crime in the United States, 1999"; (2) Bureau of the Census, "Statistical Abstract of the United States, 2000"; (3) U.S. Bureau of the Census, "Current Population Survey".

VITAL STATISTICS AND HEALTH

	Births per 1,000 People, 1999 (1)		Deaths per 1,000 People 1998* (1)				Infant Deaths per 1,000 Live Births, 1997 (2)		Death Rate per 100,000 People, 1997:				Persons Without Health Insurance, 3-year Average 1997-99(3)	
					Age-Adjusted				Heart Disease (2)		Cancer (2)			
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Percent	Rank
U.S.	14.5	–	8.7	–	4.7	–	7.2	–	271.6	–	201.6	–	16.0	–
Alabama	14.2	23	10.1	42	5.7	47	9.5	46	314.2	40	221.7	39	15.6	31
Alaska	16.1	6	4.2	1	4.4	15	7.5	30	91.4	1	102.1	1	18.2	41
Arizona	17.0	3	8.2	15	4.6	24	7.1	24	223.4	11	185.5	12	23.3	50
Arkansas	14.4	19	10.8	48	5.5	45	8.7	43	335.5	44	240.3	46	19.3	45
California	15.6	8	*	–	*	–	5.9	8	212.8	9	161.1	7	21.3	48
Colorado	15.3	11	6.7	3	4.2	5	7.0	22	166.6	3	145.1	3	15.7	32
Connecticut	13.2	38	9.1	30	4.3	10	7.2	26	297.8	35	218.3	35	11.5	14
Delaware	14.2	24	8.9	23	5.0	36	7.8	35	272.3	25	228.1	43	13.1	19
District of Colombia	14.5	17	11.4	49	6.7	50	13.2	51	305.5	37	254.8	49	16.2	33
Florida	13.0	41	10.6	47	4.6	23	7.1	25	339.8	46	260.0	50	18.8	42
Georgia	16.3	4	7.9	10	5.4	41	8.6	41	236.0	17	174.0	9	17.1	36
Hawaii	14.4	20	6.8	4	3.7	1	6.6	18	200.6	6	155.6	4	9.5	3
Idaho	15.9	7	7.5	6	4.2	9	6.8	20	208.1	8	160.9	6	18.1	40
Illinois	15.0	13	8.7	19	4.8	30	8.4	40	274.3	27	205.8	24	13.8	24
Indiana	14.5	18	8.9	24	4.9	33	8.2	38	284.1	30	210.3	31	12.2	16
Iowa	13.1	39	9.9	40	4.2	7	6.2	12	319.4	42	222.0	40	9.9	4
Kansas	14.6	15	9.2	32	4.5	21	7.4	28	280.4	29	201.1	19	11.4	13
Kentucky	13.7	34	9.6	37	5.3	40	7.3	27	318.8	41	229.5	44	14.5	28
Louisiana	15.3	12	9.2	33	5.8	48	9.5	47	272.7	26	214.9	33	20.3	47
Maine	10.9	51	9.8	39	4.6	25	5.1	2	292.8	34	239.9	45	13.2	21
Maryland	14.0	28	8.2	14	5.0	35	8.8	44	235.7	16	198.8	17	13.9	26
Massachusetts	13.1	40	9.0	27	4.2	6	5.2	3	269.8	24	223.7	41	11.1	11
Michigan	13.5	36	8.7	20	4.8	32	8.2	39	278.8	28	200.6	18	12.0	15
Minnesota	13.8	31	7.9	9	4.0	2	5.9	9	205.1	7	187.3	13	8.8	1
Mississippi	15.4	10	10.1	43	6.1	49	10.6	50	355.3	50	214.2	32	18.9	43
Missouri	13.8	32	10.1	44	5.1	37	7.6	32	341.7	48	221.4	38	10.6	8
Montana	12.2	45	9.0	26	4.5	20	6.9	21	239.9	19	203.5	21	19.2	44
Nebraska	14.3	22	9.1	31	4.3	11	7.4	29	298.0	36	195.4	16	10.2	6
Nevada	16.2	5	8.3	16	5.4	41	6.5	16	232.4	15	189.6	14	19.8	46
New Hampshire	11.7	48	8.1	13	4.4	16	4.3	1	238.9	18	205.8	25	11.1	11
New Jersey	14.0	29	8.8	21	4.4	17	6.3	14	290.5	33	225.5	42	15.4	30
New Mexico	15.6	9	7.7	8	4.8	29	6.1	10	189.3	4	159.9	5	23.2	49
New York	14.2	25	8.6	18	4.4	19	6.7	19	335.9	45	206.0	26	17.1	36
North Carolina	14.9	14	9.0	28	5.2	38	9.2	45	260.0	21	204.3	22	15.3	29
North Dakota	12.1	46	9.3	34	4.2	4	6.2	13	285.1	31	206.3	27	13.7	23
Ohio	13.4	37	9.5	36	4.9	34	7.8	36	306.8	38	220.7	36	11.0	10
Oklahoma	14.6	16	10.2	45	5.3	39	7.5	31	339.8	46	218.1	34	17.9	39
Oregon	13.6	35	9.0	25	4.5	22	5.8	5	231.8	13	208.7	28	14.1	27
Pennsylvania	12.1	47	10.6	46	4.7	27	7.6	33	350.5	49	251.1	48	10.0	5
Rhode Island	12.5	44	9.7	38	4.3	13	7.0	23	330.7	43	249.7	47	9.0	2
South Carolina	14.2	26	9.1	29	5.5	44	9.6	48	263.2	22	203.2	20	16.6	35
South Dakota	14.4	21	9.3	35	4.4	18	7.7	34	288.6	32	209.8	30	12.6	17
Tennessee	14.2	27	10.0	41	5.6	46	8.6	42	310.3	39	220.9	37	12.7	18
Texas	17.3	2	7.2	5	4.7	27	6.4	15	224.4	12	165.6	8	24.1	51
Utah	21.7	1	5.6	2	4.1	3	5.8	6	146.0	2	103.6	2	13.8	24
Vermont	11.1	50	8.4	17	4.3	12	6.1	11	255.7	20	208.8	29	10.6	8
Virginia	13.9	30	8.0	12	4.8	30	7.8	37	232.1	14	192.0	15	13.6	22
Washington	13.8	33	7.5	7	4.2	8	5.6	4	198.1	5	178.9	11	13.1	19
West Virginia	11.5	49	11.5	50	5.5	43	9.6	49	381.3	51	262.0	51	17.2	38
Wisconsin	13.0	42	8.8	22	4.3	14	6.5	17	264.9	23	204.6	23	10.3	7
Wyoming	12.8	43	8.0	11	4.7	26	5.8	7	216.8	10	175.9	10	16.2	33

Note: Rank is most favorable value to least favorable. When states share the same rank, the next lower rank is omitted.
*At time of printing, the National Center for Health Statistics had not released 1999 overall and adjusted death rates. These rates will be released January 2001.

Sources: (1) National Center for Health Statistics, "National Vital Statistics Report"; (2) Bureau of the Census, "Statistical Abstract of the United States, 2000"; (3) U.S. Bureau of the Census, "Current Population Survey".

Table 61
Social Indicators: Poverty and Public Assistance

	POVERTY		PUBLIC ASSISTANCE					
			Temporary Assistance for Needy Families (TANF)		Federal Food Stamp Program			
	All Ages in Poverty 3-year Average 1997-1999 (1)		1999 (2) Thousands		1999 (2) Thousands		1999 (2) Millions of Dollars	
	Percent	Rank	Recipients	Rank	Persons	Rank	Benefits	Rank
U.S.	12.6	–	6,901	–	18,146	–	15,729	–
Alabama	15.1	40	47	23	405	38	346	37
Alaska	8.6	7	26	10	41	5	49	8
Arizona	15.2	41	89	32	257	27	233	30
Arkansas	16.4	46	29	12	253	26	210	27
California	15.3	42	1,764	51	2,027	51	1,804	51
Colorado	8.6	7	37	18	173	19	145	20
Connecticut	8.4	4	85	30	178	20	150	21
Delaware	10.1	15	16	7	39	4	32	4
District of Colombia	19.7	50	50	24	84	12	80	14
Florida	13.3	34	188	44	933	48	819	48
Georgia	13.7	36	151	41	617	43	514	43
Hawaii	11.9	28	45	21	125	17	180	23
Idaho	13.9	38	3	2	57	8	45	7
Illinois	10.4	17	352	49	820	46	767	47
Indiana	8.3	3	110	35	298	32	255	33
Iowa	8.7	9	59	27	129	18	103	17
Kansas	10.5	19	32	15	115	16	80	14
Kentucky	13.8	37	96	33	396	37	337	36
Louisiana	18.2	49	103	34	516	42	463	42
Maine	10.4	17	35	17	109	15	89	16
Maryland	7.6	1	84	29	264	29	237	31
Massachusetts	10.9	21	125	36	261	28	205	25
Michigan	10.3	16	251	45	683	45	515	44
Minnesota	9.1	11	127	37	208	23	171	22
Mississippi	16.8	48	37	18	288	31	232	29
Missouri	11.1	24	130	39	408	39	348	39
Montana	15.9	45	13	5	61	9	52	9
Nebraska	11.0	22	33	16	92	14	66	12
Nevada	11.0	22	19	9	62	10	56	10
New Hampshire	8.9	10	15	6	37	3	31	3
New Jersey	8.5	5	160	42	385	36	346	37
New Mexico	20.8	51	79	28	178	20	144	19
New York	15.7	44	801	50	1,541	50	1,464	50
North Carolina	13.0	31	127	38	505	40	435	41
North Dakota	13.9	38	8	3	33	2	26	2
Ohio	11.4	25	279	46	640	44	552	45
Oklahoma	13.5	35	53	26	271	30	221	28
Oregon	13.1	32	45	21	224	24	190	24
Pennsylvania	10.6	20	290	47	835	47	704	46
Rhode Island	11.4	25	50	24	76	11	61	11
South Carolina	12.8	30	42	20	309	34	251	32
South Dakota	11.7	27	8	3	44	6	37	6
Tennessee	13.2	33	149	40	511	41	425	40
Texas	15.6	43	300	48	1,401	49	1,255	49
Utah	7.9	2	29	12	88	13	73	13
Vermont	9.6	13	18	8	44	6	34	5
Virginia	9.8	14	88	31	362	35	282	35
Washington	9.2	12	168	43	307	33	260	34
West Virginia	16.7	47	31	14	247	25	208	26
Wisconsin	8.5	5	26	10	182	22	124	18
Wyoming	11.9	28	2	1	23	1	19	1

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

Sources: (1) U.S. Bureau of the Census, "Current Population Survey"; (2) U.S. Bureau of the Census, "Statistical Abstract of the United States, 2000"

Industry Focus

Agriculture

Overview

Market forces and government policies have altered agricultural production nationally and in Utah during the last four years. These forces and policies have had very different impacts on various sectors of agriculture.

National Perspective. Unlike many sectors of the economy, agricultural producers face intensive competition from other producers—most markets are close to being perfectly competitive. As a result, decisions made by a single producer (and in many cases producers in any area of the country) have no influence on market prices. This is coupled with demand curves for production that are relatively inelastic. As a result, small changes in production will generally result in relatively large changes in the prices received by farmers. This results in large changes in farm income over time because the price of inputs used by farmers do not vary to the same degree—they have generally increased over time. Only improvements in production have allowed farmers to remain competitive in this environment. These improvements have resulted in low food prices for consumers—the percentage of income spent for food in the United States continues to decline and is currently at an all time low level. Thus, consumers must be viewed as the primary beneficiaries of improvements in agricultural production.

Passage of the 1996 farm bill, the "Freedom to Farm Act," resulted in major changes in the way government programs affect farm operations. This opened farming operations, to a much greater degree than had been true in the past, to the forces of the market. American farmers quickly responded to high market prices by increasing production with resultant decreases in prices. For example, milk prices were high in late 1998 and throughout much of 1999. As a result, milk production increased rapidly which has resulted in prices that are currently lower than they have been for more than two decades. When farm prices have been high, production has increased and subsequently resulted in large decreases in farm prices. Therefore, income from farming has become more variable over time.

Recent increases in grain prices have been a welcome relief to grain farmers even though the increase has been small. These increases will, however, result in increased costs and lower returns for beef, pig, dairy, and poultry producers. Some of the declines in farm income that have occurred in 2000 as a result of low prices have been offset by increased payments from government—in some cases these payments have been more than farm generated net income. These payments are, however, scheduled to be eliminated. Congress has recently shown a high inclination to extend the payment deadline and to fund payments in an effort to improve farmer incomes. If these payments are reduced, farm income would decline.

State Perspective. Farm income in Utah has steadily increased, after dropping from a high of $336 million in 1993 to a low of $168 million in 1995. These recent increases have occurred primarily because of increases in incomes received by dairy and beef producers, the two leading sectors of Utah agriculture. Over 50% of agriculture receipts in Utah are attributable to these two sectors. The large decline in milk prices since mid-year 2000 will, however, reduce receipts received by the dairy sector and are expected to exist for at least another year. This decline will be partially offset by increases in receipts obtained by grain and hay producers.

These changes in farm income have affected the personal income of farmers and ranchers. But, these changes have not affected producers evenly throughout the state. For example, personal income from farming has declined in Carbon County over time, while counties with high agricultural sales have generally experienced increases in personal income from farming. These changes have been very pronounced over time when personal income from farming is compared to non-farm personal income. These data generally show that personal income from farming has declined relative to non-farm personal income in most counties. But, in some counties (e.g., Rich, Piute) that are dominated by agriculture, changes in farm income are more important than they are in other counties (e.g., those along the Wasatch front) where other sectors of the economy are more important.

While incomes received by farmers and ranchers have varied over time, the financial position of Utah agriculture is healthy— the value of farm assets (primarily real estate) and farm equity has increased. This trend will likely continue in the future but, some sectors of Utah agriculture are facing troubled times.

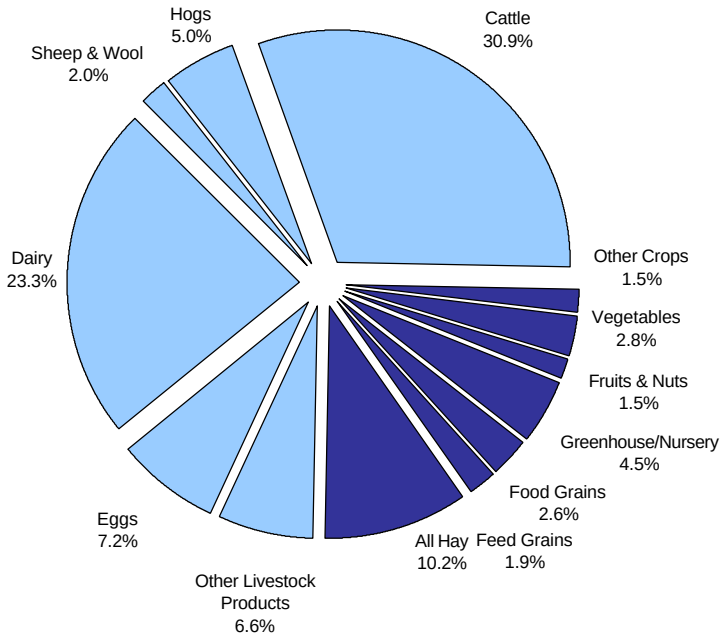
Sectors of Utah Agriculture. The dairy industry will likely be affected the most in 2001 when a relatively large number of operators are expected to leave the industry. The expected reduction in the number of dairy operations may be partially offset by increases in production by those that remain in the industry. These adjustments are likely to be large in the coming year.

Beef operators will experience relatively high returns in the coming year because prices will likely continue to be strong. One factor that is difficult to predict is the impact of changes in the use of public lands by any administration that takes office. Those operators that depend heavily on the use of federal lands could find new restrictions that will limit the use of these lands and/or make use of these lands more expensive.

Other livestock sectors will likely be affected differently by economic forces in the coming year. For example, the number of sheep producers, as well as lamb/wool production, has declined for several decades and this trend will likely continue. This is different from the large increases in hog production that have occurred in the state since the mid 1990's—a trend that will likely continue. One industry that will be worth watching closely in the coming year will be the poultry industry. Egg production has increased as a result of new (Delta Egg) operations as well as increased production by operations that have existed in the state for some time. It is also likely that turkey production will grow as an increasing number of operators shift to year-long production and implement practices that improve efficiency. Increases in feed costs will limit the rate at which hog and poultry operations expand.

Hay and grain prices have started to improve from the low levels that existed in 1998-1999. This will result in some expansion in production. This will differ from most types of fruit production which is expected to decline as a result of low prices, increased operating costs, and the removal of orchards for housing. The greenhouse and nursery industries in Utah have grown over time. It is likely that this trend will continue especially in counties along the Wasatch Front.

Figure 40
Percentage of Agricultural Receipts by Sector in Utah: 1998

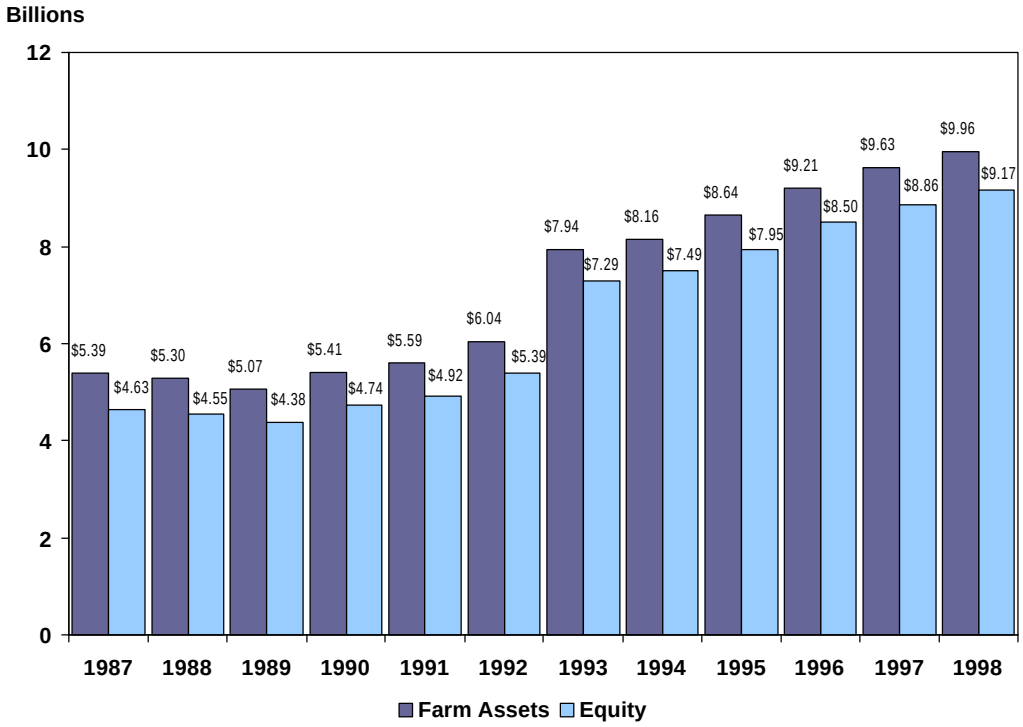


Livestock & Livestock Products = 75%

Crops = 25%

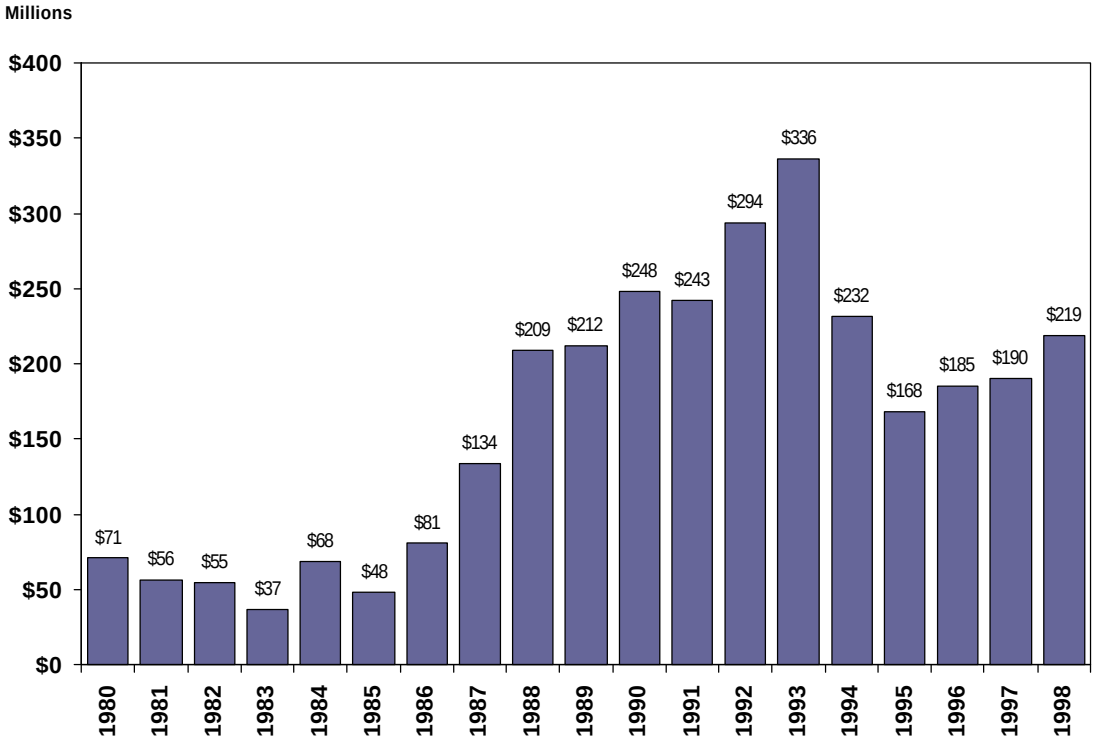
Source: Utah Agricultural Statistics

Figure 41
Farm Assets and Equity in Utah



Source: Utah Agricultural Statistics

Figure 42
Net Farm Income in Utah



Source: Utah Agricultural Statistics

Farm Balance Sheet for Utah (Millions of Dollars)

Category	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Assets	5,390.3	5,296.3	5,063.0	5,406.3	5,585.4	6,039.1	7,943.8	8,162.7	8,635.8	9,206.7	9,627.6	9,956.1
Real Estate	4,197.0	4,112.7	3,881.0	4,160.1	4,433.6	4,841.2	6,706.5	6,956.3	7,250.2	7,776.2	8,045.3	8,125.1
Livestock and Poultry	484.4	536.5	572.0	582.7	566.3	637.9	626.9	626.4	511.0	553.4	625.3	583.7
Machinery & Motor Vehicles	429.1	428.7	444.6	440.5	441.0	431.3	436.1	469.8	491.8	495.6	544.7	542.4
Crops	112.4	123.5	94.9	114.6	95.2	90.3	117.7	114.7	101.2	121.0	150.9	147.8
Purchased inputs	7.6	12.2	12.4	15.5	17.5	27.2	29.3	36.4	22.7	24.5	28.7	29.5
Financial	159.8	82.7	58.1	92.9	31.8	11.2	27.3	-40.9	258.9	236.0	232.7	527.6
Claims	756.3	743.0	683.1	661.9	660.8	653.7	650.4	668.6	688.2	709.5	766.9	786.6
Real estate debt	447.0	428.2	390.3	372.7	355.8	352.9	340.4	339.4	348.1	350.9	372.7	375.7
Non real estate debt	309.3	314.8	292.8	289.2	305.0	300.8	310.0	329.2	340.1	358.6	394.2	410.9
Equity	4,634.0	4,553.3	4,379.9	4,744.4	4,924.6	5,385.4	7,293.4	7,494.1	7,947.6	8,497.2	8,860.7	9,169.5
Debt/ Equity	16.3	16.3	15.6	14.0	13.4	12.1	8.9	8.9	8.7	8.3	8.7	8.6

Source: Utah Agricultural Statistics

Table 63
Percent of Agricultural Receipts by Sector

	1980	1985	1990	1995	1996	1997	1998
Cattle	30.0	28.3	37.7	31.8	27.5	33.3	30.9
Sheep	4.3	4.5	2.1	2.9	2.9	1.8	2.0
Hogs	1.0	0.5	0.7	0.7	1.8	4.0	5.0
Dairy	24.3	25.1	21.8	22.1	24.7	20.4	23.3
Poultry/eggs	8.4	11.7	9.5	8.4	8.2	7.7	7.2
Other livestock	5.2	4.6	4.5	6.2	7.9	6.3	6.6
Food grains	5.8	4.9	2.5	3.9	4.2	3.0	2.6
Feed grains	2.6	3.1	2.0	3.1	3.5	2.3	1.9
Hay	8.0	6.6	9.1	10.3	8.7	11.3	10.2
Vegtables	2.8	3.1	4.1	2.8	2.5	2.6	2.8
Fruits/Nuts	2.9	3.6	1.5	1.1	1.7	1.4	1.5
Greenhouse/Nursery	2.5	2.6	3.3	4.9	4.7	4.5	4.5
Other crops	2.2	1.4	1.2	1.8	1.7	1.4	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Utah Agricultural Statistics

Cash Receipts by Source in Utah Counties (Millions of Dollars)

	1993			1994			1995			1996			1997			1998		
County	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total	Livestock	Crops	Total
Beaver	20.0	3.2	23.2	18.5	4.3	22.8	16.4	4.6	21.0	24.7	4.3	29.0	58.7	5.8	64.5	63.3	5.8	69.1
Box Elder	51.2	29.8	81.0	49.6	35.4	85.0	52.7	35.7	88.4	55.8	39.4	95.2	64.2	39.4	103.6	61.9	37.3	99.2
Cache	80.8	13.4	94.2	83.1	17.4	100.5	78.5	20.0	98.5	86.2	22.1	108.3	84.4	18.9	103.3	93.2	17.8	111.0
Carbon	4.1	0.6	4.7	4.0	0.7	4.7	4.2	0.8	5.0	4.2	0.8	5.0	4.1	1.2	5.3	4.8	1.1	5.9
Daggett	1.5	0.3	1.8	1.0	0.5	1.5	0.9	0.4	1.3	0.9	0.4	1.3	1.9	0.7	2.6	1.9	0.6	2.5
Davis	14.4	22.1	36.5	12.6	25.8	38.4	12.7	22.0	34.7	14.5	22.2	36.7	12.6	27.4	40.0	9.8	29.1	38.9
Duchesne	28.5	4.4	32.9	26.7	6.3	33.0	28.7	6.8	35.5	29.5	6.5	36.0	33.3	8.9	42.2	30.1	8.0	38.1
Emery	11.4	1.8	13.2	10.4	2.3	12.7	11.2	2.2	13.4	11.0	2.0	13.0	15.5	3.8	19.3	11.8	3.4	15.2
Garfield	8.3	1.0	9.3	6.5	1.4	7.9	7.2	1.4	8.6	7.0	1.2	8.2	8.8	2.0	10.8	8.3	1.8	10.1
Grand	1.5	0.7	2.2	1.6	0.8	2.4	1.3	0.6	1.9	1.5	0.5	2.0	5.1	1.2	6.3	6.2	1.1	7.3
Iron	12.4	10.2	22.6	11.5	12.5	24.0	11.8	11.4	23.2	12.1	10.8	22.9	12.7	13.7	26.4	17.8	12.8	30.6
Juab	6.2	2.6	8.8	5.4	3.9	9.3	5.1	4.4	9.5	5.1	4.6	9.7	5.6	4.4	10.0	10.8	4.0	14.8
Kane	4.5	0.4	4.9	4.3	0.6	4.9	3.9	0.5	4.4	3.9	0.5	4.4	4.8	0.5	5.3	4.3	0.5	4.8
Millard	28.1	18.2	46.3	24.5	21.0	45.5	33.2	23.8	57.0	35.8	24.2	60.0	37.8	24.2	62.0	49.9	22.2	72.1
Morgan	10.3	1.2	11.5	10.5	1.4	11.9	9.3	1.5	10.8	12.3	1.7	14.0	11.2	2.1	13.3	13.1	1.9	15.0
Piute	7.3	1.1	8.4	7.7	1.2	8.9	7.7	1.2	8.9	8.2	1.1	9.3	7.8	1.7	9.5	9.3	1.6	10.9
Rich	18.7	2.7	21.4	16.4	4.0	20.4	17.3	3.8	21.1	16.6	3.6	20.2	18.4	4.8	23.2	19.7	4.4	24.1
Salt Lake	34.6	9.6	44.2	33.0	13.0	46.0	31.2	11.9	43.1	37.9	11.8	49.7	24.9	11.3	36.2	17.5	11.2	28.7
San Juan	8.0	2.6	10.6	9.5	3.5	13.0	7.8	4.9	12.7	7.8	2.0	9.8	8.5	8.0	16.5	9.0	7.1	16.1
Sanpete	79.3	4.7	84.0	70.2	6.5	76.7	72.4	6.9	79.3	74.3	6.7	81.0	76.3	9.9	86.2	77.3	9.2	86.5
Sevier	29.4	4.1	33.5	30.5	5.0	35.5	29.7	5.4	35.1	31.0	5.4	36.4	34.0	6.6	40.6	26.7	5.9	32.6
Summit	14.9	1.1	16.0	15.1	1.4	16.5	12.6	1.3	13.9	14.5	1.2	15.7	13.3	2.2	15.5	19.6	2.0	21.6
Tooele	8.3	2.8	11.1	7.5	3.4	10.9	8.1	3.6	11.7	8.2	3.7	11.9	11.2	3.6	14.8	10.5	3.1	13.6
Uintah	21.3	3.4	24.7	21.2	4.3	25.5	17.7	5.3	23.0	17.3	4.9	22.2	23.7	7.6	31.3	25.0	6.8	31.8
Utah	64.3	23.0	87.3	61.6	29.2	90.8	60.0	26.1	86.1	70.2	30.8	101.0	68.5	30.5	99.0	74.6	30.5	105.1
Wasatch	9.9	1.2	11.1	9.0	1.5	10.5	8.6	1.6	10.2	9.4	1.6	11.0	9.2	1.6	10.8	8.4	1.6	10.0
Washington	8.7	3.4	12.1	7.7	4.8	12.5	6.8	4.0	10.8	6.9	4.0	10.9	9.6	3.8	13.4	9.5	4.0	13.5
Wayne	9.4	1.3	10.7	8.0	1.5	9.5	9.5	1.8	11.3	11.0	1.8	12.8	10.7	2.3	13.0	12.5	2.1	14.6
Weber	29.0	6.3	35.3	30.0	7.7	37.7	24.8	6.8	31.6	28.3	7.2	35.5	28.9	7.8	36.7	29.3	7.9	37.2
Total	626.3	177.2	803.5	597.6	221.3	818.9	591.3	220.7	812.0	646.1	227.0	873.1	705.7	255.9	961.6	736.1	244.8	980.9

Source: Utah Agricultural Statistics

Table 65
Personal Income from Farming by County (Thousands of Dollars)

County	1970	1975	1980	1984	1990	1992	1997	1998
Beaver	1,360	776	1,365	1,052	11,295	9,297	11,225	12,723
Box Elder	10,178	11,117	12,101	6,523	30,739	26,769	28,089	30,511
Cache	9,007	10,343	15,569	9,132	29,493	31,862	21,955	27,139
Carbon	275	181	771	772	2,670	964	-2,777	6
Daggett	83	370	636	346	684	710	-97	-151
Davis	2,576	2,941	7,499	3,137	16,060	26,746	8,763	9,713
Duchesne	1,617	1,697	3,340	1,830	14,445	11,724	2,930	2,609
Emery	678	180	432	583	6,840	3,663	1,850	1,817
Garfield	346	498	949	1,421	5,231	3,320	-322	-485
Grand	-2	325	744	321	782	493	82	30
Iron	3,135	1,261	1,283	2,075	12,864	7,545	11,254	10,193
Juab	682	492	328	558	4,587	3,959	295	-187
Kane	320	132	382	431	1,913	510	702	585
Millard	2,536	5,665	8,153	8,117	16,592	17,010	13,784	15,326
Morgan	1,728	1,910	2,053	2,255	4,741	3,010	5,106	5,847
Piute	520	760	1,239	1,031	3,050	1,802	2,414	2,873
Rich	1,980	852	1,217	1,239	6,886	9,158	2,640	2,176
Salt Lake	6,746	7,152	11,474	3,921	12,477	12,978	2,911	3,528
San Juan	1,903	1,686	2,048	3,014	5,902	2,291	1,457	1,178
Sanpete	5,615	3,838	2,139	6,719	19,998	22,014	13,093	16,975
Sevier	3,138	2,193	3,829	9,068	10,583	18,250	11,668	12,809
Summit	2,471	2,001	3,498	2,624	9,074	2,722	4,602	5,390
Tooele	563	1,434	2,152	1,946	6,262	1,818	1,985	1,927
Uintah	1,631	813	3,190	4,774	12,900	6,615	2,229	1,399
Utah	9,806	8,869	8,620	8,067	23,743	20,412	19,744	22,673
Wasatch	1,282	956	1,486	1,247	4,226	2,264	2,226	2,539
Washington	2,214	1,890	3,031	2,002	4,819	2,051	-582	-736
Wayne	446	303	917	485	3,241	4,410	2,791	3,385
Weber	4,677	2,302	4,261	2,579	10,762	14,002	1,800	4,220
State	77,511	72,937	104,706	87,269	292,859	268,369	171,817	196,012

Source: Bureau of Economic Analysis

Residential and Nonresidential Construction

Overview

In 2000, the value of permit authorized construction in Utah was $3.93 billion, less than 2% below last year's record high of $3.97 billion. This near record pace is due, in part, to the continued strength of the nonresidential sector, which in 2000 generated $1.2 billion in new construction activity. The nonresidential sector was led by two major projects: McKay Dee Hospital in Ogden City ($104 million) and The Gateway a mixed-use commercial development in downtown Salt Lake City (to date, $92.6 million).

