Economic Report To The Governor

1990
STATE OF UTAH
NORMAN H. BANGERTER, GOVERNOR

ECONOMIC REPORT TO THE GOVERNOR

1990

STATE OF UTAH

NORMAN H. BANGERTER, GOVERNOR

State Economic Coordinating Committee

Utah Office of Planning and Budget
Utah Department of Employment Security
Utah Department of Community and Economic Development
Utah State Tax Commission
Utah Energy Office
University of Utah, Bureau of Economic and Business Research
First Security Bank Corporation

State of Utah

TABLE OF CONTENTS

PREFACE v

LIST OF TABLES vii

LIST OF FIGURES ix

LIST OF CONTRIBUTORS xi

EXECUTIVE SUMMARY 1

ECONOMIC DEVELOPMENT ACTIVITIES 15

ECONOMIC INDICATORS AND CURRENT CONDITIONS 19

- LABOR MARKET ACTIVITY 21
- PERSONAL INCOME 37
- DEMOGRAPHIC CHARACTERISTICS 45
- GROSS TAXABLE SALES 59
- CONSTRUCTION ACTIVITY 67
- PRICES, INFLATION AND UTAH'S COST OF LIVING 73
- ENERGY AND MINERALS PRODUCTION AND PRICES 79
- TAX COLLECTIONS 93
- REGIONAL COMPARISONS 97

ECONOMIC OUTLOOK 103

- NATIONAL OUTLOOK 105
- UTAH OUTLOOK 107
- UTAH'S LONG TERM OUTLOOK 111

SPECIAL STUDIES 121

- AGRICULTURE 123
- OCCUPATIONAL OUTLOOK 131
- BUSINESS AND HOUSEHOLD TAXES IN SELECTED STATES 139
- EVALUATION OF UTAH'S BUSINESS TAXES 147

APPENDIX 151

PREFACE

This report describes and analyzes Utah's economic performance over the past year. It points out some significant trends and provides an outlook for the short and long term. This report describes in some detail the changes and trends in employment, retail sales, construction, wages and personal income in Utah. It also includes information on Utah's population growth and demographic trends. Considerable national economic information including GNP, interest rates and prices are also included.

This 1990 Economic Report to the Governor is the fourth of an annual series. It represents a joint effort between several state agencies which form the State Economic Coordinating Committee. This committee was formed in 1986 by request of Governor Bangerter. The purpose of the committee is to promote better economic data and analysis of economic issues through interagency cooperation. Another purpose is to discuss the outlook of the economy for assistance in developing revenue estimates. The committee anticipates publishing this report annually. The committee is comprised of the following agencies:

Utah Office of Planning and Budget
Utah Department of Employment Security
Utah Department of Community and Economic Development
Utah State Tax Commission
Utah Energy Office
University of Utah, Bureau of Economic and Business Research

Beyond these agencies, contributions to the committee and to this report were made by Dr. Kelly Matthews, Vice-President and Economist, First Security Bank Corporation. Also the chapter titled "The Evaluation of Utah's Business Taxes" was contributed by Price Waterhouse, Washington National Tax Service.

This report contains the most recent data available as of December 15. However, all of the data for many of the categories for 1989 have not been collected. Therefore, annual totals and annual averages have been estimated for the current year based on all actual data which have been collected to date. These data are referred to in the report as preliminary estimates. Revisions to these data items will be made later in 1990, once all final data have been collected and processed.

Much of the information which is described in this report is found in other state publications. This report is an effort to summarize and interpret much of that economic and demographic information in a single document. Other regular publications from the state agencies involved in the report where more detailed information can be found are listed in the appendix.

LIST OF TABLES

Executive Summary — Page

Actual and Estimated Economic Indicators 13

Labor Market Activity

1. Utah and U.S. Labor Force Participation Rates 29
2. Total Unemployment Rates in Utah by County 30
3. Characteristics of Utah Unemployed Persons 31
4. Duration of Employment in Utah 32
5. Reasons for Unemployment in Utah 33
6. Utah Labor Force, Nonag Jobs and Total Wages 34
7. County Employment by Major Industry 35
8. Utah's Major Employers 36

Personal Income

9. Personal Income Growth Rates Utah and U.S. 41
10. Components of Utah Total Personal Income 42
11. Total Personal Income by County 43
12. Personal Income Trends Utah and U.S. 44

Demographic Characteristics

13. Utah Population, Net Migration, Births and Deaths 50
14. Utah Population Estimates by County 51
15. Total Fertility Rates Utah and U.S. 52
16. Utah Household Estimates 53
17. County Household Estimates 54
18. Utah and U.S. Median Age 55
19. Rankings of States by Selected Age Groups 56
20. Dependency Ratios for the States 57

Gross Taxable Sales

21. Utah Gross Taxable Sales 66

Construction Activity

22. Residential Construction Activity in Utah 70
23. Nonresidential Construction Activity in Utah 71
24. Utah Nonresidential Construction by Sector 72

Prices, Inflation, and Utah Cost of Living

25. U.S. Consumer Price Index 75
26. U.S. Implicit Price Deflator 76
27. ACCRA Cost-of-Living Comparisons 77
28. Wasatch Front Cost-of-Living Index 78

LIST OF TABLES - CONT.

Energy and Minerals Production and Prices — Page

29. Utah Energy Production, Prices and Value — 87
30. Utah Coal Production and Price — 88
31. Utah Oil and Natural Gas Resource Development — 89
32. Top 15 Oil Companies and Ten Largest Fields — 90
33. Utah Energy Consumption — 91

Tax Collections

34. Selected Annual Forecast and Historic Tax Collections — 95

Regional Comparisons

35. Mountain Division Economic Performance — 101

Utah Outlook

36. Actual and Estimated Economic Indicators — 109

Utah's Long Term Outlook

37. Utah Economic and Demographic Summary — 116
38. Utah Projected Population by Age Group — 117
39. Utah Population Projections by County — 118
40. Utah Industry Employment Projections — 119
41. Utah and U.S. Median Age — 120

Agriculture

42. State Personal and Farm Income, Acreage and Value — 127
43. Total Personal and Farm Income by County — 128
44. Utah Agricultural Statistical Summary — 129

Occupational Outlook

45. Utah Jobs and Job Opening Summary — 136
46. Top 50 Occupations in Demand — 137

Business and Household Taxes in Selected States

47. Household and Business Direct Taxes — 144
48. Direct Taxes as a Percent of Personal Income — 145
49. Changes in Taxes, Personal Income and GSP — 146

LIST OF FIGURES

Labor Market Activity — Page

1. Labor Force Participation Rate: Males by Age: 1988 — 22
2. Labor Force Participation Rate: Females by Age: 1988 — 22
3. Unemployment Rates for Utah: 1978-1989 — 23
4. Utah Nonagricultural Employment: 1954-1989 — 24
5. Utah Nonagricultural Employment: Annual Percent Change: 1954-1989 — 24
6. Percent of Utah Employment in Goods-Producing Industries — 26
7. Utah Nonfarm Average Monthly Wages: 1980-1989 — 27
8. Utah Average Annual Pay as a Percent of U.S.: 1978-1988 — 27

Personal Income

9. Utah and the United States Personal Income Growth Rates: 1969-1989 — 37
10. Utah's Distribution of Earnings Income by Industry for 1980 and 1989 — 38
11. Utah Per Capital Personal Income as Percent of U.S.: 1968-1988 — 40

Demographic Characteristics

12. Utah Population: 1950-1989, Annual Percent Change — 45
13. Components of Utah Population Change — 47
14. Total Fertility: 1960-1987 for Utah and the United States — 47

Gross Taxable Sales

15. Change in Gross Taxable Sales: 1981-1989 — 59
16. Shares of Utah's Sales Tax Base: 1984 and 1988 — 60
17. Retail Sales and Business Investment: 1980-1991, Second Quarter — 61
18. U.S. and Utah Consumer Sentiment Indices: 1979-1989 — 63
19. Utah Business Executive Confidence Survey by Business Size — 65
20. Utah Business Executive Confidence Survey by Type of Query — 65

Construction Activity

21. Utah Residential Construction Activity: 1969-1989 — 67
22. Value of New Construction in Utah: 1969-1989 — 69

Prices, Inflation and Utah's Cost of Living

23. Increase in Prices Measure by CPI: 1981-1989 — 73

Energy and Minerals Production and Prices

24. Utah Coal Production and Average Daily Work Force: 1980-1989 — 80
25. Average Oil Price per Barrel in Utah: 1978-1989 — 83

Regional Comparisons

26. Average Annual Pay as a Percent of U.S. by State and Region: 1988 — 99
27. Nonag Employment Growth by State and Region — 99

LIST OF FIGURES - CONT.

Utah Long-Term Outlook Page

28. Utah Population by Age Group for Selected Years: 1980-2010 111
29. Utah School Age Population: 1980-2010 113
30. Utah Employment by Industry for Selected Years: 1980-2010 115

Agriculture

31. Personal Farm Income as a Percent of State Total Personal Income: 1988 124
32. Personal Farm Income as a Percent of County Total Personal Income: 1987 125

Occupational Outlook

33. Occupational Composition of Utah Jobs: 1990 132
34. Changing Occupational Composition of Utah Jobs: 1984 and 1990 132
35. New Jobs in Utah 1990 and 1995 by Major Occupational Category 134

Business and Household Taxes in Selected States

36. Business Tax Burdens for Selected States 141
37. Share of Major Taxes Paid Initially by Business 141
38. Effective Household Tax Burdens 143

Evaluation of Utah's Business Taxes

39. Average Tax Rates on Business Pretax Income by Type of Tax, by State 148

LIST OF CONTRIBUTORS

Utah Office of Planning and Budget

Michael E. Christensen, Deputy Director/State Planning Coordinator
Brad T. Barber, Director, Demographic and Economic Analysis
Patty Frandsen, Research Analyst
Natalie Gochnour, Research Analyst
Jim Robson, Research Analyst
Lance Rovig, Economist
Linda Smith, Research Assistant
Jeanine Taylor, Economist

Utah Department of Employment Security

Larry Wardle, Director, Labor Market Information
Lecia Parks Langston, Supervising Economist
Ken Jensen, Labor Market Economist
John Mathews, Labor Market Economist

Utah Department of Community and Economic Development

Randy Rogers, Economist

Utah State Tax Commission

Roger Tew, Tax Commissioner
Doug Macdonald, Chief Economist
Tom Williams, Senior Economist

University of Utah, Bureau of Economic and Business Research

Thayne Robson, Director
Frank Hachman, Deputy Director
Boyd Fjeldsted, Senior Research Economist
Jan Crispin-Little, Research Analyst
Austin Sargent, Research Analyst
Jim Wood, Research Analyst

Utah Energy Office

Richard Anderson, Director
Kevin Higgins, Assistant Director
Jeff Burks, Senior Energy Analyst
Rod Millar, Natural Resource Specialist

First Security Bank Corporation

Kelly Matthews, Senior Vice President and Economist

NORMAN H. BANGERTER
GOVERNOR

STATE OF UTAH
OFFICE OF THE GOVERNOR
SALT LAKE CITY
84114

January 24, 1989

To My Fellow Utahns:

I am pleased to present the fourth annual Economic Report to the Governor for 1990. The report is produced by the Economic Coordinating Committee which I created in 1986. It consists of the following state agencies: Office of Planning and Budget; Department of Employment Security; Department of Community and Economic Development; Tax Commission; Energy Office and the University of Utah Bureau of Economic and Business Research.

I asked the Committee to publish a report that would describe the significant economic and demographic trends affecting Utah and its citizens. From the first publication in 1987, the report has been well accepted and has become very much in demand. Thanks to the suggestions from our many readers, each report has been an improvement upon the previous one; the 1990 report is no exception.

As in the past, the report covers the trends in employment, wages, personal income, energy prices, tax revenues, population and demographics, and a national and state "Outlook." The "Special Studies" section covers four topics: Agriculture; Occupational Outlook; Business and Household Taxes in Selected States; and Evaluation of Utah's Business Taxes.

Most exciting, is that the report details the significant growth of the Utah economy during 1989. The report also summarizes the 1980s and looks at the current trends that are leading us into the 1990s. I hope that all Utahns will take the opportunity to read this report. It will help all understand our state better and help us make better decisions about our future.

Sincerely,

Norman H. Bangerter
Governor

NHB:mec

State of Utah

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

During 1989, Utah experienced its best economic performance in many years. The year will be remembered as the second best economic performance of the decade. In 1988 a major rebound began in the Utah economy, with net new job growth of nearly 20,000 jobs, a better performance than 1986 and 1987 combined. In 1989, this recovery accelerated with nearly 32,000 net new jobs. This growth has occurred mainly in the service, trade, and manufacturing sectors. Unemployment rates have dropped to a level of almost full employment. The annual unemployment rate for 1989 is estimated to be 4.7 percent, the lowest annual rate in the 1980's. Total wages, personal income, and retail sales are all estimated to grow at considerably faster rates than 1988.

During 1989, several companies announced their intention to establish labor-intensive facilities or to expand their operations in Utah. The companies will range in size from 180 to 1,000 employees. These companies include Lucus Technologies, CPS, McDonnell Douglas, Eastern Airlines, Compeq Mfg. Ltd., Automated Language Processing, WECCO, Penney's Telemarketing, Sears' Telemarketing, NCR, Holiday Inn Reservations Center, Hecla Germanium Mining, AutoMeter, American Gourmet, Sunnyside Mining, Barney's Canyon Mining, Hoyt USA, Investors Diversified Services, Roadway Package Systems, US West, Valley Camp Mining, Marriott Travelers Services, and Great America West Insurance Company.

International trade has become more significant to Utah's economy over the last several years. As a result Utah has opened three foreign trade offices in the far East. Last year Governor Bangerter went to Europe on a trade mission and afterwards announced that a fourth trade office will be opened in Brussels, Belgium in 1990.

Despite Utah's economic recovery of the last two years, there is some unfavorable news. On the down side, closures in 1989 included Grubb and Ellis, Signetics, Castle Gate Mining, Fort Douglas, Thrifty Drug, Beehive International, Rio Algom Mining, American Greetings, Western Savings of Arizona, and Hecla Silver Mining Company. Layoffs or contractions included Wicat Systems, Thiokol, First Interstate Bank, National Semiconductor, Hercules, Signetics, Umetco Mining, and Morris Travel.

Utah continued to experience out-migration in 1989, though at a much lower level. The out-migration trend has now continued for six years. Because of 1989's healthy economic performance, continued out-migration is perplexing. The best explanation appears to be that many of the new jobs created are not household sustaining, do not attract workers from out-of-state or keep people from looking in other states for employment. The out-migration phenomenon is as much a product of prosperity in other states as it is a problem in Utah's own economy. Although Utah is experiencing good growth, many other areas in the West are also growing well and can offer Utah workers higher wages. The out-migration in 1989, however, is approximately 6,300, significantly less than the 11,500 experienced last year. This out-migration has contributed to the lowering of the unemployment rate, continued housing foreclosures and the continued construction slump.

The decade of the eighties comes to a close with 1989, a decade which will long be remembered in Utah's economic history. The decade of the eighties will be remembered for:

(1). Annual average employment growth was slower than any decade since the 1930's, 2.6%.

(2). Real average annual wages (adjusted for inflation) decreased 4.9 percent during the eighties.

(3). A major restructuring of the Utah economy, characterized by a shift from the goods-producing sector to the service-producing. This shift occurred largely because of substantial gains in jobs in the service sector (over 67,000) and a significant drop in jobs in the construction and mining sector (14,000).

(4). The shutdown and eventual reopening of two of Utah's industrial giants, Kennecott Copper and Geneva Steel.

(5). The emergence of the travel, recreation and tourism industries as major industries now contributing about 8 percent of all jobs.

(6). Growth in school enrollments of 27 percent, the largest increase in the nation.

(7). A decade of out-migration that was preceded by a decade of substantial in-migration. Net out-migration is 24,000 thus far in the eighties, while net in-migration was over 150,000 during the seventies.

(8). The decline of Utah's fertility rate from 3.2 children per woman to approximately 2.5 after 20 years of virtually no change.

(9). Major flooding and mudslide problems from 1983-1987 creating a substantial economic impact.

(10). The emergence of "High Tech" industries in Utah. Firms that meet the definition of high technology now employ over 34,000 Utah workers.

The economic outlook for Utah in 1990 is more favorable than the outlook for the national economy. Next year should continue to be a good year but with projections for all economic indicators slightly lower than experienced in 1989.

This year's report includes an analysis of most of the important indicators with which the health of the Utah economy can be measured. This report also continues the Special Studies section. This year, a section on the agriculture industry is included, a special study on business and household taxes in the state, and an analysis of the occupational composition of Utah's labor market.

The following subheadings are summaries of the major sections of this report. The Executive Summary attempts to capture the essence of the sections. For a more detailed look at each of the sections, the reader is referred to the complete text. For a quick overview of some of the major economic indicators, readers are referred to the Executive Summary Table.

Labor Market Activity

Since 1978, Utah's unemployment rate has exceeded the U.S. average during two periods: for three months in 1983 (at the end of the 1982-83 U.S. recession); and for a good portion of 1987 (during Utah's own economic slump of 1986-87). Since May of 1987, the unemployment rate has fallen rapidly, dropping 2.5 percentage points to a low of 3.9 percent in September 1989. At an average rate of 4.7 percent for the year, Utah's 1989 unemployment rate will be the lowest in the 1980's. Utah's low level of unemployment is expected to continue in 1990 with the State approaching "full employment".

The economic setbacks of the 1980's have had a larger and more long lasting effect in the non-metropolitan areas in Utah than in the metropolitan counties. In 1983, 15 non-metropolitan and one metropolitan county had double digit unemployment rates. In 1987, there were still 11 non-metropolitan counties experiencing rates higher than 10 percent. Although the Utah unemployment rate has continued to drop significantly there are still two counties (Duchesne and Sanpete) that have experienced double digit unemployment rates in 1989.

Employment Growth

Nonagricultural employment in Utah surpassed the 700,000 mark for the first time in September of 1989. And although 1989's annual average level will not reach this plateau for 1989, it will in 1990. Following two very slow years in job growth for the state, the last two years have shown healthy increases of 3.1 percent in 1988 and a brisk 4.8 percent in 1989. In 1988, 19,800 new jobs were created and a surprising 31,900 new jobs in 1989. The largest growth industries for 1989 were services, 7.1 percent, trade

5.4 percent and manufacturing at 4.4 percent. Declines were recorded in mining and finance, insurance and real estate.

Utah's growth in employment is also improving with respect to national standards. Between 1980 and 1988, Utah ranked sixteenth in the nation in employment growth. During this time, total Utah employment grew by 19.5 percent while national employment grew by only 14.5 percent. From September 1988 to September 1989 Utah became the third fastest growing state in the nation in employment growth.

Wages

Total nonagricultural payroll wages in 1989 are estimated to grow by 7.6 percent. In comparison, wages in 1988 grew by 6.4 percent, and in 1987 they grew by 3.6 percent. This is another indication of Utah's continued strong economic growth in 1989. Utah's average monthly wage for nonagricultural jobs grew by 3.2 percent in 1988. The 1989 increase will be approximately 2.6 percent, resulting in an average nonagricultural monthly wage of $1,590. Unfortunately, when adjusted for inflation, Utah's nonagricultural wage has declined every year since 1984. From 1985 through 1987, the loss of higher paying jobs in primary metals, construction, and mining seems to have contributed to a decline in the rate of wage growth. In 1987 and 1988 many of those jobs came back, but at a lower wage and in fewer numbers than in previous years.

Utah's average annual pay for workers covered by unemployment insurance programs was $18,910 in 1988 - up 3.3 percent from 1987. The average increase for the nation was 4.9 percent. Consequently, Utah's average pay as a percentage of the U.S. average declined from 87.8 percent in 1987 to 86.5 percent in 1988. In fact, from 1986 to 1988, Utah lost four places in pay level ranking, from thirty-third in 1986 to thirty-seventh in 1988. As recently as 1981, Utah's pay level was 96 percent of the national average. However, if the state continues its current path toward "full employment" it is likely that competition for jobs will begin to push wages up.

Personal Income

Utah's 1989 total personal income (TPI) is forecast to be $22.2 billion, up 7.7 percent from the 1988 total. Utah's TPI increased more rapidly than that of the United States through the 1970's, and, from 1980 through 1984, the yearly rates of growth were virtually identical. However, Utah's economic slump retarded its TPI growth from 1985 to 1988 while the national growth rate continued its steady progress. Estimates for 1989 show that Utah's TPI growth has nearly equalled that of the nation.

Per capita personal income is an area's annual total personal income divided by the total population as of July 1 of that year. Utah's 1989 per capita personal income (PCI) is estimated at approximately $12,900, a 6.1 percent increase over 1988. Also real per capita income (inflation adjusted), increased in 1989 for the first time in several years. From 1982 to 1989, Utah's inflation adjusted PCI increased $1,000, compared to the $2,200 increase in the United States real PCI.

Utah's 1988 per capita personal income of $12,193 ranked forty-eighth among the fifty states. This is 73 percent of U.S. per capita income. Because Utah's population has a large number of children (the result of many years of high birth rates), this PCI comparison portrays Utah as a low income state. However, comparing state per capita income based on adult population estimates improves the Utah ranking considerably: Utah's 1988 ranking is thirty-second among the states by this measure. Utah also compares more favorably to the rest of the U.S. when using household income data. Total personal income per household in 1988 in Utah was $39,321, compared with $44,277 for the U.S. Utah's total personal income per household was 89 percent of the national figure.

Demographic Characteristics

Utah's population reached an estimated 1,715,000 on July 1, 1989. This estimate is 254,000 more persons than were counted in the 1980 Census and represents a 1.7 percent annual average growth rate for the 1980's. Utah's rate of growth nearly doubles the comparable national growth rate of 1.0 percent and

makes Utah the 9th fastest growing state since 1980. Although Utah's population has increased in each year of the 1980's, the annual growth rates decreased each year during the decade except in 1989. This year marked the first year during the 1980's that the population growth rate has increased over the previous year. The 1989 estimate of 1,715,000 is a 1.2 percent increase over the 1988 estimate of 1,695,000. Included in the 1989 estimate is a natural increase of 26,633 and an implied net out-migration of 6,300.

The reasons for the significant drop in population growth rates are twofold: six consecutive years of out-migration; and a rather sharp decline in fertility rates. The out-migration is due to an economic growth rate that has not been able to keep pace with a fast growing labor force. Utah's employment growth rates for the last few years have been above national averages, but not high enough to keep pace with those entering the labor force.

The number of live births in the state peaked in 1982 and dropped steadily in every year except 1988. The period July 1, 1988 through July 1, 1989 once again indicates a decline in the number of births (35,648 to 35,549 a 0.3 percent decline). This decline in births in the eighties is taking place in every county and every age specific group. As a result, the total fertility rate has dropped from 3.2 (3.2 children per woman during a lifetime) to an estimated 2.5 in 1988.

Gross Taxable Sales

Utah's gross taxable sales can be divided into three major components or categories: retail trade sales, business investment (which includes business equipment purchases and utility sales) and taxable service sales. Gross taxable sales represent a rather significant portion (about 53 percent) of the production side of Utah's gross state product. Between 1986 and 1987 Utah gross taxable sales fell in six out of eight quarters. If inflation is considered, real taxable sales fell in nine consecutive quarters from the first quarter of 1986 through the first quarter of 1988. However, due to collection from a large audit and to a rebound in both retail sales and business investment, gross taxable sales in current dollars have increased in 8 consecutive quarters and in real dollars in 6 consecutive quarters. Overall, gross taxable sales are estimated to grow by 6.5 percent during 1989, slightly less that 6.8 percent for 1988.

The retail trade sales component, which fell 0.6 percent in 1987, rebounded to a 5.6 percent growth rate in 1988. The 8.8 percent estimated growth in 1989 should be followed by 4 percent to 5 percent growth in 1990.

Last year it was estimated that 1989 business equipment and utility sales would grow only 0.3 percent. Through the first half of the year, these sales were down 1.4 percent compared to 1988. Given the estimated 2.2 and 4.7 percent increases in the remaining quarters of 1989, business equipment and utility sales should grow 1 percent by year-end.

After stagnating two straight years in 1985 and 1986, taxable services in Utah rebounded 13.2 percent and 8.5 percent, respectively, in 1987 and 1988. First half 1989 taxable services continued at the 1988 pace by growing 8.1 percent. However, a portion of that growth may have been due to changes to the 1987 Standard Industrial Classification. These reclassifications certainly played a part in the 57 percent first half increase in education, legal and social services.

Construction Activity

For the fifth year in a row the number of new authorized residential dwelling units (single and multi-family) declined. The total number of new permit authorized dwelling units in 1989 was 5,500, a decrease of 3.8 percent compared to 1988. Even though the number of units decreased slightly in 1989, the value of new residential construction increased 6.5 percent to $440 million.

The decreases experienced in 1987 and 1988 were due primarily to slow economic growth, a plethora of multi-family structures, relatively high mortgage interest rates, out-migration and the tax law changes. With improved economic growth in other sectors, slowing out-migration and lower mortgage interest rates occurring in 1989, the elements appear to be in place for an improving construction industry.

The major reason 1989 failed to show dramatic growth was the continued abundance of multi-family structures and a large supply of existing single family homes for sale.

Nonresidential construction activity improved considerably in 1989. In 1988, $272.1 million in new nonresidential construction was authorized. In 1989, an estimated $350 million will be authorized, an increase of 28.7 percent. The improving state economy has increased demand for nonresidential construction in 1989 and will provide increased demand in 1990. Nonresidential construction values are projected to be around $400 million in 1990, and could be higher with major construction projects for the olympic winter sport facilities and a new sports arena downtown yet to be built.

Vacancy rates for office space, industrial space and retail space have also declined throughout 1989. Currently, the rate for office space vacancy is around 18 percent and industrial space is 9.5 percent. The improving economy should continue to improve the climate for these structures in 1990.

Prices and Inflation

Inflation, as measured by the national Consumer Price Index (CPI), accelerated to an annual rate of 6.8 percent in the January - May 1989 period compared with a 4.1 percent 1988 annual average gain. During these initial months of 1989, higher prices were broadly diversified, appearing in food, transportation, energy and medical care. Raw-material commodity prices were increasing, wage and compensation rates were higher, and capacity utilization for both capital and human resources reached nearly full employment. Rising inflation, combined with a tighter monetary policy, pushed interest rates higher in February and March and by midyear inflationary pressures throughout the economy were easing. By year-end, inflation, as measured by the CPI, is estimated to be about 4.7 percent above last year. This estimated 1989 rate of inflation is moderately higher than the 4.1 percent gain in 1988.

The American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index is prepared quarterly and includes comparative data for 269 urban areas. This index measures the differences between areas in the cost of consumer goods and services, as compared with a national average of 100. The second-quarter 1989 composite index for Salt Lake City was 95.6, or 4.4 percent below the national average for the quarter. This compares with a composite index of 98.3 for the second quarter of 1988. The Provo/Orem index for the 1989 second quarter was 88.9 as compared with an index of 90.8 for the second quarter 1988. These data suggest that Utah has reduced its cost of living during 1989 with respect to the rest of the nation.

Beginning in March 1988, First Security Bank contracted with a private research firm to develop a consumer price index for the Wasatch Front. Each month, price changes of more than 500 items are measured and analyzed. During the first three quarters of 1989, the cumulative price change in the Wasatch Front Cost of Living Index (WFCLI) was 1.5 percent, compared with a national increase of 3.3 percent. In November, the WFCLI measured 100.2 (March 1988 = 100), indicating that the modest price increases in 1989 had only offset the cumulative price declines in 1988. Local food and clothing costs over the last six-month period went up more rapidly, while transportation, health care and utility prices rose at a faster pace nationwide. Housing cost increases along the Wasatch Front were very similiar to those nationwide during this period.

Energy and Minerals Production and Prices

This past year has been characterized by the increasing importance of nonfuel minerals, burgeoning coal production, and the continued decline of petroleum production in Utah. On the positive side, non-fuel minerals production will have surged to a value of $1.35 billion in 1989, led chiefly by copper production at 489 million pounds. This surge was also supported by gold and magnesium as well. Coal production will reach an all-time high in 1989, surpassing 19 million tons, valued at $471 million.

The value of coal production, which in 1984 was only 35 percent of the value of crude oil production, has approached that of crude oil in 1989. This is occurring because record coal output is coinciding with a 16 percent decline in crude oil production and approximately a 50 percent decline in crude

oil prices.

Although prices for Utah crude oils are up 27 percent from 1988, the price level is not sufficient to encourage significant new drilling. As a result, production from existing fields is reducing reserves through depletion more rapidly than new wells have been able to add to supply. Oil production decreased from 33 million barrels in 1988 to 28.3 million in 1989, a 14.2 percent decline.

Tax Collections

Tax collections increased during fiscal year 1989 due to one-time mineral lease and inheritance tax windfalls; higher profits and bonus payments at Kennecott and Geneva; strong growth in manufacturing, trade and service sectors; and expansions of new and existing firms in prominent areas such as telecommunications, aerospace, and computer and bio-medical technologies.

Income taxes were cut by 11.5 percent in a July 1988 special session of the Legislature, yet total collections fell by only 2 percent. The strength in tax collections in fiscal year 1989 prompted another special session in September 1989 to reduce the income tax another 5.7 percent. The state's sale tax rate will also drop by 2.15 percent as of January 1, 1990. There have been numerous cuts in the rates with good growth in the tax base.

The growth in tax collections should diminish in fiscal year 1990 due to income tax cuts; a reduction in the sales tax rate; declining oil prices and production; a softening in many commodity prices; lower taxable investment spending and corporate profits; slower export growth; lower real defense spending; and fewer anticipated windfalls in inheritance tax and mineral lease payments.

Regional Comparison

Comparisons of economic performance have been made with other states of the mountain division. The Mountain Division (as defined by the Bureau of the Census) includes the states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. During the past five years (1983 to 1988) the mountain region has experienced a significant amount of economic restructuring. The region has suffered from the drop in energy prices and poor commodity prices. Agriculture and energy are major elements in the economy, as are other natural resource based industries such as timber and metal mining. Weakness in these natural resource based industries spread to related industries such as construction and financial services.

As a result of these influences many states in the mountain region have not preformed as well as that of the nation during the current economic expansion. Other states in this area have had strong and sustained growth. Nevada has been a leading growth state throughout this entire period, ranking first in the region in population and employment growth and second in personal income growth.

Utah's economy during the eighties has performed better than most of its neighboring mountain states. Of the eight mountain states, Utah ranks third in nonagricultural jobs created and fourth in personal income growth and population growth from 1983-1988. During the period September 1988 to September 1989, Utah ranked second in the region in new job growth. Again, Nevada led the region. Utah also has the lowest unemployment rate in the region.

National Outlook

Many economic indicators point to a moderately strong national economy for 1989. Inflation adjusted GNP grew at 2.7 percent, consumer spending increased at 6.2 percent, inflation increased at only 2.9 percent, the trade deficit improved, worker productivity increased, and unit labor costs decreased in the third quarter. Personal income, housing starts and construction all increased in October, and retail sales improved in November.

Other indicators point to a slowing economy. Export growth weakened, factory orders fell, and production declined in the third quarter. Unemployment climbed to a 10-month high in November and

manufacturing employment has dropped in every month from March to November. After-tax corporate profits continued to fall in the third quarter after declining in the second quarter. The Index of Leading Indicators, sales of new single-family homes, and personal consumption expenditures declined in October. Consumer confidence decreased in November to its lowest level in a year.

The U.S. economy appears to be weakening and the risk of recession is in the 20 percent range. The Federal Reserve has been easing monetary policy since last June and additional easing coupled with moderate consumer spending, and a lack of inventory imbalance could be enough to prevent a recession. Real interest rates should decline due to moderating inflation, slower economic growth, and Congressional efforts to bring the federal deficit under control. The onset of a recession would require a sharp contraction in consumer spending, failure by the Federal Reserve to adequately ease monetary policy, massive defaults on debt, or some other unforeseen financial crisis. Most economists are forecasting real GNP growth in the 1 to 2.5 percent range during 1990.

Utah Outlook

Utah's economy has improved steadily since 1987, largely as a result of strong job growth in manufacturing industries, business services, health services, and retail trade. Nonagricultural jobs grew at a year-over rate of 4.6 percent for the first six months of 1989 and have continued to show strong growth. The 3.9 percent unemployment rate in November was the lowest level of the decade. Utah's Index of Leading Indicators rose in September for the fourth consecutive month. Home and retail sales have increased and business failures have decreased.

There are, however, several signs of weakness. The finance, insurance and real estate sector remains stagnated, oil production has declined, the state continues to experience out-migration, and the economic climate for smokestack industries has deteriorated. The dollar is up, export growth is down, GNP growth has slowed, the trend of commodity prices is downward, and there has been growth in new plant capacity. A strong dollar makes Utah products less competitive with foreign goods. Geneva Steel, the second largest exporter of steel in the nation, has announced production cutbacks of 25 percent. Subsequently, Geneva announced a $70 million modernization plan to reduce pollutants and become more competitive.

Utah will likely experience declining oil prices and production, slower export growth, a softening in many commodity prices, lower corporate profits and lower real defense spending, and continued out-migration in 1990. A November survey of business leaders in the West by the San Francisco Federal Reserve found deteriorating expectations for investments, with 59 percent of the respondents expecting weaker capital spending next year.

Still, the economic outlook for Utah in 1990 remains favorable. A youthful and educated workforce, inexpensive housing and labor, and a strong work ethic should continue to attract companies to Utah. Residential and nonresidential construction should improve due to declining mortgage rates and plans to construct new office buildings, a sports arena, and winter olympic facilities. Utah's population, employment, wages, and incomes should all grow moderately in 1990.

Utah's Long Term Outlook

Utah is projected to have almost one million more inhabitants in the year 2010 than were counted during the census in 1980. The projected population in 2010 of 2,346,000 represents an average annual growth of 1.6 percent from 1980. While this rate of growth is significantly lower than Utah's rate of 2.5 percent from 1950 to 1980, it is still double the national growth rate for the same period. These projections indicate, when compared with recently completed projections by the U.S. Bureau of the Census for all states, that Utah will be the ninth fastest growing state in the U.S. during the decade of the 1980's and the eighth fastest growing state in the 1990's. Utah ranked thirty-sixth among all fifty states in population in 1980 and is expected to rise to thirty-fourth place by the year 2000.

Utah's demographic makeup will change significantly over the next few decades. Utah will

continue to have a relatively rapidly growing school age population over the next five years, then peak and will begin to decline until the year 2003 when it begins to increase again. Utah's school age population will decline from about 26 percent to 22 percent of the state's population by the year 2000. By contrast, adults of working age (18-64) will increase from 55 percent to 59 percent. As a result of these demographic changes, Utah's school age dependency ratio will drop from the current rate of 49 school age children per 100 adults of working age to 38 school age children per 100 adults of working age in the year 2000. Utah is however, projected to continue to have the youngest population in the nation. Utah's median age in the year 2010 is projected to be 29 years, while the nation's median age is projected to be 39 years. Currently, Utah's median age is 26, while the nation's median age is 32. In other words, the gap between Utah's median age and the nation's will increase over the projection period.

Total state employment is projected to increase from 617,300 jobs in 1980 to 1,225,000 jobs in 2010. This increase of over 600,000 jobs represents an average annual growth rate of 2.3 percent. The overall pattern appears to be one of significant movement away from dependence on the state's traditional extractive-heavy manufacturing-government economic base and toward services and trade as driving sectors in the Utah economy. The more specific industries (2-digit SIC code) which are projected to have the fastest growth rates are machinery and electronic equipment, air transportation, services, hotels and lodging, business services and health services.

Utah's labor force will see periods of rapid increase over the next two decades. Utah will continue to have the youngest labor force in the nation. Nationally, labor shortages are occurring now in many parts of the U.S. and will become more prevalent in the future. The current pattern of out-migration is not expected to continue every year for the next two decades. However, the large increase in the labor force will create periods of some out-migration in Utah's future unless job growth is larger than has been historically experienced.

Critical Industries and Special Studies:

Agriculture

Utahns earned $195 million in personal farm income in 1987, or one percent of the State's total personal income. The percentage of personal farm income to total personal income however, varies greatly between counties. Rich County for example, derived 19.4 percent of its total personal income from farming, while Salt Lake County derived only 0.1 percent.

Utah farms are typical of farms in the mountain region. They are larger and more valuable than the national average, and are primarily cattle-based. The average Utah farm size is 710 acres, and is valued at $302,838. Of the $618 million market value of agricultural goods sold in Utah in 1987, nearly 80 percent was from livestock and their related goods. Of the total, 36 percent was from cattle alone.

Part of Utah's 14,000 farms produced nationally ranking quantities of apricots, tart cherries and mink pelts in 1987. Of the nation's total agricultural output, 0.37 percent was produced in Utah.

Occupational Outlook

The occupational composition of Utah jobs is slowly changing, reflecting changes in consumer demand for goods and services, technological advances, and changes in local, regional, national, and global markets. Although, over the last six years, no occupational category has suffered an actual decline in employment, the share of total jobs has changed.

Managerial and administrative employment has experienced a marked decline in its relative share of total jobs since 1984 with the clerical job group also losing ground. On the other hand, sales occupations have consistently increased over the same period. The production, operating, and maintenance group experienced a slight, but continued loss in employment share. The remaining job categories: professional, paraprofessional, and technical; service; and agriculture are generally holding their own -- showing less than two percent variations, either up or down -- in employment shares.

Looking at the next five years, projections indicate the Utah economy will create over 84,000 new jobs. Employment will increase from 834,300 to nearly 918,700 by 1995. The employment growth rate will average about 2.0 percent per year. In occupational terms, the sales, clerical, service, and production/operating/maintenance categories will grow faster than the average for all occupations. The managerial/administrative,professional/paraprofessional /technical, and agriculture/forestry/fishing groups will experience growth rates below the state average of two percent per year.

In each of the next five years, an average of 42,000 job openings will occur. More job opportunities will arise to fill positions vacated by workers who leave the labor force than openings due to growth in the economy. Sixty percent of the total 42,000 job opportunities will occur to replace current workers who leave the labor force and 40 percent will be the result of job growth.

Business and Household Taxes in Selected States

Despite recent personal income tax reductions, Utahn's household effective tax burden remains the highest in the West. Tax increases during the recession in 1986 steered away from business and kept household tax burdens from slipping. Recent personal income tax reductions, however, lowered the overall household burden to slightly under 8 percent. The latest July 1989 Special Session income tax cut will lower Utah's household burden to 7.78 percent of personal income.

In contrast to a high household tax burden, Utah's business tax burden dropped 0.5 percent since fiscal year 1984-85. Utah's corporate income tax rate has traditionally been one of the lowest in the nation in the past twenty years. Yet, it is likely that a large portion of this tax is exported to owners of capital outside the state's boundaries. Recent mergers have probably exacerbated the trend.

Evaluation of Utah's Business Taxes

During 1989, an evaluation of Utah's business tax competitiveness was completed by Price Waterhouse Washington National Tax Service. The study concluded that Utah taxes on business expansion are currently competitive with those of neighboring states. Thus, current state business tax policy is a positive factor supporting economic development.

Utah business taxes on the nine industries included in the study are 24 percent below the nine-state average at the Provo location and 19 percent below-average at the West Valley City location.

Manufacturing industries are generally favored in comparison with most of the service-producing industries included in the study. However, the potential impact on investment of these differences between industries is reduced to the extent that service industries operating in local markets are more likely to be able to shift the ultimate tax burden to consumers. Although the inter-industry differences may raise concerns, it should be recognized that an argument can be made for tax policies that are favorable to export industries that compete in national or international markets. Thus these inter-industry differentials may be examined by Utah officials in the context of both the state's tax and economic development policies.

Other major findings of the study include:

Relatively low business property taxes and corporate income taxes account for Utah's below-average overall business tax burden. Sales tax on business purchases are close to the nine-state average.

Property taxes are the single most important state-local tax on the industries included in the study. Business property taxes are highest in Arizona, Michigan and Texas. The lowest property taxes on businesses for the nine states are found in New Mexico, California and Washington.

New Mexico has the lowest business taxes of the nine states.

The three states with the highest effective tax rates are Arizona, Washington and Michigan.

Effective tax rates vary greatly among industries. Of the nine industries, hotels and for-profit hospitals bear the heaviest burdens because of the relative importance of the property tax and their higher-than-average shares of taxable property (structures and equipment).

The study industries with the lowest burdens in Utah are three of the four manufacturing industries (missiles, aircraft, and machinery and equipment), wholesale trade and computer services.

Executive Summary Table
Actual and Estimated Economic Indicators
December 1989

U.S. AND UTAH INDICATORS	UNITS	1987 Actual	1988 Actual	1989 Estimate	1990 Estimate	% CHG 87-88	% CHG 88-89	% CHG 89-90
PRODUCTION AND SPENDING								
U.S. Gross National Product	Billion Dollars	4,524.3	4,880.6	5,235.1	5,565.8	7.9	7.3	6.3
U.S. Real Gross National Product	Billion 1982$	3,853.7	4,024.4	4,142.7	4,226.8	4.4	2.9	2.0
U.S. Real Personal Consumption	Billion 1982$	2,513.7	2,598.4	2,669.8	2,739.1	3.4	2.7	2.6
U.S. Real Bus. Fixed Investment	Billion 1982$	455.5	493.8	509.9	515.3	8.4	3.3	1.1
U.S. Real Defense Spending	Billion 1982$	265.2	261.5	256.2	250.5	-1.4	-2.0	-2.2
U.S. Real Exports	Billion 1982$	450.9	530.1	585.3	611.5	17.6	10.4	4.5
U.S. Industrial Production	1967=100	129.8	137.2	141.4	143.2	5.7	3.1	1.3
Utah Coal Production	Million Tons	16.5	18.2	19.2	19.2	10.3	5.5	0.0
Utah Energy Off. Oil Production	Million Barrels	35.8	33.0	28.3	24.3	-7.8	-14.2	-14.1
Utah Copper Production	Million Pounds	120.0	489.0	489.0	489.0	307.5	0.0	0.0
SALES AND CONSTRUCTION								
U.S. New Auto and Truck Sales	Millions	15.0	15.5	14.9	14.7	3.3	-3.9	-1.3
U.S. Housing Starts	Millions	1.63	1.49	1.40	1.41	-8.6	-6.0	0.7
U.S. Residential Construction	Billion Dollars	226.4	232.5	234.5	248.1	2.7	0.9	5.8
U.S. Nonresidential Structures	Billion Dollars	133.8	140.4	145.0	151.0	4.9	3.3	4.1
Utah New Auto and Truck Sales	Thousands	58.3	60.7	62.6	64.0	4.1	3.1	2.2
Utah Dwelling Unit Permits	Thousands	7.3	5.7	5.5	6.5	-21.9	-3.5	18.2
Utah Residential Permit Value	Million Dollars	495.2	413.0	440.0	469.0	-16.6	6.5	6.6
Utah Nonresidential Permit Value	Million Dollars	413.4	272.1	350.0	400.0	-34.2	28.6	14.3
Utah Retail Sales	Million Dollars	6,982	7,376	7,985	8,348	5.6	8.3	4.5
Utah Gross Taxable Sales	Million Dollars	12,189	13,018	13,859	14,433	6.8	6.5	4.1
DEMOGRAPHICS AND SENTIMENT								
U.S. Population	Millions	244.0	246.4	248.8	251.3	1.0	1.0	1.0
U.S. Consumer Sentiment	1966=100	90.6	93.7	93.1	92.6	3.4	-0.6	-0.5
Utah Population	Thousands	1,680.0	1,695.0	1,715.0	1,737.0	0.9	1.2	1.3
Utah Migration	Thousands	(11.7)	(11.5)	(6.3)	(4.0)	na	na	na
Utah Consumer Sentiment	1966=100	77.9	80.0	82.3	81.9	2.7	2.9	-0.5
PROFITS AND PRICES								
U.S. Corp. Profits Before Tax	Billion Dollars	266.8	306.8	285.8	297.6	15.0	-6.8	4.1
U.S. Oil Ref. Acquis. Cost	$ Per Barrel	17.9	14.7	18.1	16.3	-17.6	22.8	-10.1
U.S. Coal Price Index	1982=100	97.1	95.4	95.5	97.7	-1.8	0.1	2.3
U.S. Ave. Copper Cathode Price	$ Per Pound	0.82	1.21	1.25	1.05	47.6	3.3	-16.0
U.S. Steel Melting Scrap Price	$ Per Long Ton	85.8	109.0	107.6	100.0	27.1	-1.2	-7.1
Utah Energy Off. Oil Prices	$ Per Barrel	17.2	14.2	18.6	16.8	-17.4	31.0	-9.7
Utah Coal Prices	$ Per Short Ton	25.7	22.9	25.1	25.6	-10.9	9.6	2.0
INFLATION, MONEY AND INTEREST								
U.S. CPI Urban Consumers	1982-84=100	113.6	118.3	124.0	128.6	4.1	4.8	3.7
U.S. GNP Implicit Deflator	1982=100	117.4	121.3	126.4	131.7	3.3	4.2	4.2
U.S. Money Supply (M2)	Billion Dollars	2,863.2	3,009.5	3,122.0	3,348.1	5.1	3.7	7.2
U.S. Real Money Supply (M2)	Billion 1982$	2,438.8	2,481.0	2,469.9	2,542.2	1.7	-0.4	2.9
U.S. Federal Funds Rate	Percent	6.66	7.57	9.22	8.17	13.7	21.8	-11.4
U.S. Bank Prime Rate	Percent	8.20	9.32	10.85	10.00	13.7	16.4	-7.8
U.S. Prime Less GNP Inflation	Percent	5.10	6.02	6.65	5.80	18.0	10.5	-12.8
U.S. 3-Month Treasury Bills	Percent	5.78	6.67	8.11	7.56	15.4	21.6	-6.8
U.S. T-Bond Rate, 30-Year	Percent	8.58	8.96	8.45	8.23	4.4	-5.7	-2.6
U.S. Mortgage Rates, Effective	Percent	9.30	9.29	10.10	9.86	-0.1	8.7	-2.4
EMPLOYMENT, WAGES AND INCOME								
U.S. Nonagricultural Employment	Millions	102.20	105.58	108.58	110.29	3.3	2.8	1.6
U.S. Unit Labor Cost Indexes	1977=100	174.2	178.8	186.9	194.3	2.6	4.5	4.0
U.S. Personal Income	Billion Dollars	3,777.6	4,064.5	4,423.8	4,717.6	7.6	8.8	6.6
Utah Nonagricultural Employment	Thousands	640.3	660.1	692.0	715.5	3.1	4.8	3.4
Utah Average Nonagriculture Wage	Dollars	18,015	18,590	19,079	19,560	3.2	2.6	2.5
Utah Total Nonagriculture Wages	Million Dollars	11,535	12,271	13,203	13,995	6.4	7.6	6.0
Utah Personal Income	Million Dollars	19,366	20,604	22,200	23,550	6.4	7.7	6.1

Source: State Economic Coordinating Committee.

ECONOMIC DEVELOPMENT ACTIVITIES

ECONOMIC DEVELOPMENT ACTIVITIES

The most powerful economic forces under a state's control are 1) the quality of public and higher education; 2) the development and maintenance of the infrastructure (roads, water systems, airports, parks, etc.); and 3) the provision of a fair and reasonable fiscal, regulatory, and legal environment. The State of Utah recognizes the importance of these forces and continues to take steps to strengthen these "pillars" of the economy.

Beyond these basic forces, however, there are other things a government can do to influence the economy. Each of the 50 states and many local governments have chosen not to leave the workings of the economy entirely to the whims of the free market system. The State of Utah has made a decision to intervene in the process, to market and build upon the strengths of our state and its people, and to identify and correct weaknesses in our system. This section will discuss some of the highlights of these "economic development activities" of government (primarily state government) during 1989.

One important step taken during the past year was the creation and adoption of an economic development plan - "Blueprint for Utah's Future: An Economic Development Policy Statement." This document was drafted and circulated during the summer and public hearings were held in September. The final document was released in November, 1989. The "Blueprint" is an important statement about priorities and directions as the State of Utah attempts to enhance the quality of life and standard of living of its residents. Perhaps most significant was the Blueprint process itself as it raised the consciousness of both public and private agencies of their role in economic development. The Blueprint constitutes a strategic plan for focusing the state's resources on economic development priorities. Copies of the "Blueprint" may be obtained from the Utah Department of Community and Economic Development, telephone (801) 538-8824.

Four Utah industries have been targeted for pro-active, focused development because of their existing relevance to Utah's economy and their potential for further expansion. The first is the aerospace industry, which is Utah's largest corporate employer, and which includes a growing number of high technology companies. A Governor's task force for enhanced development of the aerospace industry in Utah has issued its findings and recommendations, which are now being implemented. Likewise, Governor's task forces for biomedical, information technologies, and agriculture and natural resource industries are being organized. The development of these industries will be the focus of efforts in the coming months.

For a number of years there has been concern for a perceived capital shortage for business start-ups and expansion in Utah. One outgrowth of this condition or perception has been a long-standing attempt by state and higher education officials together with the business community to enhance the availability of venture capital. Some concrete results in this area have been achieved in 1989 with the establishment of one Utah based venture capital fund and the active, part-time presence of a number of out-of-state funds. The in-state fund is Utah Ventures, a $10.5 million fund managed locally. Some of the out-of-state companies that are gradually establishing a more active presence in Utah include the Denver based Centennial Fund, the Columbine Fund from Englewood, California, and the Boston based Bain Venture Capital. Perhaps even more significant is the growing importance of the annual Utah Venture Capital Conference held each January since 1984. The 1989 conference attracted 40 venture capitalists representing over $4 billion in funds. The 1990 conference is expected to be even bigger. This improved availability of venture capital is enhancing Utah's business climate.

The Utah Centers of Excellence Program was created to stimulate the commercialization of products resulting from research through partnerships formed between the state's colleges and universities and private industry. The state has invested $11.3 million in the program since it began in 1986. These monies have generated over $205 million in matching funds from federal agencies and private industry. Sixteen new companies have spun off from the research and existing participating companies have grown. The Centers Program should prove to be an excellent long-term investment for the state, paying direct economic returns as well as enhancing the technological environment in Utah.

The U.S. Olympic Committee met in June of 1989 and selected Salt Lake City as its choice to bid for the 1998 Winter Olympics. In November, 1989 Utah voters approved of action taken earlier by the

Legislature to authorize the use of 1/32 of one percent of the state sales tax for construction of critical facilities for the Games. The International Olympic Committee will make its selection in 1991. If successful, the bid for the Olympic Games could have a major economic impact in the state. The exact extent of that impact is unknown and would depend on such factors as the television contract, prudent financial management on the part of the Salt Lake Organizing Committee, usability and attraction of new facilities before and after the Games, and any increased tourism and economic activity as a result of the enhanced image of Utah following the Games. Based on the experience of recent host cities of the Olympic Games, particularly Calgary, Canada, there is good reason to believe that the overall impacts can be successfully managed and can produce a positive experience for the State of Utah.

Utah's business recruitment efforts have become more successful as the nation's labor supply has grown tighter and companies encounter greater difficulties in finding literate, trained workers at a competitive wage level. During 1989, six companies announced their intention to establish major labor-intensive facilities along the Wasatch Front. The six companies will range in size from about 180 to 1,000 employees. They are Great America West Insurance Company, Sears Telecatalog Center, Penny's Catalog Center, Holiday Inn Reservations, Compeq Manufacturing Ltd., and Marriott Telemarketing. Another very significant corporate location decision -- and not necessarily for a labor-intensive facility -- was made by Thiokol Corporation. Thiokol, now the state's largest private employer, has had a major Utah presence for over 30 years. However, the company had been based out-of-state, most recently in Chicago and known as the Morton-Thiokol Corporation. During 1989, the company decided to split its two main activities, chemicals and aerospace, into two separate companies. Morton Chemicals remained in Chicago. Thiokol, with activities in at least a half dozen states, launched a nation-wide search for an appropriate corporate headquarters. In June, the company announced its decision in favor of Ogden, Utah. The corporate headquarters involves roughly 100 senior level executives. The announcement was a major coup for both Ogden and the State of Utah.

International trade has grown significantly during the past decade as markets have become increasingly global rather than regional or national. The State of Utah established a small International Trade Office in 1983 to promote Utah exports and attract foreign investment. That program has now become a $1 million effort that includes three overseas offices, all in the Far East. In 1989, the Governor announced his hope to establish a fourth overseas trade office. This one would be in Brussels, Belgium and could be operational sometime in 1990, pending legislative authorization.

The competition for new business investment is intense. Cities and states literally fall over one another with promises of incentives to lure new economic activity to their areas. Utah has generally not been willing or able to offer the kind of incentives that are commonly offered in some states, especially Southern States. What Utah does offer is a high quality labor force at a reasonable cost, a good location with excellent transportation infrastructure, a very competitive business tax climate, a reasonable regulatory environment, a growing reputation as center for high technology, and an outstanding quality of life including world class recreational and cultural opportunities in a relatively uncrowded, clean, and safe setting. Beyond these basic incentives a new company might also receive job training subsidies for new workers and possibly road and utility improvements or even low-cost land from a city or county. In Utah, as in other states, these negotiations for incentives are conducted with very little understanding of the total long-term costs and benefits of each project. Hopefully, that will change soon thanks to a study currently undertaken by the State Office of Planning and Budget, the University of Utah's Bureau of Economic and Business Research, and the Department of Community and Economic Development. Two components of this "Fiscal Impact of Economic Development" study include detailed case studies and the development of a model that will allow state and local officials to better understand the benefits and costs of each proposed development as it comes along. The study will be completed by July, 1990.

ECONOMIC INDICATORS AND CURRENT CONDITIONS

LABOR MARKET ACTIVITY

Utah's economic turnaround, that began in 1988, continued with growing strength in 1989. The rate of job growth in the state was much higher in 1989 than at the start of the year. As a result, there has been a continued decline in the state's unemployment rate. This decline has occurred despite a substantial number of individuals reentering the workforce.

One area of the Utah economy that continues to lag behind the nation is wages. However, if the State continues its current path toward "full employment", competition for employees could begin to push wages up. The following section will describe these issues in greater detail.

Labor Force Participation Rates

During 1988 (the most current detailed figures available), the percentage of the noninstitutional population aged 16 and older participating in the labor force dropped slightly from 70.0 percent in 1987 to 69.2 percent. This rate is still substantially higher than the national rate due primarily to the younger labor force in Utah. (see Table 1) Individuals between the ages of 20 and 44 are more likely to participate in the labor force than workers over the age of 45. In addition, Utah teenagers have a much higher participation rate than do their counterparts in other states.

As is true nationally, Utah men are more likely to be in the labor force than are Utah women. However, it is a well publicized fact that more and more women are entering the labor force. The percentage of working age women in the workforce had nearly doubled from 1950 to 1980 and has increased by another ten percent this decade. At the same time the participation rate among men has decreased slightly since the 1950's. As it stands, about 59 percent of Utah's working age women, and 79 percent of Utah's working age men participate in the labor force. Up until about 1970 the percentage of women in Utah's labor force was lower than the national figure. By 1980 the percentage of women working in Utah was the same as the U.S. average. Currently there are a larger percentage of women in the labor force in Utah than there are on average in other states. Much of this can also be attributed to Utah's relatively young population (see Figures 1 and 2).

During 1988, the labor force participation rates among both men and women dropped very slightly in the state. Even though 4,000 men entered the labor force in 1988, there was an increase of 8,000 in the number of men in the state over the age of 16.

Unemployment

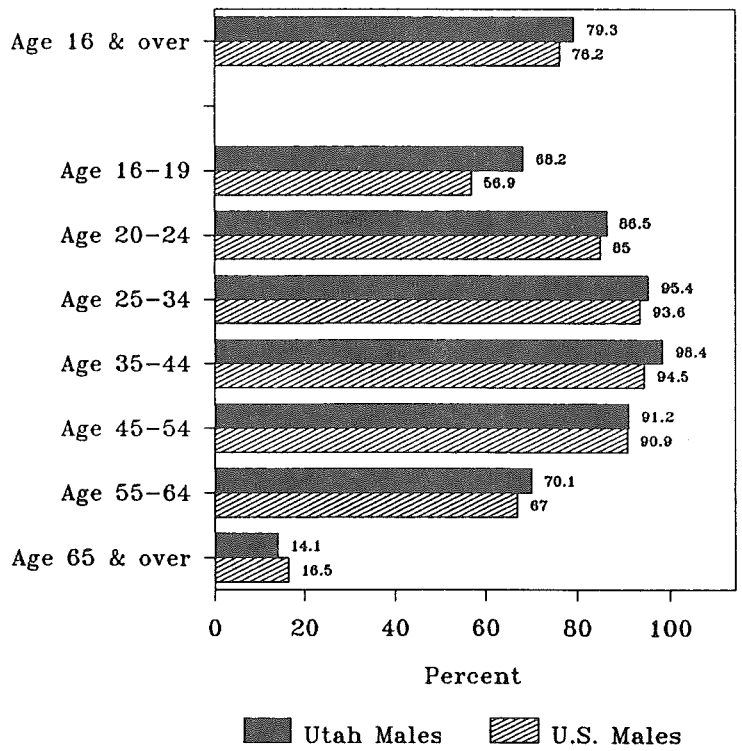
The labor force compromises both employed and unemployed persons. To be defined as unemployed an individual must not only be out of work but must also be actively seeking employment. The unemployment rate is the percentage of the labor force that is unemployed. Historically, Utah has had an unemployment rate one or two points below the national average (see Figure 3).

Since 1978, Utah's unemployment rate has only exceeded the U.S. average for three months in 1983 (at the end of the 1982-83 U.S. recession), and for a good portion of 1987 (during Utah's own economic slump). The 1987 unemployment rate was the highest in the State since 1984.