The residential sector, this past year, has not fared quite as well as the nonresidential sector. In terms of residential construction value, 2000 ranks as one of the best years ever, recording nearly $2.2 billion in new construction. When measured in terms of the number of new dwelling units, residential construction activity is down 10%, dropping from around 20,400 in 1999 to about 18,300 units in 2000.

2000 Summary

Residential Sector. The residential sector is comprised of the single-family and multifamily sectors. For several years there has been significant weakness in the multifamily sector but overall residential numbers have been buoyed up by a consistently strong performance of the single-family sector. For example, since the peak year of 1996 (23,750 units), the total number of residential units receiving building permits has fallen about 5,000 units. Approximately 30% of the decline, or 1,500 units, has been in single-family construction and 70%, or 3,500 units, in multifamily construction. By the end of 2000, multifamily construction activity has fallen to about half of what it was in 1996, whereas single-family construction is down only 20% from its 1996 peak. Significantly, half of this single-family decline was recorded this past year.

Single-family Construction. In 2000 the number of single-family building permits issued is down 7% to 13,550 units, a decline of about 1,000 units when compared to 1999. Over the past several months the weakness in the single-family sector has become more widespread and now includes some of the fastest growing cities in the state. For example, in 2000 new home construction is down approximately 40% in West Jordan, Lehi and Layton. The weakness in new single-family construction is a result of slower rates of economic and demographic growth. Since 1995, the annual increase in employment has dropped from 50,000 new jobs to 25,000, while the annual increase in population has declined from 50,000 to 34,000. Population and employment are significant factors in the demand for housing and when their growth rates are cut in half, the demand for housing is bound to contract.

The total value of single-family construction was $1.84 billion in 2000, a decline of 1.6% compared to previous year. Single-family construction is the largest component of Utah's construction industry. In the past year, the value of single-family construction was six times higher than multifamily valuation ($300 million) and 50% higher than nonresidential valuation ($1.2 billion).

Multifamily Construction. The multifamily sector, which includes apartments, condominiums, and duplexes/twin homes has not provided much support for residential activity in recent years. This year is no different. The total number of new multifamily units is down 10% to 4,000 units. Particularly troubling is the nearly 20% drop in new apartments units this year, a decline from 2,700 units to 2,200 units. The declining production of apartments is reflected in falling vacancy rates, which are now below 5% in most cities throughout the state. Unless the production of rental units turns around, it is almost certain there will be some significant increases in rental rates next year. Unfortunately, higher rental rates could coincide with a weaker economy leaving many renters with less discretionary income.

About one in three new multifamily units given permits in 2000 have been in Salt Lake County. The city with the highest concentration of activity is West Jordan, where nearly 300 multifamily units are under construction near the new Jordan Landing development (mixed-use commercial project). Sandy City ranks second among all cities with over 20 multifamily units, which includes a 144 unit senior apartment project.

Nonresidential Construction

The extraordinary performance of the nonresidential sector in 2000, with $1.2 billion in valuation, makes the fourth year in a row that nonresidential value has exceeded one billion dollars. A closer look at nonresidential activity reveals some interesting developments and shows which types of nonresidential construction are contributing to this year's spectacular nonresidential numbers.

- Hotel and motel construction is at its lowest level in the past five years. A single hotel at the Stillwater Development in Wasatch County accounts for a substantial portion of the valuation of this sector.

- Industrial/manufacturing and warehouse valuation is down, but the office and retail sectors did well in 2000. Retail construction activity was driven up mainly by an explosion of "big box" construction, which accounted for over $60 million in new retail construction.

- Two large projects, The Gateway in Salt Lake City and the McKay-Dee Hospital in Ogden City, were critical to the performance of the nonresidential sector. These two projects accounted for more than $250 million in nonresidential value.

- The Gateway project's influence on nonresidential construction will continue into next year. In 2001, the retail, office and cultural center (planetarium and children's museum) will total $100 to $110 million.

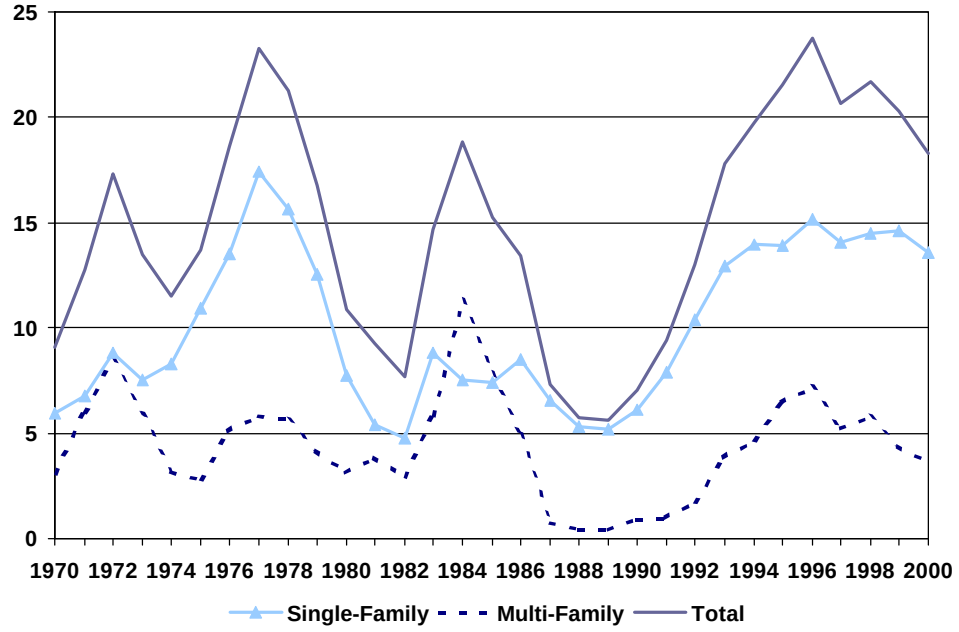
Conclusion

In the past year, the value of both residential and nonresidential construction was near record pace, but the annual total for residential construction does not reveal the growing weakness of this sector. From the second quarter through the fourth quarter the number of single-family units declined when compared to 1999. The year finished with seven consecutive months of declines. Not since 1988, has the single-family sector had such weakness in year-over comparisons. Does seven months make a trend? Given the forecast for slower employment growth and not much improvement for net in-migration, there appears to be little on the horizon that will have sufficient strength to change the direction of single-family construction activity. Single-family construction is expected to decline by about 15% in 2001. Residential construction is forecast to fall by about 7% in both value and new units.

Over the past four years, the nonresidential sector has benefitted from an Olympics induced construction boom of several hundred million dollars in nonresidential construction. Many of these projects are either completed, nearing completion, or will be wrapped by mid-2001.

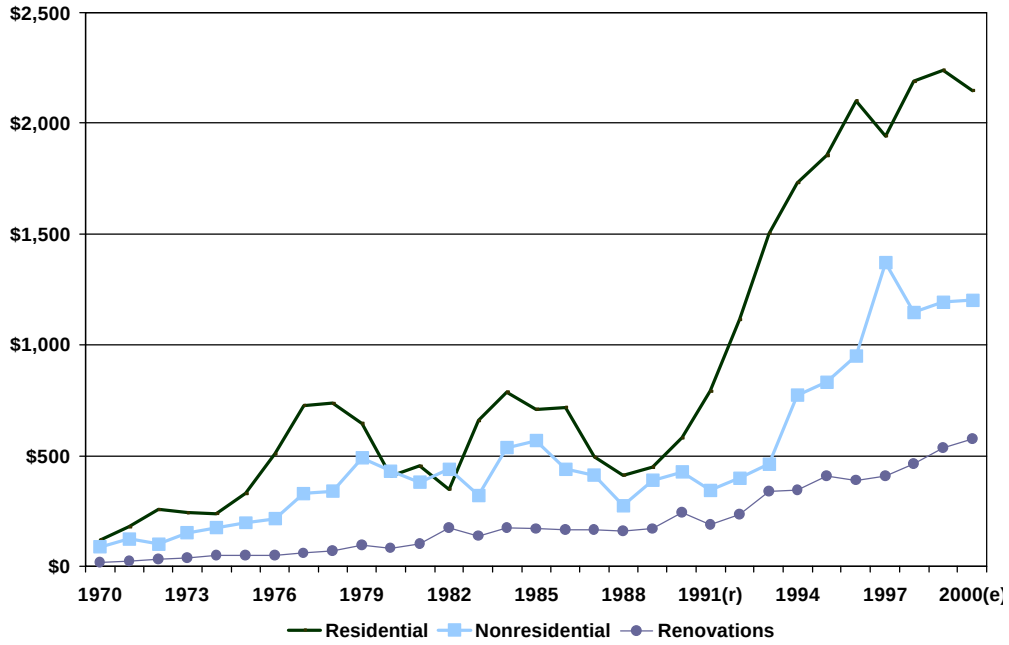
Consequently, the much discussed post-Olympic contraction in nonresidential construction will begin next year as nonresidential value is expected to decline by about 15% to $1.0 billion.

Figure 43
Utah Residential Construction Activity



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

Figure 44
Value of New Construction



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

Table 66
Residential and Nonresidential Construction Activity in Utah

Year	Single-Family Units	Multi-Family Units	Mobile Homes/ Cabins	Total Units	Value of Residential Construction (millions)	Value of Nonresidential Construction (millions)	Value of Add., Alt., and Repairs (millions)	Total Valuation (millions)
1970	5,962	3,108	na	9,070	117.0	87.3	18.0	222.3
1971	6,768	6,009	na	12,777	176.8	121.6	23.9	322.3
1972	8,807	8,513	na	17,320	256.5	99.0	31.8	387.3
1973	7,546	5,904	na	13,450	240.9	150.3	36.3	427.5
1974	8,284	3,217	na	11,501	237.9	174.2	52.3	464.4
1975	10,912	2,800	na	13,712	330.6	196.5	50.0	577.1
1976	13,546	5,075	na	18,621	507.0	216.8	49.4	773.2
1977	17,424	5,856	na	23,280	728.0	327.1	61.7	1,116.8
1978	15,618	5,646	na	21,264	734.0	338.6	70.8	1,143.4
1979	12,570	4,179	na	16,749	645.8	490.3	96.0	1,232.1
1980	7,760	3,141	na	10,901	408.3	430.0	83.7	922.0
1981	5,413	3,840	na	9,253	451.5	378.2	101.6	931.3
1982	4,767	2,904	na	7,671	347.6	440.1	175.7	963.4
1983	8,806	5,858	na	14,664	657.8	321.0	136.3	1,115.1
1984	7,496	11,327	na	18,823	786.7	535.2	172.9	1,494.8
1985	7,403	7,844	na	15,247	706.2	567.7	167.6	1,441.5
1986	8,512	4,932	na	13,444	715.5	439.9	164.1	1,319.5
1987	6,530	755	na	7,305	495.2	413.4	166.4	1,075.0
1988	5,297	418	na	5,715	413.0	272.1	161.5	846.6
1989	5,197	453	na	5,632	447.8	389.6	171.1	1,008.5
1990	6,099	910	na	7,009	579.4	422.9	243.4	1,245.7
1991(r)	7,911	958	572	9,441	791.0	342.6	186.9	1,320.5
1992	10,375	1,722	904	13,001	1,113.6	396.9	234.8	1,745.3
1993	12,929	3,865	1,010	17,804	1,504.4	463.7	337.3	2,305.4
1994	13,947	4,646	1,154	19,747	1,730.1	772.2	341.9	2,844.2
1995	13,904	6,425	1,229	21,558	1,854.6	832.7	409.0	3,096.3
1996	15,139	7,190	1,408	23,737	2,104.5	951.8	386.3	3,442.6
1997	14,079	5,265	1,343	20,687	1,943.5	1,370.9	407.1	3,721.6
1998	14,476	5,762	1,505	21,743	2,188.7	1,148.4	461.3	3,798.4
1999	14,561	4,443	1,346	20,350	2,238.0	1,195.0	537.0	3,971.0
2000(e)	13,550	3,600	1,100	18,250	2,150.0	1,200.0	575.0	3,925.0

r = revised
e = estimate
na = not available

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November 2000.

Table 67
Summary of Construction Activity in Utah

Type of Construction	1999	2000	% Change 1999-2000
Total Construction Value	$3.971 billion	$3.925 billion	-1.2%
Residential Value	$2.238 billion	$2.15 billion	-3.9%
Total Dwelling Units	20,350	18,250	-10.3%
Single Family Units	14,561	13,550	-6.9%
Multifamily Units	4,443	3,600	-19.0%
Mobile Homes/Cabins	1,346	1,100	-18.3%
Nonresidential Value	$1.195 billion	$1.2 billion	0.4%
Additions, Alterations, and Repairs	$537 million	$575 million	7.1%

Source: University of Utah, David Eccles School of Business, Bureau of Economic and Business Research, November 2000.

Table 68
Average Annual Mortgage Rates for 30-year Conventional Mortgage for Utah

Year	Mortgage Rates	Year	Mortgage Rates
1967	6.52%	1984	13.87%
1968	7.03%	1985	12.42%
1969	7.82%	1986	10.18%
1970	8.35%	1987	10.20%
1971	7.83%	1988	10.34%
1972	7.38%	1989	10.32%
1973	8.04%	1990	10.13%
1974	9.19%	1991	9.25%
1975	9.04%	1992	8.40%
1976	8.86%	1993	7.33%
1977	8.84%	1994	8.35%
1978	9.63%	1995	7.95%
1979	11.19%	1996	7.80%
1980	13.77%	1997	7.60%
1981	16.63%	1998	6.92%
1982	16.08%	1999	7.43%
1983	13.23%	2000(e)	8.05%

e = estimate

Source: Federal Home Mortgage Corporation.

Table 69
Housing Prices for Utah: 1980 to Third Quarter 2000

Year	Index	Year-Over Percent Change	Year	Index	Year-Over Percent Change
1980	101.9		1993	147.8	10.8
1981	108.4	6.3	1994	173.3	17.2
1982	111.6	3.0	1995	193.8	11.8
1983	113.6	1.7	1996	211.0	8.9
1984	113.0	-0.5	1997	224.6	6.5
1985	115.9	2.5	1998	236.6	5.3
1986	117.9	1.7	1999 1Q	242.2	4.0
1987	116.0	-1.6	1999 2Q	242.4	2.9
1988	113.0	-2.7	1999 3Q	241.5	1.5
1989	114.6	1.4	1999 4Q	243.6	1.5
1990	118.4	3.4	2000 1Q	243.6	0.6
1991	125.3	5.8	2000 2Q	244.2	0.7
1992	133.4	6.5			

Source: Office of Federal Housing Enterprise Oversight, Housing Price Index, Washington, D.C., 2000.

Defense

Overview

Utah's defense industry continued to rebound in 2000, as base closures and realignments in other states shifted jobs and military spending to Utah. Hill Air Force Base has become the Air Force's new "center of excellence" for low-observable technology.[1] This new classification, the result of a prime military contractor relocating to Hill, will help ensure the viability of this large Utah employer. Although the defense industry in Utah and in the U.S. as a whole has decreased significantly since the end of the Cold War, in the past few years this trend has shown signs of leveling. Defense spending in Utah in 1999 totaled $1.42 billion, rising nearly 12% from the previous year.

Trends

As a percent of Gross Domestic Product (GDP), defense spending was 2.6% in 1997, 2.6% in 1998, and 2.5% in 1999. Total defense spending in Utah currently stands at $1.42 billion, an 11.8% growth from 1998. As a percent of the Gross State Product (GSP), defense outlays have diminished significantly from the 1980s, with a high of over 8.3% in 1987, to a low of 2.1% in 1998. Lately, however, this trend shows signs of reversing, with a rate of 2.3% in 1999.

Contracting Activity

During the cold war build-up of the mid-1980s, a number of defense contractors in Utah routinely received contracts in the $50 million range on an annual basis. Both Thiokol and Hercules, for example, received contracts in the $200 million range for several years during the 1980s. Defense contracts to private firms have decreased considerably at both the state and national level throughout the 1990s. The number of defense companies in Utah has declined from a high of 40 before 1993, to fewer than 10 today. Total procurement contracts to Utah firms have fallen over 40% since the 1980s.

Former defense giant Hercules, once the recipient of $353 million in contracts (1986), sold its aerospace division to Minnesota-based Alliant Techsystems in March 1995, and its Composite Products division to California-based Hexcel in 1996. Thiokol remains the state's top contract recipient, however, awards have declined significantly from a peak of $587 million in 1987. Other major defense contractors include Litton Industries, Evans and Sutherland, L-3 Communications, and Utah State University. Barring a period of prolonged military buildup, defense contracting in Utah will probably not come anywhere near the levels achieved during the 1980s.

Geographic Distribution

Federal defense spending in Utah is concentrated in Davis, Salt Lake, Tooele, and Weber counties, though significant spending occurs in Utah, Cache, Washington, and Box Elder counties. Contracting activity associated with a variety of weapons systems and other projects accounts for most of the defense spending in Salt Lake County. Payroll and procurement contracts at Tooele Army Depot and Dugway Proving Grounds account for spending in Tooele County.

Military Facilities

Hill Air Force Base, the state's largest basic employer and center of Utah's defense industry, for years has had the looming possibility of a base closure as a threat to its survival. Developments over the past two years may serve to ease the threat of that possibility. In 1999, Hill was selected as headquarters for one of 10 new "expeditionary" forces that will be used for quick deployment to trouble areas around the world. This selection will bring the 388th fighter wing up to full strength for the first time since military downsizing began about a decade ago.

Additionally, because of military downsizing in other parts of the country, Hill has become the home of Northrup Grumman Corporation, the prime contractor for the military's B-2 stealth bomber. The move helped make Hill the Air Force's new "center of excellence" for low-observable technology. The future of Utah's defense industry is much more certain than in years past, and the increase in operations at Hill Air Force Base should prove to be a buffer against future base closures.

Defense Depot Ogden (DDO) was designated for closure by the Defense Base Closure and Realignment Commission (BRAC) in 1995, and was officially closed in September 1997 after 56 years of operation. Ogden City is in the process of buying the land from the Army, and in December 1999 the city approved a 70-year redevelopment project for DDO. Under the terms of the agreement, the city will lease the 1,100 acres to the Boyer Company, who will in turn redevelop the property into a major regional business and industrial park. The lease is for 40 years, with three 10-year renewal options and a long-term buyout option of $22 million. The property will be developed over the next 15 to 20 years and it is expected to create more than 5,000 jobs in Northern Utah.

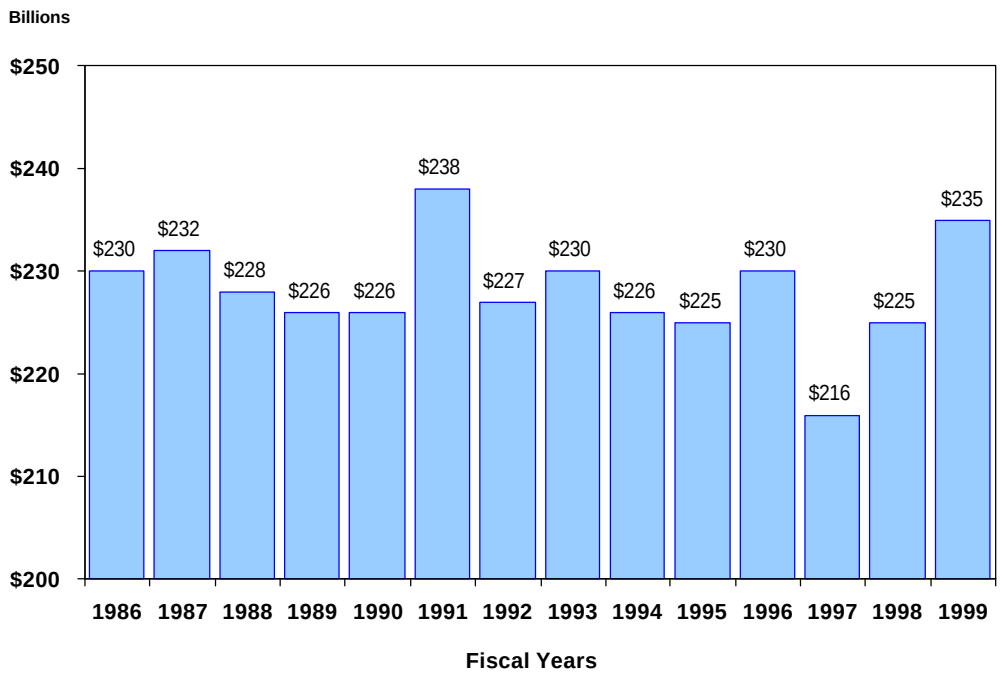
Workforce reductions at Tooele Army Depot (TAD) have brought the total number of jobs lost to reductions in workforce and realignment since 1988 to 2,500. The current workforce at TAD stands at 500 employees. While the loss of jobs at TAD has been difficult, this is another example of how redevelopment of former military bases can actually help an area's economy. The 1,700 acres that were formerly owned and occupied by TAD have been transferred to a private developer, who has renamed the area the Utah Industrial Depot. More than 40 businesses or organizations have taken up residency at the depot, which has 2.5 million square feet of existing space. More than 4,000 jobs are projected to be created as a result of the redevelopment of this property.

Outlook

Since the end of the Cold War, federal defense spending has decreased significantly. Many people refer to these cutbacks in federal spending as a "peace dividend". Estimates of cumulative savings from defense cuts are in the several hundred billion dollar range. With these kinds of cutbacks, the federal defense industry is considerably smaller than in the past, and the importance of defense to Utah's economy has similarly decreased. However, the worst of the defense cutbacks appear to be over, and redevelopment of previously closed facilities is well underway. The rapid conversion of military facilities at DDO and TAD to commercial use illustrates the strength of the state's economy, as well as its ability to absorb jobs lost from federal cutbacks. Expectations of commercial success are strong for both new facilities. In addition, new operations beginning at Hill Air Force Base should prove to be a strengthening influence on the remainder of Utah's defense industry.

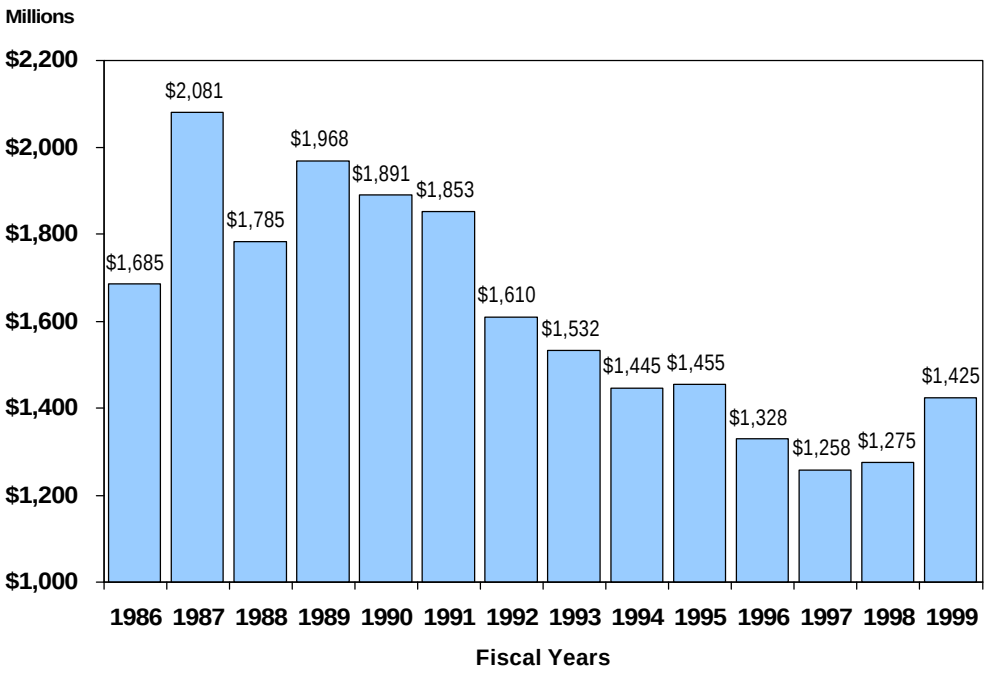
[1] Brady Snyder, "Stealth Brings Cheer to Hill", Deseret News, November 26, 2000, pB01.

Figure 45
Primary Federal Defense-Related Spending in U.S.



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

Figure 46
Federal Defense-Related Spending in Utah



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

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

Fiscal Year	Wages and Salaries*	Procurement Contract Awards	Military Retirement	State/ Local Grants	Total	Gross Domestic Product (Current Dollars)	Defense Spending as Percent of GDP
1986	$61,900,746	$150,055,345	$17,769,127	$111,366	$229,836,584	$4,452,900,000	5.2%
1987	65,097,948	147,616,385	18,732,723	127,430	231,574,486	4,742,500,000	4.9%
1988	67,270,619	142,175,108	18,640,881	113,637	228,200,245	5,108,300,000	4.5%
1989	72,771,040	132,259,473	20,669,532	172,125	225,872,170	5,489,100,000	4.1%
1990	69,103,253	135,259,039	21,235,041	175,978	225,773,311	5,803,200,000	3.9%
1991	75,254,721	139,570,721	22,669,073	111,454	237,605,969	5,986,200,000	4.0%
1992	73,851,077	129,124,509	24,024,591	223,899	227,224,076	6,318,900,000	3.6%
1993	73,947,670	129,996,047	25,752,104	241,816	229,937,637	6,642,300,000	3.5%
1994	73,470,136	125,982,520	26,478,356	212,466	226,143,478	7,054,300,000	3.2%
1995	71,192,209	126,003,863	27,695,928	244,824	225,136,824	7,400,500,000	3.0%
1996	72,955,074	128,628,822	27,922,897	247,408	229,754,201	7,813,200,000	2.9%
1997	66,719,191	119,858,710	29,595,559	191,715	216,365,175	8,318,400,000	2.6%
1998	67,178,127	126,726,012	30,457,015	171,324	224,532,478	8,790,200,000	2.6%
1999	70,412,959	133,775,555	31,078,737	159,370	235,426,621	9,299,200,000	2.5%

Percent Change					
1998 to 1999	4.8%	5.6%	2.0%	-7.0%	4.9%
1986 to 1999	13.8%	-10.8%	74.9%	43.1%	2.4%

Absolute Change					
1998 to 1999	$3,234,832	$7,049,543	$621,722	($11,954)	$10,894,143
1986 to 1999	$8,512,213	($16,279,790)	$13,309,610	$48,004	$5,590,037

* Does not include fringe benefits.

Sources: Federal Expenditures: U.S. Department of Commerce, Bureau of the Census
Gross Domestic Product: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 71
Federal Defense-Related Spending: Utah Total (Thousands of Dollars)

Fiscal Year	Wages and Salaries*	Procurement Contract Awards	Military Retirement	State/ Local Grants	Total**	Gross State Product (Current Dollars)	Defense Spending as Percent of GSP
1986	$784,567	$805,747	$94,612	$301	$1,685,227	$24,453,000	6.9%
1987	794,294	1,182,097	98,743	5,766	2,080,900	25,177,000	8.3%
1988	817,787	866,782	98,876	1,318	1,784,763	27,215,000	6.6%
1989	870,295	979,116	108,005	10,186	1,967,602	28,683,000	6.9%
1990	890,892	883,014	115,442	1,232	1,890,580	31,325,000	6.0%
1991	922,035	804,404	125,526	598	1,852,563	33,626,000	5.5%
1992	852,772	614,286	134,844	8,431	1,610,333	35,632,000	4.5%
1993	847,053	532,269	146,743	5,932	1,531,997	38,407,000	4.0%
1994	763,608	524,001	152,426	4,514	1,444,549	42,295,000	3.4%
1995	794,333	495,771	161,964	2,845	1,454,913	46,424,000	3.1%
1996	760,514	393,157	171,978	2,849	1,328,498	51,631,000	2.6%
1997	642,492	433,428	180,862	1,212	1,257,994	56,062,000	2.2%
1998	620,622	464,739	189,130	171	1,274,662	59,624,000	2.1%
1999	678,173	548,103	193,157	5,445	1,424,878	63,082,000	2.3%
Percent Change							
1998 to 1999	9.3%	17.9%	2.1%	3084.2%	11.8%		
1986 to 1999	-13.6%	-32.0%	104.2%	1709.0%	-15.4%		
Absolute Change							
1998 to 1999	$57,551	$83,364	$4,027	$5,274	$150,216		
1986 to 1999	($106,394)	($257,644)	$98,545	$5,144	($260,349)		

* Does not include fringe benefits.
** These totals do not match those in Table 3 because the data sources and concepts are slightly different.

Sources: Federal Expenditures; U.S. Department of Commerce, Bureau of the Census
Gross State Product: 1986-98, U.S. Department of Commerce, Bureau of Economic Analysis,1999
Regional Financial Associates.

Table 72
Federal Defense-Related Spending in Utah by County (Thousands of Dollars)

	1999				1998	Change in Total Spending from 1998 to 1999	
County	Wages*	Procurement	Other	Total**	Total**	Absolute	Percentage
Beaver	$473	$0	$409	$882	$886	($4)	-0.5%
Box Elder	3,115	22,572	3,265	28,952	22,831	6,121	26.8%
Cache	1,785	21,556	9,260	32,601	30,205	2,396	7.9%
Carbon	181	0	1,139	1,320	1,291	29	2.2%
Daggett	0	0	59	59	91	(32)	-35.2%
Davis	481,758	161,089	50,958	693,805	601,379	92,426	15.4%
Duchesne	0	0	637	637	1,541	(904)	-58.7%
Emery	0	0	343	343	374	(31)	-8.3%
Garfield	0	0	309	309	282	27	9.6%
Grand	0	0	303	303	318	(15)	-4.7%
Iron	782	0	2,275	3,057	2,852	205	7.2%
Juab	0	0	360	360	331	29	8.8%
Kane	0	27	608	635	588	47	8.0%
Millard	639	1,801	579	3,019	1,537	1,482	96.4%
Morgan	0	62	1,033	1,095	926	169	18.3%
Piute	0	0	153	153	130	23	17.7%
Rich	0	0	149	149	200	(51)	-25.5%
Salt Lake	95,601	260,448	71,993	428,042	379,292	48,750	12.9%
San Juan	176	0	278	454	1,141	(687)	-60.2%
Sanpete	744	0	1,157	1,901	1,885	16	0.8%
Sevier	652	130	1,382	2,164	2,135	29	1.4%
Summit	2,595	4,124	2,900	9,619	8,923	696	7.8%
Tooele	54,667	42,723	3,367	100,757	104,372	(3,615)	-3.5%
Uintah	222	0	1,086	1,308	1,317	(9)	-0.7%
Utah	5,919	10,112	20,902	36,933	40,550	(3,617)	-8.9%
Wasatch	0	0	545	545	492	53	10.8%
Washington	16,426	242	9,833	26,501	23,762	2,739	11.5%
Wayne	0	0	155	155	112	43	38.4%
Weber	12,438	23,217	35,919	71,574	75,673	(4,099)	-5.4%
Undistributed	0	0	0	0	0	0	0.0%
State Total	$678,173	$548,103	$221,356	$1,447,632	$1,305,416	$142,216	10.9%

* Does not include fringe benefits.
** The totals here will not match Table 2 because the data sources and concepts are slightly different.

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

Energy and Minerals

Energy Overview

Crude oil production declined slightly in 2000, although natural gas production increased. Wellhead prices were much higher in 2000 than in recent years and will encourage oil and gas drilling. The coal industry in Utah has not always enjoyed healthy and profitable growth, but it is expected to be more successful in the future in the wake of rising coal prices.

2000 Summary and Review

Petroleum and Natural Gas. Utah production of crude oil fell for the second straight year, after years of relatively flat production. Crude oil production is estimated to be about 15.5 million barrels in 2000, some 4.5% below the 1999 level. With crude oil wellhead prices averaging $29 per barrel, well permits, well completions, footage drilled, and drilling success rates increased in 2000.

The top ten crude oil producers in Utah account for over 90% of production. While crude oil production uses technology such as enhanced oil recovery as a remedy to slow production declines, natural gas production continues to look to new sources such as coalbed methane. Coalbed methane development remains a promising source for natural gas production, and should support new gas production. Major coalbed methane operations exist in Carbon and Emery Counties. Natural gas production statewide was up somewhat in 2000 from 1999 levels as new production from coalbed methane helped curb Utah's production decline. Coalbed methane projects may actually help boost statewide production over the next few years. The yearly average price for natural gas was $3.25 per thousand cubic feet, 70% above the 1999 level.

The demand for petroleum products in Utah is increasing faster than population, which makes the Utah market attractive for out-of-state sources. Salt Lake City petroleum refineries have operated close to capacity for several years, but have also been successful in increasing their output of refined products to meet the growing Utah market. The rapidly growing Utah market has generated various pipeline proposals for out-of-state sources.

Electric Utilities. Utah electric power generation has increased for the last five years. This trend continued into 2000, although the increase in generation was very slight over the 1999 total. Coal-fired generation grew to over 95% of total electricity production, with remaining generation being shared among hydroelectric (2.2%), light oil/natural gas (1.8%), and other sources (0.4%).

Electricity demand in Utah maintained its upward trend in 2000 with an increase of 6.6% over the 1999 total. Shares of consumption by sector remained roughly the same in 2000 with 27.5%, 34.3%, and 34.6% consumed by the residential, commercial, and industrial sectors, respectively.

In all sectors, electricity prices in 2000 resembled those from 1999. In fact, 2000 electricity prices remain unchanged from 1999, after falling the last few years.

Coal. Utah coal production, which had been on the rise from 21 million tons in 1992 to 27.1 million tons in 1996, has settled around 26.5 million tons per year for the past 4 years. Employment decreased from 2,091 in 1997 to 1,950 in 1998, 1,843 in 1999 and to 1,688 in 2000. Coal production from Carbon County decreased, while Emery and Sevier registered higher levels of production. Emery County's increase in production was within the annual fluctuation limit. The decreased production by Carbon was due to declining production at the Cyprus Plateau, Soldier Canyon, Dugout Canyon and White Oak mines. The increased production from Sevier County was due to a higher level of production from the Sufco mine. About 82.6% of total production came from Federal land. The value of coal produced surpassed $464 million.

In 2000, Utah's coal production was 47,000 tons less than the previous year. The Wasatch Plateau coal field, with production of 22.6 million tons, was the major coal-producing field in central Utah. The other coal field, Book Cliffs, produced 3.8 million tons. Wasatch Plateau coal field produced less than the 1999 level but the Book Cliffs surpassed the previous year by 0.8 million tons, mostly due to increased production by Andalex. Emery County produced the most coal in Utah (16.3 million tons). Sevier County's production of 5.9 million tons was marginally above the previous year's production level, and Carbon's production of 4.3 million tons was 0.2 million tons below the 4.5 million tons production of 1999.

A combination of increased electricity consumption in Utah and decreased electric utility consumption outside of Utah resulted in a slightly decreased coal production in Utah. Other sectors were relatively stable. Electric utilities in Utah consumed higher levels than the previous year. Major markets for Utah coal were Utah (15.0 million tons), followed by Nevada (3.7 million tons), California (3.1 million tons), the Pacific Rim Countries of Japan, Korea, and Taiwan (2.9 million tons), Tennessee (1 million tons), Oregon (0.5 million tons) and Illinois (0.3 million tons).

The Outlook for 2001

Petroleum and Natural Gas. Crude oil production is expected to decrease and assume a "normal decline rate" in 2001 at 4%. However, the high price of crude oil may dampen the decline in production to less than 4%. After a fairly dynamic year in 2000, which saw wellhead prices range from $18 to about $30 a barrel, average crude oil prices in 2001 should stabilize, but remain high, and settle around $29 a barrel. After several years of variable total natural gas production, gas production in 2001 is expected to increase and approach the 300 billion cubic foot level, especially if natural gas prices stay high. Natural gas wellhead prices, already at a 15-year high, should remain above $3.00 per thousand cubic feet for the next year.

Electric Utilities. Strong economic growth will support higher electricity demand through 2001 and into the next decade. Even though Utah's economy has slowed somewhat, its continued expansion should once again push electricity consumption higher. Overall demand should remain at or above 5% for 2001, with industrial consumption leading the way. There has been speculation that the growth in demand could adversely affect the electricity market in a couple of ways. First, sustained demand growth puts upward pressure on electric prices. Second, there is a growing shortage in available capacity throughout the western electric grid. These factors could cause prices to increase or affect electricity reliability.

Coal. Coal production in Utah is forecasted to reach 26.9 million tons in 2001, but may only reach 26.3 million tons due to an unscheduled maintenance of unit No. 1 of the Hunter Power Plant. Productivity

should increase by about 1.5%. Coal prices, which started to turn around in 2000, should increase and show some gain in 2001.

Significant Issues

Petroleum and Natural Gas. Crude oil wellhead prices were remarkably low throughout 1998 and early 1999. Consequently, drilling and exploration decreased, which resulted in some lost oil production. Decreases in production hurt Utah's oil producing counties economically and also limited the in-state supply of oil to refiners. Even though prices for crude oil have rebounded strongly and have encouraged new drilling, the lag time between bringing new supply on-line and final delivery to end users is significant. The industry is now recovering from the low prices and reduced drilling activity spurred by those events in 1998 and early 1999. In addition, relatively low and stable energy prices, like those seen in 1998, play a major role in encouraging demand and stifling energy conservation efforts. In turn, this affects whether supply over the long term can keep pace with the rate of demand growth. The long-term petroleum supply and demand balance is less clear and is discussed in a special topics chapter of this report.

Electric Utilities. Electric industry analysts continue to examine federal and state actions on the issues of restructuring and adequacy of supply. In Utah, the Deregulation and Customer Choice Task Force is proceeding with its review of restructuring and is expected to assess developments in other states before issuing a recommendation to the legislature. Other issues facing electric utilities concern the western power grid, including reliability and the ability of supply to meet demand. Regarding reliability, the western interstate grid structure is aging and in need of renovation. Without improvements, the ability to deliver electric power on a continuous basis is called into question. Utah is experiencing rates of consumption that are higher than the growth in population. Utah is fortunate to be able to generate enough electricity to supply the state and export the remainder to California. However, the portion that Utah's electric utilities sell to out-of-state markets is contractual. As a result, the ability to meet short-term demand surges in Utah is squeezed. This was evidenced during the past fall when PacifiCorp and a number of municipal electric utilities bought power on the wholesale market because they could not meet demand. Purchasing power on the wholesale market is more expensive, the implication is that rates in some areas will rise. However, on a statewide basis for all customer classes, rates have been falling over the last few years and Utah remains one of the least cost states despite its high rate of growth.

Coal. Coal is now the least expensive fuel to consume for generation of electricity. During 2000, the price of crude oil tripled and most refined products went up by 50%. The spot price of natural gas increased 400% and yet the price of coal increased only marginally.

The expectation that the Hague Conference on the International Climate Treaty would produce positive results did not materialize despite an eleventh hour effort by John Prescott, the UK Deputy Prime minister. The aim to ratify the 1997 Kyoto Accord proved beyond reach.

Without a commitment by any of the industrialized nations of the world to reduce their emissions to a level below that of 1990, it appears that the consumption of coal will increase unabated.

The second phase of Clean Air Act Amendments of 1990, which went into effect at the beginning of the year, forced the creation of a bigger market for high BTU, low-sulfur coal found in Utah. Utah coal should be in strong demand, and this should affect the overall price of coal.

Productivity continues to rise in the Utah coal industry. In 2000, the productivity of Utah coal miners rose to 6.5 tons per miner-hour. Utah coal production should continue to rise marginally for the foreseeable future, and coal prices should continue to increase.

Minerals Overview

The estimated value of mineral production in Utah was $1.9 billion in 2000. In declining order of value, contributions from the major industry segments are: base metals, $770 million; coal, $465 million; industrial minerals, $450 million; and precious metals, $210 million. Overall, mineral production remains at near-record levels despite a decrease in production of several base metals and industrial minerals. In 2000, 85 large mines (including coal) were active in Utah compared to 79 large mines in 1999. Through mid-November 2000, the Utah Division of Oil, Gas and Mining received 12 new Large mine permit applications (five acres and larger disturbance) and 56 new Small mine permit applications (less than five acres disturbance). All of the Large mine permit applications were made to change from Small mine to Large mine status. Utah, which ranked 11th in the nation in the value of nonfuel mineral production and 14th in coal production in 1999, should retain similar rankings in 2000.

Operator surveys indicate that base-metal production for 2001 will increase modestly while precious-metal production will decline. Industrial-mineral production should remain steady, although a continued reduction in the demand for sand and gravel may result in a lower total value. Industrial-mineral production is closely linked to regional and local construction and population growth, and could be affected by the completion of several major construction projects in the Salt Lake Valley. Coal production decreased slightly in 2000, but is expected to increase in 2001, buoyed by an overall increase in energy prices. Relatively low metal prices have reduced exploration activities and are expected to delay the opening of several small base- and precious-metal mines.

Significant issues that will impact the future of the minerals industry in Utah are the limited availability of public lands open for mineral exploration and development, state and federal regulations that dampen the industry's willingness to develop new resources, and the negative public perception of the mining industry.

2000 Summary

The value of Utah's mineral production in 2000 is estimated to be $1.90 billion, an increase of approximately $70 million from 1999. Estimated contributions from each of the major industry segments are:

- base metals, $770 million (41% of total);
- coal, $465 million (24% of total);
- industrial minerals, $450 million (24% of total); and
- precious metals, $210 million (11% of total).

Compared to 1999, the 2000 values changed as follows: (1) base metals increased $144 million, (2) industrial minerals decreased $135 million, (3) coal increased $5 million, and (4) precious metals increased $55 million.

Base Metals. Base-metal production was the largest contributor to the value of minerals produced in 2000. The value of base metals increased approximately $144 million compared to 1999, largely due to a rebound in copper prices. In descending order of value, base metals produced in Utah are: copper, magnesium, molybdenum, and beryllium. These metals are produced by (1) Kennecott Utah Copper Company (copper and molybdenum) from one mine in Salt Lake County, (2) Brush Wellman, Inc. (beryllium) from two mines in Juab County, and (3) Magnesium Corporation of America (magnesium) from its brine recovery facility near Great Salt Lake in Tooele County.

Coal. High-BTU, low-sulfur coal is produced from 12 underground mines located in east-central Utah. Coal production was the second-largest contributor to the value of minerals produced in 2000, and accounted for approximately 24% of the total value of minerals produced. The value of coal production increased about $5 million compared to 1999, due to an increase in average coal prices despite a slightly lower level of production.

Industrial Minerals. Industrial-minerals production (including sand and gravel) was the third-largest contributor to the value of minerals produced in 2000, and accounted for approximately 24% of the total value of minerals produced. In comparison to the relatively few (5) large mines and facilities that produce base and precious metals, there are 67 active large mines and brine processing facilities that produce a myriad of industrial-mineral commodities and products. The above number of mines does not include the numerous sand and gravel operations that are spread throughout every county in the state. The estimated value of industrial minerals decreased approximately $135 million compared to 1999, due to a substantial decrease in sand and gravel production, and an overall price decrease in many industrial-mineral commodities.

The five most important commodities produced by group or individual commodity in descending order of value included: (1) sand and gravel, and crushed stone; (2) Portland cement; (3) salines, including sulfate of potash, salt, potash (potassium chloride), and magnesium chloride; (4) lime, including dolomitic quicklime, hydrated lime, and high-calcium quicklime; and (5) phosphate. Together, these commodities contribute 87% of the total value of industrial minerals.

Precious Metals. The total value of precious-metal production was attributable to gold (91%) and silver (9%). The value of precious-metal production increased approximately $55 million compared to 1999, due to a substantial increase in production of both gold and silver. Precious metals accounted for approximately 11% of the total estimated value of minerals produced in 2000. The two major producers of precious metals are Kennecott's Bingham Canyon mine, which recovers both silver and gold as a by-product, and Kennecott's Barneys Canyon mine, which is a primary gold producer. Both mines are located a few miles west of Salt Lake City in the Oquirrh Mountains. Several small mines produce a minor amount of precious metals.

Active Mines. Eighty-five large mines (excluding sand and gravel) were active in 2000. These mines, grouped by industry segment, are: base metals, 4; precious metals, 1; coal, 12; and industrial minerals (including gems, geodes, and fossils), 68. One hundred four small mines reported production in 1999. These mines are grouped as follows: base metals, 1; precious metals, 8; industrial minerals, 86; gemstones, 7; and fossils and geodes, 2.

New Mine Permits. Through mid-November 2000, the Utah Division of Oil, Gas and Mining received 12 new Large mine permit applications (five acres and larger disturbance) and 56 new Small mine permit applications (less than five acres disturbance). All of the Large mine permit applications were made to change from Small mine to Large mine status. These numbers represent an increase of seven Large mine permit applications and a decrease of one Small mine permit application compared to 1999. New Large mine permits include 8 dimension stone quarries, 1 limestone quarry (aggregate), 1 gemstone mine, 1 high-silica sandstone mine, and 1 tar sand quarry. New Small mine permits are grouped as follows: industrial minerals, 42; precious metals, 5; gems and fossils, 5; and mill sites, 4.

Nonfuel Mineral Production Trends. According to preliminary data from the U.S. Geological Survey, the value of Utah's nonfuel mineral production in 1999 was $1.26 billion, 6% less than 1998. Between 1989 and 1999, the value of nonfuel mineral production in Utah ranged from a low of $1.18 billion in 1991, to a high of $1.85 billion in 1995. The Utah Geological Survey's estimate for the value of nonfuel mineral production for 2000 is $1.43 billion, almost $64 million (4%) more than its estimate for 1999.

The number of exploration permits issued is expected to be significantly lower in 2000 than in 1999. Only 15 Notices of Intent to explore on public lands were filed with the Utah Division of Oil, Gas and Mining through mid-November 2000, compared to 24 for all of 1999, and 22 for 1998.

2001 Outlook

The value of mineral production in Utah is expected to remain relatively high in 2001. Operator surveys indicate that in 2001: base-metal production will be mixed with an increase in copper, offset by a decrease in magnesium and molybdenum; industrial-minerals production should remain steady, although a reduced demand for sand and gravel may result in an overall lower total value; coal production is expected to increase as are average coal prices; and precious- metal production will be mixed with a decrease in gold partially offset by an increase in silver. The anticipated reopening of two small mines may add to the overall level of both precious- and base-metals production. Exploration for both base and precious metals is expected to remain relatively low.

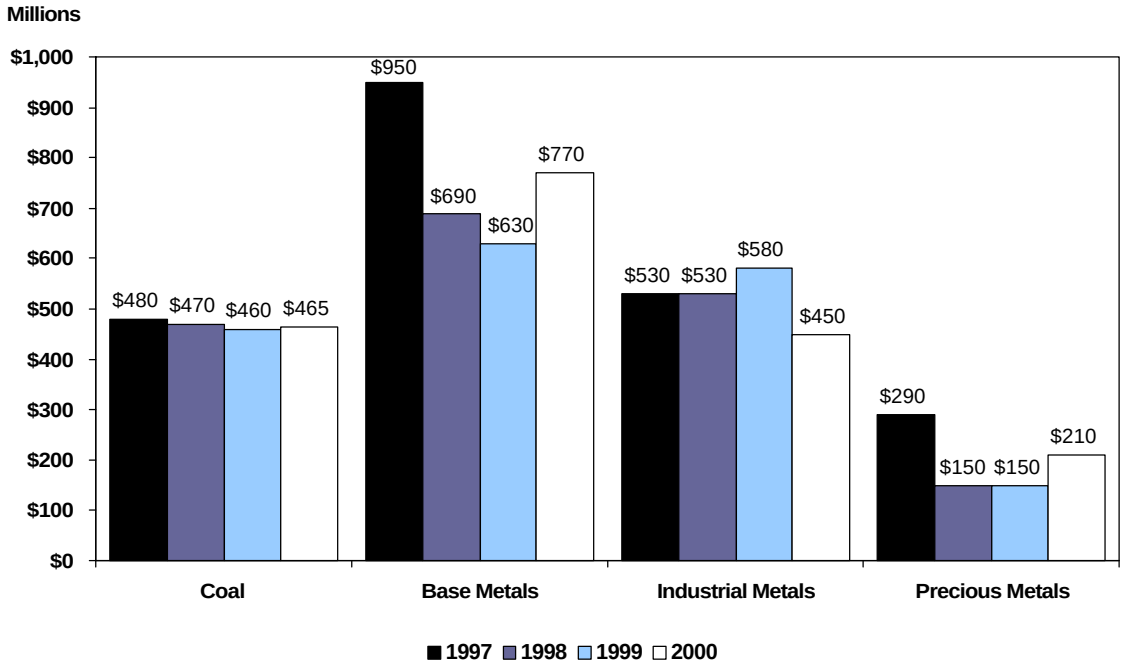
Significant Issues Affecting Utah's Mining Industry. Significant issues that will affect the long-term viability of Utah's mineral industry are: (1) the limited availability of public lands open for mineral exploration due to federal withdrawals such as Wilderness Study Areas, new U.S. Bureau of Land Management re-inventory areas, and the U.S. Forest Service's roadless initiative, (2) the negative public perception of the mining industry, and (3) difficulty and delays in acquiring required permits.

Conclusion

Utah's mineral industry continues to maintain near record-level valuations, although some slowdown in the production of industrial minerals occurred in 2000. Base-metal production increased as did base-metal prices. Magnesium metal production will decline in 2001, due to ongoing construction at the state's only magnesium-metal-producing facility. Indications are that overall, base-metal values should remain relatively steady for 2001, if copper prices do not decline. Precious-metal values will decline due to a decrease in production at

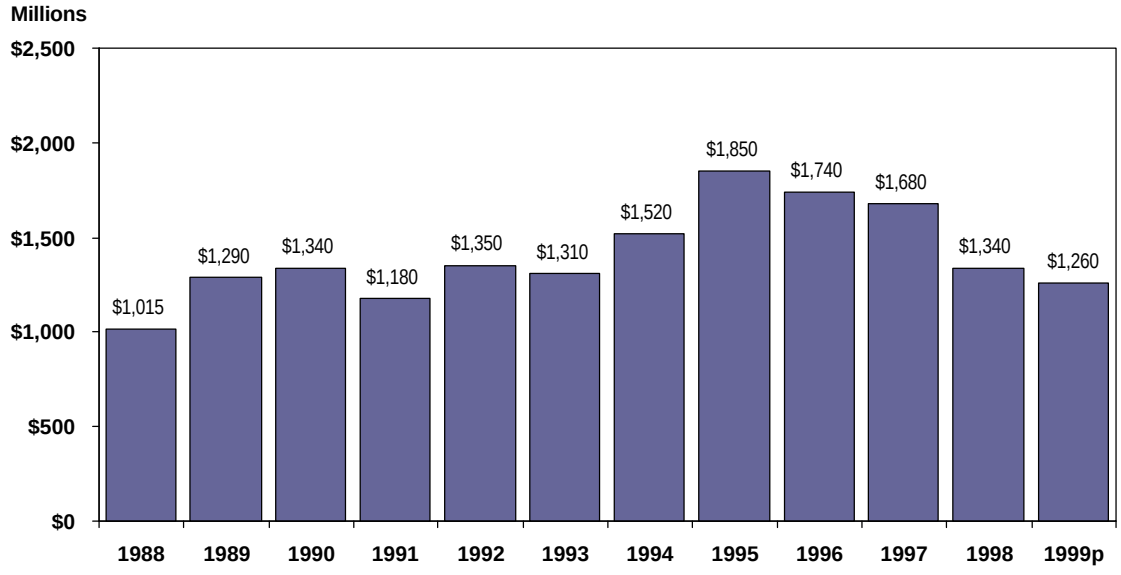
both of Utah's precious-metal operations. Industrial-mineral values should remain about the same as in 2000, although a perceived slowdown in several commodities might affect overall values. Coal production will increase as will coal prices. The number of active large mines continues to increase, which expands the state's mineral production base, although the level of mineral exploration continues to decline. Utah, which ranked 11th in the nation in the value of nonfuel mineral production and 14th in coal production in 1999, should retain similar rankings in 2000. Significant issues that will affect the long-term viability of Utah's mineral industry are the limited availability of public lands open for mineral exploration, the negative public perception of the mining industry, and difficulty in acquiring required permits.