The jobless rate hit 6.8 percent in May 1987 at the peak of the 1985 - 1987 economic slump. Since then, the unemployment rate has fallen rapidly. During the next 28 months, the unemployment rate dropped 2.9 percentage points to 3.9 percent in September 1989. At 4.7 percent, Utah's 1989 unemployment rate will be the lowest in the 1980's (see Table 2). This is a remarkable turnaround from 1987's 6.3 percent. The trend is expected to continue in 1990 as the state approaches "full employment". The average rate in 1990 should drop slightly to 4.4 percent.

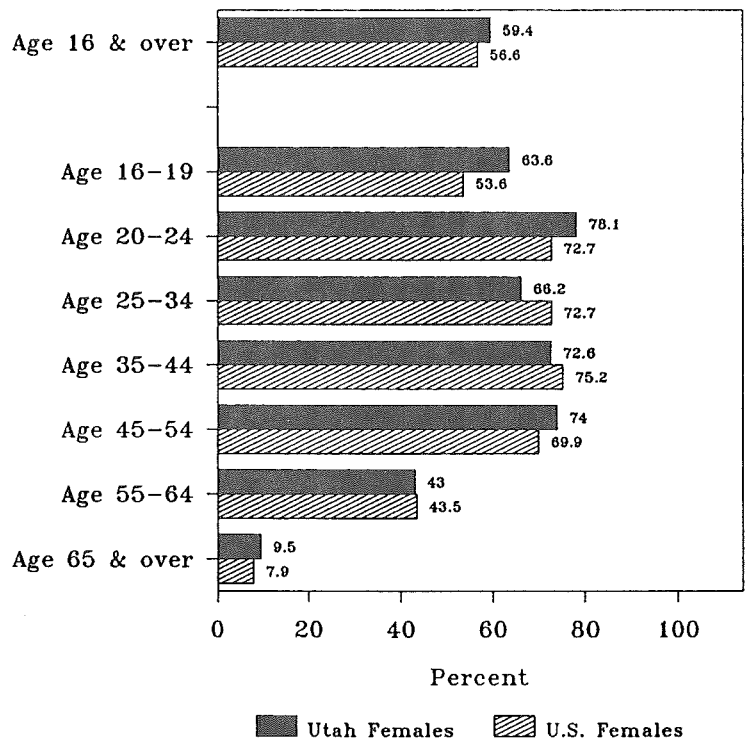
The economic setbacks of the 1980's have had a larger and more long lasting effect in the non-metropolitan areas in Utah than in the metropolitan counties. In 1983, when the state's overall unemployment was 9.2 percent, 15 non-metropolitan and one metropolitan county had double digit

Figure 1
Labor Force Participation Rate
Males Age 16 and Over: 1988



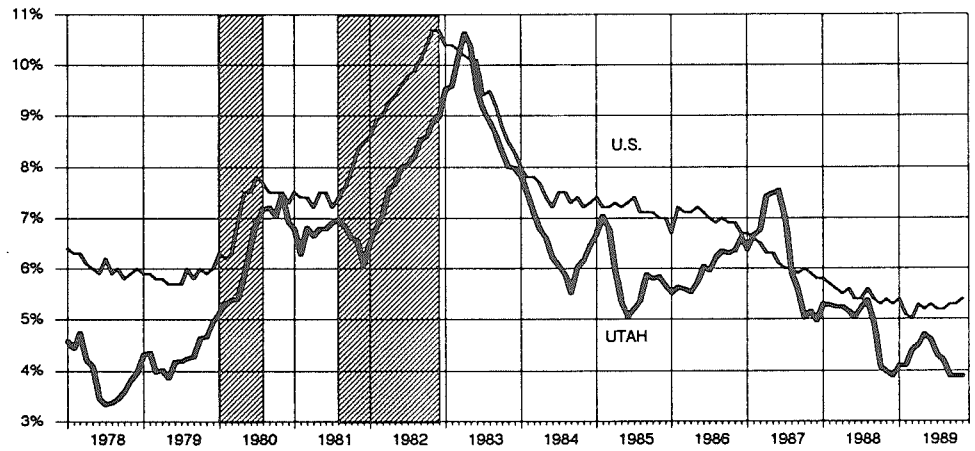
Source: Ut Dept of Employment Security

Figure 2
Labor Force Participation Rate
Females Age 16 and Over: 1988



Source: Ut Dept of Employment Security

Figure 3
Unemployment Rates for Utah and the United States: 1978–1989



Source: Ut Dept of Employment Security

unemployment rates. In 1987 with a much lower unemployment rate statewide of 6.3 percent there were still 11 non-metropolitan counties experiencing rates higher than 10 percent. Although the Utah unemployment rate has continued to drop significantly, there are still two counties (Duchesne and Sanpete) that experienced double digit unemployment rates in 1989.

Even though many of Utah's counties experienced a dramatic drop in jobless rates during 1988, the economic vitality of some of these counties is still marginal. Declining jobless rates in these areas are not the direct result of new job opportunities but of a declining number of workers in the area.

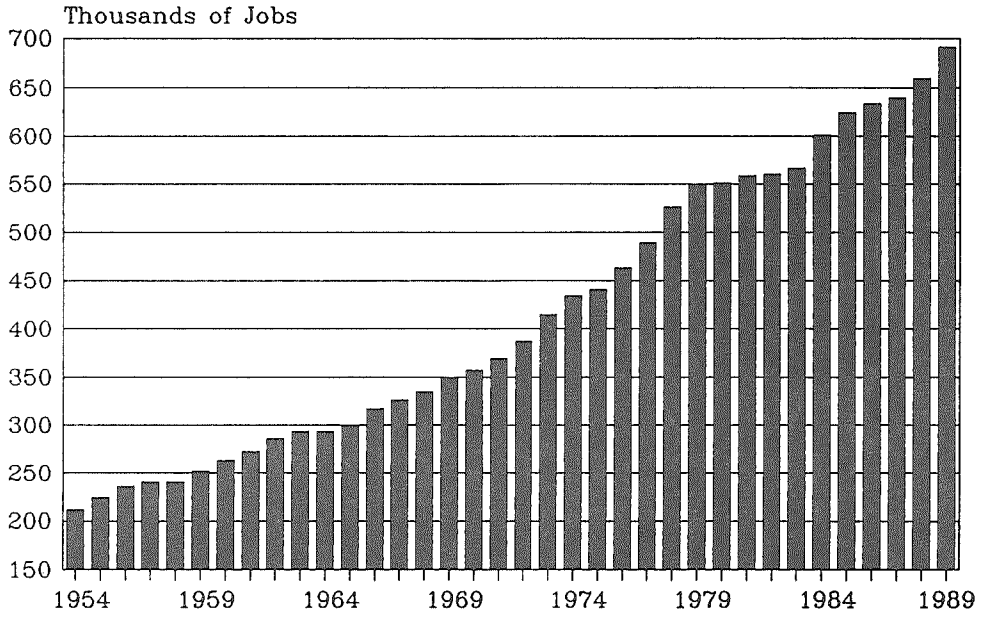
Not only has the number of people employed in the state increased over the last several years, but the ranks of the unemployed has decreased drastically as well. There are 27,000 fewer people unemployed in the state now than in 1983 when there were 64,000 people out of work. This represents a 58 percent drop in just six years. The annual average of unemployed in 1990 (36,000) is expected to drop slightly from 1989's 37,000.

Characteristics of the Unemployed

Teenagers and minorities are the segments of the population that suffer the most from unemployment both in Utah and nationally. As is normally the case, the unemployment rate among teenagers in 1988 (ages 16 - 19) at 12.2 percent was nearly 2.5 times higher than the state all-ages rate. Persons aged 45 to 54 have the lowest unemployment rate in the state at only 2.5 percent. Females have a slightly higher unemployment rate at 5.1 percent as compared to the male rate of 4.7 percent in 1988 (see Table 3).

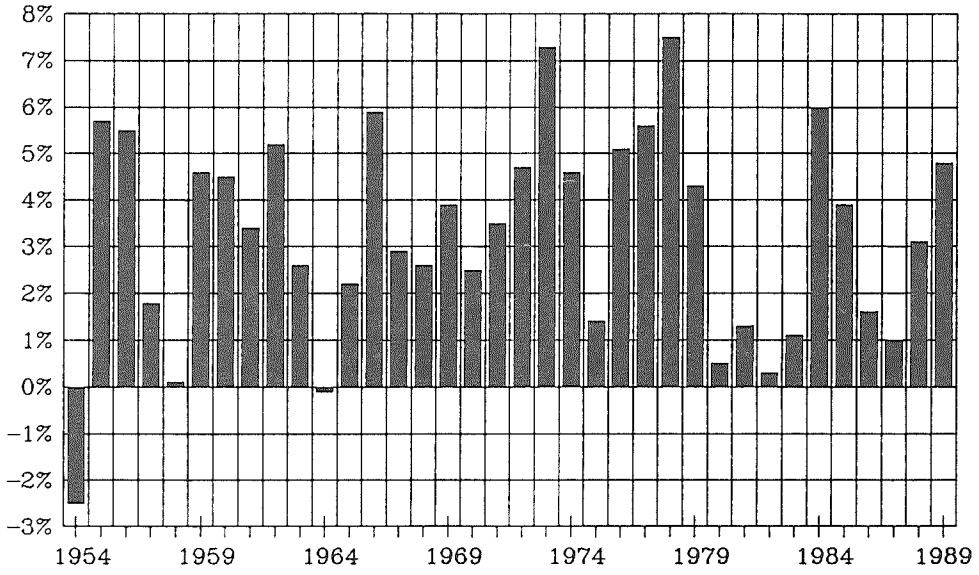
Females historically exhibit higher unemployment rates than do males in good economic times. Females tend to have lower relative rates when the economy turns downward due to the fact that women tend to work in industries less affected by economic slumps. During recessionary periods, the heavy industries and those that produce durable goods are most likely to experience cutbacks. Utah's unemployment rate among minorities was 7.8 in 1988 versus the 4.6 percent rate for Utah's white (non-Hispanic) population.

Figure 4
Utah Nonagricultural Employment: 1954–89



Source: Ut Dept of Employment Security

Figure 5
Utah Nonagricultural Employment
Annual Percent Change



Source: Ut Dept of Employment Security

Not only has the unemployment rate in the State decreased significantly in recent years, but the duration of unemployment has decreased as well. In 1988, 47.3 percent of unemployed individuals were unemployed for fewer than five weeks, while only 7.5 percent were unemployed more than 27 weeks. At the peak of the recession in 1983, only 38 percent were unemployed less than five weeks and a larger 15 percent were unemployed for over 27 weeks. The duration of unemployment among women tends to be lower than among men (see Table 4).

Individuals become unemployed for various reasons. In 1988, 44 percent of Utah's unemployed were so due to the loss of a job, while 43.5 percent were reentrants to the labor force. The "job losers" number has been steadily declining while the "reentrant" number has been steadily increasing in the last couple of years (see Table 5).

Employment Growth

Nonagricultural employment in the State of Utah surpassed the 700,000 mark for the first time in September of 1989. And although 1989's annual average level will not reach this plateau for 1989, it will in 1990 (see Figure 4). Following two very slow years in job growth for the state, the last two years have shown healthy increases of 3.1 percent in 1988 and a brisk 4.8 percent in 1989. Approximately 19,800 new jobs were created in 1988 and a surprising 31,900 new jobs were created in 1989. Barring any major downturn in the national economy in 1990 (which at this time seems unlikely) this vibrant growth rate for jobs in the State should continue through the next year. About 24,000 new nonagricultural jobs should be filled next year representing a 3.4 percent growth rate.

Goods-Producing and Service-Producing Industries

Industries are often classified into two main categories: goods-producing and service-producing. Goods-producing industries include mining, construction, and manufacturing. Although technically a goods-producing industry, agriculture is generally categorized as a sector by itself. Service-producing industries include services, trade, transportation/communications/utilities, government, and finance/insurance/real estate (see Table 6).

Goods-Producing Industries

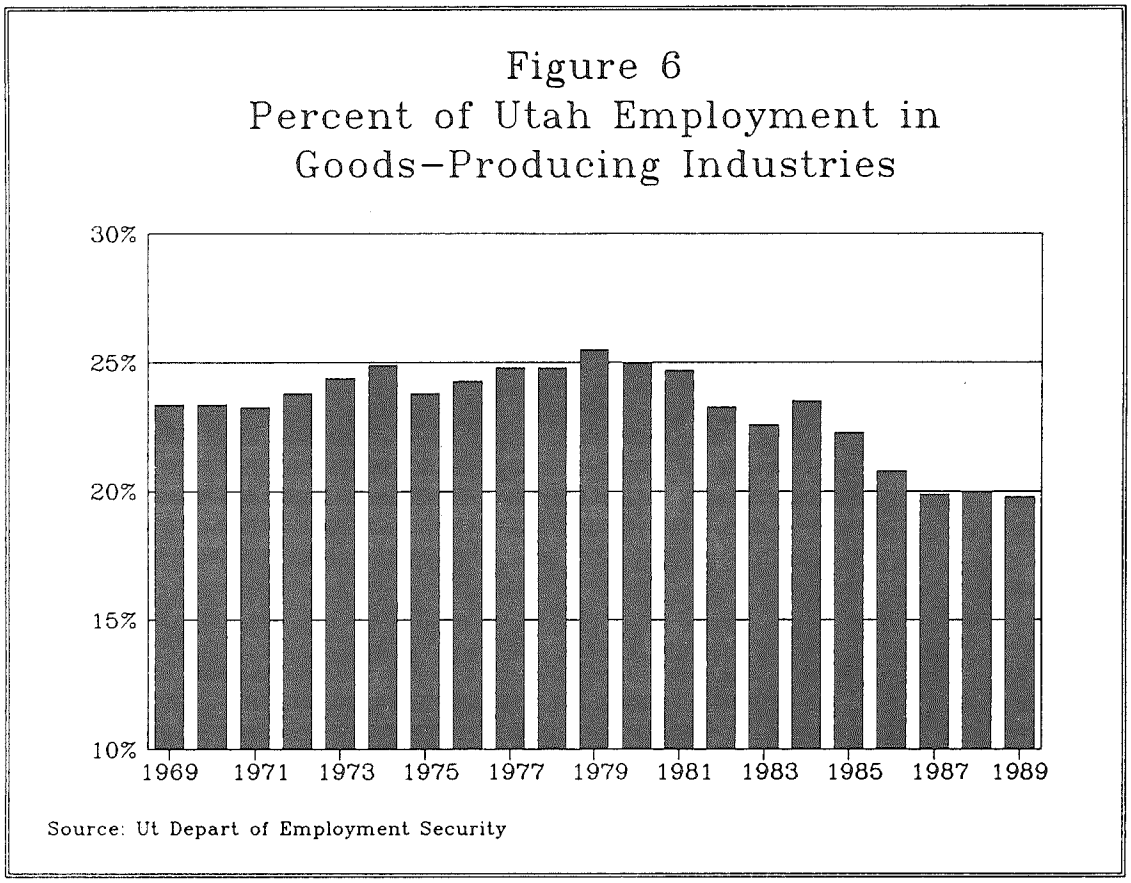
The mining industry in the State of Utah may never recover from its demise in the early eighties. From 1980 to 1986, 12,500 Utah jobs were lost in mining. That loss represented over half (61.5 percent) of the mining jobs in the state. At the present time, only about 500 of those jobs have been recovered. A net loss of 100 mining jobs took place in 1989 and only a couple hundred new jobs are projected for next year.

Manufacturing jobs have continued to recover from the major drops in primary metals and computer production employment in 1985 and 1986. Job growth was slightly lower than the 7.0 percent rate of 1988, but 4,200 jobs were added in 1989 for a 4.2 percent growth rate. Durable goods manufacturing grew by the largest amount (4.6 percent), while job growth among nondurables was somewhat slower at 3.6 percent.

In 1989, for the first time in four years, the number of construction jobs in the state increased. One thousand new jobs were added in 1989, however, there are still 9,500 (27 percent) fewer jobs in construction now as compared to just four years ago in 1985. Because of the over building that took place in 1984 and 1985, the State's growth back to the level of construction employment existing at the beginning of decade will be long in coming.

Service-Producing Industries

Job growth in the service-producing sector has returned to a more healthy growth rate after three years of slower growth. Service-producing jobs grew by 5.1 percent in 1989. This growth again represents over 80 percent of all new nonagricultural jobs in the state during the past year. The 27,000 new jobs in the service-producing sector represent strong job growth in all parts of the service sector with the exceptions of finance/insurance/real estate industry which again experienced a decline, and the government sector which experienced only moderate growth.



In 1989, the services industry generated 12,900 new-jobs, an 8.3 percent growth rate. This was up substantially from 1988's 5.7 percent figure. There was an increase of 6.0 percent in trade employment in 1989. This is a dramatic improvement from the virtual no growth level of 1987 and the slow growth of 1988. The transportation/communications/public utilities industry maintained steady growth in 1989. Another 1,300 jobs were added to this sector during the past year. Although job growth in the government sector was slower than in other parts of the service sector there was still high relative growth as compared to the previous two years. There was 2.4 percent growth in government jobs in 1989 as compared with 0.1 and 0.8 percent expansion in 1987 and 1988 respectively. As in 1988, job growth in the finance/insurance/real estate industry was again, nonexistent. There were 0.3 percent fewer jobs in this industry in 1989 than in 1988. Utah's service-producing sector will continue its healthy growth in 1990 although at a slightly slower rate (3.4 percent) than in 1989.

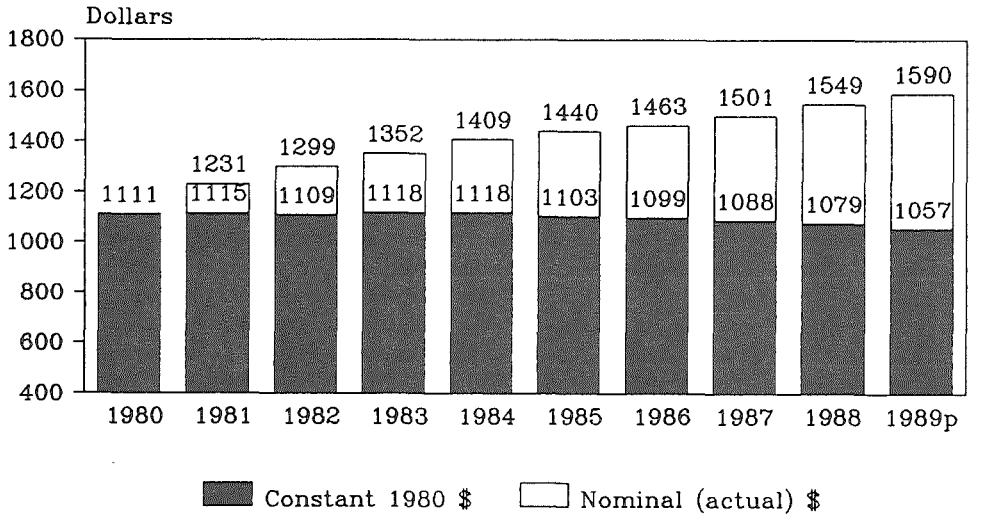
Since 1980, service-producing employment in Utah and in the U.S. has grown at a much faster pace than goods-producing employment. In these nine years, the percent of Utah employment in service-producing industries moved from 75 to 80 while the U.S. percentage increased from 71 to 76. The major difference between the industrial composition of Utah and the U.S. is that government jobs maintain more importance in Utah, while manufacturing jobs play a larger role in the national economy.

Wages

Total nonagricultural payroll wages in 1989 are estimated to grow by 7.6 percent. In comparison, wages in 1988 grew by 6.4 percent, and in 1987 they grew by 3.6 percent (see Table 6). This is another indication of Utah's continued strong economic growth in 1989. A 6.0 percent increase in wages is projected for 1990.

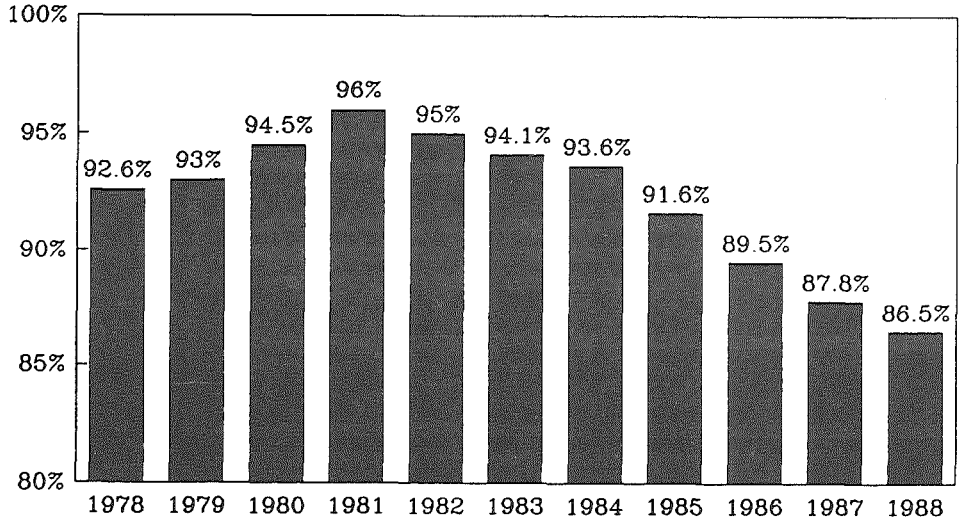
Utah's average monthly wage for nonagricultural jobs grew by 3.2 percent from 1987 to 1988. The 1989 increase will be approximately 2.6 percent, resulting in an average nonagricultural monthly wage of $1,590. Unfortunately, when adjusted for inflation, Utah's nonagricultural wage has declined every year since 1984. From 1985 through 1987 the loss of higher paying jobs in primary metals, construction, and

Figure 7
Utah Nonfarm Average Monthly Wages
Nominal and Constant* 1980 Dollars



p – preliminary estimate
*Constant 1980 $ inflation adj using CPI
Source: Ut Depart of Employment Security

Figure 8
Utah Average Annual Pay* as a Percent of U.S. Average Annual Pay*: 1978 to 1988



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

mining seems to have contributed to a decline in the rate of wage growth. In 1987 and 1988 many of those jobs came back, but at a lower wage and in fewer numbers than in previous years.

Utah's average annual pay for workers covered by unemployment insurance programs was $18,910 in 1988 - up 3.3 percent from 1987. The average increase for the nation was 4.9 percent. Consequently, Utah's average pay as a percentage of the U.S. average declined from 87.8 percent in 1987 to 86.5 percent in 1988 (see Figure 8). As recently as 1981, Utah's pay level was 96 percent of the national average.

Conclusion

Building on the economic turn around in 1988, Utah's economy continued to recover at a healthy pace. Rapid growth in the service-producing sector and continued steady growth in the goods-producing sector caused significant job growth throughout the State. The construction industry finally started to turn around after several years of decreases in jobs and only mining and finance/insurance/real estate industries showed declines in 1989. The strong economic recovery in Utah was supported by continued steady growth nationally. There were almost 32,000 jobs created by Utah employers in 1989.

There is no sign at present that this growth trend in the Utah labor market is ending. The year 1990 should be another year of strong growth in Utah barring a U.S. recession. As job growth in the Utah economy starts to level off, wages should be the next area of growth. It will take some time, however, for Utah to improve its wage position nationally.

Table 1
Utah and U.S. Labor Force Participation Rates
For Selected Years

	1950	1960	1970	1980	1988
Utah	52.2	57.4	58.4	64.2	69.2
Female	25.3	33.5	41.5	49.8	59.4
Male	82.5	82.3	77.4	79.3	79.3
U.S.	54.0	60.0	58.0	62.0	65.9
Female	30.0	37.7	43.3	49.9	56.6
Male	80.0	83.3	79.7	75.1	76.2

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

Table 2
Total Unemployment Rate in Utah
By District and County
1985 to 1989

	1985	1986r	1987r	1988p	1989f
State Total	5.9	6.0	6.3	4.9	4.7
Bear River	4.8	4.3	4.5	3.8	3.6
Box Elder	4.5	4.1	4.3	3.7	3.6
Cache	5.1	4.4	4.5	3.8	3.7
Rich	3.7	5.1	5.8	3.8	2.0
Wasatch Front	5.3	5.4	5.8	4.7	4.4
North	4.9	5.5	6.0	5.1	4.8
Davis	4.0	4.8	5.3	4.4	4.2
Morgan	6.5	7.2	8.3	7.1	8.2
Weber	5.9	6.2	6.7	5.8	5.3
South	5.5	5.3	5.7	4.5	4.2
Salt Lake	5.5	5.3	5.6	4.5	4.2
Tooele	6.0	6.3	7.4	5.5	4.7
Salt Lake - Ogden MSA	5.3	5.4	5.7	4.6	4.4
Mountainland	6.8	6.7	7.3	4.6	4.4
Summit	7.8	8.6	8.6	6.5	6.2
Utah	6.5	6.3	6.9	4.2	4.1
Wasatch	11.3	13.3	13.5	8.7	8.3
Central	8.9	10.2	10.0	7.9	7.0
Juab	15.5	15.8	15.3	9.6	7.6
Millard	5.5	6.6	7.5	5.5	5.0
Piute	13.3	14.8	12.6	13.0	7.1
Sanpete	13.2	14.9	13.4	11.2	10.4
Sevier	7.4	7.9	7.4	6.0	5.2
Wayne	8.1	9.4	9.4	7.0	6.5
Southwestern	6.0	5.9	6.3	4.9	4.8
Beaver	6.1	6.8	6.3	5.3	5.2
Garfield	13.5	12.3	12.2	8.9	8.9
Iron	6.2	6.3	6.5	4.8	4.6
Kane	8.6	7.1	7.6	6.0	6.3
Washington	4.7	4.8	5.4	4.4	4.2
Uintah Basin	9.1	13.1	13.2	9.2	8.4
Daggett	3.9	4.1	3.4	2.7	2.0
Duchesne	10.5	15.4	16.4	12.1	10.5
Uintah	8.5	12.0	11.8	8.0	7.5
Southeastern	10.9	10.7	10.9	8.5	8.1
Carbon	10.0	10.1	10.3	8.4	8.2
Emery	12.9	12.6	14.9	9.3	7.5
Grand	13.1	12.9	11.0	8.8	9.6
San Juan	9.0	8.2	8.4	7.9	7.5

p=preliminary r=revised f=forecast

Note: Salt Lake City - Ogden MSA (Metropolitan Statistical Area) consists of Davis, Salt Lake, and Weber counties.