Figure 47
Mineral Valuation--Gross Value Estimate



Source: Utah Geological Survey

Figure 48
Value of Nonfuel Minerals



Source: U.S. Geological Survey

Table 73
Supply and Disposition of Crude Oil in Utah (Thousand Barrels)

	Supply				Disposition			
Year	Field Production	Colorado Imports	Wyoming Imports	Canadian Imports	Utah Crude Exports	Refinery Receipts	Refinery Inputs	Refinery Stocks
1980	24,979	15,846	12,233	-	8,232	45,516	45,599	665
1981	24,309	14,931	11,724	-	7,866	43,700	42,673	762
1982	23,595	13,911	12,033	-	7,826	41,246	40,368	614
1983	31,045	14,696	7,283	-	8,316	43,615	43,185	632
1984	38,054	13,045	6,195	-	13,616	43,672	43,746	607
1985	41,144	13,107	6,827	-	14,597	45,549	45,021	695
1986	39,245	12,567	7,574	-	15,721	45,132	45,034	559
1987	35,835	13,246	7,454	-	12,137	45,664	44,483	612
1988	33,350	12,783	14,739	-	8,411	48,882	47,618	599
1989	28,512	13,861	18,380	-	6,179	46,775	46,767	609
1990	27,693	14,494	18,844	-	7,725	49,104	48,985	728
1991	25,930	14,423	20,113	-	8,961	48,647	48,852	513
1992	24,075	13,262	21,949	-	6,901	50,079	49,776	645
1993	21,819	11,575	22,279	-	7,758	48,554	48,307	691
1994	20,661	10,480	26,227	-	8,048	48,802	48,506	767
1995	19,988	9,929	24,916	-	7,861	46,695	46,666	767
1996	19,504	9,857	24,905	175	7,713	46,126	45,766	590
1997	19,585	8,565	28,191	525	7,819	48,492	48,486	654
1998	19,198	8,161	28,414	2,200	7,785	49,539	49,023	702
1999	16,253	7,335	28,461	6,400	7,180	51,157	49,508	720
2000(e)	15,500	7,300	25,300	7,975	6,786	49,178	49,411	600

e = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 74
Supply and Disposition of Petroleum Products in Utah (Thousand Gallons)

	Supply			Consumption by Product					
Year	Refined in Utah	Imports	Refinery Stocks	Motor Gasoline	Jet Fuel	Distillate Fuel	All Other	Total	Exports
1980	1,694,260	313,903	93,954	652,426	110,742	352,826	400,753	1,516,747	929,710
1981	1,973,731	367,721	89,754	653,037	101,803	298,130	245,256	1,298,225	992,451
1982	1,840,602	434,236	92,778	663,304	117,641	270,391	238,694	1,290,031	929,006
1983	2,184,803	340,139	77,746	670,071	137,942	268,241	285,427	1,361,681	1,062,499
1984	2,014,637	422,376	83,244	678,350	143,325	289,564	273,671	1,384,910	1,013,079
1985	2,153,603	394,479	80,430	682,086	159,923	249,531	257,126	1,348,666	981,323
1986	2,176,524	337,091	78,246	736,714	182,049	307,091	240,240	1,466,094	839,288
1987	2,198,490	349,466	66,402	740,152	208,683	284,269	262,373	1,495,477	870,198
1988	2,341,164	361,879	75,936	762,204	209,048	307,778	250,526	1,529,556	979,726
1989	2,284,128	393,766	91,980	727,064	213,983	259,530	277,335	1,477,911	937,692
1990	2,408,658	503,917	72,786	702,424	221,787	308,236	257,559	1,490,007	1,048,715
1991	2,412,732	477,078	76,566	730,571	248,529	327,126	282,874	1,589,099	1,114,853
1992	2,410,296	442,428	67,998	752,006	235,499	338,621	251,646	1,577,772	1,076,978
1993	2,419,074	449,694	71,064	791,137	231,756	335,996	247,619	1,606,508	995,020
1994	2,497,236	485,310	90,426	816,170	221,333	352,833	254,923	1,645,258	1,061,131
1995	2,409,246	516,138	84,630	872,402	237,616	384,868	293,575	1,788,462	1,016,625
1996	2,471,784	533,064	72,414	889,140	264,720	416,703	362,250	1,932,851	1,031,561
1997	2,513,658	543,858	63,208	925,026	263,614	472,920	350,784	2,012,369	1,102,418
1998	2,579,808	539,364	69,529	957,402	266,250	470,782	357,800	2,052,233	1,114,115
1999	2,635,248	609,378	70,850	981,337	268,912	444,200	364,956	2,059,405	1,123,746
2000(e)	2,437,246	640,668	65,872	999,001	271,601	455,305	372,255	2,098,162	1,139,956

e = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 75
Supply and Disposition of Natural Gas in Utah (Million Cubic Feet)

	Supply			Consumption by End Use						
Year	Gross Production	Marketed Production	Actual Sales	Residential	Commercial	Industrial	Electric Utilities	Lease & Plant	Pipeline	Total
1980	87,766	47,857	na	40,578	17,391	43,545	5,133	7,594	851	115,092
1981	90,936	58,865	na	38,592	16,540	42,779	3,087	511	721	102,230
1982	100,628	56,368	na	47,452	20,336	39,804	3,023	5,965	1,126	117,706
1983	96,933	54,700	na	44,047	18,877	40,246	1,259	4,538	1,218	110,185
1984	183,062	73,154	na	44,246	18,962	42,709	271	8,375	1,015	115,578
1985	208,803	78,906	na	47,062	20,170	37,448	235	9,001	1,201	115,117
1986	239,411	91,036	na	13,603	18,687	28,264	230	13,289	1,102	75,175
1987	262,045	96,360	na	41,536	14,811	23,884	263	17,671	822	98,987
1988	278,463	101,925	na	42,241	17,911	30,365	196	16,889	1,362	108,964
1989	278,081	120,089	na	45,168	16,522	33,963	636	16,211	1,037	113,537
1990	319,632	145,875	63,336	43,424	16,220	35,502	907	19,719	875	116,648
1991	323,660	144,817	65,288	50,572	19,276	43,120	5,190	13,738	864	132,766
1992	314,275	171,293	94,725	44,701	16,584	40,878	6,576	12,611	1,284	122,649
1993	336,183	225,401	137,864	51,779	22,588	42,301	6,305	12,526	2,513	138,044
1994	347,019	270,858	160,967	48,922	26,501	36,618	8,900	13,273	2,807	137,073
1995	303,233	241,290	164,059	48,975	26,825	42,373	8,707	27,012	2,831	156,824
1996	281,208	250,767	179,943	54,344	29,543	42,213	3,428	27,119	3,601	160,371
1997	274,920	257,139	183,427	58,108	31,129	44,162	4,078	24,619	2,935	165,159
1998	297,265	277,340	201,416	56,843	30,955	45,501	5,945	27,466	2,788	169,634
1999	276,967	262,614	205,036	55,474	30,361	40,859	6,478	23,810	2,561	159,672
2000(e)	282,506	267,866	217,819	52,700	29,147	42,750	10,883	24,223	2,605	162,308

e = estimate
na = not available

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 76
Supply and Disposition of Electricity in Utah (Gigawatthours)

	Net Generation by Fuel Type					Consumption by End Use				
Year	Coal	Other Fossil Fuels	Hydro	Other	Total	Residential	Commercial	Industrial	Other	Total
1980	10,870	421	823	-	12,114	3,293	3,569	3,800	512	11,174
1981	10,869	270	623	-	11,762	3,476	3,909	3,930	530	11,845
1982	10,635	232	1,024	-	11,891	3,630	3,033	4,610	745	12,018
1983	10,921	109	1,394	-	12,424	3,678	3,375	4,786	769	12,608
1984	12,321	38	1,391	38	13,788	3,825	3,935	4,656	950	13,366
1985	14,229	54	1,019	109	15,411	3,996	4,272	4,663	658	13,589
1986	15,155	80	1,413	171	16,819	3,984	4,262	4,583	662	13,491
1987	25,221	105	856	164	26,346	3,991	4,127	4,570	784	13,472
1988	28,806	64	593	174	29,637	4,186	4,356	5,259	765	14,566
1989	29,676	85	562	173	30,496	4,134	4,365	5,622	782	14,902
1990	31,519	103	486	152	32,260	4,188	4,713	5,553	772	15,225
1991	28,884	484	604	186	30,160	4,458	5,009	5,674	722	15,862
1992	31,543	612	580	186	32,921	4,458	5,170	6,085	668	16,381
1993	31,919	575	818	148	33,461	4,687	5,130	6,093	921	16,831
1994	32,764	780	716	195	34,455	5,031	5,561	6,322	945	17,860
1995	30,260	775	926	140	32,101	5,056	5,503	7,018	781	18,358
1996	30,693	324	1,019	192	32,229	5,481	5,911	7,660	860	19,858
1997	32,144	326	1,331	169	33,969	5,660	6,462	7,430	820	20,373
1998	33,207	494	1,299	160	35,161	5,756	6,709	7,511	724	20,700
1999	34,125	544	1,247	156	36,071	6,236	7,282	7,568	792	21,879
2000(e)	34,500	653	800	160	36,110	6,548	7,937	8,098	784	23,367

e = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 77
Supply and Disposition of Coal in Utah (Thousand Short Tons)

	Supply				Consumption by End Use				
Year	Production	Marketed Production	Imports	Exports	Residential & Commercial	Coke Plants	Industrial	Electric Utilities	Total
1980	13,236	13,014	1,215	6,728	237	1,528	446	4,895	7,106
1981	13,808	14,627	1,136	8,764	196	1,567	714	4,956	7,432
1982	16,912	15,397	797	8,261	177	841	822	4,947	6,787
1983	11,829	12,188	937	6,133	191	839	629	5,223	6,882
1984	12,259	12,074	1,539	6,432	259	1,386	548	5,712	7,905
1985	12,831	14,361	1,580	6,549	252	1,288	438	6,325	8,303
1986	14,269	13,243	1,145	5,366	191	814	351	6,756	8,112
1987	16,521	16,989	1,165	5,633	123	231	276	11,175	11,806
1988	18,164	18,244	2,448	5,925	196	1,184	589	12,544	14,513
1989	20,517	21,289	2,367	7,283	231	1,178	686	12,949	15,044
1990	22,012	21,680	2,137	7,467	181	1,318	676	13,563	15,738
1991	21,945	21,673	2,007	7,954	320	1,310	535	12,829	14,834
1992	21,015	21,339	2,155	8,332	347	1,182	497	13,136	15,162
1993	21,723	21,935	2,100	8,761	228	1,089	614	13,343	15,274
1994	24,135	23,441	2,588	10,188	157	1,198	647	13,839	15,841
1995	25,051	25,443	1,841	12,848	182	1,062	642	12,550	14,436
1996	27,071	27,816	1,925	15,116	260	1,120	517	12,728	14,625
1997	26,428	25,407	2,615	11,375	96	1,106	665	14,780	16,647
1998	26,600	26,974	2,715	13,270	212	1,110	680	14,545	16,547
1999	26,491	26,180	2,159	12,081	107	728	830	14,593	16,258
2000(e)	26,444	26,532	2,655	12,262	82	1,000	1,089	14,754	16,925

e = estimate

Source: F.R. Jahanbani, Utah Office of Energy and Resource Planning.

Energy Prices in Utah (Current Dollars)

	Field Price			Average End-Use Price								
Year	Coal ($/tons)	Crude Oil ($/barrel)	Natural Gas ($/mcf)	Coal ($/tons)	No. 2 Distillate ($/gallons)	Motor Fuel ($/gallons)	Natural Gas Residential ($/mcf)	Natural Gas Commercial ($/mcf)	Natural Gas Industrial ($/mcf)	Electric Power Residential (c/kWh)	Electric Power Commercial (c/kWh)	Electric Power Industrial (c/kWh)
1980	25.63	19.79	1.86	29.63	0.91	1.23	2.74	5.59	2.26	5.5	4.3	3.3
1981	26.87	34.14	1.87	32.79	1.04	1.37	3.23	5.35	2.58	6.0	5.0	3.7
1982	29.42	30.50	2.47	33.38	1.01	1.35	3.41	3.43	2.45	6.3	5.7	4.2
1983	28.32	28.12	2.56	30.64	0.96	1.13	4.26	4.32	3.15	6.9	6.3	4.4
1984	29.20	27.21	3.16	30.64	0.95	1.12	5.68	4.96	3.52	7.4	6.5	4.6
1985	27.69	23.98	3.23	32.34	0.93	1.14	4.86	4.91	3.23	7.8	6.9	5.0
1986	27.64	13.33	2.90	32.32	0.78	0.85	4.64	4.73	3.00	8.0	7.1	5.2
1987	25.67	17.22	1.80	30.95	0.83	0.93	4.97	4.98	3.20	8.0	7.1	4.9
1988	22.85	14.24	1.70	29.50	0.84	0.96	5.11	4.08	3.10	7.8	7.0	4.6
1989	22.00	18.63	1.61	28.05	0.94	1.03	5.14	4.16	3.30	7.4	6.7	4.1
1990	21.78	22.61	1.70	26.80	1.12	1.14	5.28	4.30	3.62	7.1	6.3	3.9
1991	21.56	19.99	1.54	27.40	1.02	1.10	5.44	4.50	3.69	7.1	6.1	4.0
1992	21.83	19.39	1.63	27.54	1.01	1.12	5.44	4.40	3.91	7.0	6.0	3.7
1993	21.17	17.48	1.85	27.34	1.00	1.10	5.13	4.06	3.67	6.9	6.0	3.8
1994	20.07	16.38	1.53	26.10	0.98	1.12	4.96	3.84	2.74	6.9	5.9	3.8
1995	19.11	17.71	1.14	25.27	1.00	1.14	4.74	3.64	2.34	6.9	6.0	3.9
1996	18.50	21.10	1.39	24.50	1.06	1.20	4.47	3.38	2.10	6.9	5.9	3.7
1997	18.34	18.57	1.85	25.33	1.10	1.25	5.13	3.91	2.55	6.9	5.7	3.5
1998	17.83	12.53	1.73	25.45	1.05	1.09	5.57	4.34	3.00	6.8	5.7	3.4
1999	17.36	17.69	1.92	25.15	1.19	1.29	5.37	4.12	2.94	6.2	5.1	3.3
2000(e)	17.57	29.03	3.25	25.30	1.40	1.50	6.24	4.62	3.20	6.2	5.1	3.3

e = estimate

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

High Technology

Overview

Utah's high tech sector continues to grow, albeit slowly, despite downturns in its early successes such as Novell, WordPerfect, Evans & Sutherland and Iomega. Utah's high technology sector is small. At present, the state's technology sector is characterized by numerous small firms, a few medium-sized firms, and almost no large firms. Finally, it is a small component of the state's economy. Even with 65,000 workers, it represents just 6.0% of the state's nonagricultural worker base.

Significant Issues

Since 1985, the Bureau of Economic and Business Research (BEBR) has tracked and analyzed Utah's high tech sector. Over this 15-year period, significant changes have occurred not just in the structure of the high tech sector, but in the very way in which it is defined.

Initially, BEBR developed a definition of high technology that incorporated the one used by the Bureau of Labor Statistics and The Brooking Institution. To be classified as a high tech company under this definition, a company needed a proportion of technology-oriented workers greater than the average for all manufacturing industries (or 6.3%) and spend the equivalent of at least 3.1% of revenues for research and development. Based on this BEBR surveyed technology companies in Utah and screened out those that did not meet the definition.

Over the years, BEBR has maintained that the product, not the process, is essential in defining high technology. With few exceptions, almost every industry uses technological processes in their day-to-day activities. These companies benefit from the development of technology, but they do not develop the technological products that allow the processes to work. Therefore, a further defining factor in BEBR's definition is product development. When these three criteria are applied to the universe of companies, only a handful remain.

Over time, the definition of high technology companies has changed. The definition now set forth by the Bureau of Labor Statistics includes 31 industries (based on a three-digit industry group level in the 1987 edition of the Standard Industrial Classification Manual). Unfortunately, these broader definitions also include companies that do not produce a technological product and whose R&D spending is significantly below that required in previous years. Entering into this fray are myriad other organizations that have set forth their own definitions of high technology sometimes based on measures that reinforce special interests, or limited by data availability.

One organization that has undertaken a careful review of what constitutes high technology is the Milken Institute, a non-profit economic think-tank located in California. The definition developed by the Milken Institute incorporates that used by BLS, and then applies a methodology that excludes industries spending below-average amounts of revenue on research and development and employing below-average numbers of technology-oriented workers. Using its definition, the Milken Institute has identified 14 industries it considers to be high tech. Other less well-defined measures of high technology include those developed by Cyberstates and Science and Engineering Indicators.

In developing its own definition of high technology, BEBR has chosen to use as its base, the definition developed by BLS. However, because this definition is so broad, a second cut was made to include only those industries designated as high technology by BLS and one other research study (Milken, Cyberstates, or Science and Engineering Indicators). BEBR made one further cut, and that is to include only those organizations that are producers of technology, or are involved in the research needed to develop new technologies.

Based on this definition, BEBR has identified 14 high technology industries. Of these, 10 are considered to be high technology intensive, i.e., industries that have a very high proportion of their workforce in the development process and that spend well above-average amounts of money on research and development.

2000 Summary

Using information provided by the Utah Department of Workforce Services, the number of people employed in high tech industries in 1999 totaled 62,122. Of these, 46,444 are in high tech intensive industries. Final data for the first quarter of 2000 show the number of technology workers increasing by about 6.0% to 65,617, with 49,902 employed in high tech intensive industries.

Caveats to the Data

The largest high tech industry in Utah is computer software and services. This industry was the fastest growing high tech sector in Utah, with an absolute gain of 4,695 workers. This industry is also the most diverse in terms of the types of companies included. For example, within computer software and service are Internet Service Providers (ISPs), computer consultants, and companies that provide computer-related customer support. The past months have been tumultuous ones for this industry in particular, not just in Utah, but nationwide as well. There have been casualties throughout this industry due to stock market volatility, lack of investor interest, and increasing competition. Locally, the loss of Packard Bell and layoff announcements at other Utah-based computer companies will likely mean that the gains reported in the first quarter in the computer sector will be much smaller by year-end.

Call Center Dilemma

From an industrial perspective, call centers are categorized into one of many industries depending on the type of activity in which they engage. This is another complicating factor in describing high tech activities in Utah. Within the Computer Software and Service classification are computer-related customer support companies. These companies contract their services to computer software development companies and provide customer support out-of-house. While these companies are classified as high technology firms, they do not meet the technology production requirement or the research and development spending requirement. Therefore, the number of workers in the computer sector, who are actually developing and producing a tangible product, is probably much lower than the number reported.

Conclusion

There are bright spots on the horizon for Utah's high tech sector. One is the possible continued expansion of activities at the Micron facility in Lehi. Plans at the Micron facility include the installation of a new line to manufacture 12-inch wafers. If this process is successful and the demand for chips remains strong, employment at the Lehi plant could reach 3,000 by 2003.

An even broader impact on the state's technology sector could be the Intel research facility in Riverton. At present, Intel is putting in place its administrative infrastructure and should begin hiring its first R&D workers in 2002. Intel's current plans call for the addition of 600 R&D workers per year at the Utah facility up through 2009. The importance of Intel is not limited to potential size of its work force. Rather, Intel could create new synergies within the technology sector, encouraging both the development and possibly the relocation of new technology companies.

Table 79
Trends in High Technology Employment in Utah, Selected Years

SIC	Industry	1998	1999	2000
	High Technology Intensive Industries			
283	Drugs	3,248	3,998	4,379
357	Computers	5,284	4,057	3,615
366	Communications Equipment	1,297	2,953	2,210
367	Electronic Components	4,353	3,993	3,788
372	Aircraft and Parts	2,888	2,744	2,542
376	Guided Missiles	5,857	5,342	5,090
381	Search/ Navigation Equipment	684	645	621
382	Measuring Devices	1,024	1,028	1,241
737	Computer Software	17,542	18,914	23,609
873	Research and Testing Services	2,871	2,770	2,808
	High Technology Industries			
365	Audio and Video Equipment	594	538	576
371	Motor Vehicles and Equipment	7,032	6,722	6,750
384	Medical Instruments	8,309	8,383	8,354
386	Photographic Equipment	85	35	35
	Totals	61,068	62,122	65,617

Source: Utah Department of Workforce Services, Annual Labor Market Report.

Tourism, Travel, and Recreation

Overview

Utah's tourism industry is diverse. The state's many attractions carry significant benefits for local communities, which are able to enjoy increased tax revenues from visitor spending, additional access to higher quality, more diverse services, and many jobs stemming from tourism-related industries. Travel and tourism continues to be among the state's top five economic activities, along with other major sectors such as manufacturing, trade, services and government.

2000 Performance - A Roller Coaster Year

It has been a wild ride for Utah's tourism and travel industry in 2000. Beginning with lower than average snowfall and concerns over potential Y2K problems, the year started slow and was further impacted by rising energy prices, a strong dollar, concerns over inflation, rising interest rates, high summer temperatures, drought conditions, western fires, uncertainty in the stock market, election-year anticipation and an excess capacity of hotel rooms. On the other hand, continued growth in the U.S. economy, real income gains highlighted by positive wage growth, strong consumer confidence and record-breaking numbers of travelers nationwide spurred the industry forward. On the whole, consumer optimism and robust spending should help offset the negative effects of external shocks on the industry.

Tourism arrivals to Utah decreased in 2000 for the first time in several years. Visitation declined at both national and state parks. Skier days were down nearly 5% over the 1998-99 season. Passenger counts at Salt Lake City International Airport and visitation to Utah's Welcome Centers remained largely unchanged for the year. Vehicle traffic along Utah's major highways and Interstates registered positive growth, although slower than in recent years. During 2000, an estimated 17.8 million nonresident visitors traveled to Utah for leisure and/or business purposes, a 2% decrease from 1999.

Although the number of tourist arrivals to Utah declined, visitor spending actually increased by 1%.[1] Travelers spent an estimated $4.25 billion in Utah in 2000, generating nearly $340 million in state and local tax revenues and creating 121,500 travel and tourism related jobs. Travel related jobs account for nearly one in nine jobs statewide. Over the past few years, growth in traveler spending has increased more rapidly than growth in visitor arrivals, indicating a possible shift towards higher quality tourism earnings.

Notable Events in 2000

Utah Heritage Highway. The Utah Heritage Highway is Utah's first tourist route dedicated solely to offering guests a quality Western heritage experience. The Highway runs parallel to Interstate 15 from Fairview to Kanab along U.S. Highway 89. The Highway is divided into five sections (Little Denmark, Sevier Valley, Headwaters, Under the Rim and Boulder Loop) that offer a unique combination of art galleries and artisan studios, heritage lodging, western adventures, historic sites, celebrations, antiques and indigenous foods.

National Park Shuttle Systems. In spring of 2000, in order to return serenity to Zion Canyon, ease auto congestion and increase visitor access, a new transportation system began operating in Zion National Park. The "two-loop" shuttle system was mandatory for all visitors through the 6-mile Zion Canyon and operated through the peak season from April through October. During 2000, the shuttle system reported over 1.5 million boardings and a satisfaction rate of above 85%. Bryce Canyon National Park also instituted an optional shuttle system beginning in 2000 concentrated on relieving congestion along the Park's northern viewpoints. The shuttle system operated during peak season from May through September.

2001 Outlook - Guarded Optimism for a Record Year

The economic fundamentals, including forecasted real GDP growth, wage increases, controlled inflation and low unemployment bode well for tourism's future prospects. The health and resiliency of the travel and tourism industry was reflected in last year's performance. Despite significant external shocks, the tourism industry continued to grow, even outpacing the performance of other industries within the state. Expectations for 2001 are high as indicators point to a record year for tourism in Utah. Some of the factors for positive growth include:

- Completion of Olympic venues and subsequent hosting of test events in preparation for 2002;
- Increased media attention related to preparations for and hosting of the 2002 Winter Olympics;
- Significant progress and completion of major infrastructure projects such as I-15, TRAX and ski resort improvements;
- Moderating energy prices;
- More favorable exchange rates;
- Improving international economies, notably in Western Europe and Japan;
- Growth in Utah's core market segments, including adventure travel, "back-to-nature" tourism and family travel;
- Continued interest in the American West, including western heritage, Native American heritage and other historic and pre-historic sites;
- Continued growth of the LDS Church with the addition of the Conference Center and the Main Street Plaza to church headquarter buildings and other church-related sites;
- Increased convention space and an excess capacity of hotel rooms, especially in the Salt Lake market.

Some factors that may offset tourism growth include the following:

- Perceptions that Utah is "closed for business," "under construction" or "very expensive" due to Olympic preparations;
- A national or regional economic slowdown that is accompanied by lower consumer confidence and less consumer spending;
- Additional external shocks, such as sustained high energy prices, higher interest rates, inflationary pressures or setbacks in stock market valuation and new investment;
- International economic fluctuations including slow growth and unfavorable exchange rates in Canada, Western Europe and Japan;
- Reduced seat capacity coincident with increased airfare prices to Salt Lake International Airport;
- Inability to meet the rising expectations of destination travelers in terms of quality service, convenience and availability of amenities;
- Natural conditions such as fires or inclement weather.

[1] Estimates for traveler spending in 2000 will largely depend on the performance of the fourth quarter, which is traditionally dependent on the holiday travel market and the beginning of the ski season. Early snowfall and a good opening bode well for the ski industry and should help traveler spending finish the year positive. However, a weak holiday season would likely produce spending levels below their 1999 levels.

2002 Winter Olympic Games

The approach of the 2002 Winter Olympic Games represents a unique, once-in-a-lifetime opportunity for Utah. With national and international attention focused on the state, favorable impressions and images generated from Olympic-related exposure should translate into increased traveler spending and greater tax relief for Utah residents. Current estimates indicate that the total economic impacts of the Olympics from 1996 through 2002 will be $4.5 billion in total output, 35,000 job years of employment, $1.5 billion in earnings to Utah workers and a net revenue to state and local government of $76 million. The Games will bring a net increase of 50,000 visitors per day to the state during the 17-day period of the Games.[2] Notwithstanding the significant benefits accrued through 2002, even greater benefits resulting from hosting the Olympics are possible following the event. Opportunities for increased business and tourism development, as well as the lasting impacts of infrastructure improvements and Olympic facilities, will impact the state for many years to come.

Documented research of past Olympic host cities has revealed that during the Olympic year, notable tourism displacement can occur. In Calgary, overall skier days declined in 1988, the year of the Olympics, despite the attention from the Games. In Atlanta, hotel occupancy rates and convention activity declined in the year of the Games. In both host cities, these declines lasted only through the Olympic year, after which Olympic publicity and attention seems to have generated increases in tourism activity. For Utah, an opportunity exists to promote visitation to non-Olympic locations and thereby fill existing capacity that might otherwise remain empty. Focused promotional and marketing efforts may mitigate the displacement effect of hosting the Games and increase their overall economic impact.

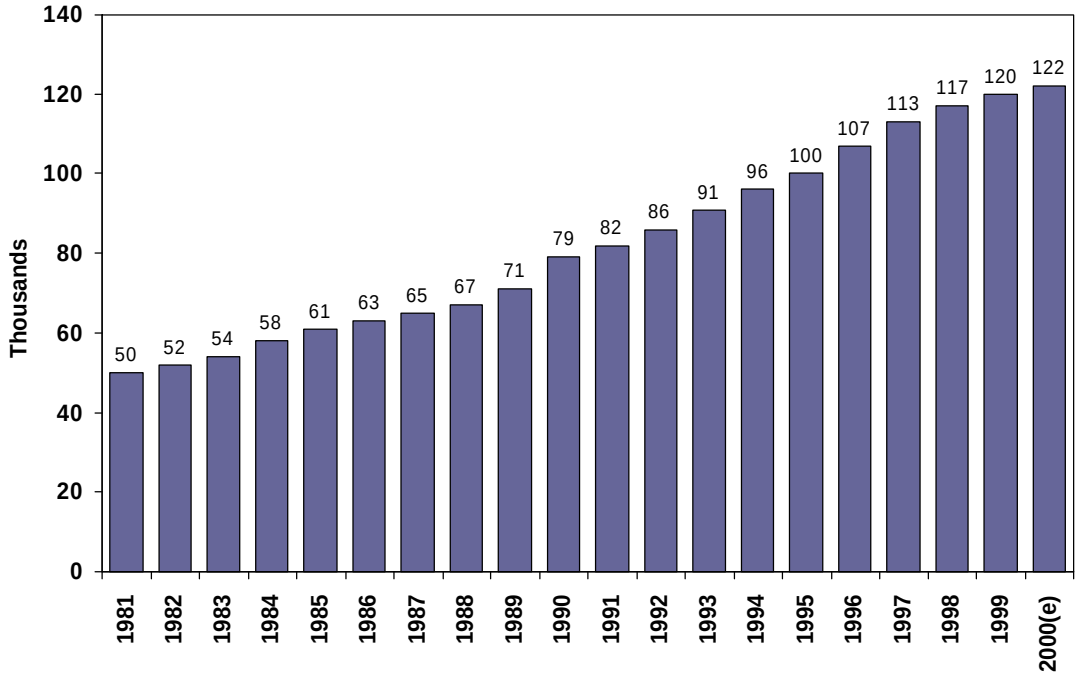
Conclusion - Moving Forward with a Purpose

Major tourism indicators point toward modest growth in tourism spending in 2000, with higher expectations for 2001. Years of strong economic growth and buoyant consumer confidence have translated into significant gains from tourism-related industries. Sensitive to changes in macroeconomic conditions, tourism growth has slowed as growth in the overall economy has also decelerated. Despite this slowdown, tourism in Utah is expected to grow considerably in the next five years as awareness of the state increases due to the 2002 Olympic Winter Games.

Capital investments in ski resorts, hotel construction and infrastructure development bode well for the future. National trends highlight opportunities in key segments of the travel market including adventure travel, cultural and heritage tourism, nature-based travel and family travel. Utah is well positioned to attract visitors seeking a higher quality, more unique experience who are willing to stay longer and spend more. By focusing on quality over quantity, tourism can provide higher quality earnings, with fewer of the challenges often associated with "windshield tourism." Long-range tourism planning and community input must be part of a balanced economic development strategy in order to capture significant, long-lasting benefits from travel and tourism.