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

Table 3
Characteristics of Utah Unemployed Persons
1988 Annual Averages

	Total Number	Percent	Males Number	Percent	Females Number	Percent
Total Unemployed	37,000	100.0%	20,000	100.0%	17,000	100.0%
Age of Unemployed						
16-19 Years	9,000	24.3%	5,000	25.0%	4,000	23.5%
20-24 Years	5,000	13.5%	2,000	10.0%	3,000	17.6%
25-34 Years	11,000	29.7%	7,000	35.0%	4,000	23.5%
35-44 Years	6,000	16.2%	2,000	10.0%	4,000	23.5%
45-54 Years	3,000	8.1%	1,000	5.0%	1,000	5.9%
55+ Years	4,000	10.8%	3,000	15.0%	1,000	5.9%
Marital Status of Unemployed						
Single: Never Married	14,000	37.8%	8,000	40.0%	6,000	35.3%
Married: Spouse Present	17,000	45.9%	9,000	45.0%	8,000	47.1%
Other: Widowed, Divorced, & Separated	6,000	16.2%	3,000	15.0%	3,000	17.6%
Length of Unemployment						
Less Than 5 Weeks	17,500	47.3%				
5-14 Weeks	12,700	34.3%				
15-26 Weeks	4,000	10.8%				
27 Weeks And Over	2,800	7.6%				
	37,000	100.0%				
Full And Part-Time Status						
Looking For Full-Time Work	26,000	70.3%				
Looking For Part Time Work	11,000	29.7%				

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

Table 4
Duration of Unemployment in Utah
as a Percent of Total Unemployed

	Less Than 5 Weeks	5-14 Weeks	15 Weeks+	27 Weeks+
TOTAL (BOTH SEXES)				
1988	47.3	34.3	37.6	7.5
1987	50.2	27.2	22.6	10.2
1986	45.9	32.2	21.9	10.7
1985	46.7	32.2	21.1	9.8
1984	47.3	29.9	22.7	11.1
1983	37.7	32.0	30.3	15.0
1982	38.2	36.6	25.3	10.1
1981	49.6	29.9	20.5	8.9
MALES				
1987	44.3	29.5	26.3	11.2
1986	38.4	34.1	27.4	12.8
1985	43.3	34.4	22.3	10.8
1984	42.6	29.3	28.1	13.6
1983	29.8	32.5	37.6	20.2
1982	35.4	34.6	30.0	13.1
FEMALES				
1987	58.1	24.3	17.6	8.6
1986	53.8	30.2	16.0	8.4
1985	50.9	29.5	19.5	8.6
1984	50.0	31.8	18.1	9.0
1983	49.5	31.3	19.2	7.2

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

Table 5
Reasons for Unemployment in Utah
as a Percent of Total Unemployed

	Job Losers	Job Leavers	New & Reentrants
TOTAL (BOTH SEXES)			
1988	44.2	12.2	43.5
1987	45.7	12.8	41.5
1986	48.5	13.1	38.4
1985	45.0	14.5	40.5
1984	44.3	10.8	44.9
1983	52.9	8.4	38.7
1982	57.5	9.0	36.5
1981	45.0	16.1	38.8
MALES			
1987	62.7	8.6	28.7
1986	61.3	12.2	26.6
1985	56.3	14.0	29.7
1984	58.6	9.7	31.7
1983	67.5	5.0	27.5
1982	65.4	7.0	27.7
FEMALES			
1987	23.8	18.1	58.0
1986	34.9	14.1	51.0
1985	30.8	15.2	54.0
1984	27.3	13.6	59.1
1983	30.9	13.5	55.6

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

Table 6
Utah Labor Force, Nonagricultural Jobs and Wages
Selected Years

	1980	1985	1986	1987	1988	1989Pp	1990f	% Change 85-86	% Change 86-87	% Change 87-88	% Change 88-89	% Change 89-90
Civilian Labor Force	634,000	730,000	754,000	757,000	759,000	786,000	814,000	3.3	0.4	0.3	3.6	3.6
Total Employed Persons	594,000	687,000	709,000	709,000	722,000	749,000	778,000	3.2	0.0	1.8	3.7	3.9
Unemployed Persons	40,000	43,000	45,000	48,000	37,000	37,000	36,000	4.7	6.7	-22.9	0.0	-2.7
Unemployment Rate	6.3	5.9	6.0	6.3	4.9	4.7	4.4	1.7	5.0	-22.6	-3.4	-6.0
Nonagricultural Jobs	551,900	624,400	634,100	640,300	660,100	692,000	715,500	1.6	1.0	3.1	4.8	3.4
Mining	18,500	9,700	7,800	8,000	8,200	8,100	8,300	-19.6	2.6	2.5	-1.2	2.5
Contract Construction	31,500	35,500	32,200	26,700	25,000	26,000	27,500	-9.3	-17.1	-6.4	4.0	5.8
Manufacturing	87,700	94,000	92,100	92,500	99,000	103,200	106,000	-2.0	0.4	7.0	4.2	2.7
Durable	60,100	65,900	63,200	62,500	65,900	68,900		-4.1	-1.1	5.4	4.6	
Nondurable	27,600	28,100	28,900	30,000	33,100	34,300		2.8	3.8	10.3	3.6	
Trans., Comm., & Publ. Util.	34,100	37,000	37,500	37,900	39,400	40,700	41,600	1.4	1.1	4.0	3.3	2.2
Trade	128,700	147,900	152,400	152,600	156,500	165,900	173,500	3.0	0.1	2.6	6.0	4.6
Wholesale	34,100	35,600	36,100	34,700	35,700	38,300		1.4	-3.9	2.9	7.3	
Retail	94,600	112,400	116,300	117,800	120,800	127,600		3.5	1.3	2.5	5.6	
Finance, Ins., & Real Est.	25,800	31,100	32,900	33,700	33,400	33,300	33,300	5.8	2.4	-0.9	-0.3	0.0
Services	100,500	131,400	137,900	147,500	155,900	168,800	176,500	4.9	7.0	5.7	8.3	4.6
Government	125,000	137,800	141,300	141,500	142,700	146,000	148,800	2.5	0.1	0.8	2.3	1.9
Federal	37,100	39,400	40,400	39,900	39,400	40,400		2.5	-1.2	-1.3	2.5	
State	32,300	36,300	37,800	37,900	38,600	40,000		4.1	0.3	1.8	3.6	
Local	55,700	62,100	63,100	63,700	64,800	65,700		1.6	1.0	1.7	1.4	
Goods-Producing	137,700	139,200	132,100	127,200	132,200	137,300	141,800	-5.1	-3.7	3.9	3.9	3.3
Service-Producing	414,100	485,200	502,000	513,200	527,900	554,700	573,700	3.5	2.2	2.9	5.1	3.4
Percent Service-Producing	75.0%	77.7%	79.2%	80.1%	80.0%	80.2%	80.2%					
Nonagricultural Wages (Millions)	$7,396	$10,792	$11,131	$11,535	$12,271	$13,203	$13,995	3.1	3.6	6.4	7.6	6.0
Average Monthly Wage	$1,111	$1,440	$1,463	$1,501	$1,549	$1,590	$1,630	1.6	2.6	3.2	2.6	2.5
Adjusted for Inflation (Real Wages)	$1,111	$1,103	$1,099	$1,088	$1,079	$1,057	$1,037	-0.3	-1.0	-0.8	-2.1	-1.8

p=preliminary
f=forecast

Source: Utah Department of Employment Security, Labor Market Information Services, December 1989.

Table 7
1988 Nonagricultural Employment in Utah
By District, County and Major Industry

District and County	Total	Mining	Construction	Manufacturing	Transportation, Communications & Public Utilities	Trade	Finance, Insurance & Real Estate	Services & Misc.	Government
State Total	660,075	8,162	24,981	98,989	39,375	156,530	33,429	155,880	142,729
Bear River	40,834	37	1,450	15,812	845	7,102	863	5,039	9,686
Box Elder	15,674	36	499	8,979	232	2,560	263	1,161	1,944
Cache	24,811	0	946	6,831	601	4,474	576	3,833	7,550
Rich	349	1	5	2	12	68	24	45	192
Wasatch Front	466,099	2,865	17,901	65,213	30,412	114,753	27,571	107,054	100,330
North	115,977	106	4,253	16,542	3,973	26,232	3,507	22,781	38,583
Davis	52,981	69	2,270	6,205	1,849	11,884	1,115	8,514	21,075
Morgan	884	0	72	181	7	290	16	41	277
Weber	62,112	37	1,911	10,156	2,117	14,058	2,376	14,226	17,231
South	350,122	2,759	13,648	48,671	26,439	88,521	24,064	84,273	61,747
Salt Lake	340,126	2,504	13,401	47,724	26,233	87,379	23,913	83,553	55,419
Tooele	9,996	255	247	947	206	1,142	151	720	6,328
Mountainland	90,736	165	3,322	13,567	3,062	19,957	3,250	32,195	15,218
Summit	6,985	138	325	184	265	1,794	916	2,388	975
Utah	81,393	24	2,701	13,304	2,719	17,569	2,293	29,139	13,644
Wasatch	2,358	3	296	79	78	594	41	668	599
Central	14,126	475	672	1,776	1,332	3,230	370	1,912	4,359
Juab	1,561	82	55	273	25	405	32	263	426
Millard	3,191	111	177	230	698	684	80	400	811
Piute	181	0	0	30	9	13	5	8	116
Sanpete	3,722	2	137	694	139	800	92	395	1,463
Sevier	4,955	279	240	489	459	1,270	161	799	1,258
Wayne	516	1	63	60	2	58	0	47	285
Southwestern	22,381	213	955	1,773	1,236	6,266	842	5,366	5,730
Beaver	1,274	2	31	87	167	337	37	154	459
Garfield	1,387	14	16	222	47	187	21	415	465
Iron	6,527	153	242	301	317	1,865	231	1,395	2,023
Kane	1,453	9	20	68	30	451	42	443	390
Washington	11,740	35	646	1,095	675	3,426	511	2,959	2,393
Uintah Basin	10,171	1,469	221	310	975	2,161	198	1,785	3,052
Daggett	301	0	0	0	29	33	0	63	176
Duchesne	3,420	393	98	100	371	771	82	374	1,231
Uintah	6,450	1,076	123	210	575	1,357	116	1,348	1,645
Southeastern	15,728	2,938	460	538	1,513	3,061	335	2,529	4,354
Carbon	7,227	1,401	154	267	377	1,622	184	1,277	1,945
Emery	3,446	959	139	9	811	354	47	287	840
Grand	2,025	164	63	58	170	590	73	409	498
San Juan	3,030	414	104	204	155	495	31	556	1,071

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

Table 8
Utah's Largest Nonagricultural Employers
Ranked by Employment Size
March 1989

		Approximate Employment
1	Hill Air Force Base	14,000
2	Brigham Young University	13,000
3	University of Utah	12,500
4	Morton Thiokol	8,000
5	Granite School District	7,000
6	Jordan School District	6,000
7	U.S. Treasury Department (IRS)	6,000
8	Utah State University	5,000
9	Smith's Foods	5,000
10	Hercules Inc.	4,500
11	Pacific Corp	4,500
12	Utah State Social Services	4,500
13	Davis School District	4,000
14	Delta Airlines	4,000
15	U.S. Post Office	4,000
16	Tooele Army Depot	4,000
17	Alpine School District	3,500
18	Salt Lake County	3,500
19	ZCMI	3,500
20	Salt Lake School District	3,000
21	Unisys Corporation	3,000
22	US West Communications	3,000
23	Albertson's	3,000
24	Weber School District	2,500
25	Kennecott Corporation	2,500
26	Basic Manufacturing and Technology	2,500
27	K Mart Corporation	2,500
28	Weber State College	2,500
29	Salt Lake City Corporation	2,500
30	LDS Hospital	2,500
31	Nice Corporation	2,000
32	Fred Meyer	2,000
33	SOS Service	2,000
34	Union Pacific Corp.	2,000
35	Defense Depot Ogden	2,000
36	Utah Valley Regional Medical Center	2,000
37	McKay-Dee Hospital	2,000
38	The Hospital Corp	2,000
39	Shopko Stores	1,500
40	Utah Dept. of Transportation	1,500
41	American Express Travel	1,500
42	US Benefit	1,500
43	First Security Bank	1,500
44	JC Penney Co	1,500
45	Provo School District	1,500
46	Signetics Corp	1,500
47	Holy Cross Hospital	1,500
48	Sears Roebuck & Co.	1,500
49	Skaggs Alpha Beta Stores	1,500
50	Zions First National Bank	1,500

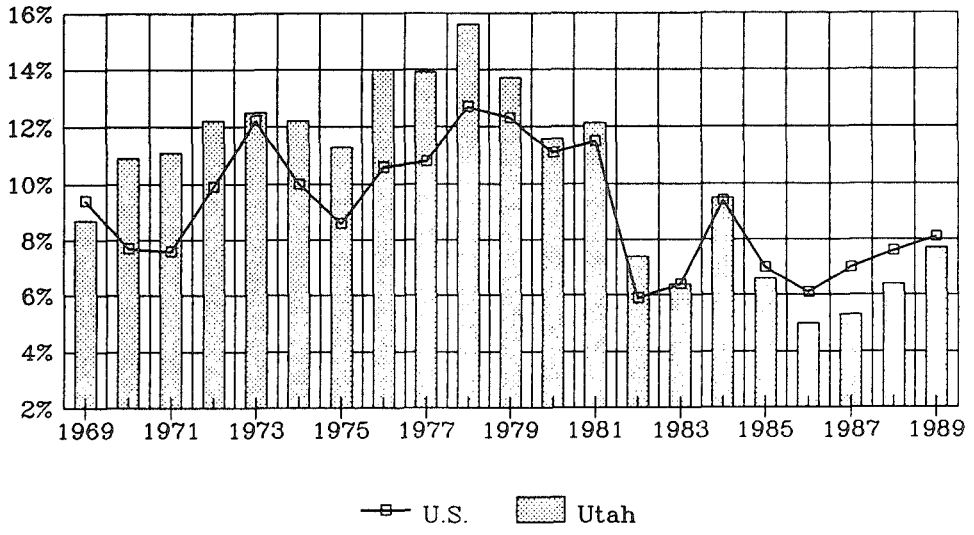
Source: Utah Department of Employment Security.

PERSONAL INCOME

Total personal income is defined as all income received by all residents of an area. The statistical series comprising the components of total personal income, by area and by year, constitute the most extensive body of consistent economic information available for the nation, states, counties and metropolitan areas. This entire data series was developed and is maintained by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce.

Utah's 1989 total personal income (TPI) is forecast to be $22.2 billion, up 7.7 percent from the 1988 total. As Table 9 and Figure 9 show, Utah's TPI increased more rapidly than that of the United States through the 1970's. And, from 1980 through 1984, the yearly rates of growth were virtually identical. However, Utah's economic slump from 1985 to 1988 retarded its TPI growth while the national growth rate continued its steady progress. Forecasts for 1989 show that Utah's TPI growth has nearly overtaken that of the nation.

Figure 9
Utah and United States
Personal Income Growth Rates: 1969-89

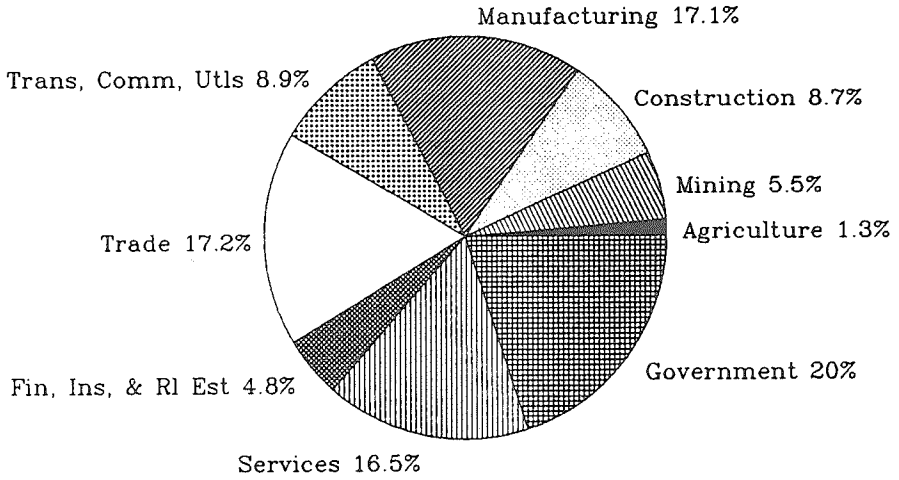


Source: U.S. Bureau of Economic Analysis
and Ut Economic Coordinating Committee

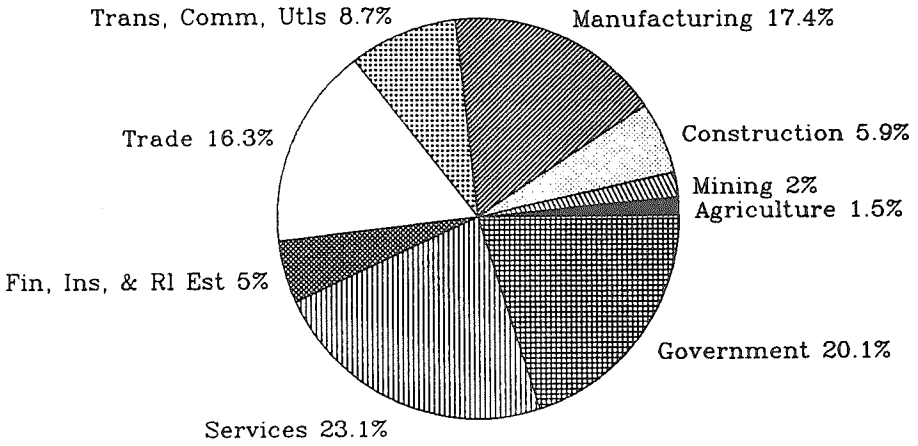
Components of Personal Income

The composition of TPI can be viewed from several perspectives, as shown in Table 10. The largest single component is "Earnings by Place of Work." This portion consists of the total earnings from both farm and nonfarm industries, including contributions for social insurance. It may also be viewed as the combined earnings of wages and salaries, other labor income and proprietors income--both farm and nonfarm.

Figure 10
Utah's Distribution of Earnings Income by Industry for 1980 and 1989



1980



1989p

p – preliminary estimate
Source: U.S. Bureau of Economic Analysis and Ut Depart of Employment Security.

In 1989, earnings by place of work was $16.9 billion, representing 76 percent of TPI. Approximately 10 percent of this figure was proprietors' income; 90 percent was wages, salary and other labor income. Nonfarm earnings (almost $16.7 billion) was nearly 99 percent of total earnings; farm income was about one percent. Private sector nonfarm industries accounted for 80 percent of nonfarm earnings, while public (government) industries made up 20 percent.

The other components of TPI are (1) dividends, interest and rent (DIR), and (2) transfer payments. In 1989, DIR amounted to $3.1 billion, and transfer payments were $3.2 billion. These two components, plus "Earnings by Place of Residence," constitute TPI.

Some of the major differences between the economic compositions of Utah and the United States can be observed in Table 10. Perhaps the most significant is that Utah DIR (dividends, interest and rent) comprise a somewhat smaller (13.7 percent vs. 17.0) share of TPI than the national figure. Thus, Utahns must rely to a greater extent on earnings. The problem with this is that Utah's average wage is only about 87 percent of the U.S. average. Due to these two factors, Utah's TPI is somewhat lower than that of the U.S.

The industrial composition of Utah's TPI has changed in recent years. In 1980, prior to the recession periods, goods-producing industries (mining, construction, manufacturing) generated over 31 percent of Utah's earnings. By 1989 that had dropped to 25.3 percent. In 1980 service-producing industries (including government) paid 67 percent of total earnings. By 1989 this statistic had increased to over 73 percent. These comparisons reflect the continuing historical shift from goods- to service-producing jobs in the state's economy. Similar shifts have been experienced nationally. However, Utah's 1988 and 1989 TPI data indicate that this trend may have ended--earnings from goods-producing industries are up from 24.9 percent in 1987 to 25.3 percent in 1989.

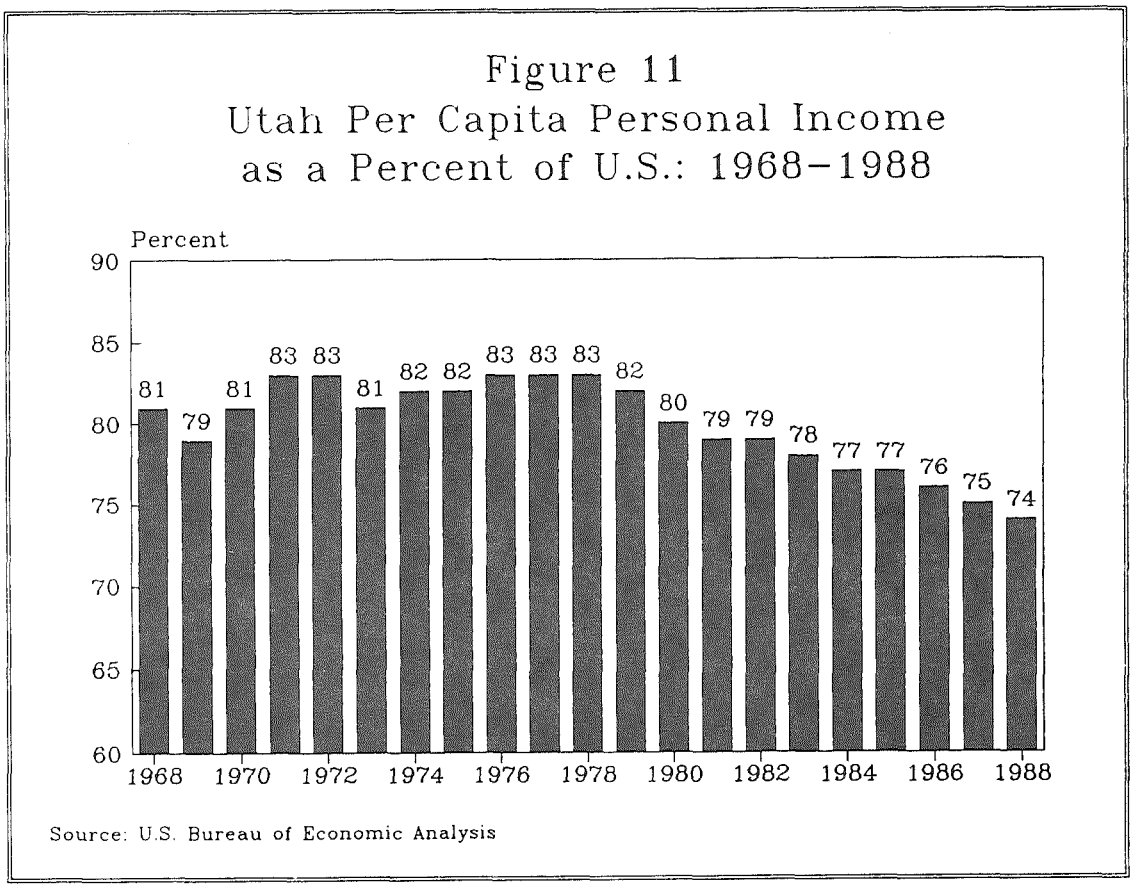
Four major industry sectors generate over three-fourths of Utah's total earnings. Services is the leader, providing 23 percent of earnings; government (including military) pays 20 percent. Manufacturing accounts for over 17 percent, and trade produces 16 percent of Utah's total earnings. Following these are transportation/communications/utilities at 9 percent, construction at 6 percent, finance/insurance/real estate at 5 percent, and mining at 2 percent of earnings. Agriculture and agricultural services make up the remaining 2 percent. Figure 10 illustrates these industrial shares of earnings for Utah for 1980 and 1989.

Per Capita Personal Income

Per capita personal income is an area's annual total personal income divided by the total population as of July 1 of that year. Utah's 1989 per capita personal income (PCI) is estimated at approximately $12,900. From 1982 to 1989, Utah's real (inflation-adjusted) PCI has increased $1,000, compared to the $2,200 increase in the United States real PCI.

Utah's 1988 per capita personal income of $12,193 ranked forty-eighth among the 50 states. Because Utah's population has a large number of children (the result of many years of high birth rates), this PCI comparison portrays Utah as a low-income state. However, comparing state per capita income based on adult population estimates improves the Utah ranking considerably: Utah's 1988 ranking is thirty-second among the states by this measure. Utah also compares more favorably to the rest of the U.S. when using household income data. Total personal income per household in 1988 in Utah was $39,321, compared with $44,277 for the U.S; Utah's total personal income per household was 88.8 percent of the national figure.

During the 1970's, Utah's PCI ranged between 81 and 83 percent of the United States PCI. However, as shown in Figure 11, from 1978 to 1989 this parameter dropped ten percentage points--from 83 to 73 percent. Each major sector of Utah's total personal income contributed to this decline. That is, taking population growth into consideration, each of Utah's major TPI components has not increased as rapidly as its national counterpart. Utah's PCI for 1986 to 1989 is included in Table 10.



County Personal Income

Considerable variability exists in the 1987-88 total personal income growth rates of Utah's counties. These figures range from Duchesne County's -15 percent to Wasatch County's 20 percent. With the exception of minor declines in Tooele, Morgan and Rich, all northern Utah counties posted gains in TPI. Of the remaining 18 counties, ten had TPI gains. Thus, a total of 11 counties experienced TPI declines.

With a few exceptions, the per capita income estimates in northern Utah's counties are considerably higher than those of the rest of the state. Summit County's $17,100 leads Utah; San Juan County's $8,100 is lowest. Interestingly, Carbon and Daggett are the only counties outside the northern Utah group with PCI greater than the state figure. The 1988 per capita income of the United States, at $16,489, is higher than that of all but one of Utah's counties (see Table 11).

Table 9
Total Personal Income
Utah and U.S.
1969 to 1989

	Utah Total Personal Income (Millions)	U.S. Total Personal Income (Millions)	Utah Growth Rates	U.S. Growth Rates
1969	$3,169	$766,522	--	--
1970	3,513	825,534	10.9%	7.7%
1971	3,904	888,536	11.1%	7.6%
1972	4,380	976,181	12.2%	9.9%
1973	4,928	1,095,289	12.5%	12.2%
1974	5,530	1,204,899	12.2%	10.0%
1975	6,155	1,308,482	11.3%	8.6%
1976	7,014	1,447,002	14.0%	10.6%
1977	7,987	1,602,863	13.9%	10.8%
1978	9,230	1,806,968	15.6%	12.7%
1979	10,490	2,028,510	13.7%	12.3%
1980	11,710	2,254,076	11.6%	11.1%
1981	13,125	2,514,231	12.1%	11.5%
1982	14,091	2,663,432	7.4%	5.9%
1983	14,998	2,834,385	6.4%	6.4%
1984	16,426	3,101,163	9.5%	9.4%
1985	17,512	3,317,545	6.6%	7.0%
1986	18,391	3,519,211	5.0%	6.1%
1987	19,366	3,766,075	5.3%	7.0%
1988	20,604	4,052,992	6.4%	7.6%
1989	22,200	4,380,000	7.7%	8.1%

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

Table 10
Components of Utah Total Personal Income
1986 to 1989

Items	1986 (Millions)	1987 (Millions)	1988 (Millions)	1989 (Millions)	86-87 % Change	87-88 % Change	88-89 % Change	1988 % Distribution Utah	1988 % Distribution U.S.	
Total Personal Income	$18,391	$19,366	$20,604	$22,200	5.3	6.4	7.7	100.0	100.0	
Total Earnings - Place/Work	$14,119	$14,705	$15,644	$16,890	4.1	6.4	8.0	75.9	73.4	
Less:										
Personal Cont. for Soc. Ins.	$875	$894	$991	$1,070	2.2	10.8	8.0	4.8	4.8	
Plus: Resid. Adjustment	$77	$84	$92	$100	9.4	8.6	9.3	0.4	-0.0	
Equals: Earnings by Residence	$13,321	$13,895	$14,745	$15,920	4.3	6.1	8.0	71.6	68.6	
Plus:										
Dividends, Interest & Rent	$2,417	$2,601	$2,827	$3,081	7.6	8.7	9.0	13.7	17.0	
Plus:										
Transfer Payments	$2,653	$2,870	$3,032	$3,199	8.2	5.7	5.5	14.7	14.4	
Components of Earnings	$14,203	$14,705	$15,645	$16,890	3.5	6.4	8.0	75.9	73.4	
Wages & Salaries	$11,681	$12,111	$12,897	$13,938	3.7	6.5	8.1	62.6	59.7	
Other Labor Income	$1,147	$1,105	$1,187	$1,282	-3.7	7.4	8.0	5.8	5.6	
Proprietors' Income	$1,375	$1,489	$1,561	$1,670	8.3	4.8	7.0	7.6	8.0	
Farm	$101	$136	$149	$154	35.2	9.4	3.5	0.7	0.9	
Nonfarm	$1,275	$1,353	$1,412	$1,462	6.1	4.4	3.5	6.9	7.1	
Earnings by Industry	$14,119	$14,705	$15,645	$16,890	4.2	6.4	8.0	75.9	73.4	100.0
Farm	$144	$182	$194	$210	26.4	6.7	8.1	0.9	1.1	1.2
Nonfarm	$13,975	$14,523	$15,450	$16,680	3.9	6.4	8.0	75.0	72.2	98.8
Private Sector	$10,935	$11,412	$12,216	$13,291	4.4	7.0	8.8	59.3	60.8	78.7
Ag Services, Etc.	$37	$46	$48	$50	24.7	5.5	4.2	0.2	0.5	0.3
Mining	$310	$312	$329	$337	0.6	5.5	2.3	1.6	0.8	2.0
Construction	$1,027	$931	$923	$989	-9.3	-0.9	7.2	4.5	4.7	5.9
Manufacturing	$2,364	$2,418	$2,678	$2,943	2.3	10.8	9.9	13.0	14.9	17.4
Trans., Comm., Utilities	$1,359	$1,242	$1,325	$1,462	-8.6	6.7	10.4	6.4	4.9	8.7
Trade (Whsl & Retail)	$2,291	$2,327	$2,476	$2,758	1.6	6.4	11.4	12.0	11.8	16.3
Fin., Ins., Real Estate	$768	$827	$837	$850	7.7	1.2	1.5	4.1	5.3	5.0
Services	$2,931	$3,310	$3,562	$3,902	13.0	7.6	9.5	17.3	17.9	23.1
Government (Incl Military)	$3,040	$3,112	$3,235	$3,389	2.4	4.0	4.7	15.7	11.5	20.1
Per Capita Personal Income	$11,052	$11,530	$12,193	$12,900	4.3	5.8	5.8			

Source: Utah Department of Employment Security, Labor Market Information Services, November 1989.

Table 11
Total and Per Capita Personal Income
By County and Multi-County Planning District

Planning District and County	Total Personal Income (Millions) 1986	1987	1988	86-87 % Change	87-88 % Change	Per Capita Personal Income 1986	1987	1988	86-87 % Change	87-88 % Change
State Total	$18,391.0	$19,366.0	$20,604.0	5.3	6.4	$11,051.6	$11,524.6	$12,191.7	4.3	5.8
Bear River	$1,083.2	$1,180.5	$1,270.2	9.0	7.6	$10,315.9	$11,147.6	$11,849.2	8.1	6.3
Box Elder	$432.0	$481.9	$525.0	11.5	8.9	$11,520.0	$12,648.1	$13,671.8	9.8	8.1
Cache	$631.3	$676.2	$723.9	7.1	7.1	$9,667.0	$10,307.4	$10,837.5	6.6	5.1
Rich	$19.9	$22.5	$21.3	12.9	-5.3	$9,052.4	$10,215.8	$10,644.7	12.9	4.2
Wasatch Front	$12,898.5	$13,583.9	$14,312.2	5.3	5.4	$11,996.4	$12,473.7	$13,021.7	4.0	4.4
North	$3,940.2	$4,163.2	$4,345.9	5.7	4.4	$11,602.5	$12,025.4	$12,402.7	3.6	3.1
Davis	$1,934.9	$2,047.9	$2,100.6	5.8	2.6	$11,044.0	$11,352.2	$11,367.0	2.8	0.1
Morgan	$62.8	$67.0	$66.6	6.8	-0.7	$11,842.2	$12,185.4	$12,327.4	2.9	1.2
Weber	$1,942.5	$2,048.2	$2,178.7	5.4	6.4	$12,209.6	$12,777.6	$13,600.0	4.7	6.4
South	$8,958.3	$9,420.7	$9,966.3	5.2	5.8	$12,178.2	$12,682.7	$13,311.4	4.1	5.0
Salt Lake	$8,632.5	$9,081.0	$9,629.6	5.2	6.0	$12,216.9	$12,722.1	$13,374.4	4.1	5.1
Tooele	$325.8	$339.7	$336.7	4.3	-0.9	$11,234.0	$11,712.2	$11,732.4	4.3	0.2
Mountainland	$2,370.5	$2,488.6	$2,870.8	5.0	15.4	$9,034.0	$9,391.1	$10,764.2	4.0	14.6
Summit	$202.8	$215.5	$236.2	6.3	9.6	$15,598.0	$16,084.7	$17,118.0	3.1	6.4
Utah	$2,071.0	$2,171.6	$2,512.7	4.9	15.7	$8,636.3	$8,980.8	$10,340.5	4.0	15.1
Wasatch	$96.8	$101.5	$121.8	4.9	20.0	$10,079.2	$10,361.4	$12,308.0	2.8	18.8
Central	$497.6	$507.4	$514.1	2.0	1.3	$8,885.4	$9,293.1	$9,681.5	4.6	4.2
Juab	$47.6	$49.2	$54.8	3.4	11.5	$7,799.3	$8,200.3	$9,620.6	5.1	17.3
Millard	$137.9	$124.1	$120.1	-10.0	-3.3	$9,849.9	$9,621.5	$9,762.0	-2.3	1.5
Piute	$11.1	$12.2	$11.9	10.7	-2.7	$7,376.0	$8,749.8	$8,512.6	18.6	-2.7
Sanpete	$133.0	$139.9	$146.5	5.2	4.7	$8,010.2	$8,479.4	$8,930.7	5.9	5.3
Sevier	$149.6	$160.3	$161.0	7.1	0.5	$9,526.5	$10,273.1	$10,593.3	7.8	3.1
Wayne	$18.5	$21.7	$19.8	17.1	-8.7	$8,812.9	$9,847.7	$9,419.1	11.7	-4.4
Southwestern	$653.3	$695.8	$749.0	6.5	7.6	$9,035.7	$9,252.8	$9,803.7	2.4	6.0
Beaver	$44.8	$46.7	$45.8	4.3	-1.9	$8,951.8	$9,334.1	$9,743.0	4.3	4.4
Garfield	$40.4	$42.0	$46.3	3.9	10.1	$9,627.2	$10,003.3	$11,287.0	3.9	12.8
Iron	$161.5	$171.0	$175.7	5.9	2.7	$8,241.6	$8,768.8	$9,149.9	6.4	4.3
Kane	$47.1	$49.6	$53.0	5.4	6.8	$10,015.4	$10,123.8	$10,816.3	1.1	6.8
Washington	$359.5	$386.5	$428.3	7.5	10.8	$9,265.0	$9,291.5	$9,845.0	0.3	6.0
Uintah Basin	$364.2	$369.4	$341.9	1.4	-7.4	$9,105.2	$9,670.6	$9,368.2	6.2	-3.1
Daggett	$8.1	$9.0	$9.5	10.6	5.0	$11,638.8	$10,011.3	$13,510.5	-14.0	35.0
Duchesne	$140.1	$142.5	$121.3	1.7	-14.9	$9,217.9	$9,898.8	$8,987.4	7.4	-9.2
Uintah	$216.0	$217.9	$211.2	0.9	-3.1	$8,960.6	$9,513.7	$9,468.7	6.2	-0.5
Southeastern	$523.5	$540.3	$545.7	3.2	1.0	$9,840.8	$10,291.6	$10,700.5	4.6	4.0
Carbon	$264.6	$272.0	$270.1	2.8	-0.7	$11,761.4	$12,198.5	$12,504.3	3.7	2.5
Emery	$102.4	$103.3	$103.7	0.8	0.4	$8,462.2	$8,677.5	$9,176.8	2.5	5.8
Grand	$76.1	$78.7	$78.5	3.3	-0.2	$11,034.9	$11,567.9	$12,073.9	4.8	4.4
San Juan	$80.4	$86.4	$93.5	7.5	8.2	$6,868.8	$7,509.2	$8,056.4	9.3	7.3

Source: Utah Department of Employment Security, Labor Market Information Services, November 1989.

Table 12
Personal Income Trends
Utah and U.S.

	1979	1984	1989	Av. Annual Percent Change 1979-84	1984-89	1979-89	Percent of U.S. Total 1979	1984	1989
Population (Thousands)									
U.S.	224,564	236,477	248,255	1.0%	1.0%	1.0%	100.00%	100.00%	100.00%
Utah	1,416	1,623	1,715	2.8%	1.1%	1.9%	0.63%	0.69%	0.69%
Total Personal Income (Billions)									
U.S.	$2,028.5	$3,101.2	$4,380.0	8.9%	7.1%	8.0%	100.00%	100.00%	100.00%
Utah	$10.5	$16.4	$22.2	9.3%	6.2%	7.8%	0.52%	0.53%	0.51%
Per Capita Personal Income									
U.S.	$9,033	$13,114	$17,640	7.7%	6.1%	6.9%	100.0%	100.0%	100.0%
Utah	$7,407	$10,120	$12,940	6.4%	5.0%	5.7%	82.0%	77.2%	73.4%

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

DEMOGRAPHIC CHARACTERISTICS

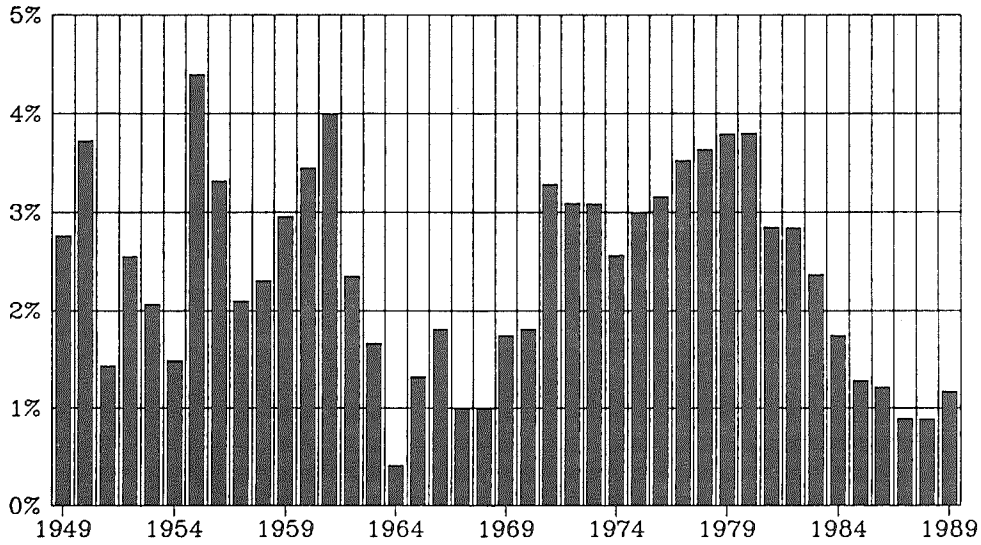
Utah's demographic characteristics are among the most unique in the nation. For example, it is well known that Utah's fertility rate is the highest in the country. Because of the high fertility rate, Utah's population increases faster than most states, Utah's median age is the lowest, and Utah's family sizes are the largest. These and other uncommon demographic characteristics impact the state's economy and need to be understood in order to gauge the overall success of the Utah economy.

State Population

Utah's population reached an estimated 1,715,000 on July 1, 1989. This estimate is 254,000 more persons than were counted in the 1980 Census and represents a 1.7 percent annual average growth rate for the 1980's. Utah's rate of growth nearly doubles the comparable national growth rate of 1.0 percent and makes Utah the ninth fastest growing state since 1980.

Although Utah's population has increased in each year of the 1980's, the growth occurred from 1980 to 1988 at a decreasing rate. This year marked the first year during the 1980's that the population growth rate has increased over the previous year. The 1989 estimate of 1,715,000 is a 1.2 percent increase over the 1988 estimate of 1,695,000 (see Figure 12). Included in the 1989 estimate is a natural increase of 26,633 and an implied net out-migration of approximately 6,300. Table 13 and Figure 13 provide a history of Utah population, net migration and natural increase.

Figure 12
Utah Population: 1949 to 1989
Annual Percent Change



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

County Population

Population change among Utah's counties reflects the relative health of the local economies. In general, northern Utah and the metropolitan counties have had higher rates of population growth than the counties in eastern and southern Utah. For example, six of the eight counties with growth rates higher than the state average from 1988 to 1989 were in northern Utah. All of Utah's metropolitan counties (Davis, Salt Lake, Utah and Weber) increased from 1988 to 1989.

In stark contrast, all of the counties that lost population from 1988 to 1989 were located in eastern and southern Utah. The Uintah Basin area, which includes Daggett, Duchesne and Uintah Counties, lost a higher percent of their population than any other area in the state. Furthermore, three of the four counties in the southeast portion of the state either lost or showed no change in population from 1988 to 1989. The economic problems brought on by the depressed natural resource industry has meant many people have left these counties to find jobs.

Although many counties in southern Utah have struggled over the past few years, Washington County leads all counties in population growth for the fifth straight year. From 1988 to 1989, Washington County increased from 43,000 to 45,100, a 4.9 percent increase. Just since 1980, Washington County has increased by an extraordinary 71 percent. Table 14 shows Utah population estimates by county from 1980 to 1989.

Natural Increase

Births, deaths and migration are the three components of population change. Natural increase is the measure of births minus deaths. For the first time in the 1980's, natural increase rose in 1989. The rise in natural increase was surprising because births fell in 1989. Deaths, however, also dropped resulting in a rise in natural increase.

Fiscal year births in Utah peaked in 1982 and dropped every year until 1988 when births increased slightly. In 1989, births declined once again from 35,648 in 1988 to 35,549. Births, however, in 1989 are slightly higher (80) than they were in 1987.

The drop in births has meant a decline in Utah's total fertility rate. While the nation's total fertility rate has remained constant at 1.8 births per woman for over a decade and a half, Utah's has dropped from 3.3 births per woman in 1979 to 2.5 in 1987. Although Utah's fertility is still the highest in the country and well above the national average, the drop in fertility represents a significant demographic and lifestyle change in Utah. Table 15 and Figure 14 show total fertility rates for Utah and the nation.

Deaths in Utah declined slightly from 1988 to 1989. In general, mortality rates have remained relatively stable. Therefore, as population has grown, deaths have increased at a similar rate. The drop in deaths in 1989 is not significant.

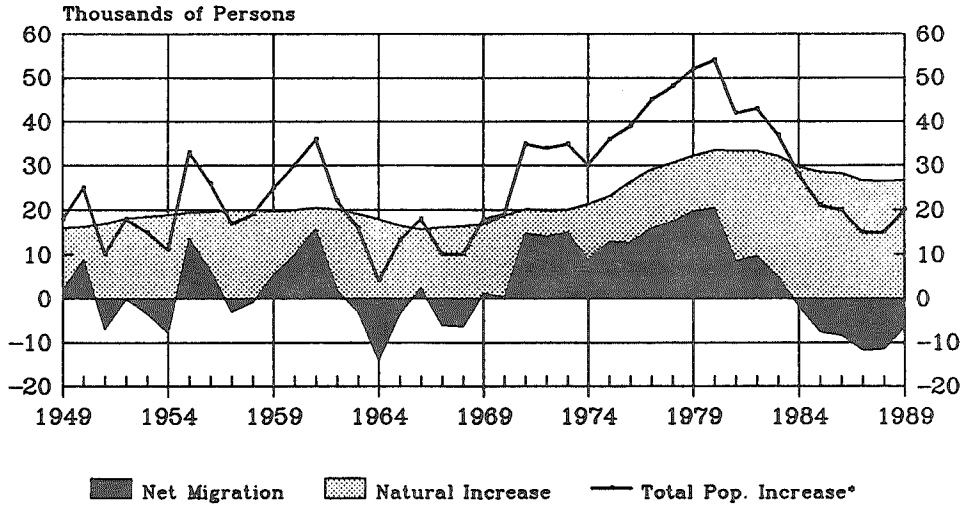
Migration

Out-migration continued in Utah for the sixth straight year in 1989. The magnitude of out-migration, however, has dropped dramatically. Out-migration peaked in 1987 at 11,700 and dropped to 6,300 in 1989. During the last two years Utah has had less out-migration because of a stronger economy.

Because of Utah's stronger economic performance over the past two years, a sixth consecutive year of out-migration surprised many economists. Out-migration normally occurs when job growth is too slow to provide work for new entrants into the labor market. During 1989, however, the Utah economy created over 32,000 jobs, more than any year since 1984. Because of this healthy job growth, the out-migration in 1989 warrants further explanation.

Many economists point out that the type of jobs created over the past year have not been the type that cause people to migrate to Utah or stop people from leaving for jobs out-of-state. For example, Business Services have led all other job categories in percent growth during 1989. Business Services

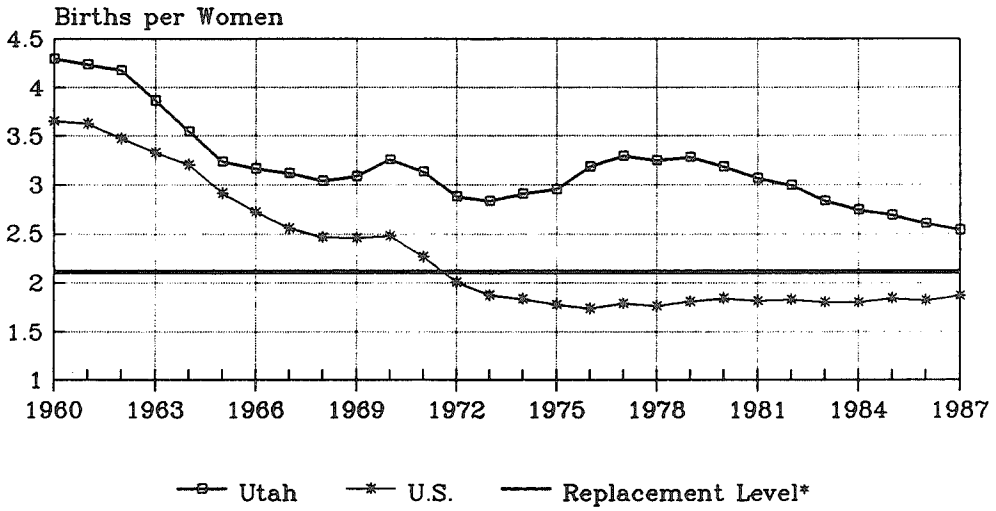
Figure 13
Annual Population Increase in Utah
Net Migration, Natural Increase, & Total



*Population increase = Natural Increase + Net Migration

Source: U.S. Bureau of the Census and
Utah State Office of Planning & Budget.

Figure 14
Total Fertility: 1960–1987
for Utah and the U.S.



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

includes jobs in direct mail advertising, employment agencies, and other areas that are relatively low paying jobs that do not attract workers from out-of-state.

Another explanation for rapid job growth yet continued out-migration is a tightening of the labor market. Perhaps the poor economic performance of the mid-1980s forced many in the labor force to drop out. A stronger economy has now brought these people back into the labor force. Consequently, new jobs can easily be filled by current residents in the state.

A final reason for Utah's out-migration during 1989 is the labor shortages that are starting to occur in many other states. Utah's young, well-educated labor force may be a sought after commodity, for instance, in the strong economies of the West Coast. Despite Utah's stronger economic performance during 1988 and 1989, the higher pay offered in other states may be a great attraction for Utahns. As a result, many Utah workers are being pulled not pushed out of the Utah economy.

Households

Since many economic commodities are made specifically for households, businesses often base decisions on household estimates rather than population estimates. Recognizing these data needs, the Bureau of the Census releases annual state household estimates. Utah's household estimates are shown in Table 16. The most recent county household data are provided in Table 17.

Nationwide household growth from 1980 to 1988 significantly exceeded population growth. Households across the nation increased by 13.9 percent, compared with 8.5 percent population growth. Households increase more rapidly because of the age structure of the population. As the baby boomers are aging a higher percentage of the population are in the household formation years (over 18 years of age). Conversely, the population under 18 years of age has been declining in the country.

Utah's household formation differs significantly from the nation. In Utah, households are growing at about the same rate as the population. This occurs because, unlike the nation, the growth in Utah's population 18 years and over and the population under age 18 has been relatively balanced. From 1980 to 1988, Utah households increased by 16.7 percent and population increased by 16.0 percent.

Another unique characteristic of Utah households is the size. Utah has the largest household size of any state in the country at 3.17 persons per household in 1988. No other state has even 3.0 persons per household. The average household size in the nation is 2.62.

Among Utah's counties household sizes in 1985 ranged from 4.24 in San Juan County to 2.94 in Grand County. San Juan County registers a large household size primarily because of the large American Indian population in the county. American Indians tend to have above average household sizes. Most of the counties have household sizes very close to the state average.

Age Structure

One important consequence of a high fertility rate is a youthful age structure. Utah's 1988 median age of 25.7 -- the age at which half the population are older and half are younger -- is 6.6 years younger than the nation. Utah has the youngest median age of any state and is still lower than the U.S. median age in the 1930 Census of 26.4. Table 18 shows the median age for Utah and the U.S. for the 1980's.

Because Utah has the youngest population of any state, Utah's age distribution provides an interesting basis for the study of dependency ratios and their policy implications. Dependency ratios show the number of dependents (young and old population) as a proportion of the working age population (ages 18 to 64). Table 20 shows the number of pre-school, school age, retirement age and total dependents for every 100 persons of working age.

In 1988, Utah had 84 dependents for every 100 adults of working age. This is the highest dependency ratio, by a big margin, of any state. This ratio shows that for every 100 people who are of working age, Utah must provide for 22 more young and elderly than the national average.

Utah's dependency ratio is high because of the young population. As shown in Table 20, the number of persons in Utah of retirement age for every 100 of working age is 15, five less than the national average. However, in both the pre-school age and school age for every 100 workers, Utah shows dramatically more children than the nation.

Dependency ratios are important because it is the working age population that sustains the young and elderly. Utah's high youth dependency ratio means that extra resources must be placed in education, child care, and other youth services if the young are to be cared for properly. Because of Utah's high dependency ratio, the resources of individuals and families in the state are stretched.

Table 13
Utah Population Estimates, Net Migration, Births and Deaths
1947 to 1989

Year	July First Population	Percent Change	Increase	Net Migration*	Natural Increase	Fiscal Year Births**	Fiscal Year Deaths*
1947	636,000	-0.31	(2,000)	(17,082)	15,082	19,972	4,891
1948	653,000	2.67	17,000	814	16,186	21,219	5,033
1949	671,000	2.76	18,000	2,061	15,940	20,939	5,000
1950	696,000	3.73	25,000	8,774	16,227	21,178	4,952
1951	706,000	1.44	10,000	(7,046)	17,046	21,981	4,935
1952	724,000	2.55	18,000	(209)	18,209	23,251	5,042
1953	739,000	2.07	15,000	(3,522)	18,522	23,658	5,136
1954	750,000	1.49	11,000	(7,906)	18,906	23,944	5,038
1955	783,000	4.40	33,000	13,589	19,412	24,454	5,042
1956	809,000	3.32	26,000	6,372	19,629	24,787	5,158
1957	826,000	2.10	17,000	(3,058)	20,058	25,518	5,460
1958	845,000	2.30	19,000	(972)	19,972	25,724	5,753
1959	870,000	2.96	25,000	5,330	19,671	25,515	5,844
1960	900,000	3.45	30,000	9,980	20,021	25,959	5,938
1961	936,000	4.00	36,000	15,608	20,392	26,431	6,039
1962	958,000	2.35	22,000	1,802	20,199	26,402	6,203
1963	974,000	1.67	16,000	(3,148)	19,148	25,583	6,435
1964	978,000	0.41	4,000	(13,924)	17,924	24,398	6,474
1965	991,000	1.33	13,000	(3,515)	16,515	23,053	6,538
1966	1,009,000	1.82	18,000	2,330	15,670	22,431	6,761
1967	1,019,000	0.99	10,000	(6,092)	16,092	22,775	6,683
1968	1,029,000	0.98	10,000	(6,372)	16,372	23,071	6,699
1969	1,047,000	1.75	18,000	1,124	16,876	23,713	6,837
1970	1,066,000	1.81	19,000	327	18,674	25,601	6,927
1971	1,101,000	3.28	35,000	14,800	20,200	27,407	7,207
1972	1,135,000	3.09	34,000	14,090	19,910	27,146	7,236
1973	1,170,000	3.08	35,000	14,955	20,045	27,562	7,517
1974	1,200,000	2.56	30,000	8,620	21,380	28,876	7,496
1975	1,236,000	3.00	36,000	12,949	23,051	30,566	7,515
1976	1,275,000	3.16	39,000	12,605	26,395	33,773	7,378
1977	1,320,000	3.53	45,000	15,886	29,114	36,709	7,595
1978	1,368,000	3.64	48,000	17,422	30,578	38,265	7,687
1979	1,420,000	3.80	52,000	19,712	32,288	40,134	7,846
1980	1,474,000	3.80	54,000	20,517	33,483	41,591	8,108
1981	1,516,000	2.85	42,000	8,601	33,399	41,511	8,112
1982	1,559,000	2.84	43,000	9,630	33,370	41,774	8,404
1983	1,596,000	2.37	37,000	4,789	32,211	40,557	8,346
1984	1,624,000	1.75	28,000	(1,757)	29,757	38,643	8,886
1985	1,645,000	1.29	21,000	(7,585)	28,585	37,508	8,923
1986	1,665,000	1.22	20,000	(8,355)	28,355	37,145	8,790
1987	1,680,000	0.90	15,000	(11,656)	26,656	35,469	8,813
1988	1,695,000	0.89	15,000	(11,526)	26,526	35,648	9,122
1989	1,715,000	1.18	20,000	(6,633)	26,633	35,549	8,916

* Net migration figures are based on unrounded population estimates to maintain consistency with the historical database. Therefore, these migration estimates may differ from those found elsewhere in the report.

** From 1947 to 1970 fiscal year births and deaths are estimated by averaging calendar year births and deaths in the two years that are partially covered by each fiscal year. After 1970, actual fiscal year births and deaths are shown.

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

Table 14
Utah Population Estimates
By County
1980 to 1989

County	July 1 1980	July 1 1981	July 1 1982	July 1 1983	July 1 1984	July 1 1985	July 1 1986	July 1 1987	July 1 1988	July 1 1989*	1980-89 % Change	1988-89 % Change
Beaver	4,400	4,600	4,650	5,000	5,150	5,050	4,950	4,900	4,800	4,800	9.1%	0.0%
Box Elder	33,500	34,000	34,700	35,300	35,800	36,600	37,300	37,800	38,000	38,400	14.6%	1.1%
Cache	57,700	59,800	62,000	64,500	65,600	66,700	67,800	69,200	70,600	71,700	24.3%	1.6%
Carbon	22,400	23,100	24,700	24,500	23,700	23,400	23,000	22,500	22,000	21,500	-4.0%	-2.3%
Daggett	750	850	850	750	750	700	700	700	700	650	-13.3%	-7.1%
Davis	148,000	153,000	158,000	162,000	166,000	170,000	175,000	179,000	184,000	187,000	26.4%	1.6%
Duchesne	12,700	13,100	13,700	14,400	14,800	14,700	14,300	13,700	13,100	12,800	0.8%	-2.3%
Emery	11,600	12,100	13,000	13,100	12,400	11,800	11,800	11,600	11,300	11,300	-2.6%	0.0%
Garfield	3,700	3,700	3,750	3,950	3,950	4,050	4,050	4,050	4,050	4,100	10.8%	1.2%
Grand	8,250	8,400	8,100	7,950	7,650	7,050	6,850	6,700	6,550	6,500	-21.2%	-0.8%
Iron	17,500	17,900	18,300	18,900	19,300	19,400	19,500	19,500	19,200	19,500	11.4%	1.6%
Juab	5,550	5,600	5,700	5,900	6,150	6,250	5,800	5,700	5,700	5,800	4.5%	1.8%
Kane	4,050	4,050	4,150	4,350	4,500	4,700	4,800	4,850	4,900	4,900	21.0%	0.0%
Millard	9,050	9,600	10,400	11,400	13,500	14,200	13,600	13,000	12,900	13,000	43.6%	0.8%
Morgan	4,950	5,050	5,200	5,250	5,350	5,450	5,500	5,650	5,700	5,850	18.2%	2.6%
Piute	1,350	1,400	1,350	1,450	1,500	1,550	1,550	1,550	1,550	1,550	14.8%	0.0%
Rich	2,150	2,250	2,400	2,300	2,150	2,100	2,050	1,950	1,850	1,850	-14.0%	0.0%
Salt Lake	625,000	640,000	655,000	667,000	679,000	689,000	697,000	701,000	705,000	712,000	13.9%	1.0%
San Juan	12,400	12,700	12,600	13,000	12,800	12,500	12,700	12,900	12,900	13,000	4.8%	0.8%
Sanpete	14,800	15,400	16,100	16,900	17,000	16,900	16,500	16,600	16,700	16,800	13.5%	0.6%
Sevier	14,900	15,200	15,500	15,800	16,100	16,200	15,800	15,900	15,900	16,000	7.4%	0.6%
Summit	10,400	10,900	11,300	11,800	12,200	12,400	12,700	13,300	13,400	14,000	34.6%	4.5%
Tooele	26,200	26,800	27,100	27,300	28,200	28,300	28,100	28,100	27,800	27,800	6.1%	0.0%
Uintah	20,700	21,900	24,300	25,300	24,500	24,000	23,000	21,800	21,500	21,000	1.4%	-2.3%
Utah	220,000	228,000	235,000	242,000	247,000	250,000	253,000	258,000	262,000	267,000	21.4%	1.9%
Wasatch	8,650	8,900	8,750	9,050	9,200	9,200	9,450	9,700	9,800	10,000	15.6%	2.0%
Washington	26,400	27,700	29,400	30,700	32,600	35,700	39,100	41,300	43,000	45,100	70.8%	4.9%
Wayne	1,950	2,000	2,000	2,150	2,150	2,100	2,100	2,050	2,100	2,100	7.7%	0.0%
Weber	145,000	148,000	151,000	154,000	155,000	155,000	157,000	157,000	158,000	159,000	9.7%	0.6%
TOTAL	1,474,000	1,516,000	1,559,000	1,596,000	1,624,000	1,645,000	1,665,000	1,680,000	1,695,000	1,715,000	16.4%	1.2%

* Preliminary
Source: Utah Population Estimates Committee.

Table 15
Total Fertility Rates
Utah and the U.S.
1960 to 1987

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

Source: Eileen Brown, "Fertility in Utah: 1960-1985", Utah Office of Planning and Budget, and U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1023.

Table 16
Utah Household Estimates
1980 to 1988

	Households	Percent Change
1980 Census	449,000	--
1981	465,000	3.6%
1982	476,000	2.4%
1983	483,000	1.5%
1984	496,000	2.7%
1985	505,000	1.8%
1986	514,000	1.8%
1987	518,000	0.8%
1988	524,000	1.2%

Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1044.

Table 17
Utah County Household Estimates
1980 to 1985

	1980 Census	July 1 1985 Estimate	Percent Change	Persons Per Household 1980	Persons Per Household 1985
Beaver	1,428	1,700	17.1	3.06	3.10
Box Elder	9,808	10,300	5.2	3.31	3.44
Cache	17,558	19,700	11.9	3.16	3.18
Carbon	7,242	7,200	-1.3	3.03	3.13
Daggett	244	200	1.8	3.15	3.11
Davis	39,994	47,200	17.9	3.58	3.64
Duchesne	3,499	4,400	26.9	3.57	3.42
Emery	3,276	3,300	0.6	3.48	3.65
Garfield	1,196	1,300	6.8	3.00	3.08
Grand	2,759	2,500	-9.5	2.98	2.94
Iron	5,168	5,900	14.7	3.28	3.23
Juab	1,707	1,800	7.3	3.21	3.29
Kane	1,286	1,500	15.5	3.12	3.10
Millard	2,728	4,200	55.5	3.28	3.38
Morgan	1,355	1,300	-1.1	3.63	3.82
Piute	435	500	3.7	3.06	3.21
Rich	654	700	5.6	3.21	3.37
Salt Lake	201,742	227,400	12.7	3.03	3.01
San Juan	3,018	2,700	-9.7	4.04	4.24
Sanpete	4,454	4,800	8.4	3.17	3.34
Sevier	4,587	4,900	5.8	3.19	3.21
Summit	3,381	4,100	21.2	3.02	3.04
Tooele	7,966	8,800	10.4	3.23	3.29
Uintah	5,949	7,200	20.8	3.44	3.49
Utah	58,515	65,400	11.7	3.59	3.53
Wasatch	2,595	2,900	13.3	3.26	3.28
Washington	7,801	10,500	34.1	3.28	3.29
Wayne	615	700	6.2	3.11	3.27
Weber	47,643	52,500	10.2	2.99	2.96
State	448,603	505,000	12.7	3.20	3.20

Source: U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 156.