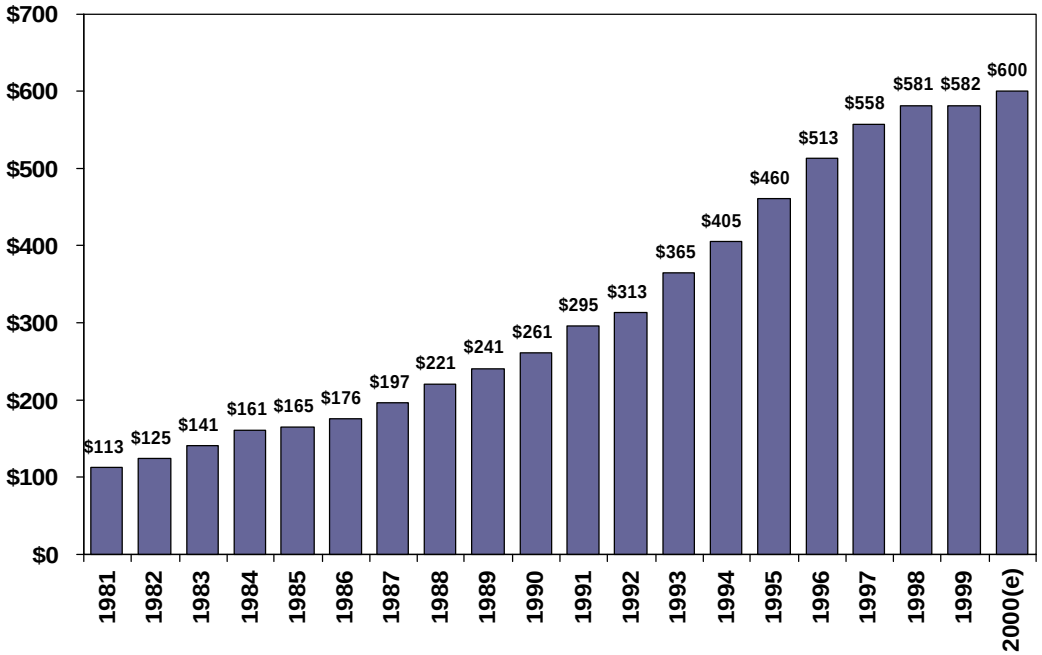
[2] "2002 Olympic Winter Games - Economic, Demographic and Fiscal Impacts", Governor's Office of Planning & Budget, November 2000

Figure 49
Direct and Indirect Travel-Related Employment in Utah



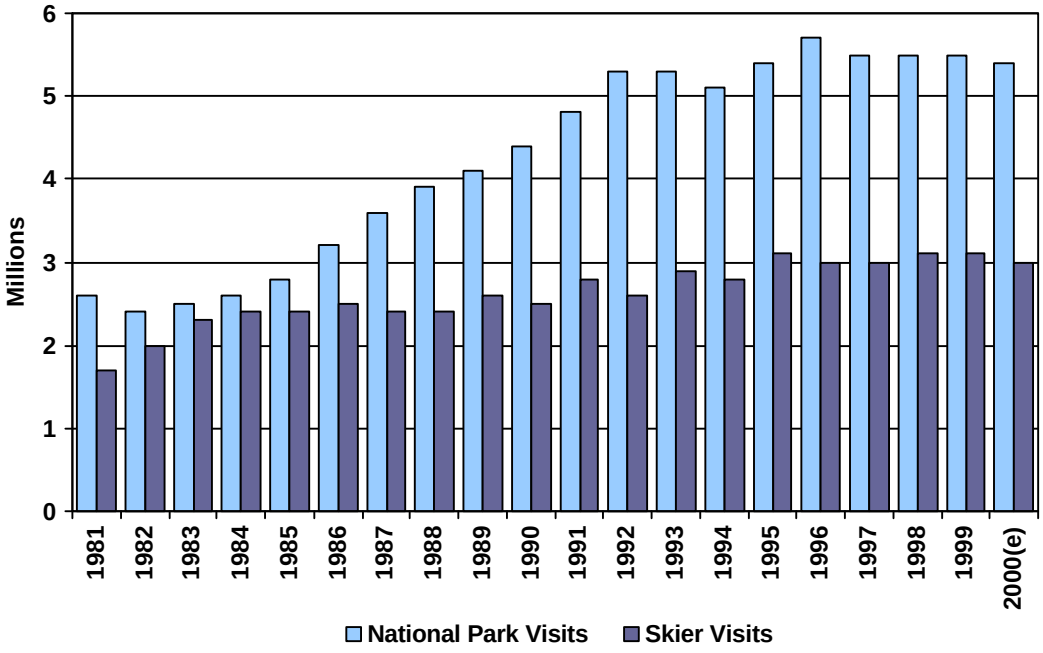
Source: Utah Department of Workforce Services, adapted by the Utah Travel Council

Figure 50
Utah Tourism Indicators--Hotel Room Rents (Millions of Current Dollars)



Source: Utah State Tax Commission

Figure 51
Utah Tourism Indicators--National Park and Skier Visits



Sources: National Park Service; Ski Utah

Profile of the Utah Travel Industry

Category	1994	1995	1996	1997	1998	1999(r)	2000(e)	% Change	AAPC
Total Spending by Travelers and Tourists (millions)	$3,350	$3,550	$3,800	$4,000	$4,100	$4,200	$4,250	1.2%	4.0%
Total Number of Foreign and Domestic Visits (millions)	15.2	16.1	17.0	17.4	17.8	18.2	17.8	-2.2%	2.7%
Number of U.S. Visits	14.5	15.3	16.1	16.7	17.2	17.5	17.1	-2.6%	2.8%
Number of Foreign Visits	0.72	0.76	0.88	0.72	0.64	0.70	0.75	7.1%	0.7%
Total Travel and Recreation-Related Employment	96,000	100,000	107,000	112,500	117,000	119,500	121,500	1.7%	4.0%
Direct Travel and Recreation-Related Employment	54,000	56,000	60,000	63,000	65,500	67,000	68,000	1.5%	3.9%
Indirect Travel and Recreation-Related Employment	42,000	44,000	47,000	49,500	51,500	52,500	53,500	1.9%	4.1%
Percent of All Utah Non-Agricultural Jobs	11.1%	11.0%	11.2%	11.2%	11.4%	11.4%	11.3%		
Total State and Local Taxes Generated by Travel Spending (millions)	$268	$284	$304	$320	$328	$336	$340	1.2%	4.0%
State Government Portion	$198	$210	$225	$237	$243	$249	$252	1.2%	4.1%
Local Government Portion	$70	$74	$79	$83	$85	$87	$88	1.1%	4.0%
Total Airline Passengers at Salt Lake International Airport (millions)	17.6	18.5	21.1	21.1	20.3	19.9	20.0	0.5%	2.2%
Total Traffic Count at Interstate Borders (millions)	16.6	17.3	18.0	18.7	19.6	20.7	21.3	2.9%	4.2%
Total National Park Recreation Visits (millions)	5.1	5.4	5.7	5.5	5.5	5.5	5.4	-1.8%	1.0%
Total Skier Visits (millions)	2.8	3.1	2.9	3.0	3.1	3.1	3.0	-3.2%	1.2%
Total State Park Visits (millions)	7.0	7.1	7.5	7.2	6.9	6.8	6.6	-2.0%	-0.8%
Taxable Room Rents (millions)	$405	$460	$513	$558	$581	$582	$600	3.1%	6.8%
Hotel/Motel Occupancy Rates	73.7%	73.5%	73.1%	68.0%	63.0%	61.5%	60.5%	-1.0%	-2.2%

r = revised
e = estimate

AAPC = Average Annual Percent Change

and the Rocky Mountain Lodging Report.

Table 81
Utah Tourism Indicators

Year	Hotel Room Rents (Current $)	National Park Visits	State Park Visits	Salt Lake Int'l. Airport Passengers	Skier Visits	Travel-Related Employment	Traveler Spending
1981	$113,273,174	2,577,112	6,430,174	4,149,316	1,726,000	50,000	$1,100,000,000
1982	124,787,207	2,443,787	6,436,488	5,861,477	2,038,544	52,000	1,400,000,000
1983	140,728,877	2,465,294	5,214,498	7,059,964	2,317,255	54,000	1,600,000,000
1984	161,217,797	2,616,301	4,400,103	7,514,113	2,369,901	58,000	1,850,000,000
1985	165,280,248	2,804,693	4,846,637	8,984,780	2,436,544	60,700	2,000,000,000
1986	175,807,344	3,224,694	5,387,791	9,990,986	2,491,191	62,500	2,150,000,000
1987	196,960,612	3,566,069	5,489,539	10,163,883	2,440,668	64,500	2,300,000,000
1988	220,687,694	3,941,791	5,072,123	10,408,233	2,368,985	67,000	2,450,000,000
1989	240,959,095	4,135,399	4,917,615	11,898,847	2,572,154	71,000	2,570,000,000
1990	261,017,079	4,425,086	5,033,776	11,982,276	2,500,134	79,000	2,660,000,000
1991	295,490,324	4,829,317	5,425,129	12,477,926	2,751,551	82,000	2,900,000,000
1992	312,895,967	5,280,100	5,908,000	13,870,609	2,560,805	86,000	3,050,000,000
1993	364,632,516	5,338,707	6,950,063	15,894,404	2,850,000	91,000	3,250,000,000
1994	405,342,342	5,111,400	6,953,400	17,564,149	2,800,000	96,000	3,350,000,000
1995	460,213,064	5,381,717	7,070,702	18,460,000	3,113,800	100,000	3,550,000,000
1996	513,080,390	5,749,110	7,478,764	21,088,482	2,954,690	107,000	3,800,000,000
1997	558,204,110	5,537,260	7,184,639	21,068,314	3,042,767	112,500	4,000,000,000
1998	580,782,660	5,466,090	6,943,780	20,297,371	3,101,735	117,000	4,100,000,000
1999(r)	582,102,275	5,527,478	6,768,016	19,944,556	3,144,380	119,500	4,200,000,000
2000(e)	599,565,343	5,375,407	6,632,656	19,904,667	2,976,696	121,500	4,350,000,000
Percent Change							
1981-2000	429.3%	108.6%	3.1%	379.7%	72.5%	143.0%	295.5%
1999-2000	3.0%	-2.8%	-2.0%	-0.2%	-5.3%	1.7%	3.6%
Average Annual Rate of Change							
1981-2000	9.2%	3.9%	0.2%	8.6%	2.9%	4.8%	7.5%

r = revised
e = estimate

Sources: Estimates based on information gathered from a variety of sources including National Park Service, Utah State Tax Commission, Utah Department of Transportation, Utah Department of Workforce Services, Utah Department of Natural Resources, Salt Lake International Airport and Ski Utah.

Table 82
National Parks' Recreation Visits

Year	Bryce Canyon	Canyonlands	Capitol Reef	Zion	Total National Parks
1981	474,092	89,915	397,789	1,288,808	2,577,112
1982	471,517	97,079	289,486	1,246,290	2,443,787
1983	472,633	100,022	331,734	1,273,030	2,465,294
1984	495,104	102,533	296,230	1,377,254	2,616,301
1985	500,782	116,672	320,503	1,503,272	2,804,693
1986	578,018	172,987	383,742	1,670,503	3,224,694
1987	718,342	172,384	428,808	1,777,619	3,566,069
1988	791,348	212,100	469,556	1,948,332	3,941,791
1989	808,045	257,411	515,278	1,998,856	4,135,399
1990	862,659	276,831	562,477	2,102,400	4,425,086
1991	929,067	339,315	618,056	2,236,997	4,829,317
1992	1,018,174	395,698	675,837	2,390,626	5,280,166
1993	1,107,951	434,844	610,707	2,392,580	5,319,760
1994	1,028,134	429,921	605,324	2,270,871	5,111,428
1995	994,548	448,769	648,864	2,430,162	5,381,717
1996	1,269,600	447,527	678,012	2,498,001	5,749,156
1997	1,174,824	432,697	625,680	2,445,534	5,537,260
1998	1,166,331	436,524	656,026	2,370,048	5,466,090
1999(r)	1,081,521	446,160	680,153	2,449,664	5,527,478
2000(e)	1,084,766	406,006	629,142	2,459,463	5,375,407
Percent Change					
1981-2000	128.8%	351.5%	58.2%	90.8%	108.6%
1999-2000	0.3%	-9.0%	-7.5%	0.4%	-2.8%
Average Annual Rate of Change					
1981-2000	4.5%	8.3%	2.4%	3.5%	3.9%

r = revised
e = estimate

Sources: Estimates based on information gathered from a variety of sources including National Park Service, Utah State Tax Commission, Utah Department of Transportation, Utah Department of Workforce Services, Utah Department of Natural Resources, Salt Lake International Airport and Ski Utah.

Special Topics

Are the Economies of Utah and California Linked?

Overview

Over the past 50 years, employment growth rates in Utah and California have been closely correlated. This chapter explores whether this correlation in employment growth is indicative of significant economic linkages between the two states. The results suggest that, although there is a statistically significant relationship between employment growth in California and growth in Utah, Utah's economy is far more dependent on changes in its own economic conditions and those in the rest of the U.S., than it is on changes in conditions in California.

Employment Growth in Utah and California

From 1947 to 1988 the economies of Utah and California were closely correlated, with Utah's economy rising and falling more or less with California's economy. Between 1947 and 1988 the correlation coefficient for employment growth in Utah and California was .75 (the coefficient equals one when two series are perfectly correlated). In the late 1980s the historical relationship between the two economies began to deteriorate, as California fell into recession while Utah continued to expand rapidly. As a result, the correlation coefficient between employment growth in the two states fell to .43 between 1989 and 1997. Of late, the economies of California and Utah once again have settled into a similar pattern of growth, with a correlation of .68, as economic growth in California has picked up and growth in Utah has slowed. The remainder of this chapter formally examines whether significant economic linkages between Utah and California were present during the period from 1947-2000.

Factors Contributing to Linkages

States may be linked for a variety of reasons. States may trade intermediate and final goods and services with one another. Also, factors of production (labor and capital) may move across state borders in response to market or political conditions in each state. Finally, multi-state firms and government institutions may engage in behaviors affecting numerous states. In general, linkages between states are largest when state economies are open, or when factors of production, goods, and services flow freely across state boundaries.

Each of these types of linkages can be found in the relationship between Utah and California over the past 50 years. The relationship between Utah and California was characterized by trade flows for much of the examined period. Utah produced raw materials and intermediate manufactured goods for California's rapidly expanding aerospace, defense, and high tech sectors. In addition, Utah provided energy, fuel, and a variety of consumer goods demanded by California's growing population. Finally, Utah benefitted from Californians traveling to Utah for skiing and other entertainment activities.

In the early 1990s, this relationship changed dramatically. As California entered a recession, Utah benefitted from a flow of factors of production, as opposed to a flow of trade, from California. The divergence in economic growth between Utah and California, the relatively low cost of doing business in Utah, and initiatives to diversify the Utah economy resulted in a significant migration of both labor and capital from California to Utah. The movement of people and businesses from California boosted demand for a variety of goods and services in Utah and further lifted the level of economic activity in the state.[1] The presence of trade and factor flows between the two states raises the possibility that economic growth in Utah and California are linked.

[1] As the California economy began to recover in 1994, the pace of migration and business relocation to Utah slowed; by 1998 the period of migration from California to Utah had ended.

Testing for Economic Linkages between Utah and California

Although simple correlations of employment growth, as well as evidence on trade and production factor flows between Utah and California, suggest that the economies of the two states are related and more formal analysis is needed to understand the magnitude and dimension of the relationship. Estimates of a system of equations relates changes in employment growth in Utah, California, and the rest of the nation, to past changes in these variables (formally, a vector autoregression or VAR).[2]

The VAR model, was used to test whether changes in employment in the rest of the nation and California lead to changes in employment in Utah. Then the order was reversed and tested whether changes in employment in the rest of the nation and Utah lead to changes in employment in California. The tests were performed for the entire sample period, 1947-2000.

The results indicate that changes in employment growth in California lead changes in employment growth in Utah, but that the reverse is not true. These results confirm that the economies of Utah and California are related in such a way that economic shocks to California spill over to Utah.

Having established that California is a statistically significant predictor of employment growth in Utah, the magnitude and the relative importance of spillovers from California to Utah is examined. The response of employment growth in Utah to a shock to employment growth in California is measured. The spillover to Utah is largest about three quarters after the initial shock to California. The effect on Utah employment growth of a change in annualized employment growth in California from 2.9%, the historical mean for California, to 3.9% is considered. Three quarters after the shock to California would make Utah's annualized employment growth about 0.2 percentage points higher than it would have been without the California shock. For example, if Utah's annualized employment growth were at its historical mean of 3.4%, Utah's growth would increase to 3.6% over the next three quarters. After one year, the effect largely would have disappeared.

The relative importance of the spillovers from California in determining the path of employment growth in Utah also can be assessed. The results of the decomposition of any error that might be made in forecasting employment growth for Utah using the estimated VAR are measured. The percentage of any forecast error for Utah that is due to errors in predicting employment growth for California is also assessed. Errors in predicting changes in employment growth in California account for about 5% of the forecast error in Utah employment growth four quarters out. In comparison, errors in predicting changes in the rest of the U.S. account for almost five times as much (24%) of the error in Utah's forecast. Not surprisingly, most of the error in Utah is associated with past errors in forecasting Utah's growth.[3]

Finally, to assess the model's fit over time we compare actual employment growth in Utah to employment growth predicted from our VAR model. The turning points in the predicted and actual growth rates follow each other fairly closely, although the errors are not entirely

[2] The data are quarterly for the period January 1947 through June 2000. The number of lags is six and employment growth is measured in log difference form. The lagged values of employment growth in the rest of the nation are included to control for national shocks common to both Utah and California.

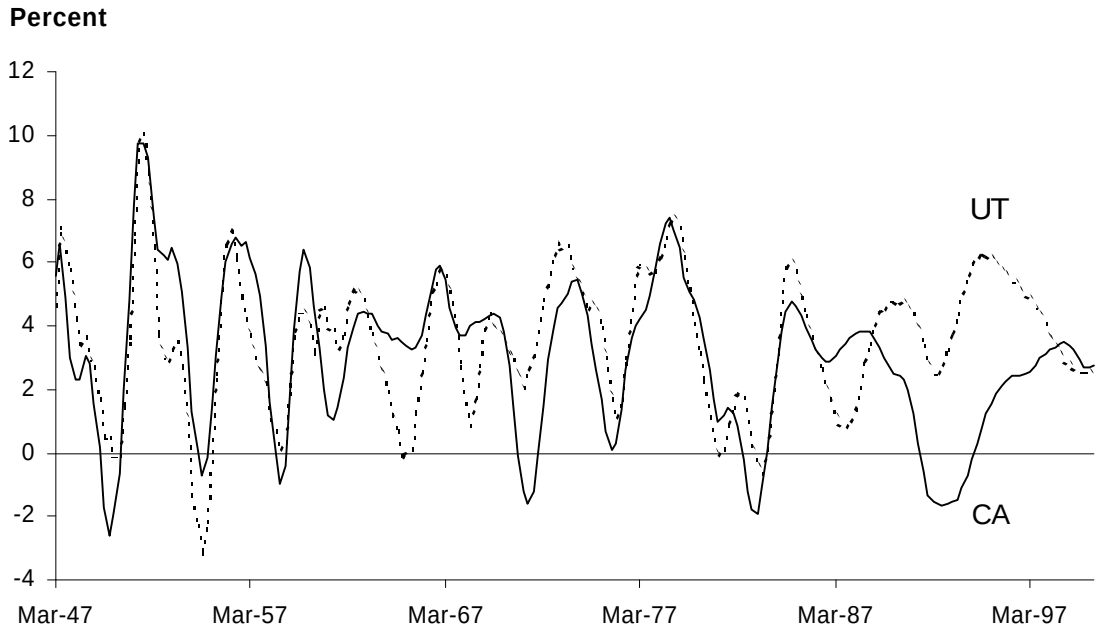
[3] The results are robust to variations in ordering in the vector autoregression.

negligible. Over the entire time period examined, the average absolute forecast error was about 0.6, or 60% of the average quarterly growth rate in Utah between 1947 and 2000. However, this average hides considerable differences over time. Between 1947 and 1988, the average absolute prediction error was 0.7, or 70% of average employment growth, while between 1989 and 2000 the average absolute prediction error was 0.3, or 30% of average employment growth. This suggests that recent modeling efforts of Utah employment growth are more accurate than previous efforts.

Conclusion

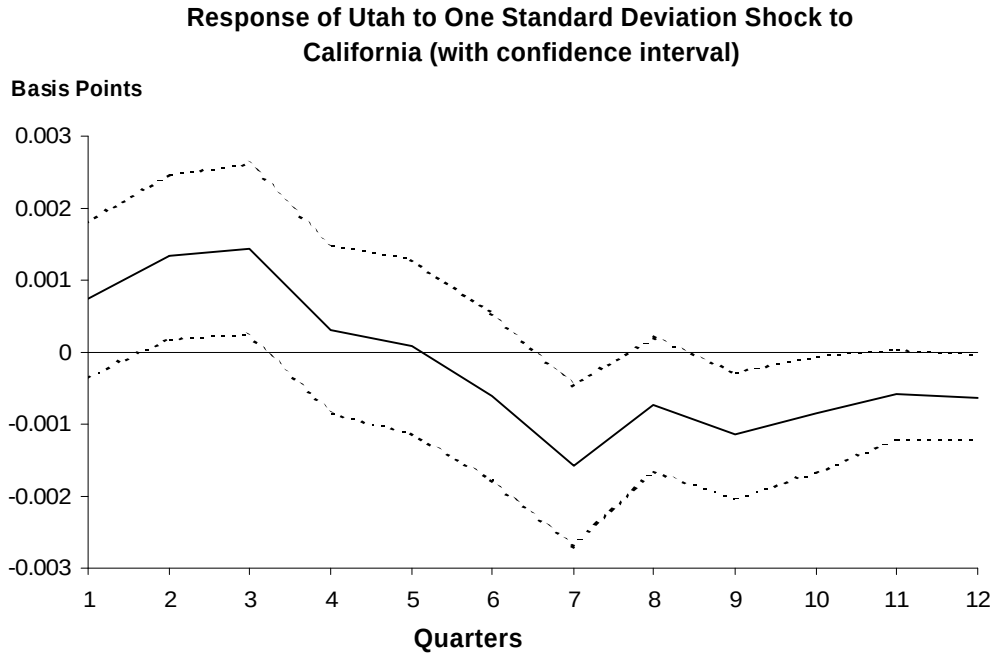
In general, the analysis for over the 1947-2000 period shows that economic shocks to California spill over to Utah, and, as a result, forecasts of employment changes in Utah can be improved by including lagged values of employment growth in California. However, on average, for the 1947-2000 period, the magnitude of these spillovers has been fairly small and their importance rather limited compared to Utah's own intermal shocks and economic changes in the rest of the U.S.

Figure 52
Employment Growth in Utah and California (Year-Over-Year Percent Change in 4-Quarter Moving Average of Employment)



Source: Bureau of Labor Statistics

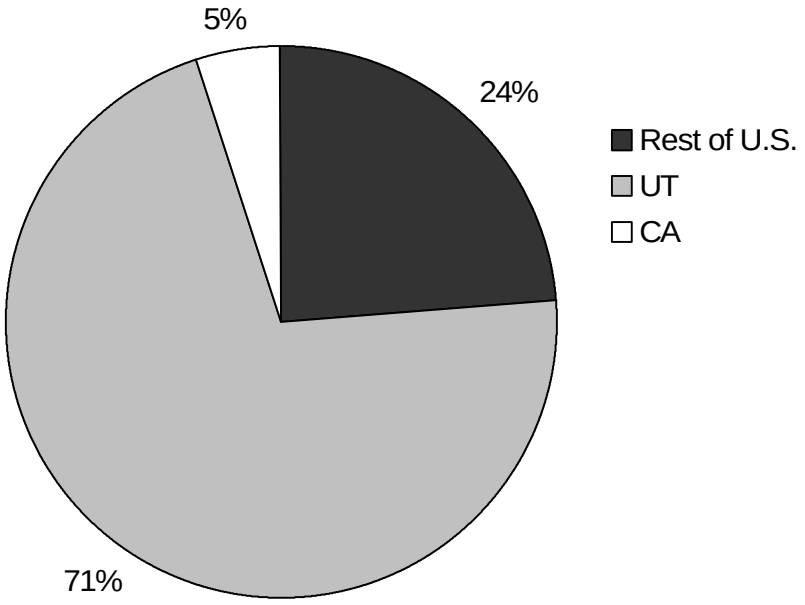
Figure 53
Response of Utah to One Standard Deviation Shock to California (With Confidence Interval)



* Dotted lines represent confidence interval around point estimate. Point estimates with confidence intervals that do not contain zero are statistically significant.

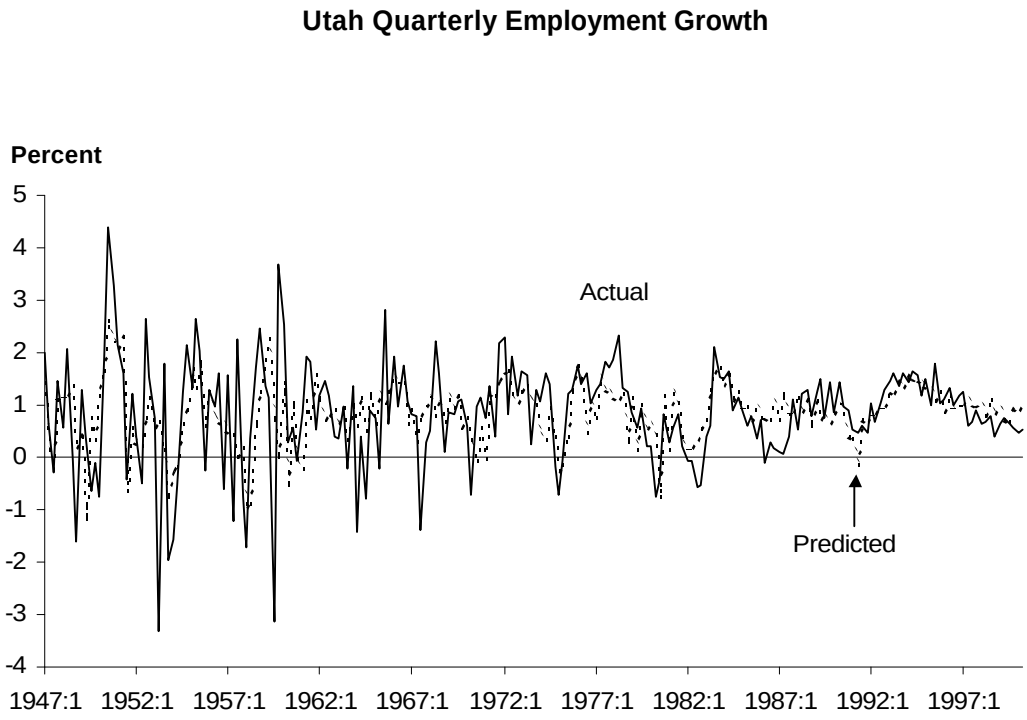
Source: San Francisco Federal Reserve Bank

Figure 54
Contribution to Forecast Error for Utah



Source: San Francisco Federal Reserve Bank

Figure 55
Utah Quarterly Employment Growth



Source: San Francisco Federal Reserve Bank

Transportation Funding

Highway Overview[1]

Highway transportation needs of the state are financed in a variety of ways, a major portion of which comes from the state tax on motor and special fuels. This tax revenue is deposited into the Transportation Fund and is divided between the state, cities, and counties. The state receives 75% of the revenues deposited in the Transportation Fund while cities and counties receive the remaining 25%. The state also receives federal funds. This generally comes from the federal tax levied on motor and special fuels.

Federal transportation money is allocated to the state in special categories. These categories cover a mixture of purposes, such as recreational trails, metropolitan planning, bridge replacement, interstate maintenance, and the National Highway System.

In addition to transportation related taxes, the state also diverts a 1/16 percent state sales tax for roads. Two programs receive $500,000 each, the corridor preservation program and the state park access program. The remainder, approximately $18 million, goes to local and county governments for their road projects each year.

With rapidly growing population and aging transportation infrastructure, many critical areas in Utah are in need of new roadways or major reconstruction on existing roadways. Even with the above funding sources, the building of roads has not been sufficient to keep up with transportation demands.

Standard Transportation Program

The Utah Department of Transportation and the Transportation Commission are in charge of the Statewide Transportation Improvement Program known as the STIP. This program includes highway and transit projects that are scheduled for construction in the next five years. The STIP contains a list of projects that have been approved by the seven member Transportation Commission based on funding projections from various federal and state transportation sources. Many projects are critical to meet transportation capacity needs, but due to insufficient funding, are left off the STIP. These projects are commonly referred to as unfunded transportation capacity needs. The STIP program funds approximately $100 million of state projects each year. With the increasing population growth of Utah, the STIP program has not been sufficiently funded to keep pace with needed infrastructure demands.

Centennial Highway Fund

The Centennial Highway Fund, created by the state legislature during the 1996 General Legislative Session, is a special revenue fund to pay the costs of construction, major reconstruction, or major renovation to state and federal highways. This fund is providing the financing for critical projects not scheduled for construction in the STIP. The planned financing sources for the Centennial Highway Fund include General Fund appropriations, sales taxes, fuel taxes, registration fees, bonding, federal funds, local contributions, and department efficiencies.

In 1997, the governor and legislature adopted a ten-year transportation financing plan to build $2.6 billion of construction projects above current levels of highway construction. The money would go into the Centennial Highway Fund to pay the costs of these projects. One of these projects, the reconstruction of Interstate 15 (I-15), was estimated to cost $1.36 billion. After the financing plan was adopted and passed by the legislature, the Utah Department of Transportation (UDOT) received and accepted a bid from Wasatch Constructors for reconstruction of I-15 at a price tag of $1.325 billion. However, with enhancements and changes in the program, the total cost of the I-15 project is now $1.59 billion or $230 million higher than the original estimate of $1.36 billion financed in the ten-year plan. The governor, along with legislative leadership, decided to finance the additional $230 million so other projects to be financed by the Centennial Highway Fund program would remain unaffected.

In 1999, an additional project was added. This project provided an additional lane on each side of I-15 from North Salt Lake to the junction of U.S. 89 in Farmington. These additional lanes have already been constructed and have temporarily relieved the extreme traffic needs in the Davis County corridor.

During the 2000 General Legislative Session, the Utah Department of Transportation informed the legislature that costs of many of the projects still to be constructed were underestimated by close to $400 million. Instead of canceling some projects to make up this shortfall, the legislature increased the cost of the projects in the ten-year plan. The enhancements to I-15, the addition of two lanes for I-15 north, and the upward adjustment to project costs has increased the projects to be financed by the Centennial Highway Fund by over $626 million in just four years.

To add additional cash flow strain on the ten-year financing plan, the construction date for the West Davis Highway portion of the Legacy Parkway originally scheduled for construction in Fiscal Year (FY) 2004 has been moved up to FY 2001. Moving forward a $400 million project by three years will necessitate the need for additional bonding or other financing alternatives for FY 2002, FY 2003, and FY 2004.

General Fund. The General Fund contribution to the ten-year plan has been modified significantly in each of the past legislative sessions. The plan adopted in the 1997 legislative session committed $85 million from the General Fund for FY 1999, growing by $5 million annually through FY 2004, and by $10 million annually through FY 2007. The plan adopted in the 1998 legislative session added $25 million each year beginning FY 1999, and continuing through FY 2007. The plan adopted in the 1999 legislative session added $7 million in ongoing General Fund money each year from FY 2000 through FY 2002, and then $6 million each year from FY 2003 through FY 2007. In the 2000 legislative session, the legislature reduced the ongoing General Fund commitment by $20 million annually beginning in FY 2002.