Table 18
Utah and U.S. Median Age
1980 to 1988

	U.S.	Utah	Difference
1980	30.0	24.2	5.8
1981	30.3	24.3	6.0
1982	30.6	24.6	6.0
1983	30.8	24.8	6.0
1984	31.1	25.0	6.1
1985	31.4	25.2	6.2
1986	31.7	25.5	6.2
1987	32.1	25.5	6.6
1988	32.3	25.7	6.6

Source: U.S. Bureau of the Census
Current Population Reports,
Series P-25, No. 1044.

Table 19
Rankings of States and the District of Columbia by Selected Age Groups
July 1, 1988

Ranking by % of Total		Under 5 (000)	% of Total		5-17 (000)	% of Total		18-64 (000)	% of Total		65+ (000)	% of Total
-	United States	18,456	7.5%	United States	45,389	18.5%	United States	151,596	61.7%	United States	30,367	12.4%
1	Alaska	57	10.9%	Utah	452	26.8%	D.C.	402	65.2%	Florida	2,201	17.8%
2	Utah	177	10.5%	Idaho	223	22.2%	Virginia	3,906	64.9%	Pennsylvania	1,793	14.9%
3	New Mexico	134	8.9%	Mississippi	574	21.9%	Maryland	2,979	64.4%	Iowa	423	14.9%
4	Texas	1,488	8.8%	Wyoming	102	21.3%	Alaska	336	64.2%	Rhode Island	146	14.7%
5	Arizona	299	8.6%	Alaska	110	21.0%	Colorado	2,118	64.2%	Arkansas	350	14.6%
6	Louisiana	372	8.4%	Louisiana	924	21.0%	Nevada	675	64.0%	West Virginia	268	14.3%
7	California	2,381	8.4%	New Mexico	315	20.9%	Massachusetts	3,750	63.7%	South Dakota	100	14.0%
8	Wyoming	39	8.1%	Texas	3,498	20.8%	Hawaii	698	63.5%	Missouri	710	13.8%
9	Hawaii	89	8.1%	Georgia	1,280	20.2%	New Hampshire	688	63.4%	Nebraska	221	13.8%
10	Idaho	81	8.1%	Alabama	819	20.0%	New Jersey	4,880	63.2%	Oregon	381	13.8%
11	Colorado	264	8.0%	Arkansas	476	19.9%	Delaware	417	63.2%	Massachusetts	806	13.7%
12	South Dakota	57	8.0%	So. Carolina	690	19.9%	Connecticut	2,040	63.1%	Kansas	338	13.5%
13	Mississippi	206	7.9%	Montana	159	19.8%	California	17,810	62.9%	North Dakota	90	13.5%
14	Georgia	496	7.8%	North Dakota	131	19.6%	No. Carolina	4,079	62.9%	Connecticut	435	13.4%
15	North Dakota	52	7.8%	South Dakota	140	19.6%	Vermont	350	62.8%	Maine	161	13.4%
16	Nevada	82	7.8%	Oklahoma	635	19.6%	New York	11,226	62.7%	Wisconsin	641	13.2%
17	Montana	62	7.7%	Kentucky	728	19.5%	Washington	2,907	62.5%	New Jersey	1,009	13.1%
18	Kansas	191	7.7%	West Virginia	364	19.4%	Rhode Island	617	62.1%	Oklahoma	422	13.0%
19	Oklahoma	247	7.6%	Indiana	1,072	19.3%	Georgia	3,929	62.0%	New York	2,328	13.0%
20	D.C.	47	7.6%	Michigan	1,776	19.2%	Tennessee	3,031	61.9%	Arizona	447	12.8%
21	Minnesota	325	7.5%	Nebraska	303	18.9%	Illinois	7,188	61.9%	Montana	103	12.8%
22	Nebraska	120	7.5%	Ohio	2,049	18.9%	Michigan	5,710	61.8%	Ohio	1,372	12.6%
23	Washington	348	7.5%	Wisconsin	916	18.9%	So. Carolina	2,143	61.7%	Minnesota	540	12.5%
24	Maryland	346	7.5%	Tennessee	921	18.8%	Indiana	3,414	61.5%	Alabama	513	12.5%
25	So. Carolina	259	7.5%	Arizona	653	18.7%	Minnesota	2,647	61.5%	Tennessee	612	12.5%
26	New Hampshire	81	7.5%	Kansas	462	18.5%	Oregon	1,699	61.4%	D.C.	77	12.5%
27	Illinois	859	7.4%	Illinois	2,144	18.5%	Maine	740	61.4%	Kentucky	463	12.4%
28	Wisconsin	357	7.4%	Minnesota	795	18.5%	Florida	7,339	59.5%	Mississippi	321	12.3%
29	Michigan	677	7.3%	Iowa	523	18.5%	Ohio	6,660	61.4%	Indiana	680	12.2%
30	Delaware	48	7.3%	Colorado	605	18.3%	Pennsylvania	7,360	61.3%	Illinois	1,421	12.2%
31	Arkansas	173	7.2%	Missouri	942	18.3%	Kentucky	2,282	61.2%	No. Carolina	775	11.9%
32	Alabama	296	7.2%	No. Carolina	1,187	18.3%	Wyoming	293	61.2%	Washington	551	11.9%
33	Missouri	370	7.2%	Maine	220	18.3%	Missouri	3,120	60.7%	Vermont	66	11.8%
34	Vermont	40	7.2%	Vermont	101	18.1%	Wisconsin	2,940	60.6%	Idaho	118	11.8%
35	Virginia	430	7.1%	Washington	842	18.1%	Texas	10,188	60.5%	Delaware	77	11.7%
36	Ohio	774	7.1%	California	5,113	18.1%	Alabama	2,475	60.3%	Michigan	1,076	11.6%
37	New York	1,275	7.1%	Hawaii	198	18.0%	West Virginia	1,131	60.3%	New Hampshire	123	11.3%
38	Indiana	389	7.0%	Oregon	496	17.9%	Kansas	1,504	60.3%	So. Carolina	379	10.9%
39	Maine	84	7.0%	Delaware	118	17.9%	Arizona	2,090	59.9%	Louisiana	479	10.9%
40	No. Carolina	449	6.9%	New Hampshire	194	17.9%	New Mexico	902	59.9%	Maryland	498	10.8%
41	Oregon	190	6.9%	Nevada	184	17.5%	Iowa	1,697	59.9%	Nevada	113	10.7%
42	Connecticut	222	6.9%	Maryland	801	17.3%	Nebraska	958	59.8%	Virginia	640	10.6%
43	New Jersey	529	6.9%	Virginia	1,040	17.3%	Oklahoma	1,937	59.8%	California	3,011	10.6%
44	Massachusetts	400	6.8%	New York	3,081	17.2%	Montana	481	59.8%	Hawaii	114	10.4%
45	Kentucky	253	6.8%	Pennsylvania	2,057	17.1%	Louisiana	2,632	59.7%	New Mexico	155	10.3%
46	Tennessee	332	6.8%	New Jersey	1,302	16.9%	North Dakota	394	59.1%	Georgia	637	10.0%
47	Iowa	191	6.7%	Connecticut	538	16.6%	South Dakota	416	58.3%	Texas	1,666	9.9%
48	Rhode Island	66	6.6%	Rhode Island	164	16.5%	Arkansas	1,395	58.3%	Colorado	314	9.5%
49	Pennsylvania	791	6.6%	Massachusetts	932	15.8%	Mississippi	1,519	58.0%	Wyoming	45	9.4%
50	Florida	848	6.9%	Florida	1,947	15.8%	Idaho	581	57.9%	Utah	141	8.4%
51	West Virginia	113	6.0%	D.C.	91	14.7%	Utah	918	54.4%	Alaska	20	3.8%

* May not add to totals due to rounding.
Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1044.

Table 20
Dependency Ratios for States and the District of Columbia
July 1, 1988

Rank		Dependents Per 100 of Working Age	Rank		Pre-School Per 100 of Working Age	Rank		School Age Per 100 of Work. Age	Rank		Retirement Age Per 100 of Work. Age	Rank
-	U.S. Average	62	-	U.S. Average	12	-	U.S. Average	30	-	U.S. Average	20	-
1	Utah	84	1	Utah	19	1	Utah	49	1	Florida	28	1
2	Idaho	73	2	Alaska	17	2	Idaho	38	2	Arkansas	25	2
3	Mississippi	72	3	New Mexico	15	3	Mississippi	38	3	Iowa	25	3
4	Arkansas	72	4	Texas	15	4	Arkansas	34	4	Pennsylvania	24	4
5	South Dakota	71	5	Arizona	14	5	South Dakota	34	5	South Dakota	24	5
6	North Dakota	69	6	Louisiana	14	6	North Dakota	33	6	West Virginia	24	6
7	Louisiana	67	7	Idaho	14	7	Louisiana	35	7	Rhode Island	24	7
8	Montana	67	8	South Dakota	14	8	Montana	33	8	Nebraska	23	8
9	Oklahoma	67	9	Mississippi	14	9	Oklahoma	33	9	North Dakota	23	9
10	Nebraska	67	10	California	13	10	Nebraska	32	10	Missouri	23	10
11	Iowa	67	11	Wyoming	13	11	Iowa	31	11	Kansas	22	11
12	New Mexico	67	12	North Dakota	13	12	New Mexico	35	12	Oregon	22	12
13	Arizona	67	13	Montana	13	13	Arizona	31	13	Wisconsin	22	13
14	Kansas	66	14	Oklahoma	13	14	Kansas	31	14	Oklahoma	22	14
15	West Virginia	66	15	Hawaii	13	15	West Virginia	32	15	Maine	22	15
16	Alabama	66	16	Kansas	13	16	Alabama	33	16	Massachusetts	21	16
17	Texas	65	17	Georgia	13	17	Texas	34	17	Montana	21	17
18	Wisconsin	65	18	Nebraska	13	18	Wisconsin	31	18	Arizona	21	18
19	Missouri	65	19	Colorado	12	19	Missouri	30	19	Connecticut	21	19
20	Wyoming	63	20	Arkansas	12	20	Wyoming	35	20	Mississippi	21	20
21	Kentucky	63	21	Minnesota	12	21	Kentucky	32	21	New York	21	21
22	Pennsylvania	63	22	Nevada	12	22	Pennsylvania	28	22	Alabama	21	22
23	Ohio	63	23	Wisconsin	12	23	Ohio	31	23	New Jersey	21	23
24	Florida	63	24	So. Carolina	12	24	Florida	25	24	Ohio	21	24
25	Maine	63	25	Washington	12	25	Maine	30	25	Minnesota	20	25
26	Oregon	63	26	Alabama	12	26	Oregon	29	26	Idaho	20	26
27	Minnesota	63	27	Illinois	12	27	Minnesota	30	27	Kentucky	20	27
28	Indiana	63	28	Missouri	12	28	Indiana	31	28	Tennessee	20	28
29	So. Carolina	62	29	Michigan	12	29	So. Carolina	32	29	Indiana	20	29
30	Michigan	62	30	New Hampshir	12	30	Michigan	31	30	Illinois	20	30
31	Illinois	62	31	D.C.	12	31	Illinois	30	31	D.C.	19	31
32	Tennessee	62	32	Ohio	12	32	Tennessee	30	32	No. Carolina	19	32
33	Georgia	61	33	Maryland	12	33	Georgia	33	33	Washington	19	33
34	Rhode Island	61	34	Delaware	12	34	Rhode Island	27	34	Vermont	19	34
35	Washington	60	35	Vermont	11	35	Washington	29	35	Michigan	19	35
36	New York	60	36	Indiana	11	36	New York	27	36	Delaware	18	36
37	Vermont	59	37	New York	11	37	Vermont	29	37	Louisiana	18	37
38	No. Carolina	59	38	Maine	11	38	No. Carolina	29	38	New Hamp.	18	38
39	California	59	39	Iowa	11	39	California	29	39	So. Carolina	18	39
40	Connecticut	59	40	Oregon	11	40	Connecticut	26	40	New Mexico	17	40
41	Delaware	58	41	Kentucky	11	41	Delaware	28	41	California	17	41
42	New Jersey	58	42	Virginia	11	42	New Jersey	27	42	Nevada	17	42
43	New Hampshir	58	43	No. Carolina	11	43	New Hampshir	28	43	Maryland	17	43
44	Hawaii	57	44	Tennessee	11	44	Hawaii	28	44	Virginia	16	44
45	Massachusetts	57	45	Connecticut	11	45	Massachusetts	25	45	Texas	16	45
46	Nevada	56	46	New Jersey	11	46	Nevada	27	46	Hawaii	16	46
47	Colorado	56	47	Pennsylvania	11	47	Colorado	29	47	Georgia	16	47
48	Alaska	56	48	Rhode Island	11	48	Alaska	33	48	Utah	15	48
49	Maryland	55	49	Florida	11	49	Maryland	27	49	Wyoming	15	49
50	Virginia	54	50	Massachusetts	11	50	Virginia	27	50	Colorado	15	50
51	D.C.	53	51	West Virginia	10	51	D.C.	23	51	Alaska	6	51

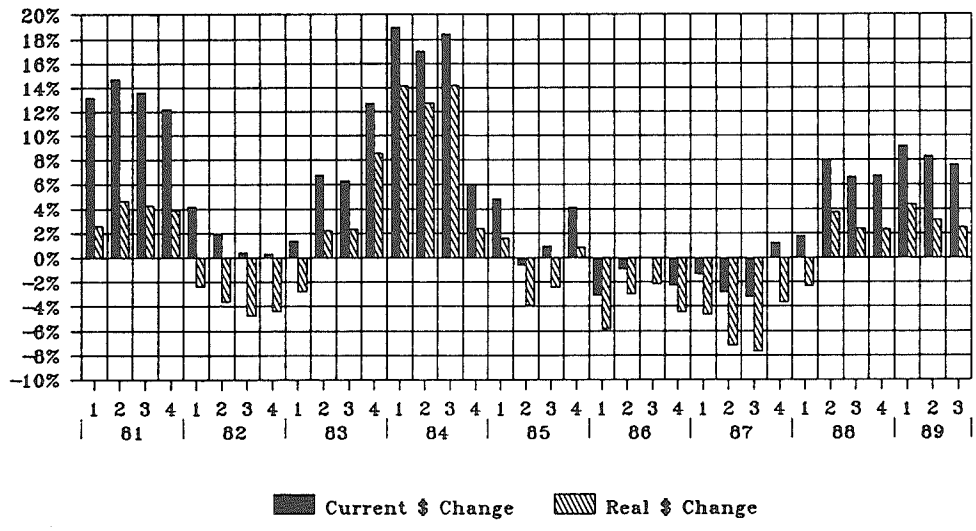
Sources: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 1044.
Utah Office of Planning and Budget.

GROSS TAXABLE SALES

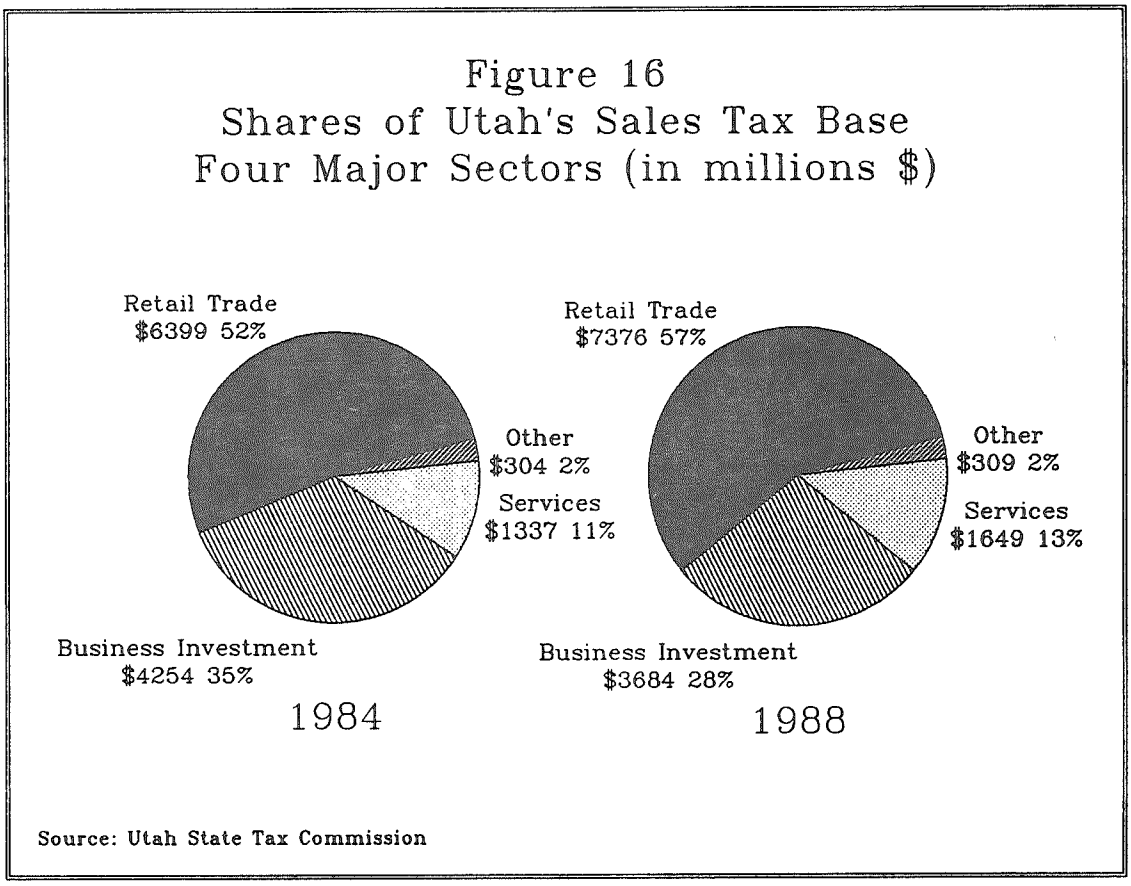
Utah's sales and use tax base, referred to here as "gross taxable sales", has been roughly constant over the past 50 years since the sale tax inception. There are three basic components to the sales tax base (although these could be further dissected). The one almost exclusively thought of, retail trade sales, accounts for 57 percent of taxable sales. Important, however, to the overall growth of the entire base are two other significant components of gross taxable sales: business investment purchases and taxable services (see Figure 16). Since 1984, taxable business investment purchases fell from 35 percent to 28 percent of the total sales tax base. Thus, the two non-retail trade portions of the base, representing 41 percent of the base together, can significantly affect the direction and magnitude of gross taxable sales growth. A recent trend to spur economic development has resulted in granting 16 new exemptions in the 1980's. Thirty-five of the 43 sales tax exemptions focus on purchases by business investment and service accounts. Another factor which makes the business investment forecast tricky is that the bulk of Utah Tax Commission audit collections come from the non-retail trade components.

Taxable services' share of the sales tax base rose from 11 percent in 1984 to 13 percent in 1988. Despite the fact that Utah taxes a comparatively large portion of its services via its sales and use taxes, less than half of consumer services are taxed. It is also important to note that this sector of Utah's economy is growing faster than any other major sector, in terms of employment and taxable sales. Confirming this trend were data from the Bureau of Economic Analysis' gross state product accounts. Between 1963 and 1986 real gross state product rose 108 percent. In contrast, real services rose almost 200 percent in this thirteen year period with respect to taxable services.

Figure 15
Change in Gross Taxable Sales
Percent Change from Prior Year



* Adjusted for large utility audit in the second quarter of 1988
Source: Utah State Tax Commission

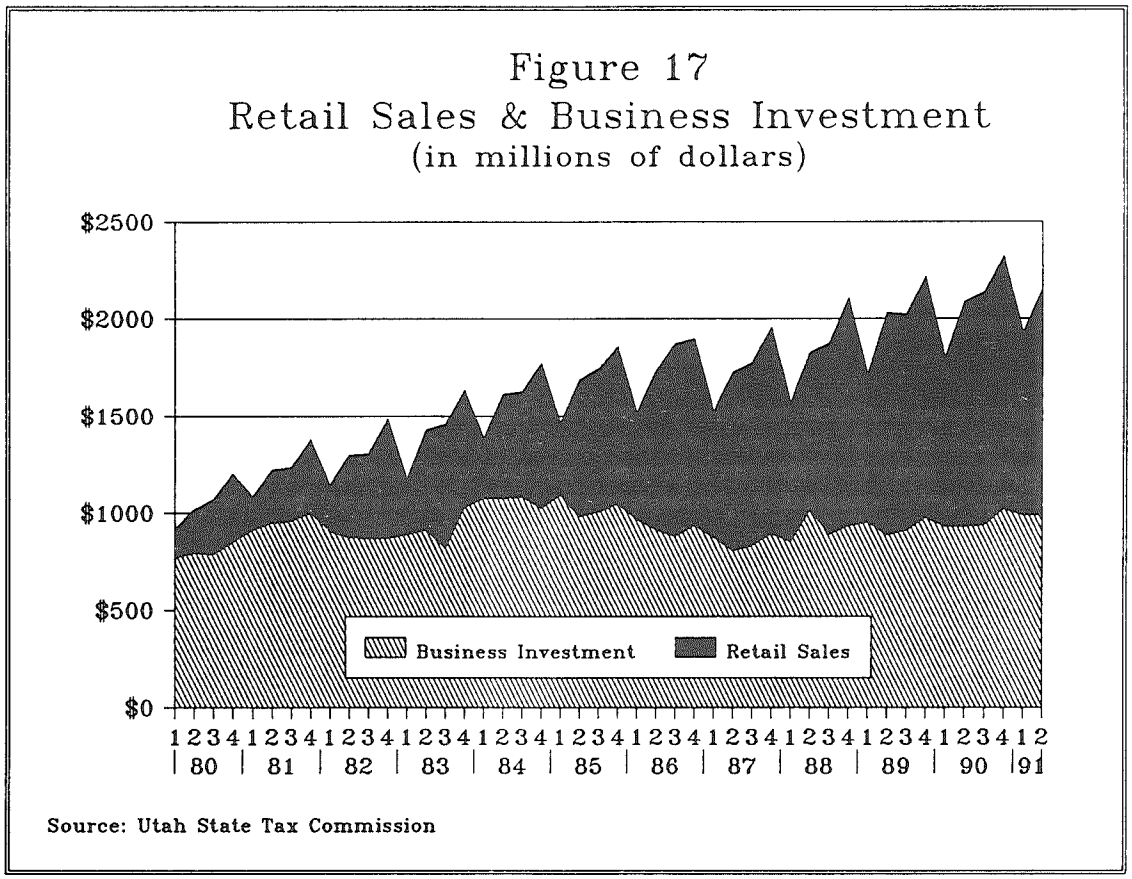


Retail Trade Sales

Retail trade sales, which fell 0.6 percent in 1987, rebounded to a 5.6 percent growth rate in 1988. The 8.3 percent estimated growth in 1989 should be followed by 4 percent to 5 percent growth in 1990. Quarterly growth rates compared to a year earlier were 2.8, 6.0, 5.4 and 7.7 percent in 1988, followed by 9.4 and 11.1 percent growth rates in the first two quarters of 1989. The models estimate that after an 8 percent increase in retail trade sales during the third calendar quarter of 1989, 3 to 7 percent growth rates will occur from the last quarter of 1989 through the second quarter of 1991 (see Figure 17).

Within the retail sector, nondurable goods sales constitute the largest and most stable subsector. Nondurable goods, which last three years or less, are categorized into food store sales, general merchandise and apparel sales, restaurant sales, and miscellaneous shopping goods store sales. Over two thirds of all retail trade sales are nondurable items. General merchandise, apparel and miscellaneous shopping goods store sales grew in double digits during the first half of 1989. Food store and restaurant sales rose about 7 percent and 8 percent, respectively. Part of the jump in general merchandise store sales was due to the addition of a nine store chain into the Utah retail trade market. The forecasting models indicate that the second half of 1989 may be rather flat in overall general merchandise store sales, because of the nine store addition. After sharp increases in 1989, nondurable sales will grow between 5 percent and 6 percent in 1990.

The second, less stable and smaller subsector within retail trade is durable goods store sales. Made up primarily of motor vehicle dealer sales and building, garden and furniture store sales, this subsector appears to be driven not only by the level of Utah wages and salaries, but also by interest rates, price discounting (through incentives) and consumer confidence. Despite unit sales growth of less than 2 percent in the first half of 1989, car dealer sales volume grew over 15 percent in the same period. Apparently, as Utah's adults are aging, they are demanding higher priced cars. This is the beginning of a trend that will continue, as Utah's post-World War II baby boomers continue to age in the 1990's, their propensity to consume more cars will subside, but their tendency to purchase upper-end models will increase.



The demographic changes in the 1990's should be a boon to the furniture and home furnishing store sales as well. As children of the post-World War II baby boomers leave home and go to college, their parents will attempt to upgrade those worn-out home furnishings. This trend, while not yet confirmed by 1989 taxable sales, may be affecting average dwelling unit permit values. Permit value of residential construction rose only 1.1 percent in the first half of 1989. But the average value for each dwelling unit permit rose from $71,235 in 1988 to $78,032 in 1989, an increase of 9.5 percent, suggesting the dynamics of higher standards of quality, as opposed to quantity, may already be prevailing in the Utah housing market. No such trend was clear in taxable sales during the first half on 1989. While building and garden sales were up 7.4 percent in the first half, furniture and home furnishing store sales dropped 0.2 percent.

Estimates for 1990 pit the difficulty of duplicating back-to-back large increases in motor vehicle dealer sales with continued advances in Utahn's consumer confidence. A conservative approach estimates that motor vehicle dealer sales will rise only 2.2 percent in 1990, partially due to 13.6 percent and 9.1 percent back-to-back gains in 1988 and 1989. This approach also estimates less than two percent growth for the building, garden and home furnishings store sales. However, another model, using longer lags from wages and consumer sentiment, indicates that 5 percent growth in durable retail sales is a possibility in 1990.

Business Equipment and Utility Sales and Purchases

Last year it was estimated that 1989 business equipment and utility sales would grow only 0.3 percent. Through the first half of the year, these sales were down 1.4 percent compared to 1988. Given the estimated 2.2 and 4.7 percent increases in the remaining quarters of 1989, these sales and purchases would grow 1 percent by year-end. Next year, excepting a 2.5 percent decline in the first quarter, business equipment and utility sales should see quarterly growth rates between 3 and 5 percent.

During the first half of 1989, taxable mining purchases fell 28 percent, from $85 million last year to $61 million. Manufacturing and construction purchases, in contrast, rose 18 percent, from $411 million in the first half of 1988 to over $485 million in the first half of 1989. Wholesale trade's final, taxable sales

fell during the first half from $574 million last year to $569 million. After adjusting for the 1988 audit collection of $113.6 million in the transportation, communication and public utility subsector, first half sales and purchases rose a respectable 6 percent.

It is important to note that imbedded in the growth forecast in 1990 for transportation, communication and public utility sales and purchases are Public Service Commission mandated price decreases which effectively decrease utility sales by 3 percent.

Taxable Services

After stagnating two straight years in 1985 and 1986, taxable services in Utah rebounded 13.2 percent and 8.5 percent, respectively, in 1987 and 1988. First half 1989 taxable services continued at the 1988 pace by growing 8.1 percent. However, a portion of that growth may have been due to changes to the 1987 Standard Industrial Classification. These reclassifications certainly played a part in the 57 percent first half increase in education, legal and social services.

The largest subsector within taxable services, auto and other repair work, dropped 0.7 percent in the first half of 1989 compared to a year earlier. Auto repair services tend to fall when new auto sales rise. The reclassification from a ski resort to the hotel category, as well as improved winter tourism sales drove hotel and lodging sales up 25.6 percent during the first half of 1989. Despite an almost 25 percent gain in computer and data processing sales and leases, overall business services rose only 4.4 percent in the first half. The reclassification of the above mentioned ski resort was entirely responsible for the seeming 10 percent decline in amusement and recreation during the first half of 1989. Had no reclassification occurred, amusement and recreation sales would have grown about 10 percent.

1990 Gross Taxable Sales Outlook

The growth in 1989 gross taxable sales is estimated at 6.5 percent, substantially better than the 2.9 percent which was forecast in January 1989 (see Figure 15). Both retail trade (up 8.3 percent) and taxable services (up 8.2 percent) increased almost double the respective 4.3 percent rates projected last year.

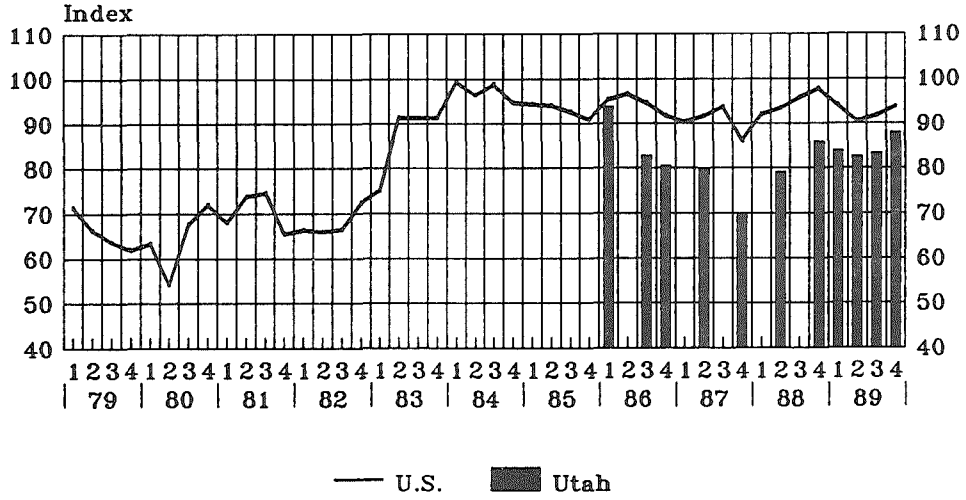
In 1990 taxable sales are expected to slow down to about a 3 percent growth rate in the first half, followed by 5 percent growth in the second half of the year. Taxable services will lead the other two sectors with growth nearing 10 percent in 1990. However, taxable services only represent about 13 percent of the sales tax base. The largest sector, retail trade, after a substantial 8.3 percent growth in 1989, may subside to a 4.5 percent gain. Soft growth of only 2 percent is expected in retail durables. Other modeling techniques put durable growth upwards at 5 percent in 1990. Nondurables appear to be headed for growth rates between 5 and 6 percent next year. Business investment purchases, should grow about 2.4 percent in 1990. Despite the expected firming of equipment prices to about 3.6 percent, the 3 percent effective cut in utility pricing by the Public Service Commission will dampen growth in this sector. While manufacturing and construction purchases may grow between 6 and 7 percent, mining purchases are expected to drop 23 percent next year.

Outlook For the Mid-1990's

Substantial changes in Utah's demographic makeup in the 1990's will most likely alter consumer goods purchases. Unit volumes of automobiles and housing will not be robust. But consumers in the 35 to 54 age brackets are at the peak of their income earning ability and will demand higher quality. Thus, the price per unit, and sales profits may improve.

As Utah's late 1970's baby boom matriculate to college and the workplace, their parents will attempt to upgrade home furnishings and perhaps move up into upper-scale cars. However, outlays for college students may also place substantial constraints on Utah household budgets, until those children are off on their own.

Figure 18
U.S. and Utah Consumer
Sentiment Indices



Source: U.S. – University of Michigan,
Utah – University of Utah Survey
Research Center.

Consumer Confidence

Bolstered by almost five percent employment gains and three percent increases in average wages, Utahns' consumer confidence surged during the October (fourth quarter) 1989 survey performed by the University of Utah's Survey Research Bureau, on behalf of the Utah State Tax Commission and the Office of Planning and Budget.

Compared to the U.S. survey, performed by the University of Michigan in the same month, Utah's consumer confidence index rose much more dramatically, rising from 83.4 in July to 88.0 in October 1989 (Figure 18). In contrast, U.S. consumers responding to the same five questions, exhibited only a modest upswing in confidence from 92.0 to 93.9. (The indices use 1966 as their baseline year. In other words, in 1966 the confidence index was 100. When calculations result in an index less than 100, this indicates that consumers are not as optimistic about the economy as they were in 1966).

By combining three of the five questions, which ask consumers about their future expectations, a Utah consumer expectations index (CEI) is formed. The CEI rose from 73.2 in July 1989 to 79.4 in October. When asked if personal finances were expected to improve over the next 12 months, 31 percent of Utah consumers in July 1989 thought they would be better off next year, compared to 37.5 percent in October 1989.

Regarding Utah business conditions during the next 12 months, Utahns' favorable responses rose from 25.6 percent in July to 27.4 percent in October. Utahns were much more sanguine about the prospects for the U.S. economy, as the percentage of respondents who expected improvement rose from 43.7 percent in July 1989 to 54.7 percent in October 1989.

Looking into the future five years out, 28.6 percent of Utahns expected an improved U.S. in July, compared to 34.5 percent in October 1989. When the "worse" responses are subtracted from the "better" responses the resulting subindex rose from 78.3 in July to 87.3 in October 1989.

As to whether it was a good or bad time to purchase a large appliance, 67.2 percent of the Utah consumers responded favorably. This compared to about a 64 percent favorable reaction in the past four surveys, taken between December 1988 and July 1989.

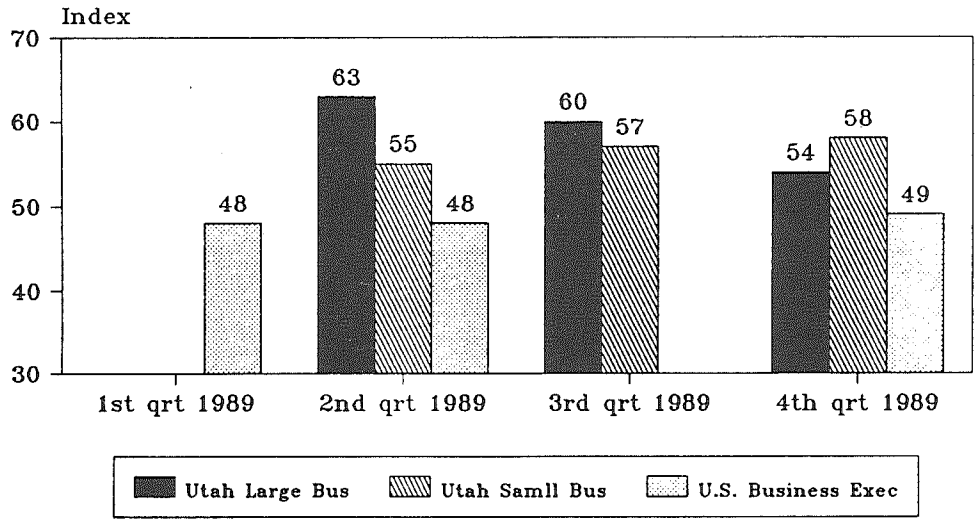
Recent statistical work by Tax Commission economists indicates a significant correlation between Utah durable goods retail sales and the consumer sentiment index two quarters prior to the retail sale level. Results from the survey will be used in forecasting Utah's sales and use taxes, which comprise over 87 percent of the State's General Fund revenues.

Business Executive Confidence

The Utah Business Conditions Survey is a quarterly, random, stratified sample of the 1500 business executives in the state. The survey is conducted by the University of Utah Survey Research Center on behalf of the Utah State Tax Commission. The percentages referred to above are within, plus or minus, 6.3 percent of the percentages that would be expected if all of the 1500 businesses were interviewed. The sampling error is larger for analyses on subsets of the sample.

Utah's business executives view of the Utah economy dipped slightly during the fourth quarter of 1989 (conducted in October 1989). The index for large businesses slipped from 60 in the third quarter to 54 in the fourth quarter survey. Confidence among moderate sized businessmen rose slightly from 57 to 58 in the last quarter of 1989. Compared to U.S. business executives, however, Utah businessmen's confidence of the U.S. economy, on the same basic questions, was only 49 (a score of 50 means the economy is about the same, while a score of 75 would mean the economy is viewed as moderately better).

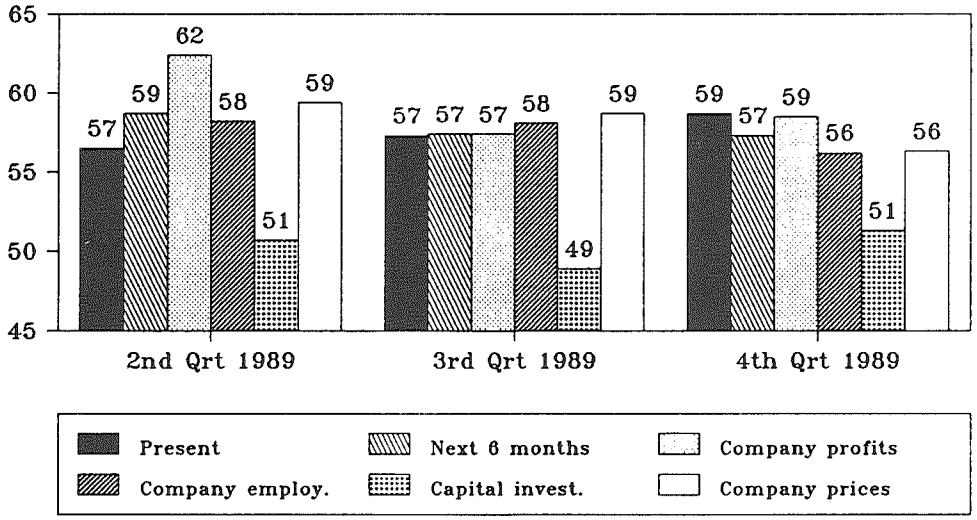
Figure 19
Utah Business Executive Confidence Survey



(50=same, 75=moderately better)

Source: Utah State Tax Commission

Figure 20
Utah Business Executive Confidence Survey



(50=same, 75=moderately better)

Source: Utah State Tax Commission

Table 21
Utah Gross Taxable Sales
1984 to 1990
(In Millions of Dollars)

Year	Retail Sales	Business Purchases	Services	All Other	Total Gross Taxable Sales
1984	$6,399	$4,254	$1,337	$304	$12,294
1985	$6,749	$4,122	$1,379	$324	$12,574
1986	$7,022	$3,689	$1,342	$325	$12,378
1987	$6,982	$3,398	$1,520	$289	$12,189
1988	$7,376	$3,684	$1,649	$309	$13,018
1989(e)	$7,985	$3,722	$1,784	$368	$13,859
1990(f)	$8,348	$3,812	$1,957	$316	$14,433
Percent Change					
1985	5.5%	-3.1%	3.1%	6.6%	2.3%
1986	4.0%	-10.5%	-2.7%	0.3%	-1.6%
1987	-0.6%	-7.9%	13.3%	-11.1%	-1.5%
1988	5.6%	8.4%	8.5%	6.9%	6.8%
1989(e)	8.3%	1.0%	8.2%	19.1%	6.5%
1990(f)	4.5%	2.4%	9.7%	-14.1%	4.1%

(e) estimate
(f) forecast

Source: Utah State Tax Commission.

CONSTRUCTION ACTIVITY

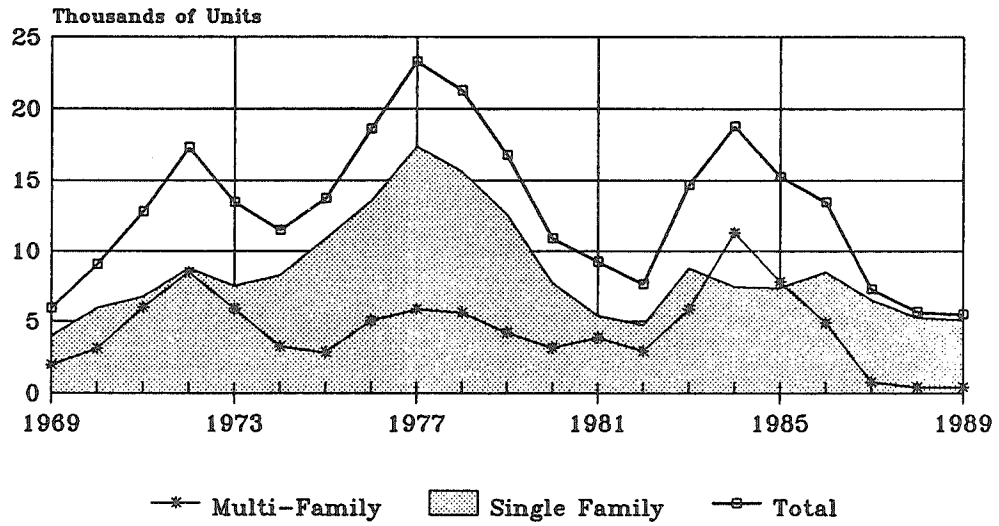
Residential Construction

For the fifth year in a row the number of new authorized residential dwelling units (single and multi-family) declined. The total number of new permit authorized dwelling units in 1989 was 5,500, a decrease of 3.8 percent compared to 1988. Even though the number of units decreased slightly in 1989 the value of new residential construction increased 6.5 percent to $440 million.

The decreases experienced in 1987 and 1988 were due primarily to slow economic growth, a plethora of multi-family structures, relatively high mortgage interest rates, out-migration and the tax law changes. With improved economic growth in other sectors, slowing out-migration and lower mortgage interest rates occurring in 1989 the elements appeared to be in place for an improving construction industry. The major reason for the failure of 1989 to show dramatic growth was due to a continued abundance in multi-family structures and a large supply of existing single family homes for sale. The number of FHA/HUD-VA homes in metropolitan markets weakened demand for new single-family homes, particularly in the $50,000 and less range. Demand for high valued structures was strong as indicated by the improvement in the valuation of new residential construction.

Improved economic growth in manufacturing, mining, and services, slower out-migration patterns and lower interest rates will help increase demand for construction in 1990. It is projected that 1990 residential construction will be above 1989 with 6,500 new dwelling units being authorized. Residential construction activity from 1970 to 1989 is shown in Table 22 and Figure 21.

Figure 21
Utah Residential Construction Activity
Permit-Authorized Construction



*1989 Estimated
Source: U of U, Bureau of Economic and Business Research.

Multi-family units decreased 4.3 percent in 1989 to 400 units. Multi-family construction still suffers from over building and decreased tax incentives for building. Vacancy rates for multi-family units in the Salt Lake market have declined over the past couple of years and are currently running around 9.5 percent. The vacancy rate still needs to drop further before demand for new construction will increase. Even with improved economic conditions and lower vacancy rates multi-family dwellings will remain weak until the existing surplus decreases. Multi-family construction in 1990 will see between 500 and 600 units authorized.

Single family homes, which have dominated construction activity since 1987, will continue to account for over 90 percent of new dwelling units in 1990. Even with lower mortgage interest rates, and economic expansion, single family construction fell 3.8 percent to 5,100 units in 1989. Single family activity in 1989 was concentrated in the higher valued custom home market. These conditions will persist into next year and should spur increased single family construction activity. About 6,000 single family homes are projected to be authorized in Utah in 1990.

Nonresidential Construction

Nonresidential construction activity improved considerably in 1989. In 1988, $272.1 million in new nonresidential construction was authorized. In 1989, an estimated $350 million will be authorized, an increase of 28.7 percent (see Figure 22). The improving state economy has increased demand for nonresidential construction in 1989 and will provide increased demand in 1990. Nonresidential construction values are projected to be around $400 million in 1990, and could be higher with major construction projects for the Olympics and a new sports arena, in Salt Lake, yet to be built.

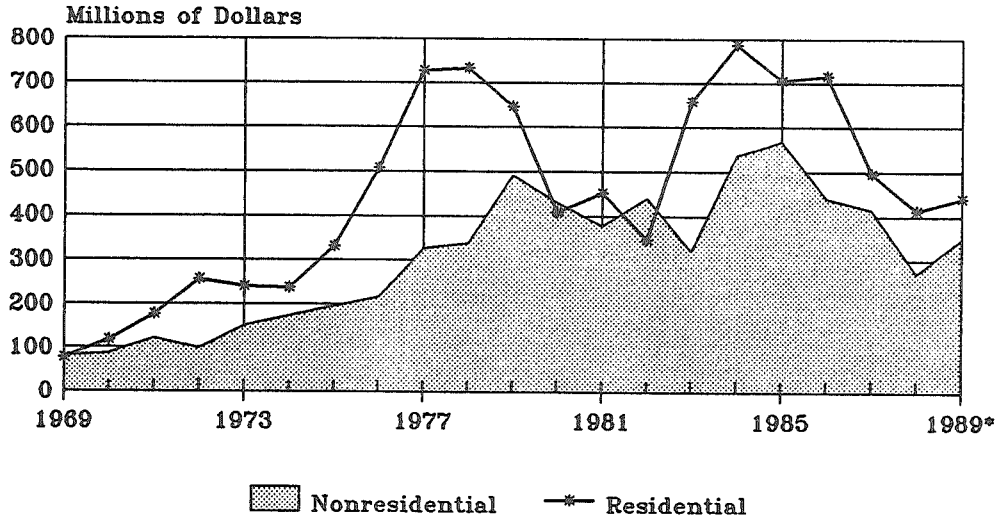
Vacancy rates for office space, industrial space and retail space have also declined throughout 1989. Currently, the rate for office space is around 18 percent and industrial space is 9.5 percent. The stronger economy should continue to improve the climate for these structures in 1990.

Construction in the major nonresidential sectors, hotels and motels, churches, office buildings, industrial buildings, and retail stores (these fives areas historically account for over 52 percent of all nonresidential construction) have all experienced increased activity in 1989. Increased employment, lower migration rates and increased economic activity are the major reasons behind this surge in activity. Nonresidential construction values are shown in Tables 23 and 24.

Nonbuilding Construction

An important contributor to the construction industry is nonbuilding construction. Nonbuilding construction consists of projects that do not require a permit such as highway and bridge construction, dams and water projects, power plants and various government projects. The value of nonbuilding construction increased 1.4 percent in 1989 to $428 million. Work on the Central Utah Project and highway improvements are the major components of the increase. Nonbuilding valuation should increase slightly in 1990.

Figure 22
Value of New Construction in Utah
Residential and Nonresidential



*1989 Estimated
Source: U of U, Bureau of Economic and Business Research.

Table 22
Residential Construction Activity in Utah
1970 to 1989

Year	Single Family Units	Multi-Family Units	Total Units	Value (Millions)
1970	5,962	3,108	9,070	$117.0
1971	6,768	6,009	12,777	$176.8
1972	8,807	8,513	17,320	$256.5
1973	7,546	5,904	13,450	$240.9
1974	8,284	3,217	11,501	$237.9
1975	10,912	2,800	13,712	$330.6
1976	13,546	5,075	18,621	$507.0
1977	17,424	5,856	23,280	$728.0
1978	15,618	5,646	21,264	$734.0
1979	12,570	4,179	16,749	$645.8
1980	7,760	3,141	10,901	$408.3
1981	5,413	3,840	9,253	$451.5
1982	4,767	2,904	7,671	$347.6
1983	8,806	5,858	14,664	$657.8
1984	7,496	11,327	18,823	$786.7
1985	7,403	7,844	15,247	$706.2
1986	8,512	4,932	13,444	$715.5
1987	6,530	775	7,305	$495.2
1988	5,297	418	5,715	$413.0
1989(e)	5,100	400	5,500	$440.0

(e) estimate

Source: Bureau of Economic and Business Research.

Table 23
Nonresidential Construction Activity in Utah
1970 to 1989

Year	Value of Nonresidential Construction (Millions)
1970	$87.3
1971	$121.6
1972	$99.0
1973	$150.3
1974	$174.2
1975	$196.5
1976	$216.8
1977	$327.1
1978	$338.6
1979	$490.3
1980	$430.0
1981	$378.2
1982	$440.1
1983	$321.0
1984	$535.2
1985	$567.7
1986	$439.9
1987	$413.4
1988	$272.1
1989(e)	$350.0

(e) estimate

Source: Bureau of Economic and Business Research.

Table 24
Utah Nonresidential Construction by Sector
(Millions)

Sector	1986	1987	1988	1989(e)	Percent of Total(a)
Hotels and Motels	$14,392.9	$4,621.8	$17.1	$5,500.0	4.9
Churches and Religious Buildings	35,127.5	25,429.9	20,909.1	22,000.0	5.6
Industrial Buildings	86,381.6	67,450.1	57,906.6	60,000.0	18.9
Offices, Banks and Professional Buildings	55,787.3	79,923.4	46,909.0	92,000.0	19.4
Stores and Other Mercantile Buildings	55,813.6	59,609.6	49,598.5	52,000.0	13.6
Publicly Owned Buildings	49,485.3	84,193.3	24,584.3	30,000.0	14.4
Other Nonresidential Construction	142,933.0	92,212.3	72,130.5	88,500.0	23.3
Total Nonresidential Construction	$439,921.2	$413,440.4	$272,055.1	$350,000.0	100.0

(a) Data represent ten-year average.
(e) Estimate

Source: Bureau of Economic and Business Research.

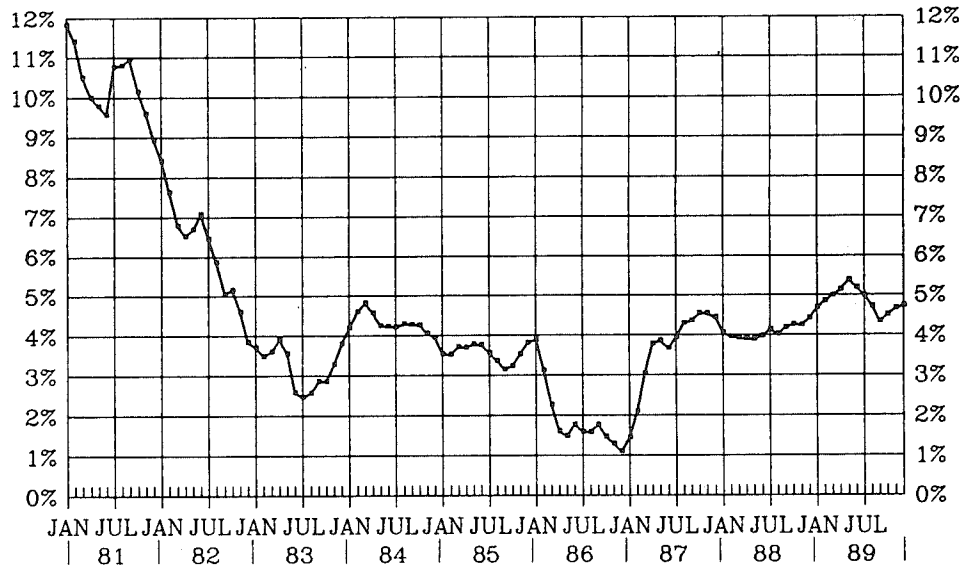
PRICES, INFLATION AND UTAH'S COST OF LIVING

Inflation, as measured by the national Consumer Price Index (CPI), accelerated to an annual rate of 6.8 percent in the January - May 1989 period compared with a 4.1-percent 1988 annual average gain. During these initial months of 1989, higher prices were broadly diversified, appearing in food, transportation, energy and medical care. Raw-material commodity prices were increasing also, wage and compensation rates were higher, and capacity utilization for both capital and human resources reached nearly full employment.

Rising inflation, combined with a tighter monetary policy, pushed interest rates higher in February and March. By midyear, however, inflationary pressures throughout the economy were easing. U.S. dollar exchange rates were sufficiently strong to require concerted central bank intervention. Gold and other precious metals prices were drifting downward. Wage increases had stabilized, and bond yields were also lower. These evidences, together with slower economic growth and a persistently cautious Federal Reserve monetary policy, suggest that inflation will be a diminished problem in 1990---increasing within a 3 1/2 to 4 percent range.

In September, 1989, the CPI was at 125.0, an increase of 4.3 percent over the previous year. By year-end, inflation, as measured by the CPI, will be about 4.3 percent above last year (see Figure 23), and the annual average increase will be approximately 4.7 percent. This anticipated 1989 rate of inflation is moderately higher than the 4.1 percent gain in 1988.

Figure 23
Increase in Prices Over the Previous 12 Months measured by CPI: Jan 81 to Dec 89



Source: U.S. Department of Labor

There are two commonly used GNP related measures of inflation. The Implicit Price Deflator is a comprehensive measure of price changes also impacted by variations in the composition of output. The Fixed Weight Deflator is another broad measure of price change, but it measures price changes for a fixed number of goods and services and, therefore, is not influenced by alterations in the output composition of GNP. These measures are shown on Table 26.

In the third quarter of 1989, the GNP implicit deflator increased at an annual rate of 2.9 percent, lower than the 4.6 percent increase in the second quarter, and 4.0 percent increase in the first quarter. The GNP fixed weight deflator dropped abruptly in the third quarter to an annual increase of 2.8 percent, compared to 5.1 percent in the second quarter, and 4.8 percent in the first quarter.

As the Bureau of Labor Statistics does not produce a Utah consumer price index, comparable local inflation measurements are not available. There are, however, two other sources of price information which provide some data pertaining to local cost patterns.

Utah Cost of Living

The American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index is prepared quarterly and includes comparative data for 269 urban areas. The index includes price comparisons for a single point in time, but it does not measure inflation or price changes over time. What it does measure is the differences between areas in the cost of consumer goods and services, as compared with a national average of 100. The composite index is based on six components, including grocery items, housing, utilities, transportation, health care and miscellaneous goods and services. The Salt Lake Area Chamber of Commerce is a member of ACCRA and submits quarterly data for the local area.

The second-quarter 1989 composite index for Salt Lake City was 95.6, or 4.4 percent below the national average for the quarter. This compares with a composite index of 95.9 for the first quarter of 1989. The second-quarter breakdown by component for the Salt Lake area is:

Grocery items, 94.8	Transportation, 101.1
Housing, 86.9	Health care, 100.9
Utilities, 89.8	Miscellaneous goods and services, 100.9

The Provo/Orem index for the 1989 second quarter was 88.9 as compared with an index of 89.6 for the first quarter.

Utah Inflation

Beginning in March 1988, First Security Bank contracted with a private research firm to develop a consumer price index for the Wasatch Front. Each month, price changes of more than 500 items are measured and analyzed. The individual price changes are categorized into eight standard areas: clothing, food at home, food away from home, health care, housing, transportation, utilities, and other. The weights used to combine these categories are the same as those used nationally by the Bureau of Labor Statistics and reflect an average family's spending patterns.

During the first three quarters of 1989, the cumulative price increase in the Wasatch Front Cost of Living Index was 1.5 percent, compared with a national increase of 3.3 percent. In November, the Wasatch Front Cost of Living Index was 100.2 (March 1988 = 100), indicating that the modest price increases in 1989 had only offset the cumulative price declines in 1988. During the second and third quarters of 1989, price changes were substantially less along the Wasatch Front than they were nationally. Local food and clothing costs over this six-month period went up more rapidly, while health care, transportation and utility prices rose at a faster pace nationwide. Housing cost increases along the Wasatch Front were very similar to those nationwide during this period (see Table 28).

Table 25
U.S. Consumer Price Index
All Urban Consumers (CPI-U)
1982 to 1984 = 100

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	AVG.	Percent Change Dec-Dec	Percent Change Ann. Avg.
1954	26.9	26.9	26.9	26.8	26.9	26.9	26.9	26.9	26.8	26.8	26.8	26.7	26.9	-0.7	0.7
1955	26.7	26.7	26.7	26.7	26.7	26.7	26.8	26.8	26.9	26.9	26.9	26.8	26.8	0.4	-0.4
1956	26.8	26.8	26.8	26.9	27.0	27.2	27.4	27.3	27.4	27.5	27.5	27.6	27.2	3.0	1.5
1957	27.6	27.7	27.8	27.9	28.0	28.1	28.3	28.3	28.3	28.3	28.4	28.4	28.1	2.9	3.3
1958	28.6	28.6	28.8	28.9	28.9	28.9	29.0	28.9	28.9	28.9	29.0	28.9	28.9	1.8	2.8
1959	29.0	28.9	28.9	29.0	29.0	29.1	29.2	29.2	29.3	29.4	29.4	29.4	29.1	1.7	0.7
1960	29.3	29.4	29.4	29.5	29.5	29.6	29.6	29.6	29.6	29.8	29.8	29.8	29.6	1.4	1.7
1961	29.8	29.8	29.8	29.8	29.8	29.8	30.0	29.9	30.0	30.0	30.0	30.0	29.9	0.7	1.0
1962	30.1	30.1	30.1	30.2	30.2	30.2	30.3	30.3	30.4	30.4	30.4	30.4	30.2	1.3	1.0
1963	30.4	360.4	30.5	30.5	30.5	30.6	30.7	30.7	30.7	30.8	30.8	30.9	30.6	1.6	1.3
1964	30.9	30.9	30.9	30.9	30.9	31.1	31.1	31.0	31.1	31.1	31.2	31.2	31.0	1.0	1.3
1965	31.2	31.2	31.3	31.4	31.4	31.6	31.6	31.6	31.6	31.7	31.7	31.8	31.5	1.9	1.6
1966	31.8	32.0	32.1	32.3	32.3	32.4	32.5	32.7	32.7	32.9	32.9	32.9	32.4	3.5	2.9
1967	32.6	32.9	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	33.4	3.0	3.1
1968	34.1	34.2	34.3	34.4	34.5	34.7	34.9	35.0	35.1	35.3	35.4	35.5	34.8	4.7	4.2
1969	35.6	35.8	36.1	36.3	36.4	36.6	36.8	37.0	37.1	37.3	37.6	37.7	36.7	6.2	5.5
1970	37.8	38.0	38.2	38.5	38.6	38.8	39.0	39.0	39.2	39.4	39.6	39.8	38.8	5.6	5.7
1971	39.8	39.9	40.0	40.1	40.3	40.6	40.7	40.8	40.8	40.9	40.9	41.1	40.5	3.3	4.4
1972	41.1	41.3	41.4	41.5	41.6	41.7	41.9	42.0	42.1	42.3	42.4	42.5	41.8	3.4	3.2
1973	42.6	42.9	43.3	43.6	43.9	44.2	44.3	45.1	45.2	45.6	45.9	46.2	44.4	8.7	6.2
1974	46.6	47.2	47.8	48.0	48.6	49.0	49.4	50.0	50.6	51.1	51.5	51.9	49.3	12.3	11.0
1975	52.1	52.5	52.7	52.9	53.2	53.6	54.2	54.3	54.6	54.9	55.3	55.5	53.8	6.9	9.1
1976	55.6	55.8	55.9	56.1	56.5	56.8	57.1	57.4	57.6	57.9	58.0	58.2	56.9	4.9	5.8
1977	58.5	59.1	59.5	60.0	60.3	60.7	61.0	61.2	61.4	61.6	61.9	62.1	60.6	6.7	6.5
1978	62.5	62.9	63.4	63.9	64.5	65.2	65.7	66.0	66.5	67.1	67.4	67.7	65.2	9.0	7.6
1979	68.3	69.1	69.8	70.6	71.5	72.3	73.1	73.8	74.6	75.2	75.9	76.7	72.6	13.3	11.3
1980	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3	82.4	12.5	13.5
1981	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0	90.9	8.9	10.3
1982	94.3	94.6	94.5	94.9	95.8	97.0	97.5	97.7	97.9	98.2	98.0	97.6	96.5	3.8	6.2
1983	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3	99.6	3.8	3.2
1984	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3	103.9	3.9	4.3
1985	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3	107.6	3.8	3.6
1986	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5	109.6	1.1	1.9
1987	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4	113.6	4.4	3.6
1988	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.7	118.3	4.6	4.1
1989	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9(e)	126.2(e)	124.0(e)	4.4	4.7

(e) Estimate.