The governor and legislature felt that other critical needs of state government, especially in the education area, were being overlooked because of the large amount of General Fund monies being used for highways. Reducing the base ongoing contribution by $20 million per year freed up additional funds for other critical areas.

The original intent of the legislature was to have a balanced ten-year plan by the end of FY 2007. This meant that by the end of FY 2007, the net debt position of the fund would be zero. In other words, all bonds would be paid off or enough cash would be available in the fund to payoff bonds if desired. Reducing the General Fund by $20 million

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

annually lowers the cash available in future years to pay bond principle, effectively delaying the early payoff of bonds. The plan adopted by the 2000 legislature showed a net debt position of over $700 million at the end of FY 2007.

Total General Fund contributions through FY 2007 are now estimated to be $1.505 billion, which is $120 million less than the plan adopted by the 1999 legislature. Still this amount is $117 million more than the plan adopted by the 1998 legislature, and $326 million more than the plan adopted by the 1997 legislature.

In addition to the $12 million of ongoing General Fund contributions scheduled to be added in FY 2002, the governor is recommending $20 million in one-time General Fund monies also be appropriated to the Centennial Highway Fund for FY 2002. With this addition, the total General Fund contribution for FY 2002 is $146 million. Total General Fund contributions through fiscal year 2007 is recommended at $1.525 billion.

Beginning on January 1, 2000, the state's portion of the sales tax used for Olympic facilities has been going into the Centennial Highway Fund. With this sales tax included, total General Fund contributions through fiscal year 2007 will be $1.57 billion.

In November 2000, voters in Salt Lake County passed an additional quarter cent sales tax that is to go to the Utah Transit Authority for increased bus and light rail service. According to the Tax Commission, this tax will take effect beginning April 1, 2001. One quarter of the quarter cent transit sales tax increase is supposed to finance construction, repairs, and improvements to I-15. The governor has recommended that this quarter of a quarter cent sales tax increase be placed in the Centennial Highway Fund. This is estimated to bring in approximately $1.6 million in FY 2001, and $10 million in FY 2002.

Fuel Taxes and Vehicle Registration Fees. The 2000 legislature left this area unchanged. The Centennial Highway Fund will still receive collections from a five-cent-per-gallon tax on motor fuels and special fuels, and a half-cent-per-gallon tax formerly collected for the Underground Storage Tank program. Increased registration fees for vehicles and trucks continue to be included in the Centennial Highway Fund. Total collections is estimated at a little over $80 million for FY 2002.

Bonding. No additional bonding for the Centennial Highway Fund was authorized for FY 2001. In late spring of 1999, the state retired $290 million of commercial paper and issued $358 million of variable rate demand bonds. The interest rate on these variable rate demand bonds has usually been less than 3.5%. However, with rising interest rates, interest on these bonds is now conservatively projected by the Division of Finance at 4.5%.

Since 1997, the state has borrowed $908 million for highways. The interest rate the state is earning on the unspent bonds is greater than the interest rate owed on the borrowed money, creating arbitrage earnings. The state will spend the bond proceeds in less than two years, avoiding federal arbitrage penalties.

Federal Funding. The Centennial Highway Fund is scheduled to get additional federal funding over and above what Utah normally has received in years before 1997. The governor and legislators hoped that the federal government would give Utah extra money due to the reconstruction of a major interstate and preparations for the 2002 Winter Games. For state FY 1998, UDOT received a little over $11 million in additional federal funding.

In the fall of 1998, Congress passed The Transportation Equity Act for the 21st Century (TEA-21). This bill increased federal distributions going to all states. The increased amount coming to Utah is allocated to the Centennial Highway Fund.

Originally this extra money was estimated between $65-$75 million per year. However, with obligation authority and requirements to spend the extra money in special categories, this amount has significantly decreased. Obligation authority is the authority to spend money that has been authorized. In other words, each year Congress authorizes the amount of federal money Utah is to receive, however, the only amount which actually comes to Utah is the amount that is obligated. This amount is typically lower, sometimes by as much as 20%, than the authorized amount. The federal money also comes with strings attached as to where it can be spent. With this in mind, UDOT estimates that with passage of TEA-21 it will receive between $25 and $35 million additional federal funds each year that can go into the Centennial Highway Fund.

The amount Utah is scheduled to receive over the next six years for high priority projects is $80.7 million, with $8.8 million in the first year and $12.0 million in the next year. These projects are not on the Centennial projects list. As a result, spending federal funds on these projects will reduce the extra federal funding from TEA-21 that could have gone to the Centennial Highway Fund.

This extra money allocated to Utah due to TEA-21 has nothing to do with additional federal money being requested by the state because of the Olympics or reconstruction of I-15. Any additional money for Olympic projects or reconstruction of I-15 would come at the discretion of the Secretary of Transportation. The Secretary of Transportation receives a limited amount of money each year from Congress that, at his discretion, is given to various states for transportation needs. Secretary of Transportation Rodney Slater, gave Utah approximately $90 million of discretionary funding in 1998 to help with I-15 reconstruction and Olympic-related projects. Of this amount, approximately $62 million will go into the Centennial Highway Fund. The rest of the funds will go for highway projects not included on the Centennial list.

In 1999, the state received an additional $25.8 million in federal discretionary funding, although only $18.3 million helped with Centennial Highway Fund projects. Discretionary funding for year 2000 has yet to be decided.

Additional funds due to TEA-21 (reduced for high priority projects), and federal discretionary funding given by Secretary Slater, resulted in the Centennial Highway Fund receiving $69.4 million in federal funds in FY 1999, and $46.9 million in FY 2000. UDOT estimates the fund will receive an additional $71.7 million in FY 2001.

One significant change made by the 2000 legislature reduced the federal contribution schedule for the ten-year plan from $521 million to the original estimate of $450 million. The legislature decreased the amount of federal funds participation in the ten-year plan to better reflect estimated federal participation.

Other Funding and Department Efficiencies.
The 1999 plan eliminated almost entirely the amount of financing from local or private sources. Beginning FY 1999, the legislature reduced the amount of department efficiencies from $20 million per year to $6 million per year through FY 2007. Now, however, these efficiencies are to be a transfer of funds from the operations of UDOT to the Centennial Highway Fund.

I-15 Reconstruction

The reconstruction of I-15 is close to completion. The project is estimated to be substantially complete by May 2001. Substantially complete means all lanes of traffic should be open. This will include four general purpose lanes, one high occupancy vehicle lane, and one auxiliary lane connecting intersections. The project should be entirely complete by July 2001, three months ahead of schedule. The project is still within the budget established almost four years ago. This will be quite an accomplishment given the scope and sheer size of I-15 and the relatively new design/build method used for construction.

Issues and Alternatives

Issues. The extra cost of the I-15 project, along with the accelerated cash flow needs of Wasatch Constructors, has put a tremendous strain on the ten-year financing plan in its early years. However, these needs have, for the most part, been met by adjusting the ten-year plan to include large amounts of borrowing.

Now, project costs have been increased by another $400 million and the West Davis Highway portion of the Legacy Parkway is scheduled to begin construction four years earlier than anticipated in last year's plan. In addition, the planned General Fund contribution was reduced $20 million annually starting in FY 2002.

If everything stays as scheduled, the state will be facing another cash shortfall in the Centennial Highway Fund for FY 2002. The plan adopted by the 2000 Legislature shows this shortfall being funded with bonding of $234 million in FY 2002, $131 million in FY 2003, and $27 million in FY 2004.

Recent project cost reports from the Utah Department of Transportation show a shifting of project costs from fiscal year's 2000 and 2001 to 2004 and 2005. This is due to various reasons that are commonplace with many construction projects such as environmental issues, changes to meet public concerns, acquiring property, etc. With these cost changes and proposed funding increases by the governor, estimated shortfalls will be significantly reduced. The shortfalls for FY 2002, FY 2003, and FY 2004 are now estimated at $107 million, $102 million, and $88 million respectively.

In total, the governor and legislature will need to come up with a plan to increase cash flow in the Centennial Highway Fund by almost $300 million in the next three years. The governor is proposing bonding for the shortfall in FY 2002. The shortfalls in FY 2003 and FY 2004 will be dealt with when the budgets for FY 2003 and FY 2004 are considered and more information is available on federal funding, project costs, and other variables.

Federal funding is perhaps the most pivotal of future funding. Federal funding is dependent on future appropriations from Congress. Discretionary funding from the Secretary of Transportation is likely to decrease significantly in future years as Interstate 15 will be rebuilt and the 2002 Olympics will be over.

The projects to be constructed with Centennial Highway Funds are also subject to many variables, such as the environmental impacts of each project, timing of project construction, and the escalating costs of land and materials.

For example, last year Salt Lake County and Utah County found that their transportation improvement plans would soon be out of conformity with the state's PM10 State Implementation Plan (SIP). This nonconformity is due to EPA changes to mobile emissions models that were used to establish emission budgets in the current SIP. If these counties are out of conformity, federal funds cannot be used in these counties for transportation capacity projects. Utah's Division of Air Quality is working hard to create a new PM10 SIP, which hopefully will be approved in spring 2002. This nonconformity may delay projects in these counties.

Alternatives. With so many uncertainties and other state priorities vying for General Fund dollars, the ten-year plan must be flexible and reevaluated each year. If shortfalls in the financing plan occur, they need to be resolved. The governor is proposing the state bond for the shortfall in FY 2002.

The legislature may not desire to bond. If so, other alternatives are available. Alternatives to finance shortfalls in the ten-year plan if bonding is not done would be the following: 1) increase transportation related taxes or fees; 2) increase allocation of General Fund to the Centennial Highway Fund; 3) eliminate other projects on the Centennial projects list; 4) delay the timing of some projects on the Centennial projects list; 5) extend the length of the ten-year plan; or 6) a combination of the above.

If no additional financing is adopted in the next legislative session, there would not be enough financing in the current plan to meet projected transportation costs of the West Davis portion of the Legacy Parkway. If federal sources fall short, the state may have to delay some projects that are slated for construction in the next couple of years or find some other financing alternative.

Conclusion

The governor and the legislature again have some major decisions to make about financing projects on the Centennial projects list. The focus will be on the timing and costs associated with construction of the West Davis portion of the Legacy Parkway.

Whatever plan changes are adopted, there is little doubt that additional decisions will have to be made in the future. Projected revenues and expenditures are fluid. Already, the timing of projects, cash needs, estimates of revenues, and bond interest rates, have changed since the 2000 General Legislative Session.

This ten-year plan, while addressing many of Utah's critical infrastructure needs, will by no means complete all transportation projects vital to Utah. Critical areas, such as widening of I-15 south into Utah County, reconstruction of Interstate 80 from Parley's Canyon to downtown Salt Lake, and additional widening of I-15 north off 600 North, are not included at full cost in the Centennial projects list. Responsible long-term planning necessitates a ten-year plan, however, this plan, and other transportation issues, must be revisited each year.

Transit Overview

The Utah Transit Authority (UTA) was incorporated on March 2, 1970 under the authority of the Utah Public Transit District Act of 1969 for the purpose of providing a public mass transportation system for Utah communities. The Utah Transit Authority is a political subdivision of the State of Utah. It is not a state agency. Oversight of UTA is exercised by a 15-member Board of Directors appointed by each municipality, or combination of municipalities (or county), that has annexed to the Authority and that pays a one-quarter of one percent local option sales tax to support its operation. Through UTA's enabling legislation, the Utah State Legislature determines the number of board members and their method of appointment. The board is an oversight authority that sets agency policy and provides guidance for the operation of UTA.

Responsibility for the operation of the Authority is held by the General Manager in accordance with the direction, goals, and policies of the UTA Board of Directors. The General Manager has charge of the acquisition, construction, maintenance, and operations of the facilities of the Authority, and the administration of its business affairs.

The UTA system began operation in Salt Lake County on August 10, 1970, with a fleet of 67 buses. UTA currently operates 689 vehicles (bus, paratransit, and rail) in a 1,400 square mile service district. It reaches through six counties, from Brigham City on the north to Payson on the south, and from the Cottonwood Canyon ski areas to Grantsville. About 75% of the population of the state of Utah reside in the service district that is, geographically, one of the largest in the nation.

Approximately 1,570 people are currently employed by UTA. An estimated 80% of those employees are bus and rail operators, maintenance and operations support personnel. The remaining 20% are administrative employees. In addition, UTA operates six state-of-the-art maintenance facilities to service its bus, paratransit, and TRAX rail vehicles.

Operational Funding

A majority (62%) of UTA's operational funding is received from the 1/4 of one percent local option sales tax authorized by counties and municipalities in the district. The balance of operating funds comes from federal operating and maintenance grants (combined 17% with FY 98 accounting rules changes), passenger fares (15%), and the balance from miscellaneous sources including advertising, investments, and earned interest.

UTA's 2000 operating budget is projected to be $95.1 million. This reflects a 13.9% increase over the 1999 budget. The significant items that affect the increase are twelve months of TRAX light rail operations (versus one month and related start-up expenses in 1999), increases in paratransit services, and significant fuel cost increases. UTA's 2001 operating budget prior to inclusion of the additional sales tax revenues approved by voters in November of 2000, is anticipated to be $106.2 million. This tentative 11.6% increase reflects the projected costs of additional TRAX light rail services, paratransit services for disabled customers, and moderate levels of bus service changes. UTA's bus operations will account for 55% of expenditures in 2000. Rail operations will represent slightly more than 9% of UTA's expenditures for the upcoming year. As this report is being prepared, budget reviews and revisions to reflect the funding increases approved in Davis, Weber, and Salt Lake Counties are underway. Operating expenditure will increase as Sunday and holiday rail and bus services are introduced in those service areas.

Capital Funding (2000-01 program)

UTA has an ongoing capital program that provides funds for fleet replacement, selected maintenance activities, fleet expansion, park and ride lots, transfer centers, and other programs and projects. Fleet needs average approximately $15 million each year to replace and expand bus services in the district. In 1999, federal contributions for capital projects (including North/South TRAX) were $63.7 million. In 1998, those funds totaled $93 million. Through 2003, UTA, in cooperation with the Wasatch Front Regional Council and the Mountainland Association of Governments, has adopted a program that averages capital expenditures of $18 million per year for new vehicles, services, facilities, Rideshare activities, and planning projects.

In addition, UTA will potentially spend an average of $45 million per year on current rail construction projects in the next two years. UTA's capital program budget through 2003 is $131 million, with $116 million expected to be spent in 2001. The largest items are $68 million for the University line TRAX project, $18.2 million for buses, $16 million for major strategic projects, and $10 million as the final federal contribution on the North/South TRAX project.

TRAX North/South

UTA's fifteen mile North/South TRAX line opened on December 4, 1999, and revenue service began December 6, 1999. The line runs from the Delta Center in downtown Salt Lake City to 100th South in Sandy. The project was recognized by the General Accounting Office in 1999 as the only major transportation infrastructure project in the nation to be both under budget and ahead of schedule. TRAX opened more than three months ahead of schedule and under budget. The grand opening day carried more than 30,000 passengers in 6 hours of service. Projections for opening day ridership were 14,000. In November, 2000, TRAX celebrated its five millionth passenger trip. Through early November, the system averaged more than 20,000 passenger trips per day.

The total capital budget of the North/South line was $312.5 million. The Federal Transit Administration agreed in 1996 to provide $241.4 million in capital funds to combine with UTA's $71.1 million in local funds. Capital costs include all trackwork, vehicles, stations, park-and-ride lots, and electrical systems. Current activities on the line include the addition of nearly 2,000 additional park-and-ride spaces to meet existing demand.

University TRAX

The 2.5 mile University of Utah TRAX rail extension completed its environmental and engineering analysis, and construction began in the summer of 2000. The University line connects with the North/South Line at 400 South and Main Street in downtown Salt Lake City, and extends east to Rice-Eccles Stadium at the University of Utah. It will run in the center of the street and add four stations to the TRAX system when complete. The Design/Build project has completed significant street and utility work through 2000 along 400 South. Construction on the $118 million (80% federal grant) extension is under contract to be complete in September 2002. However, it is expected to be complete in late 2001 as a result of extraordinary efforts being put forth by the construction consortium. Revenue operations are anticipated to begin in late 2001 or early 2002.

Other Activities

2002 Olympic Winter Games. In addition to the efforts being put forth to complete the University TRAX extension, the Utah Transit Authority has been deeply involved in the planning for the spectator services associated with events in the Salt Lake Valley. UTA is assisting in the procurement of approximately 1,200 borrowed buses from agencies across the nation that will be used for all venue areas, and 29 additional borrowed light rail cars to augment UTA's fleet during the Olympics.

November 2000 Election. In November, 2000, voters in Davis, Weber, and Salt Lake Counties approved an increase in their local option sales tax of an additional one-quarter of one percent. This increases the transit portion of the sales tax in those counties to one-half of one percent. In Salt Lake County only, one-quarter of the additional funds will be applied to improvements on Interstate 15 in the county, as outlined in the initiative language. This funding has been identified to implement the Long-Range Transportation Plan that was adopted by the Wasatch Front Regional Council in 1998. Several projects from that plan are currently under study throughout the region. Beginning in mid 2001, the addition of approximately $43 million in new revenue per year to Utah Transit Authority will provide for the implementation of Sunday service, TRAX extensions, high speed commuter service, expanded bus service, and other improved customer services in the three counties.

The airport line, a West Valley alignment, a West Jordan rail spur and a Draper TRAX extension are being examined for future implementation. In addition, the Wasatch Front Regional Council, the Mountainland Association of Governments, and UTA are studying regional commuter rail services. A recent feasibility study was expanded to complete a detailed analysis of alternatives in a 120 mile corridor along the Wasatch Front. Those alternatives include commuter rail, commuter bus, and freeway improvements. The study will develop an implementation plan, operation scenarios, property requirements, and capital costs.

At the time this article was prepared, Utah Transit Authority's Board of Trustees was reviewing and revising the 2001 Capital and Operating Budgets to reflect the timing of new revenues and the implementation of extended services.

Plan Adopted by the Legislature, 2000 General Session:
Ten-Year Funding Option for Transportation Project Needs (Thousands of Dollars)

Available Funding Sources	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Beginning Balances		$44,390	$515,221	$318,689	$59,653	-$2,695	-$2,254	-$1,913	-$1,681	$41,970	$89,364	
State Sources												
General Fund	110,000	78,000	110,000	115,000	120,000	125,000	130,000	135,000	145,000	155,000	165,000	1,388,000
General Fund Additions	0	0	0	7,000	14,000	21,000	27,000	33,000	39,000	45,000	51,000	237,000
General Fund Reductions	0	0	0	0	0	-20,000	-20,000	-20,000	-20,000	-20,000	-20,000	-120,000
Less: Debt Service Interest	0	-23,924	-39,986	-43,784	-41,104	-49,521	-52,845	-51,365	-47,839	-43,760	-39,407	-433,534
Less: Debt Service Principal	0	0	0	0	0	-54,000	-56,550	-59,100	-76,383	-87,973	-93,761	-427,767
Net General Funds Available	110,000	54,076	70,014	78,216	92,896	22,479	27,605	37,535	39,778	48,267	62,832	643,699
New Transportation Funds												
Fuel Tax Change (UST Shift)	0	5,750	5,923	6,100	6,283	6,472	6,666	6,866	7,072	7,284	7,502	65,917
Fuel Tax Increase (5.0 Cents)	0	57,500	59,225	61,002	62,832	64,717	66,658	68,658	70,718	72,839	75,024	659,173
Diesel Tax Collection Change	0	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048	114,639
Less B & C Allocation (25% on above changes)	0	-18,313	-18,862	-19,428	-20,011	-20,611	-21,229	-21,866	-22,522	-23,198	-23,894	-209,933
Registration Increase Autos	0	12,477	13,935	15,222	15,679	16,149	16,633	17,132	17,646	18,176	18,721	161,771
Registration Increase (Commercial Carriers)	0	1,872	2,090	2,284	2,353	2,423	2,496	2,571	2,648	2,727	2,809	24,272
Departmental Efficiencies	0	13,413	4,608	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	66,021
Net Transportation Funds Available	0	82,700	77,219	81,789	84,063	86,405	88,817	91,301	93,860	96,496	99,211	881,861
Sales Tax Revenue (Olympics 1/64 cent)	0	0	0	2,250	4,770	5,056	5,360	5,681	6,022	6,383	6,766	42,289
Local Governments	0	359	0	315	1,260	1,260	1,260	1,260	300		0	6,014
Investment Income	720	36,200	24,146	2,516	1,433	1,668	1,256	879	791	1,048	1,356	72,014
General Obligation Bonds												
Par Amount of Bond Issued	0	340,000	568,000	0	0	234,000	131,000	27,000	0	0	0	1,300,000
Bond Anticipation Notes	0	500,000	-500,000	0	0	0	0	0	0	0	0	0
Less Issuance Costs	0	2,962	1,406	0	0	1,453	814	168	0	0	0	6,802
Subtotal Bonds Proceeds	0	837,038	66,594	0	0	232,547	130,186	26,832	0	0	0	1,293,198
Subtotal State Sources	110,720	1,010,373	237,973	165,086	184,422	349,415	254,484	163,489	140,751	152,194	170,166	2,896,786
New Federal Funds	0	11,453	70,305	78,089	77,163	26,942	29,358	36,000	37,800	39,700	43,190	450,000
Total Project Funds Available	110,720	1,066,216	823,498	561,864	321,238	373,662	281,588	197,577	176,870	233,864	302,720	3,346,786
Capital Expenditures												
I-15 Construction	49,227	487,589	457,814	372,793	157,190	65,387	0	0	0	0	0	1,590,000
Statewide Construction	17,103	63,406	46,995	155,623	115,936	272,745	239,394	144,908	73,800	128,094	-18,004	1,240,000
2/3/00 Adjustments to Original Projects				-26,205	50,807	37,784	44,107	54,350	61,100	16,406	158,463	396,812
Net Capital Expenditures	66,330	550,995	504,809	502,211	323,933	375,916	283,501	199,258	134,900	144,500	140,459	3,226,812
Projected Ending Balances	44,390	515,221	318,689	59,653	-2,695	-2,254	-1,913	-1,681	41,970	89,364	162,261	162,261
Total Capital Expenditure & Ending Balance	$110,720	$1,066,216	$823,498	$561,864	$321,238	$373,662	$281,588	$197,577	$176,870	$233,864	$302,720	$3,389,073
Projected Ending Principal Balances												$709,972

Source: Plan adopted by the legislature, 2000 General Session

Table 84
Comparison of Legislative Plans for Ten-Year Funding Option for Transportation Needs (Thousands of Dollars)

	Plan Adpoted In:			
Funding Source	1997 General Session	1998 General Session	1999 General Session	2000 General Session
General Fund	1,178,982	1,388,000	1,625,000	1,505,000
New Transportation Funds	814,365	881,779	884,223	881,861
Sales Tax Revenue	35,254	35,254	42,289	42,289
Local Match/Toll Road	119,843	135,000	1,478	6,014
Investment Income	12,755	45,114	70,021	72,014
Bonds and Bond Anticipation Notes	563,500	874,000	908,000	1,300,000
Federal Funds	450,000	450,000	520,762	450,000
Debt Service Interest	207,119	315,305	314,378	433,534
Debt Service Principal	561,574	491,209	544,977	427,767
Bond Issuance Costs	6,006	4,203	5,129	6,802
Bond Outstanding at FY 2007	1,926	382,791	363,023	872,233
Cash Balance at FY 2007	0	168,429	364,478	162,261
Net Bonds Outstanding Less Cash	1,926	214,362	-1,455	709,972

Sources: Utah Legislature, 1997, 1998. 1999, and 2000 General Sessions;
Legislative Fiscal Analyst's Office

Petroleum Balance

Overview

While the available supply of petroleum products in the Salt Lake City market is currently adequate, there may be a tightening of the market over the next decade. Evidence of this tightening has surfaced for one petroleum product in particular – jet fuel. A similar pattern may occur with other refined products, such as motor gasoline and diesel fuel, over the next decade. The cause of the tightening market can be attributed, in general, to market supply and demand. Namely, growth in demand has, for some time, outpaced growth in supply. The Salt Lake petroleum refineries and the product import pipeline are operating near capacity.

Other supply factors also contribute to the tightening of the petroleum product market. The Rocky Mountain States are a fairly remote geographical market, and Salt Lake City is at the end of the supply chain. The two major U.S. petroleum supply areas are Alaska and Texas and neither have direct connections to Utah. Consequently, Utah relies on smaller product sources to meet its growing demand requirements and must compete with other geographical markets for refined products. Additionally, Utah refineries actively market petroleum products for export to Idaho, which further decreases available supply.

This analysis considers the petroleum product supply and demand situation for the state of Utah through the year 2010. Past, present, and future supply and demand balances are calculated for motor gasoline, diesel fuel, jet fuel, all other products, and total products. Particular attention will be paid to the long-term situation and how potential future developments may provide additional supply.

Utah Pipelines and Petroleum Refineries. Between the drilling and producing industry and the consumer retail market, the petroleum industry in Utah consists of four refineries, two crude oil pipelines, one product import pipeline, and one product export pipeline.

The Pioneer product import pipeline runs from Sinclair, Wyoming, to Salt Lake City, and is jointly operated by Conoco and Sinclair. Its capacity was 34,000 barrels per day between 1990-1996. It was expanded to 48,000 barrels per day in 1997. Due to the rapidly growing Wasatch Front demand for refined petroleum products, the Pioneer pipeline was expanded again in 2000 to a new capacity of 70,000 barrels per day. Testing of the expanded pipeline is underway, and new supplies will soon be available.

The Chevron Product Pipeline supplies the Salt Lake International Airport and exports refined products to Boise, Idaho, and then to Pasco, Washington. Its total capacity is 64,000 barrels per day for all refined products. Both the import and export pipelines ship motor gasoline, diesel fuel, and jet fuel.

All four Salt Lake City petroleum refineries produce motor gasoline and diesel fuel, as well as other refined products. Three refineries produce jet fuel. The operating capacity of the four Salt Lake refineries is about 152,000 barrels per day.

Utah Petroleum Balance. The demand for petroleum products in Utah has been growing between 2% and 4% a year throughout the 1990s. Salt Lake refinery capacity has increased gradually over the past few years, but the refineries are operating at the limit of their effective capacities.

On the export front, Idaho represents an attractive market for petroleum product shippers. Growth in Idaho product demand has been strong over the past few years.

The Long-Term Situation

Projecting the Future Net Supply and Demand Balance. To consider what the future may hold for the petroleum product balance in Utah, certain assumptions must be made about the growth in supply and demand. Aided by the assumptions, the net supply-demand balance can be calculated by subtracting demand from net supply. Net supply is refinery production, plus pipeline product imports, minus pipeline product exports.

The value of projecting the growth in supply and demand and calculating the supply-demand balance is that such an analysis reveals the degree to which the petroleum product market will tighten and when this may occur. Positive values indicate that net supply is in excess of demand. Negative values indicate that net supply is less than demand.

It is important to note that when the net supply-demand balance is negative the Utah market has not necessarily run out of refined products. But such a situation may require other supply alternatives. Often this is met by using trucks or rail transport to supplement supply. These alternatives will result in higher prices due to the increased transportation cost associated with delivery of petroleum products. For example, transportation costs $2 per barrel by truck from the Uintah Basin compared to $1 per barrel by pipeline from Central Wyoming. When jet fuel supplies were low in recent years, additional supplies were trucked into Salt Lake from the West Coast and from Denver to meet demand. Delivering jet fuel from such distances by truck increased its price. The resulting average price for jet fuel in Utah in 1996 and 1997 was at least 10 cents a gallon higher than in surrounding States.

The net supply-demand balance of jet fuel illustrates the predicament for the airline industry. While the other petroleum products generally have a positive net supply-demand balance, the market appears to tighten in the near future. Diesel fuel shows a positive net supply-demand balance for the next 10 years, while the motor gasoline balance turns negative very soon.

Sources of Crude Oil Supply for Utah. The long-term viability of the Salt Lake petroleum refineries also depends upon the availability of crude oil. The refineries are served by two crude oil pipelines from Colorado and Wyoming, which are operated by Amoco and Chevron. The Amoco crude oil pipeline flows in from Wyoming, while the Chevron crude oil pipeline brings crude oil from Northwest Colorado as well as from the Uintah Basin.

While crude oil field production in Utah has been in a long-term decline, in the past few years the production decline has slowed significantly. Crude oil is exported from Utah on the Texas-New Mexico pipeline to the Four Corners area. Crude oil export volumes have been relatively steady at about 7-8 million barrels a year. Wyoming has replaced Colorado as the dominant crude oil source. Crude oil receipts by the four Salt Lake refineries have held relatively steady in the 48,000 to 50,000 barrels a year range. To summarize, Utah production has declined from 32% to about 15% of Salt Lake refinery receipts, Colorado crude oil has declined from about 29% to 15% of Salt Lake receipts, and

Wyoming crude oil has increased from 35% to 51% of Salt Lake receipts.

Finally, the Salt Lake petroleum refineries now have a new, stable source for crude oil from Canada, which flows from Alberta, through Montana and Wyoming. Canadian crude oil pipeline shipments to Utah began in 1996 and by 2000 reached 16% of Salt Lake petroleum refinery receipts. Canadian crude oil is a stable, diversified, and potentially huge source for the Salt Lake refineries. Canadian crude oil should be at world cost in a few years once additional Canadian pipeline capacity is built.

Potential Developments. The expansion of the Pioneer product import pipeline was completed in 2000; new supplies should be available in early 2001. In addition, the Sinclair refinery in Sinclair, Wyoming, recently completed an expansion. This development will provide additional supplies, including jet fuel, for the Wasatch Front market. Beyond these two expansion projects, a number of potential developments exist that would increase the supply of petroleum products to Utah.

In addition, the refining industry must also deliver gasoline and diesel with a significantly lower sulfur content. The refining industry recognizes the necessity and importance of moving to cleaner, low-sulfur fuels. However, low-sulfur fuels will a require large investment by the industry. While low-sulfur gasoline, for example, may cost the consumer an extra 2-5 cents per gallon, the capital investment for a petroleum refinery is $50-$100 million.

Salt Lake City petroleum refinery capacity will gradually increase. Nevertheless, investment in refining capacity and equipment is expensive. Alternatively, expansion of refinery storage capacity would aid the supply picture. Inventories play an important role in the industry and allow it to smooth out the volatility consumers would otherwise encounter.

Another potential source of supply is a proposal by the Williams pipeline that would bring refined petroleum products from Northwest New Mexico and ultimately the Texas Gulf Coast into the Wasatch Front. The Texas Gulf coast is one of the largest producing areas in the United States and such a link to the region would represent a significant source of petroleum products to Utah. The status of the Williams pipeline project, planned for 65,000 barrels per day, is uncertain and possibly several years away from realization.

A pipeline running between Sinclair, Wyoming, and Denver may be reversed, allowing refined products to flow from Denver to Sinclair. Consequently, petroleum product could flow into Utah from Denver via Sinclair. The reversal benefits Utah because of the Denver pipeline connection to Oklahoma.

The product pipeline from Boise to Pasco may be reversed. This development would provide additional product supplies for the booming Boise market and back out product exports from Idaho to Utah.

Another option exists from Las Vegas. Refineries in Los Angeles supply petroleum products to Las Vegas and, on regular occasion, to St. George, Utah. A pipeline delivers product to Las Vegas, while St. George receives product by tanker trucks coming from Las Vegas. Northern Utah could also receive petroleum products from Las Vegas via trucking. However, market conditions would dictate whether this option is viable, and currently the price of gasoline along the Wasatch Front would have to be, at a minimum, 10 cents per gallon higher than Las Vegas. This option is not the most desirable for a couple of reasons. First, the supply would probably not be as steady as, say, pipeline supply, since the former only becomes viable when the price differential exists. Secondly, trucking supply increases the price of product and, ultimately, this would be passed on to consumers.

Conclusion

In Utah, the rate of growth of demand for refined petroleum products has outpaced the rate of growth in supply. Salt Lake City petroleum refineries are operating at the limit of their effective capacities. The key result is a declining net supply-demand balance for all petroleum products. The declining net supply-demand balance first encountered with jet fuel may very well be an indication of future trends for other products, such as motor gasoline and diesel fuel.

Table 85
Capacity and Utilization of Salt Lake City Refineries and Pipelines

	Thousand Barrels per Day	Capacity Utilization
Crude Oil		
Pipeline crude oil imports	172	90%
SLC refineries	152	95%
Petroleum Products		
Pipeline product imports		
Through 1996	34	70-90%
1997 expansion	48	70-90%
2000 expansion	70	70-90%
Pipeline product exports	64	90-95%

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 86
Average Annual Growth for Utah Petroleum Supply: 1990-2000

Petroleum Supply	Average Annual Growth 1990-2000
Crude Oil	
Utah Production	-4.4%
Colorado Imports	-5.0%
Wyoming Imports	3.4%
All Imports	2.2%
SLC Refinery Receipts	0.2%
Exports from Utah	-1.2%
Petroleum Products	
Imports from Wyoming	4.3%
Exports to Idaho	2.6%
Exports to Washington	-4.6%
Total Exports	1.1%
Total Refinery Production	0.1%
Motor Gasoline	0.3%
Diesel Fuel	1.0%
Jet Fuel	-0.3%
All Other Products	-1.3%

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 87
Average Annual Growth for Utah Petroleum Product Demand: 1990-2000

Petroleum Demand	Average Annual Growth 1990-2000
Motor Gasoline	4.2%
Diesel Fuel	4.7%
Jet Fuel	2.2%
All Other Products	4.2%
Total	4.0%

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 88
Utah Demand, Production, Imports, and Exports for All Petroleum Products (Thousand Barrels)

				Pipeline Exports		
Year	Total Product Demand	Refinery Production	Pipeline Imports	Idaho	Washington	Total Exports
1990	35,476	57,187	10,647	16,766	4,457	21,223
1991	37,836	56,951	11,459	16,480	5,438	21,918
1992	37,566	57,763	10,534	16,465	4,622	21,087
1993	38,250	57,434	10,707	17,280	2,259	19,539
1994	39,173	59,258	11,555	17,963	3,384	21,347
1995	42,582	57,266	12,289	17,799	2,713	20,512
1996	46,020	59,257	12,692	18,087	2,424	20,512
1997	47,914	60,500	12,916	18,459	3,986	22,444
1998	48,863	61,033	12,842	19,429	3,045	22,474
1999	49,033	60,599	14,509	20,521	2,367	22,887
2000	49,956	58,030	15,253	21,144	2,248	23,392

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 89
Average Annual Growth Assumptions: 2001-2010

	Average Annual Growth Assumption 2001-2010
Total Refinery Production	0.5%
Petroleum Products	
Imports from Wyoming	4.3%
Exports to Idaho	1.5%
Exports to Washington	-5.0%
Demand	
Motor Gasoline	1.5%
Diesel Fuel	2.0%
Jet Fuel	1.0%
All Other Products	1.5%

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 90
Utah Net Supply of Petroleum Products (Thousand Barrels)

Year	Gasoline	Diesel	Jet Fuel	All Other	Total Products
1990	3,968	2,990	575	3,602	11,135
1991	2,873	2,962	(242)	3,063	8,656
1992	3,383	2,599	4	3,657	9,644
1993	3,476	3,563	47	3,265	10,351
1994	3,006	4,071	(103)	3,319	10,293
1995	1,290	3,605	(798)	2,363	6,461
1996	1,603	3,597	(1,132)	1,350	5,417
1997	374	1,469	(1,016)	2,232	3,058
1998	(206)	1,963	(1,397)	2,222	2,582
1999	(152)	2,352	(1,310)	2,381	3,272
2000	(448)	2,170	(1,346)	(259)	117
2001	(564)	2,023	(1,373)	(348)	(261)
2002	(687)	1,872	(1,401)	(438)	(654)
2003	(819)	1,717	(1,429)	(530)	(1,062)
2004	(959)	1,557	(1,458)	(624)	(1,484)
2005	(1,106)	1,393	(1,488)	(720)	(1,922)
2006	(1,261)	1,224	(1,519)	(818)	(2,374)
2007	(1,424)	1,050	(1,550)	(917)	(2,841)
2008	(1,594)	872	(1,582)	(1,019)	(3,322)
2009	(1,770)	689	(1,614)	(1,122)	(3,817)
2010	(1,954)	502	(1,647)	(1,228)	(4,327)

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Table 91
Supply and Disposition of Crude Oil in Utah (Thousand Barrels)

	Supply					Disposition		
		Pipeline Imports						
Year	Field Production	Colorado	Wyoming	Canadian	Total	Utah Crude Exports	Refinery Receipts	Refinery Stocks
1990	27,712	14,494	18,844	-	33,338	7,725	49,104	728
1991	25,930	14,423	20,113	-	34,536	8,961	48,647	513
1992	24,077	13,262	21,949	-	35,211	6,901	50,079	645
1993	21,819	11,575	22,279	-	33,854	7,758	48,554	691
1994	20,661	10,480	26,227	-	36,706	8,048	48,802	767
1995	19,988	9,929	24,916	-	34,845	7,861	46,695	767
1996	19,504	9,857	24,905	175	34,937	7,713	46,126	590
1997	19,585	8,565	28,191	525	37,282	7,819	48,492	654
1998	19,198	8,161	28,414	2,200	38,775	7,785	49,539	702
1999	16,253	7,335	28,461	6,400	42,196	7,180	51,157	720
2000	15,500	7,300	25,300	7,975	40,575	6,786	49,178	600

Source: Energy Data Information System, Utah Office of Energy and Resource Planning.

Long-Term Demographic Trends Affecting Public Education in Utah

Overview

Utah consistently ranks among the youngest and fastest growing populations with the highest fertility rates and largest household sizes among all states. These distinguishing demographic characteristics should continue into the foreseeable future. Among the most significant of the long-term demographic trends confronting the state is the expected substantial increase in the number of school-age persons[1], beginning in 2004 and extending for at least another decade. This acceleration in the growth rate of the school age population is largely explained by the pattern of births in the state over time, especially the large number of births in the early 1980s. The number of births is determined by the number, age structure, and fertility patterns of women in Utah, which is further influenced by the cycles of in and out migration.

Demographic Cycles and the 1990s

The 1990s were a period of economic expansion for the state. At the end of the decade there were 392,000 more Utahns than at the beginning. Of these, 128,500 are accounted for by in-migration, while the balance is attributable to natural increase[2]. Population increased by 23% from 1990 to 1999, an average rate of 2.3% per year[3]. In contrast, the number of school-aged persons increased from an estimated 458,400 in 1990 to 483,500 in 1999. This is a total increase of about 5.5%, and an average growth rate of far less than 1%. In consequence, the school-age population has declined from over 26% of the population in 1990 to an estimated 23% in 1999.

After over a decade of decelerating growth rates in the number of school age persons in Utah, this trend will soon reverse[4]. Growth rates of the school age population will accelerate significantly over the next five years and remain high for the subsequent ten years. According to projections from the Utah Governor's Office of Planning and Budget, the school age population is expected to increase to 523,000 by 2005, and to about 600,000 ten years from now. From 2005 through 2015, an average of nearly 15,000 school age persons will be added to the Utah population each year. If these projections are correct, there will be 114,000 more school age persons in the state in 2010 as compared to 2000, which is an increase of 24%. The total population is expected to grow by roughly the same rate to 2010, so that the school-age population share of the total population is expected to remain constant at about 22.5%.

So why, after a decade of very slow growth, will the growth of the school age population accelerate over the next five years? The answer is found in the number of births over time. The cumulative number of births that occurred 5 years ago (1995) through 17 years ago (1983) is about 483,000, which is within 1% of the estimated school age population. It is clear from these calculations that it is the pattern of births that explains the changes in the school age population over time.

Historic Pattern of Births

Fluctuations in the number of births of a given population have a profound influence on the age distributions for current and future generations. Nationally, the post World War II Baby Boom, which lasted from 1946 through 1964, was followed by a Baby Bust (1965-1976). As this large cohort of Boomers came of age and began having their own children, they created the Echo Boom (1977-present). In this way, birth patterns have an effect many years into the future as successive generations are impacted.

Utah also had a post war Baby Boom. However, this was not followed by a Baby Bust. Instead, in 1965 when the national Baby Bust began, the number of births in Utah began a sixteen-year run of increases, peaking at record levels in 1982. Utah's Post War Baby Boom has never really ended. Births declined and remained fairly constant from 1987 through 1990, then began another period of increase. Record level births have occurred for each year since 1997. State projections indicate that we can expect another thirty year run of increasing births. This is indeed the never-ending Utah Baby Boom. It is this pattern of births that explains changes in the school age population.

Sources of Recent and Projected Demographic Cycles

The number of births in any given year is the combined result of the size and age structure of the female population and age-specific fertility rates.[5] The characteristics of in and out-migrants in turn affect these demographic characteristics. Long waves of in- and out-migration over the past fifty years have generally been shaped by economic conditions. On net, the state gained 175,000 residents because of migration during the 1970s expansion (1969-1983). The downturn in the 1984 through 1990 period resulted in a net out-migration of 59,000, while the 1990s expansion resulted in a net in-migration of 128,500 people. The state projects a prolonged period of net in-migration especially pronounced between 2007 and 2012. If correct, this would bring an additional 245,000 persons to the state through migration between 2004 and 2020. These cycles particularly influence the number of births because the peak years for individuals to migrate for employment reasons (mid-twenties) are also the years in which they are most likely to have children. The net migration estimates for any given year underestimate the full impact of these predominantly young migrants because, once they relocate, they tend to continue to have children.

The anticipated increase in Utah's school age population is a consequence of cumulative impact of these influences. In sorting out the reasons for this projected increase, we separately consider the influences of 1) the number and age structure of women, 2) changes in fertility rates, 3) the in-migration of the 1990s and 4) the projected in-migration in the 2000-2030 period.

Fertility and the Population of Women Aged 15 through 44

In the U.S., the total fertility rate (TFR)[6] was about 4.0 births per woman

[1] The school age population includes all persons at least 5 years old and less than 18 years old.

[2] According to demographic accounting conventions, population change is the sum of natural increase (the number of births less the number of deaths) and net migration (the number of in-migrants less the number of out-migrants) over a given year. These are flows that are added (or subtracted) from the population at the beginning of the year. In the following year, in-migrants from the previous year are counted as residents in the beginning population in the following year.

[3] Annual rates of change for a series reported here are log linear regression calculations.

[4] Both the Bureau of the Census and the Utah Governor's Office of Planning and Budget have projected increases in the school age population. See "Utah's Long Term Projections" in this volume and Campbell, Paul R. "Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2025." Population Projections Branch, Population Division, U.S. Bureau of the Census. October 1996.

[5] An age specific fertility rate is the proportion of women of a specific age who give birth during a given year. It is calculated as follows: ${}_nf_x = {}_nB_x / {}_nF_x$ Where nfx is the age specific fertility rate of women aged x to x+n, nBx is the number of births to women aged x to x+n over the year, and ${}_nF_x$ is the number of women aged x to x+n at midyear.

in 1900. It fell to 2.2 during the Great Depression, followed by an upward postwar cycle that hit a peak of 3.7 in 1957, which was also the peak year for births. Fertility fell to 1.8 births in the mid-1980s and subsequently has fluctuated around 2.0. Nationally, the TFR is projected to increase slightly over the next several decades.

The Utah Post-War Baby Boom peaked in 1961. In that year the national TFR was 3.6 and the Utah TFR was 4.2. In contrast to the long national decline in fertility, Utah women's fertility rates increased significantly in the late 1970s, and remained high throughout the early 1980s. The sustained in-migration to Utah in the 1969-1983 period brought 175,000 more persons to the state. Growth rates in the number of women in childbearing years were quite high in the early 1980s, increasing more rapidly than the population in general. These high fertility rates, in combination with the increasing number of women aged 15 through 44, explain Utah's never ending Baby Boom, which most recently peaked in the early 1980s.

After declining significantly from this peak, Utah's fertility rate remained well above that of the nation, fluctuating around 2.6. As is true nationally, women are having children later, on average by several years as compared to previous decades. Growth rates of women in childbearing years were relatively high in 1991 through 1995 and are projected to be high in the 2009 through 2013 period. Because these projections assume constant (relatively high) fertility rates, increases in births are attributable to increases in the number of women having children. This is in contrast to the 1980s when both factors were positive.

Effects of In-Migration

Two major waves of in-migration that affect the projected pattern of births, and therefore the projected school-age population, are the in-migration of 128,500 persons that occurred in the 1991-99 period, and the projected in-migration occurring after 2003. Once people relocate to the state in these waves of migration, their family formation, childbearing, labor force participation, productive activity, and demand for goods and services affect the state far into the future.

The State's long-term projections model (UPED) separates labor market-induced migration (job-seekers and associated others) from migration based on non-economic factors (i.e., retirement, college, missions, etc.) The most recent projections include historic demographic data for 1999 (and previous years), and the forecast begins in 2000. This model produces estimates of detailed employment-related migration for the historical period and for 2000 and beyond. These estimates prior to 2000 were analyzed using a simple cohort-component technique.[7] In this way, the estimated population that moved to the state in the 1991-99 period was separated from the baseline projection. For the projection period, the UPED model itself was used to analyze the effects of employment related migration.[8]

For this work, we identify the 2003 through 2020 period as the peak growth years for the school-age population. This analysis indicates that the employment-induced migration of the 1990s contributes about 10,000 (about 4%) of the expected increase of 225,000 increase in the school-age population in the 2003 through 2020 period. Most of the impact is realized in 2003 through 2009, so that this wave of migration is estimated to have contributed about 14% (6,500) of the projected 47,000 increase in the school-age population between 2003 and 2006.

In the projected period, this in-migration of the 1990s becomes part of the demographic momentum already introduced to the system, or people already "in the pipeline." This analysis indicates that the projected in-migration will contribute over a quarter of the projected increase in the school-age population between 2003 and 2020. This means that, by the year 2020, about 64,000 of the projected increase of 225,000 school-age persons are added because of the projected wave of in-migration. Demographic momentum (births and deaths attributable to the year 2000 population) account, for 161,000 of the projected increase in the school-age population.

Separating the projected economically motivated migration effects from the baseline is important because modeling this migration really amounts to forecasting relative economic opportunities. These migration forecasts are much more uncertain than are more strictly defined demographic forces of fertility and mortality. What this analysis shows is that, even if we make very conservative assumptions concerning the state's economic expansion and resulting in-migration, the wave of increase in the school-age population is still substantial.

Conclusions

The coming increase in the school-age population is primarily the result of the pattern of births that peaked in the early 1980s. As this large cohort moves out of the school-age population and into the labor force and childbearing years, the growth of the school-age population has declined. This is the major reason for the slow growth of the school-age population in the 1990s. As the peak of the Utah Baby Boom (born 1978-1984) is now 16 through 22 years old, this cohort is leaving the educational system and beginning to have children who will begin to enter school in 2005. At the peak of the projected school-age population boom in 2011, this cohort subset will be 27 through 33 years old. Even though fertility rates are projected to be constant, the sheer size of this cohort creates another increase in births and the subsequent increase in the school-age population. This demographic momentum explains about 70% of the projected increase in school-age population between 2003 through 2020.

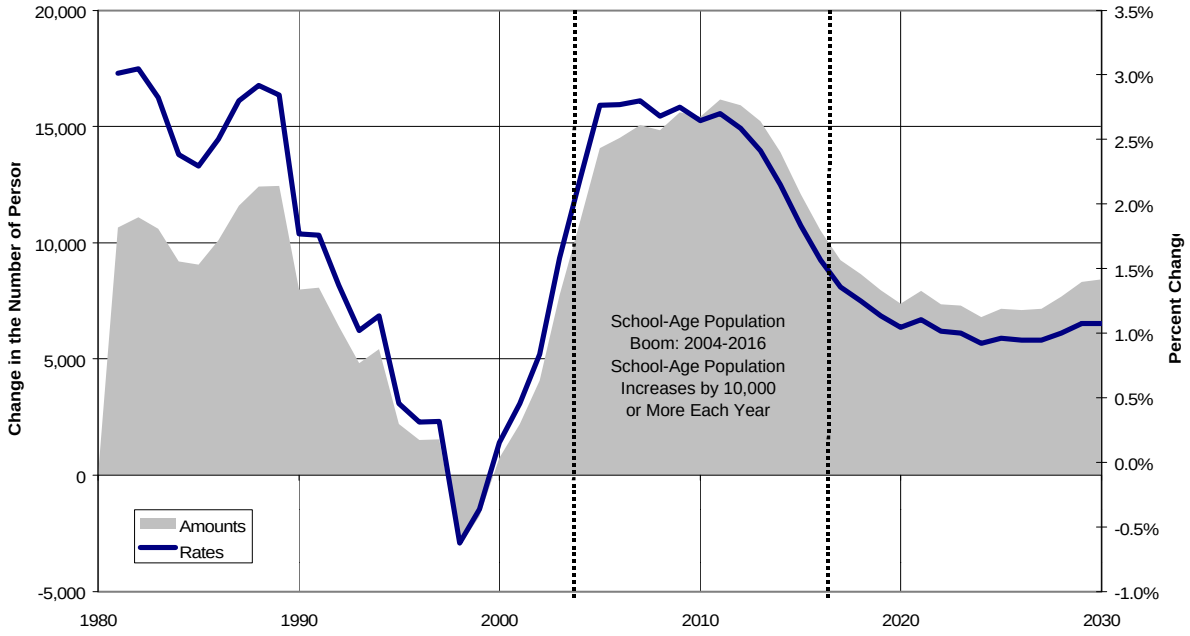
The Official baseline projections of the state include a large and sustained net in-migration to the state. These in-migration projections are based on a relatively optimistic economic forecast. Importantly, even if we assume a very conservative economic growth path and no future employment related in-migration, the school-age population is still projected to increase significantly over the next two decades. Even with this more conservative view of the future, the school-age population will increase to about 70% of the Planning Office's projections, and Utah can expect an additional 90,000 school-age persons by the year 2010.

[6] Total fertility rates are the sum of age specific rates for a particular year. Because these are computed on a per woman basis, they are not affected by age structure. Total fertility rates (TFR) represent the total number of children that a hypothetical woman would have over her entire childbearing years if her birthing pattern matched that of the age specific fertility rates for the given year.

[7] The cohort component demographic accounting technique takes the initial population dimensioned by age and sex, applies survival rates (to calculate deaths), ages the population, and applies fertility rates (to calculate births). The result (assuming no migration) is the beginning population of the next year. Single year of age and sex estimates for the employment-related migration were taken from UPED projections: www.qget.state.ut.us/projections These were survived and aged for each year using rates from the 1990 Decennial Life Table for Utah (NCHS). Births were calculated from the age specific fertility rates reported on the same website. No migration component was calculated.

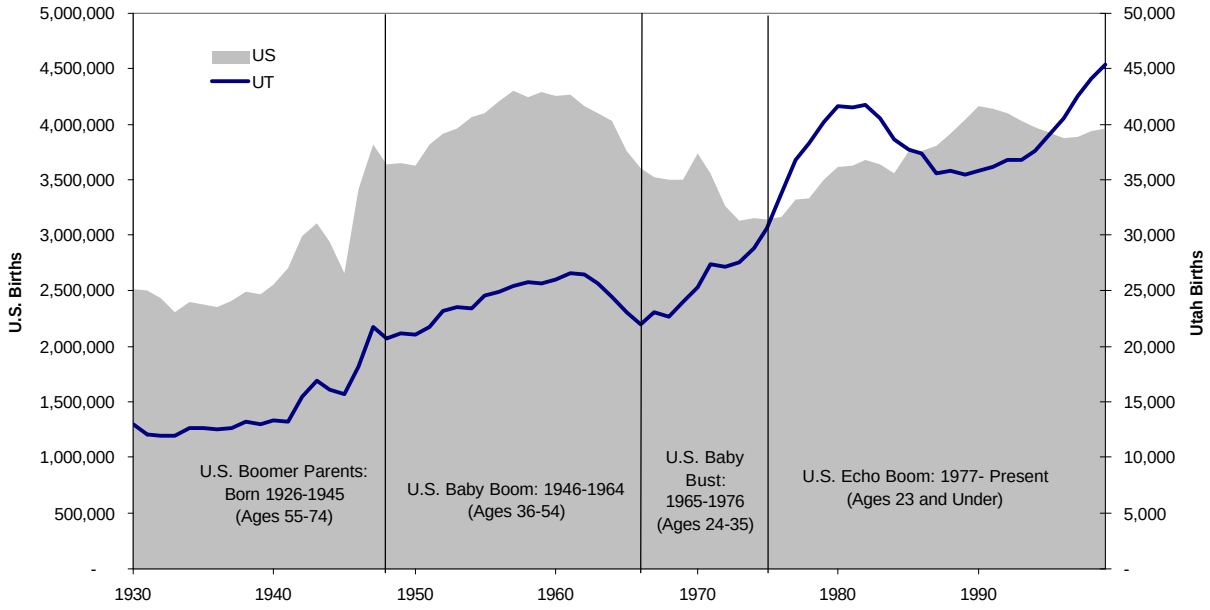
[8] This is the Zero Employment-Related Migration scenario for the UPED model.

Figure 56
Utah Year-Over Amounts and Rates of Change in the School-Age Population: 1980-2030



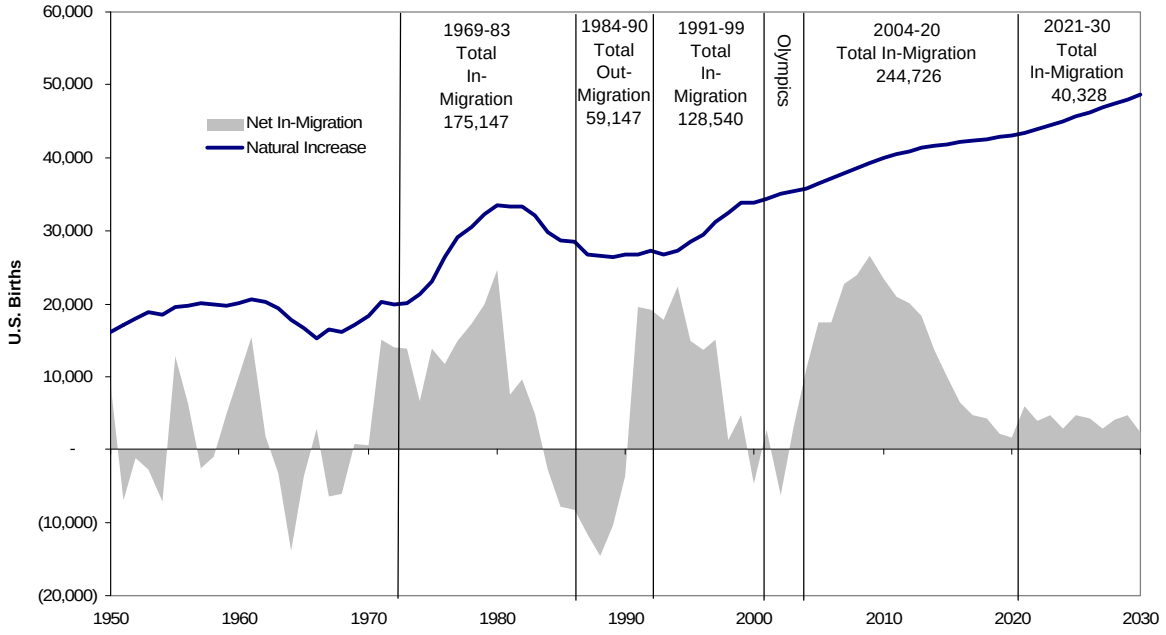
Source: UPED Model System (Baseline 2000).

Figure 57
U.S. and Utah Fiscal Year Births: 1930-1999



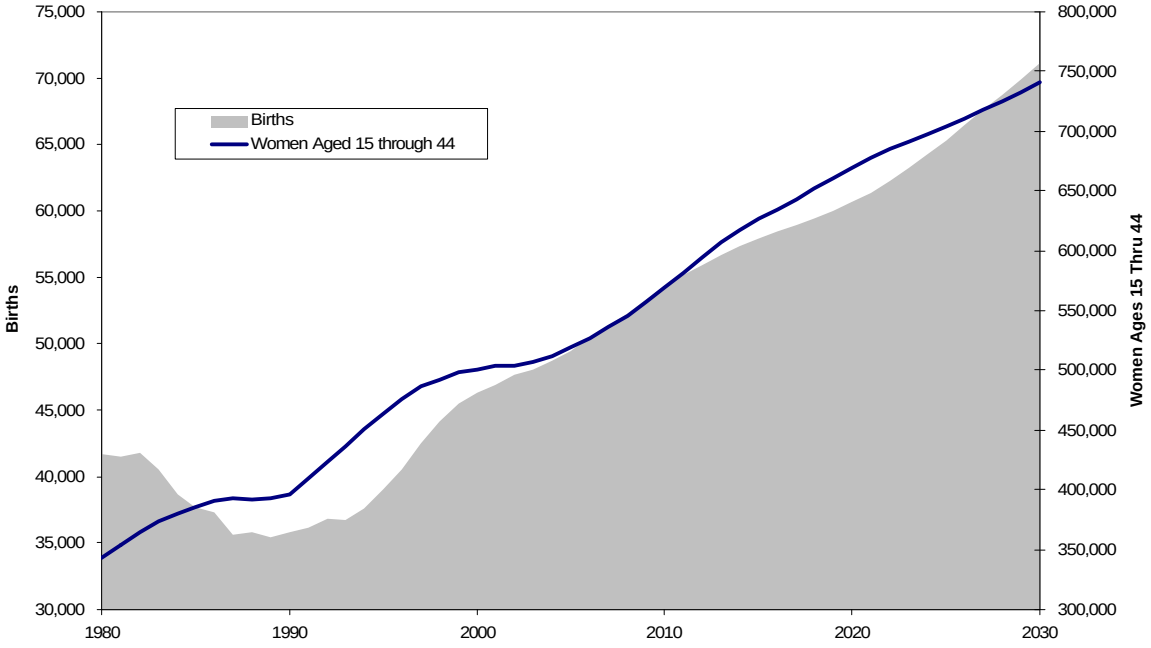
Source: Utah Bureau of Vital Records and the National Center for Health Statistics.

Figure 58
Utah Components of Population Change: 1950-2030



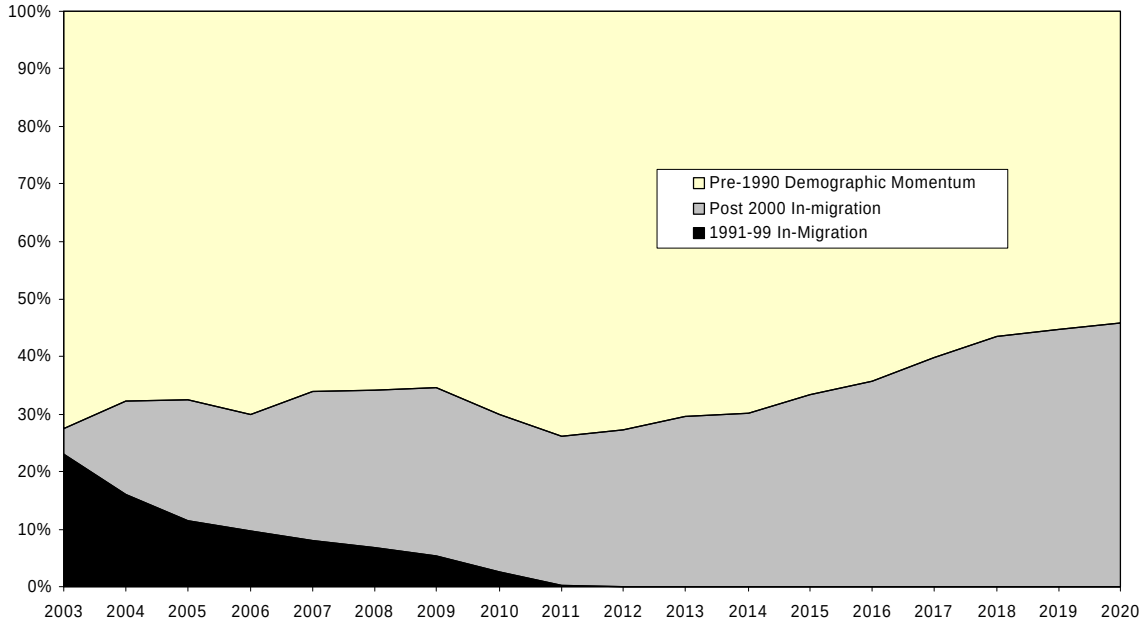
Source: Utah Population Estimates Committee, Utah Bureau of Vital Records, UPED Model System.

Figure 59
Utah Women Ages 15 through 44 & Fiscal Year Births



Source: Utah Bureau of Vital Records, UPED Model System, Bureau of Economic and Business Research Calculations.

Figure 60
Contributions to the Projected Growth in Utah School-Age Population



Source: National Center for Health Statistics, Bureau of the Census, UPED Model System, BEBR calculations.

Table 92
Utah School-Age Population: Growth, Share, and Cumulative Birth Comparison

	Total Population		Cumulative Births	School Age Population				Women Ages 15-44		
	Number	Annual Growth Rate	5 thru 17 Years Prior	Number	Annual Change Amounts	Annual Change Rates	Share of Population	Number	Annual Growth Rate	Share
1980	1,474,000	4.1%	331,781	353,265	na	na	24.0%	342,817	na	23.3%
1981	1,515,000	2.8%	339,906	363,907	10,642	3.0%	24.0%	354,104	3.3%	23.4%
1982	1,558,000	2.8%	352,152	374,998	11,091	3.0%	24.1%	364,805	3.0%	23.4%
1983	1,595,000	2.4%	367,359	385,590	10,592	2.8%	24.2%	373,353	2.3%	23.4%
1984	1,622,000	1.7%	385,622	394,783	9,193	2.4%	24.3%	380,038	1.8%	23.4%
1985	1,643,000	1.3%	404,237	403,848	9,065	2.3%	24.6%	385,335	1.4%	23.5%
1986	1,663,000	1.2%	423,003	413,958	10,110	2.5%	24.9%	390,531	1.3%	23.5%
1987	1,678,000	0.9%	440,743	425,554	11,596	2.8%	25.4%	392,732	0.6%	23.4%
1988	1,690,000	0.7%	456,017	437,980	12,426	2.9%	25.9%	392,274	-0.1%	23.2%
1989	1,706,000	0.9%	467,260	450,435	12,455	2.8%	26.4%	392,606	0.1%	23.0%
1990	1,729,100	1.4%	477,778	458,408	7,973	1.8%	26.5%	395,781	0.8%	22.9%
1991	1,775,500	2.7%	487,525	466,478	8,070	1.8%	26.3%	410,106	3.6%	23.1%
1992	1,821,950	2.6%	494,280	472,890	6,412	1.4%	26.0%	423,145	3.2%	23.2%
1993	1,866,450	2.4%	499,523	477,708	4,818	1.0%	25.6%	436,287	3.1%	23.4%
1994	1,916,000	2.7%	501,189	483,136	5,428	1.1%	25.2%	451,177	3.4%	23.5%
1995	1,959,351	2.3%	500,312	485,336	2,200	0.5%	24.8%	463,847	2.8%	23.7%
1996	2,002,400	2.2%	498,217	486,846	1,510	0.3%	24.3%	475,709	2.6%	23.8%
1997	2,048,753	2.3%	494,797	488,378	1,532	0.3%	23.8%	486,592	2.3%	23.8%
1998	2,082,502	1.6%	489,890	485,320	(3,058)	-0.6%	23.3%	492,370	1.2%	23.6%
1999	2,121,053	1.9%	486,004	483,559	(1,761)	-0.4%	22.8%	498,067	1.2%	23.5%
2000	2,150,205	1.4%	483,295	484,305	746	0.2%	22.5%	499,917	0.4%	23.2%
2001	2,187,276	1.7%	483,235	486,511	2,206	0.5%	22.2%	503,331	0.7%	23.0%
2002	2,216,175	1.3%	487,104	490,578	4,067	0.8%	22.1%	503,468	0.0%	22.7%
2003	2,254,500	1.7%	493,566	498,321	7,743	1.6%	22.1%	506,340	0.6%	22.5%
2004	2,301,301	2.1%	501,691	509,237	10,916	2.2%	22.1%	511,891	1.1%	22.2%
2005	2,355,120	2.3%	512,413	523,315	14,078	2.8%	22.2%	519,339	1.5%	22.1%
2006	2,409,802	2.3%	523,477	537,825	14,510	2.8%	22.3%	526,598	1.4%	21.9%
2007	2,470,278	2.5%	535,670	552,893	15,068	2.8%	22.4%	536,562	1.9%	21.7%
2008	2,532,770	2.5%	547,874	567,730	14,837	2.7%	22.4%	546,256	1.8%	21.6%
2009	2,598,568	2.6%	560,358	583,356	15,626	2.8%	22.4%	557,783	2.1%	21.5%
2010	2,661,902	2.4%	573,047	598,775	15,419	2.6%	22.5%	569,399	2.1%	21.4%
2011	2,723,333	2.3%	586,784	614,935	16,160	2.7%	22.6%	581,437	2.1%	21.4%
2012	2,784,211	2.2%	600,520	630,848	15,913	2.6%	22.7%	594,236	2.2%	21.3%
2013	2,843,786	2.1%	613,812	646,079	15,231	2.4%	22.7%	606,859	2.1%	21.3%
2014	2,899,066	1.9%	626,662	659,974	13,895	2.2%	22.8%	617,715	1.8%	21.3%
2015	2,951,006	1.8%	638,498	672,057	12,083	1.8%	22.8%	626,723	1.5%	21.2%
2016	2,999,680	1.6%	649,550	682,585	10,528	1.6%	22.8%	634,153	1.2%	21.1%
2017	3,046,746	1.6%	660,039	691,834	9,249	1.4%	22.7%	643,311	1.4%	21.1%
2018	3,093,597	1.5%	670,339	700,467	8,633	1.2%	22.6%	652,191	1.4%	21.1%
2019	3,138,573	1.5%	680,806	708,420	7,953	1.1%	22.6%	660,818	1.3%	21.1%
2020	3,183,388	1.4%	691,099	715,815	7,395	1.0%	22.5%	668,785	1.2%	21.0%
2021	3,232,739	1.6%	701,508	723,738	7,923	1.1%	22.4%	677,627	1.3%	21.0%
2022	3,280,563	1.5%	711,768	731,085	7,347	1.0%	22.3%	684,719	1.0%	20.9%
2023	3,329,881	1.5%	721,725	738,390	7,305	1.0%	22.2%	691,754	1.0%	20.8%
2024	3,377,841	1.4%	731,287	745,189	6,799	0.9%	22.1%	698,181	0.9%	20.7%
2025	3,428,230	1.5%	740,596	752,349	7,160	1.0%	21.9%	704,457	0.9%	20.5%
2026	3,478,682	1.5%	749,595	759,459	7,110	0.9%	21.8%	710,390	0.8%	20.4%
2027	3,528,477	1.4%	758,533	766,627	7,168	0.9%	21.7%	717,534	1.0%	20.3%
2028	3,580,083	1.5%	767,403	774,308	7,681	1.0%	21.6%	724,601	1.0%	20.2%
2029	3,632,794	1.5%	776,482	782,628	8,320	1.1%	21.5%	732,775	1.1%	20.2%
2030	3,683,687	1.4%	785,848	791,043	8,415	1.1%	21.5%	740,835	1.1%	20.1%

* Totals differ in this table from other tables due to different release dates or data sources.

Sources: Population: Decennial Censuses, Utah Population Estimates Committee, UPED Model System; Utah Bureau of Vital Records; Bureau of Economic & Business Research calculations.
Note: Cumulative birth comparison is a calculation of the total number of births that occurred 5 through 17 years prior to the given year. For example, in the year 2000, births for 1983 through 1995 were totaled.

Impact of Migration Waves

	Population			Births			School Age Population			Women Ages 15-44		
		Employment Related Migration Impacts			Employment Related Migration Impacts			Employment Related Migration Impacts			Employment Related Migration Impacts	
	Baseline	1991-99	2000-30	Baseline	1991-99	2000-30	Baseline	1991-99	2000-30	Baseline	1991-99	2000-30
1990	1,729,100	na	na	35,830	na	na	458,429	na	na	395,767	na	na
1991	1,775,500	18,493	na	36,194	na	na	466,503	3,002	na	410,093	5,935	na
1992	1,821,950	36,145	na	36,796	633	na	472,925	5,885	na	423,136	11,310	na
1993	1,866,450	52,993	na	36,738	1,168	na	477,733	8,687	na	436,279	16,234	na
1994	1,916,000	74,952	na	37,623	1,654	na	483,153	12,418	na	451,170	22,566	na
1995	1,959,351	90,699	na	39,064	2,294	na	485,353	15,089	na	463,843	26,725	na
1996	2,002,400	105,644	na	40,495	2,697	na	486,863	17,709	na	475,698	30,466	na
1997	2,048,753	122,470	na	42,512	3,076	na	488,395	20,966	na	486,595	34,673	na
1998	2,082,502	125,769	na	44,126	3,468	na	485,315	21,950	na	492,367	34,594	na
1999	2,121,053	132,445	na	45,435	3,376	na	483,563	23,780	na	498,063	35,543	na
2000	2,150,205	135,272	na	46,353	3,341	na	484,309	25,294	(1,095)	499,911	35,344	(1,539)
2001	2,187,276	137,924	(3,679)	46,873	3,179	(194)	486,503	26,900	(858)	503,322	35,173	(1,076)
2002	2,216,175	140,403	(10,374)	47,632	3,017	(159)	490,579	28,691	(2,237)	503,460	34,867	(3,021)
2003	2,254,500	142,714	(8,337)	48,034	2,863	(414)	498,298	30,470	(1,904)	506,331	34,521	(2,334)
2004	2,301,301	144,867	1,556	48,678	2,719	(324)	509,226	32,219	(127)	511,882	34,100	607
2005	2,355,120	146,877	18,242	49,485	2,589	46	523,294	33,836	2,829	519,331	33,584	5,395
2006	2,409,802	148,756	35,540	50,475	2,476	660	537,817	35,241	5,782	526,594	33,047	10,150
2007	2,470,278	150,524	58,334	51,359	2,381	1,263	552,879	36,449	9,678	536,562	32,494	16,302
2008	2,532,770	152,196	83,304	52,356	2,305	2,029	567,721	37,443	13,753	546,258	31,980	22,813
2009	2,598,568	153,792	111,644	53,345	2,248	2,824	583,354	38,264	18,326	557,776	31,561	30,044
2010	2,661,902	155,330	137,635	54,348	2,212	3,691	598,767	38,666	22,527	569,394	31,250	36,352
2011	2,723,333	156,831	161,823	55,178	2,197	4,409	614,919	38,703	26,721	581,432	31,107	41,988
2012	2,784,211	158,317	185,312	55,923	2,206	5,010	630,842	38,428	31,063	594,223	31,073	47,312
2013	2,843,786	159,806	207,642	56,653	2,235	5,538	646,075	37,764	35,565	606,853	31,101	52,231
2014	2,899,066	161,318	225,938	57,340	2,289	5,971	659,967	36,884	39,750	617,705	31,142	55,919
2015	2,951,006	162,875	241,097	57,925	2,365	6,220	672,049	35,777	43,771	626,714	31,083	58,609
2016	2,999,680	164,499	253,064	58,443	2,465	6,316	682,594	34,575	47,524	634,147	30,978	60,251
2017	3,046,746	166,204	263,135	58,938	2,582	6,269	691,836	33,377	51,213	643,304	31,026	61,275
2018	3,093,597	168,005	272,436	59,442	2,713	6,144	700,469	32,284	54,959	652,191	31,214	62,143
2019	3,138,573	169,906	279,379	60,037	2,853	5,985	708,418	31,405	58,509	660,817	31,485	62,448
2020	3,183,388	171,909	285,358	60,668	2,995	5,742	715,818	30,760	61,904	668,778	31,840	62,584
2021	3,232,739	174,005	295,046	61,355	3,132	5,476	723,749	30,367	66,072	677,613	32,246	63,872
2022	3,280,563	176,182	302,565	62,283	3,259	5,374	731,084	30,233	69,679	684,712	32,669	64,704
2023	3,329,881	178,421	310,725	63,218	3,369	5,228	738,399	30,356	73,081	691,749	33,149	65,734
2024	3,377,841	180,700	316,646	64,257	3,460	5,147	745,200	30,731	75,579	698,177	33,576	66,228
2025	3,428,230	182,995	324,239	65,289	3,529	5,043	752,355	31,339	77,862	704,460	33,986	67,272
2026	3,478,682	185,281	331,128	66,423	3,575	5,060	759,469	32,159	79,391	710,387	34,373	67,997
2027	3,528,477	187,532	336,772	67,572	3,598	5,117	766,623	33,159	80,128	717,532	34,729	68,410
2028	3,580,083	189,727	343,195	68,705	3,601	5,198	774,303	34,305	80,398	724,592	35,065	68,939
2029	3,632,794	191,842	350,419	69,878	3,585	5,371	782,629	35,555	80,327	732,768	35,423	69,700
2030	3,683,687	193,864	355,453	71,065	3,554	5,622	791,043	36,865	79,359	740,827	35,779	69,920

* Totals differ in this table from other tables due to different release dates or data sources.

Sources: Decennial Censuses, Utah Population Estimates Committee, UPED Model System; Utah Bureau of Vital Records; Bureau of Economic and Business Research Calculations.

Table 94
Impact of Migration Waves: Share of Increments

	Population			School Age Population			Women Ages 15-44		
		Employment Related Migration Impacts			Employment Related Migration Impacts			Employment Related Migration Impacts	
	Baseline	1991-99	2000-30	Baseline	1991-99	2000-30	Baseline	1991-99	2000-30
1990	na	na	na	na	na	na	na	na	na
1991	100%	40%	na	100%	37%	na	100%	41%	na
1992	100%	38%	na	100%	45%	na	100%	41%	na
1993	100%	38%	na	100%	58%	na	100%	37%	na
1994	100%	44%	na	100%	69%	na	100%	43%	na
1995	100%	36%	na	100%	121%	na	100%	33%	na
1996	100%	35%	na	100%	174%	na	100%	32%	na
1997	100%	36%	na	100%	213%	na	100%	39%	na
1998	100%	10%	na	100%	-32%	na	100%	-1%	na
1999	100%	17%	na	100%	-104%	na	100%	17%	na
2000	100%	10%	na	100%	203%	na	100%	-11%	na
2001	100%	7%	na	100%	73%	na	100%	-5%	na
2002	100%	9%	na	100%	44%	na	100%	-222%	na
2003	100%	6%	5%	100%	23%	4%	100%	-12%	24%
2004	100%	5%	21%	100%	16%	16%	100%	-8%	53%
2005	100%	4%	31%	100%	11%	21%	100%	-7%	64%
2006	100%	3%	32%	100%	10%	20%	100%	-7%	65%
2007	100%	3%	38%	100%	8%	26%	100%	-6%	62%
2008	100%	3%	40%	100%	7%	27%	100%	-5%	67%
2009	100%	2%	43%	100%	5%	29%	100%	-4%	63%
2010	100%	2%	41%	100%	3%	27%	100%	-3%	54%
2011	100%	2%	39%	100%	0%	26%	100%	-1%	47%
2012	100%	2%	39%	100%	-2%	27%	100%	0%	42%
2013	100%	2%	37%	100%	-4%	30%	100%	0%	39%
2014	100%	3%	33%	100%	-6%	30%	100%	0%	34%
2015	100%	3%	29%	100%	-9%	33%	100%	-1%	30%
2016	100%	3%	25%	100%	-11%	36%	100%	-1%	22%
2017	100%	4%	21%	100%	-13%	40%	100%	1%	11%
2018	100%	4%	20%	100%	-13%	43%	100%	2%	10%
2019	100%	4%	15%	100%	-11%	45%	100%	3%	4%
2020	100%	4%	13%	100%	-9%	46%	100%	4%	2%
2021	100%	4%	20%	100%	-5%	53%	100%	5%	15%
2022	100%	5%	16%	100%	-2%	49%	100%	6%	12%
2023	100%	5%	17%	100%	2%	47%	100%	7%	15%
2024	100%	5%	12%	100%	6%	37%	100%	7%	8%
2025	100%	5%	15%	100%	9%	32%	100%	7%	17%
2026	100%	5%	14%	100%	12%	21%	100%	7%	12%
2027	100%	5%	11%	100%	14%	10%	100%	5%	6%
2028	100%	4%	12%	100%	15%	4%	100%	5%	7%
2029	100%	4%	14%	100%	15%	-1%	100%	4%	9%
2030	100%	4%	10%	100%	16%	-12%	100%	4%	3%

Sources: Decennial Censuses, Utah Population Estimates Committee, UPED Model System; Utah Bureau of Vital Records; Bureau of Economic and Business Research Calculations.

Table 95
Impact of Migration Waves: Annual Changes

School Age Population

		Employment Related Migration Impacts			Projection Effects	
	Baseline	1991-99	2000-30	Pre-1990 Demographic Momentum	Employment Related Migration	Pre-2000 Demographic Momentum
2003	7,719	1,779	333	5,607	333	7,386
2004	10,928	1,749	1,777	7,402	1,777	9,151
2005	14,068	1,617	2,956	9,495	2,956	11,112
2006	14,523	1,404	2,953	10,166	2,953	11,570
2007	15,062	1,209	3,896	9,957	3,896	11,166
2008	14,842	994	4,075	9,773	4,075	10,767
2009	15,633	821	4,573	10,239	4,573	11,060
2010	15,413	402	4,201	10,810	4,201	11,212
2011	16,152	37	4,194	11,921	4,194	11,958
2012	15,923	-	4,342	11,581	4,342	11,581
2013	15,233	-	4,502	10,731	4,502	10,731
2014	13,892	-	4,185	9,707	4,185	9,707
2015	12,082	-	4,021	8,061	4,021	8,061
2016	10,545	-	3,753	6,792	3,753	6,792
2017	9,242	-	3,689	5,553	3,689	5,553
2018	8,633	-	3,746	4,887	3,746	4,887
2019	7,949	-	3,550	4,399	3,550	4,399
2020	7,400	-	3,395	4,005	3,395	4,005
Total	225,239	10,013	64,141	151,085	64,141	161,098
Share	100%	4%	28%	67%	28%	72%

Cumulative Impacts

		Employment Related Migration Impacts			Projection Effects	
	Baseline	1991-99	2000-30	Pre-1990 Demographic Momentum	Employment Related Migration	Pre-2000 Demographic Momentum
2003	7,719	1,779	333	5,607	333	7,386
2004	18,647	3,528	2,110	13,009	2,110	16,537
2005	32,715	5,146	5,066	22,503	5,066	27,649
2006	47,238	6,550	8,019	32,669	8,019	39,219
2007	62,300	7,758	11,915	42,627	11,915	50,385
2008	77,142	8,753	15,990	52,399	15,990	61,152
2009	92,775	9,573	20,563	62,639	20,563	72,212
2010	108,188	9,975	24,764	73,449	24,764	83,424
2011	124,340	10,013	28,958	85,369	28,958	95,382
2012	140,263	10,013	33,300	96,950	33,300	106,963
2013	155,496	10,013	37,802	107,681	37,802	117,694
2014	169,388	10,013	41,987	117,388	41,987	127,401
2015	181,470	10,013	46,008	125,449	46,008	135,462
2016	192,015	10,013	49,761	132,241	49,761	142,254
2017	201,257	10,013	53,450	137,794	53,450	147,807
2018	209,890	10,013	57,196	142,681	57,196	152,694
2019	217,839	10,013	60,746	147,080	60,746	157,093
2020	225,239	10,013	64,141	151,085	64,141	161,098

Table 95 (Continued)
Impact of Migration Waves: Annual Changes

Cumulative Impact Shares

		Employment Related Migration Impacts			Projection Effects	
	Baseline	1991-99	2000-30	Pre-1990 Demographic Momentum	Employment Related Migration	Pre-2000 Demographic Momentum
2003	100%	23%	4%	73%	4%	96%
2004	100%	19%	11%	70%	11%	89%
2005	100%	16%	15%	69%	15%	85%
2006	100%	14%	17%	69%	17%	83%
2007	100%	12%	19%	68%	19%	81%
2008	100%	11%	21%	68%	21%	79%
2009	100%	10%	22%	68%	22%	78%
2010	100%	9%	23%	68%	23%	77%
2011	100%	8%	23%	69%	23%	77%
2012	100%	7%	24%	69%	24%	76%
2013	100%	6%	24%	69%	24%	76%
2014	100%	6%	25%	69%	25%	75%
2015	100%	6%	25%	69%	25%	75%
2016	100%	5%	26%	69%	26%	74%
2017	100%	5%	27%	68%	27%	73%
2018	100%	5%	27%	68%	27%	73%
2019	100%	5%	28%	68%	28%	72%
2020	100%	4%	28%	67%	28%	72%

Sources: Population: Decennial Censuses, Utah Population Estimates Committee, UPED Model System; Utah Bureau of Vital Records; BEBR calculations.

Water Conservation and Pricing

Overview

Water agencies of Utah continue to search for ways to improve the efficiency of water use. The way water is priced often receives criticism with the claim that our overuse is a direct result of underpricing, and that demand would adjust to the supply over time if water was priced at its full cost. Indeed, past national studies have shown that while Utah's water use is second highest in the nation, our prices are among the lowest. This discussion explores two aspects of the water-pricing question - what does it cost now? And, how is it paid for?

Introduction

Each year a survey of the state's community drinking water systems is conducted by the Division of Drinking Water.[1] The survey is funded jointly by the Utah Division of Water Rights, the Utah Division of Water Resources, and the Utah Division of Drinking Water. The survey gathers a variety of information, including water withdrawals, water usage, anticipated projects, and rate structures. A summary of the survey findings for 1999, as compiled by the Division of Drinking Water, are presented in this chapter.[2]

Average Water Bill (cost/month/connection)

The average water bill in Utah is $27.77 per month, per connection. This figure was calculated by dividing total water system income from billings and taxes, by the total number of connections. This does not include income to water systems from connection fees or impact fees. Furthermore, it should be noted that 58% of public drinking water systems have a separate irrigation system serving some or all of their service area (Utah is unique in this respect). It also does not include any expenses associated with secondary irrigation systems.

The average monthly water bill of $27.77 per month amounts to $333 per year, per connection. Utah's median adjusted gross income in 1998 was $30,461. Thus, the average yearly water bill is 1.09% of median adjusted gross income, although historically, it has been around 1%.

Average Water Rate (cost/1000 gallons)

An alternative way of expressing the expense of water is in terms of cost/1000 gallons. Two methodologies were used in the study to determine the average water rate.[3] The first method was to apply a typical, theoretical water use pattern to known residential rate structures. The result using this method was $1.00 per 1000 gallons. The second method was to examine actual billings for residential, commercial, industrial, and institutional customers. The result using this method was $1.07 per 1000 gallons.

An attempt was made to compare Utah water rates with national levels. A national study on water rates is conducted by Raftelis Financial Consulting (www.raftelis.com). Their 2000 study using data compiled during 1999, indicated that the national average billing for residential water use amounts to $2.02 per 1000 gallons. Thus, it appears that Utah's water bills are approximately 50% of the national average. This study presented data on impact and connection fees but did not mention any taxes being levied to pay a portion of water costs. The absence of taxes would require higher water rates and may explain some of the difference in rates between Utah and the national average.

The Raftelis study also presented the water prices for 25 cities in 12 western states, which average $1.62 per 1000 gallons. Since these cities represent climatic and institutional conditions more similar to Utah, i.e., landscape irrigation is required in most instances and U.S. Bureau of Reclamation assisted projects provide major water supplies, this price may serve as a better comparison to Utah's water prices. The average water price in Utah is 66% of the western cities average.

Types of Rate Structures

Typically, water customers are billed monthly for water use. They are billed according to a pre-determined rate structure, an example of which is shown below:

Base Rate: $15.00 for up to 10,000 gallons
Overage Block 1: $0.50 per 1,000 gallons for the next 15,000 gallons
Overage Block 2: $0.75 per 1,000 gallons for the next 15,000 gallons
Overage Block 3: $1.00 per 1,000 gallons for additional usage

The rate structure shown above would tend to encourage conservation. As water use rises above that allowed in the base rate, it becomes more expensive. This type of rate structure is referred to as an "increasing cost" rate structure.

Average Water Use (gallons/person/day)

Previous work done by the Utah Division of Water Resources concludes that the average daily use in Utah is 317 gallons per person, per day (gpcd). Recent studies from the U.S. Geological Survey estimate that the national average is approximately 179 gpcd using 1995 data. Water use data for the Upper and Lower Colorado River basins and the Great Basin, which includes Utah and surrounding states, show an average of 250 gpcd. Thus, Utah's water use appears to be about 77% more than the national average and 27% more than three-basin average. Other studies show national water use averages 150 gpcd, less that half of Utah's usage.

Subsidies for Water System Projects

The survey indicated that in Utah approximately $142 million per year is spent on drinking water projects (exclusive of large federal projects such as the Central Utah Project). Of this amount, $29 million originates from Federal or State funding agencies.

As can be seen, approximately 20% of the funds needed for drinking water projects originate from state or federal agencies. Approximately $16 million (11%) originated from the Federal government via Rural Development, Community Development Block Grant, Community Impact Board and the Utah Drinking Water Board's Federal State Revolving Fund (SRF) program. An estimated $13 million (9%) originated from State Government via the Utah Drinking Water Board, the Utah Board of Water Resources, and a 20% State contribution to the Drinking Water Board's Federal SRF program.

Conclusion

The statewide water system income is $223 million annually. Approximately 17% of this is for capital costs paid as one-time impact

[1] The results of the study should be used cautiously. The survey report is not a peer-reviewed scientific study and data was not field-verified. Not all community drinking water systems responded to the survey.

[2] Copies of the full report can be obtained from the Division of Drinking Water.

[3] Please note that these water rates only reflect income to water systems from billings. They do not include income from taxes, impact fees or connection fees. If these are included, the cost rises to $1.51 per 1000 gallons.

and connection fees. An estimated 10% is paid with property taxes yearly and is likely used to cover capital related debt service costs of the water providers.

The study shows that $29 million is allocated for capital projects from state and federal funding sources. Most of this amount comes from revolving loans and is paid back to the funding agency at a reduced interest rate. Estimating the amount of the subsidy provided to the water agencies by this reduction was not within the scope of the study.

Perhaps most important to the water conservation aspect of the pricing issue is that 74% of the water systems currently have rate structures that contain little or no incentive to use water efficiently. More important, however, is the amount of water delivered under these “low/no” incentive rates. An examination of the data generated in this study shows approximately 75% of all connections in the state are in systems using the uniform cost structure. This suggests additional efficiencies could be achieved if the larger water retail agencies would adopt more aggressive rate structures.

Table 96
Rate Structures by Type in Utah

Residential Rate Structure Type	Number of Systems	Percent of Systems
Decreasing Cost	8	4%
Uniform Cost	164	70%
Increasing Cost	64	26%
Total	233	100%

Source: Utah Department of Environmental Quality, Division of Drinking Water: Survey of Community Drinking Water Systems, October 18, 2000.

Table 97
Statewide Water System Income

Category	Amount	Percent of State Total
Billings	$164,000,000	73%
Taxes	$22,000,000	10%
Impact Fees	$22,000,000	10%
Connection Fees	$15,000,000	7%
Total	$223,000,000	100%

Source: Utah Department of Environmental Quality, Division of Drinking Water: Survey of Community Drinking Water Systems, October 18, 2000.

Table 98
Subsidies for Water System Projects

Agency	Actual Allocations FY 2000 (millions)	Percent of Total Allocations	Percent of $142 Million Project Total
Utah Drinking Water Board State Revolving Fund	$4.4	15%	3.1%
Utah Drinking Water Board Federal SRF	$9.5	33%	6.7%
Utah Board of Water Resources	$6.2	22%	4.3%
Utah Community Impact Board	$2.5	9%	1.8%
Utah Community Development Block Grant	$1.3	4%	0.9%
Rural Development (USDA)	$4.9	17%	3.5%
Total	$29	100%	20.3%

Source: Utah Department of Environmental Quality, Division of Drinking Water: Survey of Community Drinking Water Systems, October 18, 2000.