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

Table 26
U.S. Implicit Price Deflator and Fixed Weight Deflator

	GNP Implicit Price Deflator			GNP Fixed Weighted Deflator		
	Index (1982=100)	% Change Last Quarter*	% Change Year Ago	Index (1982=100)	% Change Last Quarter*	% Change Year Ago
1984						
Q1	106.5	4.2%	3.9%	106.8	4.2%	4.1%
Q2	107.3	3.0%	3.9%	107.8	3.7%	4.0%
Q3	108.2	3.4%	3.8%	108.7	3.4%	3.9%
Q4	109.0	3.0%	3.4%	109.6	3.4%	3.7%
Ann. Avg.	107.7	--	3.7%	108.3	--	4.0%
1985						
Q1	109.7	2.6%	3.0%	110.6	3.7%	3.6%
Q2	110.6	3.3%	3.1%	111.5	3.3%	3.4%
Q3	111.3	2.5%	2.9%	112.3	2.9%	3.3%
Q4	112.2	3.2%	2.9%	113.2	3.2%	3.3%
Ann. Avg.	110.9	--	3.0%	111.9	--	3.3%
1986						
Q1	112.4	0.7%	2.5%	113.8	2.1%	2.9%
Q2	113.2	2.8%	2.4%	114.4	2.1%	2.6%
Q3	114.6	4.9%	3.0%	115.3	3.1%	2.7%
Q4	115.1	1.7%	2.6%	116.1	2.8%	2.6%
Ann. Avg.	113.8	--	2.6%	114.9	--	2.7%
1987						
Q1	116.0	3.1%	3.2%	117.4	4.5%	3.2%
Q2	117.1	3.8%	3.4%	118.5	3.7%	3.6%
Q3	117.9	2.7%	2.9%	119.6	3.7%	3.7%
Q4	118.6	2.4%	3.0%	120.8	4.0%	4.0%
Ann. Avg.	117.4	--	3.2%	119.1	--	3.7%
1988						
Q1	119.2	2.0%	2.8%	121.9	3.6%	3.8%
Q2	120.6	4.7%	3.0%	123.3	4.6%	4.1%
Q3	121.9	4.3%	3.4%	124.9	5.2%	4.4%
Q4	123.3	4.6%	4.0%	126.2	4.2%	4.5%
Ann. Avg.	121.3	--	3.3%	124.1	--	4.2%
1989						
Q1	124.5	3.9%	4.4%	127.7	4.8%	4.8%
Q2	125.9	4.5%	4.4%	129.3	5.0%	4.9%
Q3(e)	126.9	3.2%	4.1%	130.2	2.8%	4.2%
Q4(e)	128.2	4.1%	4.0%	131.5	4.0%	4.2%
Ann. Avg.(e)	126.4	--	4.2%	129.7	--	4.5%

* Annual Basis

Source: U.S. Bureau of Economic Analysis and Utah Office of Planning and Budget.

Table 27
ACCRA Composite Cost-of-Living Comparisons
For Selected Metropolitan Areas
Second Quarter 1989

Component Index Weight	100%	17%	22%	11%	13%	7%	30%
City	All Items	Groceries	Housing	Utilities	Transportation	Health Care	Miscellaneous
U.S. Average	100	100	100	100	100	100	100
Salt Lake City	95.6	94.8	86.9	89.8	101.1	100.0	100.0
Provo, Utah	88.9	89.7	75.4	88.9	99.4	89.2	93.7
Western States							
Phoenix, Arizona	104.6	103.8	106.7	91.7	108.0	120.9	103.0
Sacramento, California	112.6	104.8	120.3	111.5	111.9	122.8	110.1
San Diego, California	129.2	106.4	200.8	78.1	127.0	125.2	110.1
Denver, Colorado	103.9	95.5	117.9	89.9	101.4	113.8	102.4
Boise, Idaho	95.1	89.8	101.9	73.7	99.3	87.2	101.1
Missoula, Montana	98.5	103.7	86.4	97.7	100.7	110.0	101.3
Reno/Sparks, Nevada	103.4	99.1	114.1	97.8	99.5	109.5	100.4
Albuquerque, New Mexico	101.5	98.1	108.8	99.0	103.0	105.1	97.5
Seattle, Washington	108.5	111.2	115.9	63.0	117.0	139.7	107.2
Casper, Wyoming	91.2	101.3	72.4	93.5	87.8	98.4	98.2
Other Areas							
Atlanta, Georgia	106.5	94.5	108.1	118.7	99.1	131.5	105.0
Indianapolis, Indiana	100.1	97.0	100.6	100.2	110.7	98.5	97.3
Kansas, MO/KS	96.7	93.5	94.8	90.5	99.3	97.9	101.0
Buffalo, New York	109.7	110.2	115.4	118.4	108.5	102.1	104.2
Houston, Texas	102.8	106.9	83.9	118.8	111.7	105.6	103.9
* Highest City	San Diego, CA	Midland, TX	San Diego, CA	Lancaster, PA	San Diego, CA	Bakersfield, CA	Philadelphia, PA
	129.2	113.2	200.8	139.2	127.0	166.2	116.0
* Lowest City	Pueblo, Co	Akron, OH	Pueblo, CO	Seattle, WA	Sharon, PA	Fayetteville, AK	Fayetteville, AK
	86.7	85.8	71.3	63.0	86.6	66.4	88.3

* Does not include cities in Alaska or New York.

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

Table 28
First Security Bank Cost-of-Living Index

	Wasatch Front			National			
	November 1989 Index (Mar. 1988=100)	Non-Seasonally Adjusted % Change 6 Months Prior	Non-Seasonally Adjusted % Change 1 Month Prior	November 1989 Index (Mar. 1988=100)	Non-Seasonally Adjusted % Change 6 Months Prior	Non-Seasonally Adjusted % Change 1 Month Prior	Seas. Adjusted % Change 1 Month Prior
All Catagories	100.2	0.0%	-0.8%	108.3	1.7%	0.2%	0.4%
Housing	98.6	2.0%	0.0%	106.7	2.0%	0.1%	0.5%
Transportation	101.0	-6.0%	-2.8%	107.5	-0.9%	0.4%	0.2%
Health Care	103.1	2.2%	-0.5%	113.2	4.4%	0.8%	0.8%
Food at Home	111.1	1.9%	0.4%	110.0	1.1%	0.3%	0.7%
Clothing	96.1	2.0%	-1.8%	110.5	1.5%	-0.5%	0.1%
Food Away	102.8	0.2%	-2.0%	108.2	2.0%	0.3%	0.3%
Utilities	92.7	0.9%	-0.8%	105.1	1.6%	-0.5%	0.9%
Other	100.5	-0.1%	-0.4%	112.8	4.5%	0.1%	0.3%

Source: First Security Bank and U.S. Bureau of Labor Statistics.

ENERGY AND MINERALS PRODUCTION AND PRICES

This past year has been characterized by the increasing importance of nonfuel minerals, burgeoning coal production, and the continued decline of petroleum production in Utah. Non-fuel minerals production will surge to a value of $1.35 billion in 1989, led chiefly by copper production, but supported by gold and magnesium as well. Coal production will reach an all-time high, surpassing 19 million tons, valued at $471 million.

The value of coal production, which in 1984 was only 35 percent of the value of crude oil production, has approached that of crude oil in 1989. This is occurring because record coal output is coinciding with a 16 percent decline in crude oil production and approximately a 50 percent decline in crude oil prices.

Although prices for Utah crude oils are up 28 percent from 1988, the price level is not sufficient to encourage significant new drilling. As a result, production from existing fields is reducing reserves through depletion more rapidly than new wells have been able to add to supply.

Non-Fuel Minerals

The total value of non-fuel minerals produced in Utah during 1989 is expected to reach $1.35 billion, 35 percent more than 1988.

The main contributor to this surge of value of non-fuel production was the Bingham Canyon mine of RTZ Corporation of PLC London. This mine was sold to RTZ on July 1, 1989 by B.P. Minerals after spending $400 million in modernization and making it once again one of the world's most productive mines. The value of production from this mine alone during 1989 will surpass the total value of all the 1987 non-fuel mineral production of the state of Utah by more than $100 million.

This increase in value is partly attributable to a significant upturn in the world copper market. During 1988 the price of copper rose 45 percent over the previous year. During 1989 it will rise another 10 percent.

Gold production increased substantially in 1988 and again in 1989. The total value of the gold produced also increased over the previous year despite a price decline. The Bingham Canyon mine was the major producer of gold, even though it was a by-product of the copper production. The open pit gold mine of American Barrick Resources in Tooele County was the other producer of gold.

During 1989, the Renco Group Incorporated acquired Amax Magnesium Corporation from Amax Incorporated and continued operation under Magnesium Corporation of America (Magcorp). Production of magnesium reached a new high and the total value of the production surpassed $100 million in 1988. It is expected that production will stay at the same level during 1989, making it the second largest producer of magnesium in the country and the third largest in the free world.

During 1988, production of the major industrial minerals such as Portland cement, sand and gravel, crushed stone, limestone and gypsum were down mainly due to a slowdown in the construction industry. During 1989, they are expected to stay slightly above the 1988 levels. In December of 1987, Lonestar Industries Incorporated, formerly known as Portland Cement of Utah, idled its Salt Lake plant indefinitely due to decreased demand for cement.

Production of other non-fuel minerals such as salt, silver and potash increased during 1988 and this trend is expected to continue in 1989. Production of molybdenum was markedly down during 1988 but it is expected to be up in 1989 by almost 400 percent.

By August of 1988, Geneva Steel of Utah produced its one-millionth ton of steel within one year of its re-opening date. By the end of 1988, production surpassed 1.3 million tons and it is expected to have a similar production during 1989. It is noteworthy that presently Geneva Steel is exporting between 12 to 20

percent of its production to the major steel producing countries of the world such as Belgium, Korea, Japan and Canada.

Coal

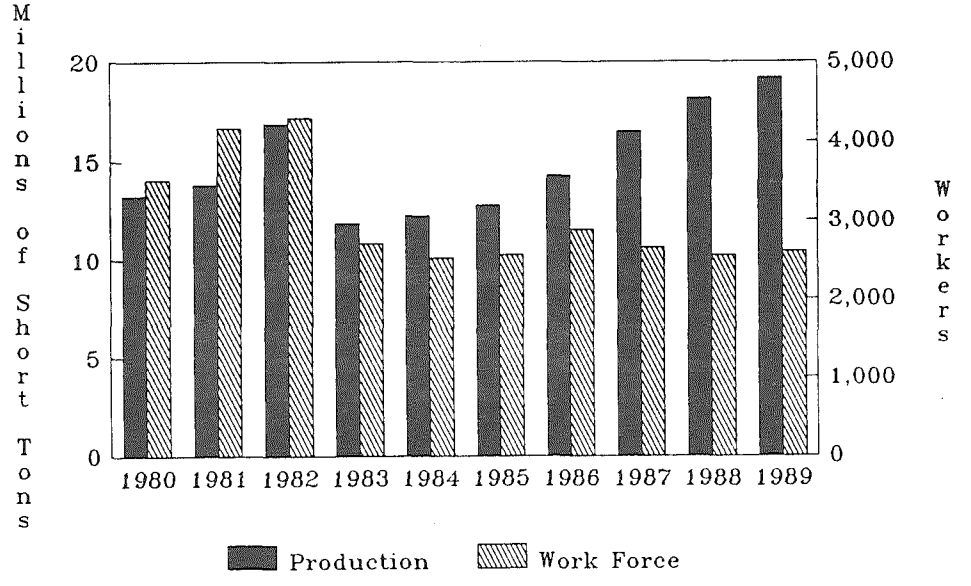
During 1989, coal production will reach another all-time high, surpassing 19 million tons. The main reason for the increased production is the completion of the Intermountain Power Project. Since IPP's first full year of operation electric utility demands for coal have reached 14 million short tons annually. This is a 130 percent increase since 1984.

Another recent growth area for Utah coal has been the export market. Exports in 1989 are expected to exceed 1.7 million tons, up from 555 thousand tons in 1987. This is the highest level since 1982. Higher prices for coal in U.S. ports and improved efficiency of Utah operators help explain this trend. The principle overseas market for Utah coal is the Pacific Rim.

Industrial consumption of Utah coal has grown steadily in out-of-state markets since 1983 and now stands at around 2 million tons per year. Much of it destined for the cement industry in California.

The value of Utah coal production in 1989 will be around $471 million, making it comparable to the value of the state's petroleum production. The industry continues to become more capital-intensive. Employment has fallen some 39 percent since 1982, while output has grown 62 percent since 1983. The principle means for the improved productivity is the long-wall mining machine. It is used in Utah more than in any other western state.

Figure 24
Utah Coal Production and
Average Daily Work Force



Source: Utah Energy Office

Uranium

In discussing the Utah uranium industry, it is useful to distinguish between the mining of the raw product, and the milling of the raw product into yellowcake. For both aspects of the business, the 1980's has been the most turbulent period in the history of Utah's uranium industry. After an overall steady increase in production of yellowcake from 1966 to 1980, the Utah industry experienced its second boom in 1981. Production that year nearly doubled from the previous year, reaching 4.5 million pounds, the largest level of production since 1964, when it exceeded 6 million pounds. This "boom" lasted only one year and production declined during the next three years to 858 thousand pounds in 1984, the lowest level since 1956.

Presently, the only uranium mill operating in Utah is the White Mesa mill at Blanding. The Atlas mill at Moab and the Rio Algom mill at La Sal were both shut down in 1988. A fourth Utah mill, at Ticaboo, was constructed in 1980 and was subsequently mothballed without ever commencing commercial operations. It became a casualty of the second U.S. uranium industry bust which began in 1981.

Since 1984, Utah's uranium industry has been in a third boom period. By 1986, Utah's yellowcake production had reached 5.8 million pounds, the highest level since 1964. This output represented 42 percent of total U.S. production and established Utah as the leading producer of yellowcake that year, a position which was repeated in 1987. In 1988, the Rio Algom mill ceased operations and the White Mesa mill was shut down for half the year to allow for ore stockpiling at the mill. This action was intended to allow it to operate continuously once operations were resumed. Nonetheless, Utah production reached 2.8 million pounds that year, which was nearly 21 percent of the total U.S. production. During 1989, Utah's lone uranium mill has operated continuously and it is expected that by year-end, yellowcake production will once again dominate the U.S. industry and may reach 6 million pounds.

This resurgence of Utah's uranium industry is notable for several reasons. First, it is occurring during a dramatic U.S. industry bust period. Prior to 1988, this nation-wide bust had affected the Utah uranium mining industry by causing Utah's ore production to fall to its lowest level in 30 years. However, by 1988, there were 7 mines operating, two more than the previous year. These mines produced 21 thousand tons of uranium ore containing 96 thousand pounds of yellowcake. This year there are currently 17 uranium/vanadium mines operating in Utah. A recent increase in vanadium prices spurred this increase in Utah mining activity. Uranium mines, without associated vanadium ores, are not profitable to mine at this time. These 17 producing mines produced 66 thousand tons of uranium ore containing 241 thousand pounds of yellowcake from January to September of this year.

Secondly, the competitiveness of the Utah industry is due to the acquisition by Utah's principal milling operation of firm sales contracts with foreign utilities. Also, this mill is remaining competitive by using the highest grade, lowest cost uranium reserves in the country. These reserves are being mined from special geologic formations located on the Arizona Strip between the Utah border and the Grand Canyon.

Nonetheless, Utah's uranium milling industry faces a more competitive market than ever before. Most of the yellowcake being produced today is stockpiled at the mill site. Current Utah ore production is being subsidized by associated vanadium production and this will continue only as long as vanadium prices remain high. Even with the high-grade, low-cost Arizona Strip ores new sales contracts are becoming more difficult to secure due to competition with low-cost foreign uranium. This competitive position has been further weakened since the U.S. - Canadian Free Trade Agreement was formally adopted during the past year. The U.S. Congress is currently considering legislation which may aid the ailing uranium industry and final enactment of this legislation is pending. Even so, unless the uranium market improves, i.e., prices increase significantly, Utah's uranium industry may not be able to compete much longer.

Crude Oil

Evidence of petroleum in Utah was first documented in 1847 with the discovery of oil seeps on the old pioneer trail near what is now the Utah/Wyoming border. Other seeps would be discovered at sites along the San Juan River near the present day town of Mexican Hat, Rozell Point on the shores of the Great Salt Lake, and near the Virgin River in Washington County as the Utah territory was settled. While offering the tantalizing possibility of large reservoirs of hydrocarbons a short distance below the surface,

early drilling efforts targeting these seeps failed to find significant quantities of crude and in no instances were commercial discoveries made.

The turning point for Utah's oil industry came in 1948 with Equity Oil Company's discovery of the first commercial quantities of oil in the Ashley Valley field. This discovery served to stimulate oil companies' interest in the unexplored regions of eastern Utah and further increase the level of drilling and exploration activity that had been taking place in this area since the early 1940's. Over the course of the next eight years a large number of discoveries were made throughout eastern and southeastern Utah culminating in the discovery of the Aneth field in San Juan County in 1956. Within a decade following the Ashely Valley discovery, annual crude oil production jumped from 500 thousand to 40.1 million barrels, ranking Utah twelfth among the nation's producing states.

Utah continues as a major oil producing state and the petroleum industry is an important sector in Utah's economy. Each of the four separate sectors that are popularly recognized as comprising the petroleum industry - production, transportation, refining, and marketing - is present in Utah's economy.

Since the first well was drilled in 1891, more than 7,500 wells have been drilled in the state. Utah is one of the most difficult regions to explore for oil in the continental United States. Ample evidence of the difficulty of prospecting for oil in Utah can be found in drilling records. They show that over 600 dry wells were drilled before the first commercial well was brought into production in 1948. Utah's oil provinces also are among the most expensive to drill due to the complexity of the geology and depth of producing formations. Despite the difficult geology and expensive drilling, strong market prices for crude oil in the region and an extremely high rate of success for both development and exploratory wells have ensured that drilling activity in Utah has remained relatively strong over the years.

Crude Oil Exploration and Development

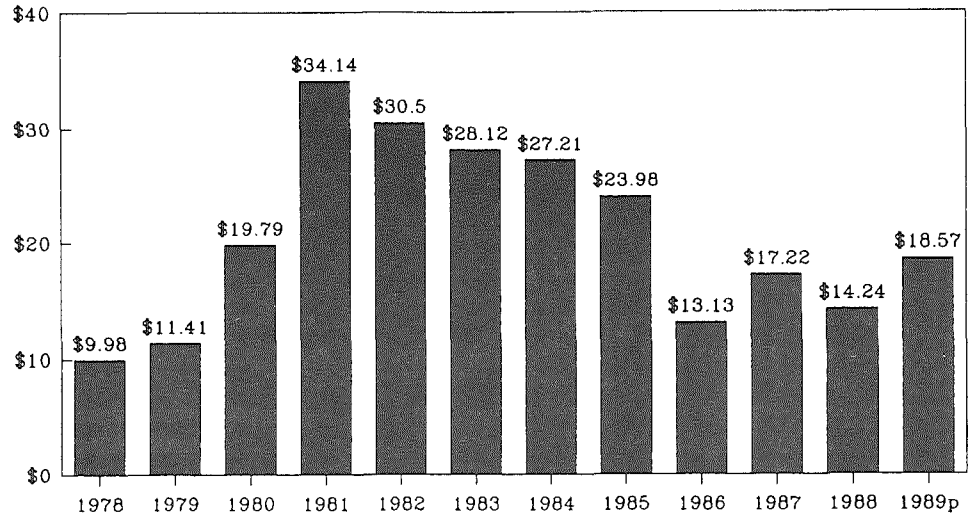
Three years of oil price instability have severely impacted the level of exploration activity occurring in Utah's oil provinces. Several key measures of industry activity -- well permits, rotary rig activity, and well completions -- have each fallen below their depressed levels of 1988. This has occurred despite prices for Utah crude oils that have averaged $18.57 per barrel, 28 percent above the price received for a barrel of Utah crude oil in 1988. The first nine months of the year saw only 68 drilling permits issued for wells in Utah, 62 percent below the number issued for the same period in 1988. The number of rotary rigs operating in Utah during this period also dropped, falling to an average of five rigs. Well completions in Utah's oil provinces tracked drilling permits and rotary rig activity totaling only 55 wells through the first nine months of the year, down nearly 50 percent from 1988.

Contrary to early forecasts, Utah crude oil prices demonstrated surprising strength in 1989 surging to $22.00 per barrel by July. This significant rise in prices may have been responsible for an increase in drilling activity which occurred in the third quarter. Exploration and drilling indicators for the quarter indicate a marked improvement over results from the first half of 1989. For example, thirty-five drilling permits were issued during the third quarter, doubling the total issued for the first six months of 1989.

Operators in Utah appear to be striving for efficiency by concentrating drilling targets on low risk development and extension work in San Juan, Duchense, and Uintah Counties. Eighty-two percent of all wells drilled through the first nine months of 1989 have been development or extension wells the rest are considered to be wildcats, i.e. wells drilled in unproven areas far from producing wells. San Juan County has again been the target for most drilling activity in 1989 accounting for 44 percent of all wells completed in the state, followed by Duchense and Uintah at 24 and 22 percent respectively. Of the 55 wells drilled through the first nine months of 1989 29 have been oil wells. The success rate among oil wells remains very high as 27 of the 29 wells drilled are currently listed as producing, with only two wells identified as shut-in or abandoned.

Mild fall weather that has extended to the end of November, combined with higher crude oil prices that have remained at $20.00 since June suggest that exploration and drilling activity for the remainder of 1989 will continue to increase over the first half of the year. Even with this anticipated upturn in activity total well permits issued in 1989 are not expected to exceed 110, fifty-five fewer than in 1988. The number

Figure 25
Average Oil Price per Barrel
in Utah: 1978-1989



p - preliminary estimate
Source: U.S. Department of Enery and
Utah State Energy Office.

of rotary rigs operating in Utah is not likely to rise above a year-end average of 5.2, a decrease of 17 % from the level of activity achieved in 1988. Accordingly, well completions are projected to fall to 95 wells in 1989, thirty-one fewer than in 1988.

Crude Oil Production

Since the first quantities of oil were produced in Utah at the Virgin field in 1907, Utah oil wells have produced an estimated 973.1 million barrels of oil. The Paradox Basin located in San Juan County, and the Uintah Basin encompassing Duchesne and Uintah Counties, have been the most prolific producing regions in the state. Seven of the top ten all-time producing fields are located in the three counties included in these basins. More recently Summit County has become an important player in the production of oil. The reason is the discovery and development of the Pineview field in 1974 and the giant Anschutz Ranch East field in 1981 in Utah's portion of the Overthrust Belt. Despite having only produced for six years, Anschutz Ranch East ranks as the fourth all-time cumulative producing field in Utah.

During 1989, 1,829 wells in 117 fields are projected to produce an estimated 28.33 million barrels of oil, ranking Utah tenth among producing states in the U.S. Unstable prices continue to depress Utah crude oil production, however, which is projected to fall for the fourth consecutive year. It is projected the oil production will drop 14 percent from 1988's 33.02 million barrels. For the sixth straight year Summit County, from the Anschutz Ranch East field, will lead all other producing counties with 10.3 million barrels. San Juan County is projected to follow with 7.4 million barrels while Duchense and Uintah counties are expected to produce 6.0 and 4.4 million barrels, respectively.

Utah oil production activities in 1989 were carried out by 110 producers, a decrease of 22 from the year before. While there are a large number of producers operating in the state, production remains concentrated among a relative handful, most of whom can be characterized as "major" oil companies or large independents. In 1989, the 15 companies will account for approximately 85 percent of total Utah production. One production company, Amoco Rockmount (a consortium comprised of Amoco, Anschutz Corporation, Mobil Oil, Union Pacific Resources, Pan Canadian, BWAB, and Chevron who have unitized the

East Anschutz field into one production unit) will be responsible for 34 percent of the state's total production in 1989.

Crude oil production in Utah has been cyclic. Since the first commercial quantities of oil were produced in the state in 1948, Utah has experienced three complete cycles of production peaks followed by extended periods of falling production.

The current slump in production and drilling activity experienced in Utah is an inevitable response to falling oil prices. Utah's oil provinces have been the most expensive to drill in the continental United States due to complex geology, and difficult and isolated terrain. The drop in the number of wells drilled in the state since 1985 reflects that many Utah drilling prospects have been weeded out of exploration and development programs as firms have tightened their screening processes and applied more rigorous economic criteria in ranking prospective drilling opportunities. The result has been that firms have shifted their drilling programs away from geologically difficult and costly regions such as Utah, to low risk areas or have abandoned drilling programs altogether waiting for higher and more stable prices. What has followed has been an inevitable decline in production as wells that were drilled in the 1980's, and responsible for the surge in production between 1982-1985, continue their natural decline and too few new wells are drilled to compensate for the production losses from these older wells. The result has been aptly demonstrated by the drop in production between 1986 and 1988. Lacking a significant increase in the price of Utah crude oil, the level of activity in exploration and drilling is expected to remain depressed and current trends are anticipated to continue into the early 1990's.

Petroleum Product Consumption and Prices

Preliminary estimates indicate that 1989 Utah petroleum consumption will approach the record levels achieved in the period 1977-1979 as growth in the economy, and oil prices that have remained relatively low will combine to increase petroleum demand 2.6 percent to 37.5 million barrels. Petroleum products consumption estimates for 1989 indicate most major product categories will experience increases. Demand over the first six months of 1989 has shown considerable strength. This is expected to continue for the remainder of the year. One notable exception to this trend was motor gasoline, the single largest consumption category of petroleum. For the first half of 1989 consumption of motor fuel was approximately the same as 1988. For the year, consumption of motor fuel is estimated to increase by less than one percent and totaling 17.8 million barrels. This accounts for 47 percent of total petroleum demand in Utah.

The sharpest percentage rise in consumption of petroleum products is anticipated for distillate fuel oils due to increased activity in the agricultural and industrial sectors of the Utah economy and unusually cold weather during the first part of 1989. Consumption of distillate fuel is projected to increase 11 percent to 8.2 million barrels and account for 24 percent of total petroleum consumed in 1989.

The combined category of aviation fuel includes kerosene jet fuel for commercial aviation, naptha jet fuel used in military aircraft and aviation gasoline for small fixed wing aircraft. This represents the third largest consumption category for Utah petroleum products. On the strength of increased consumption of kerosene jet fuel, consumption of aviation fuel is projected to grow by 260,000 barrels, an increase of 5.4 percent over 1988 consumption.

Increased supplies of petroleum products to meet present and future demand will come increasingly from importation from California and Wyoming, and crude oil transported via pipeline from Colorado and Wyoming. Three years of lower crude oil prices have sharply curtailed drilling activity in Utah and accelerated a decline in Utah crude oil production. This in turn has led to a tightening of crude oil supplies for local refineries. Refiners have increasingly had to rely on crude oil from Wyoming and Colorado to fill out their crude runs to distillation units and this has been seen in the rise of crude oil imported into Utah.

Tightening supplies of crude oil have also been reflected in the price paid for a barrel of Uintah Basin Wax, Western Colorado, and Southwest Wyoming Sweet crude oil. For the first time in ten years prices for these crude oils have tracked $1-$2 per barrel more than West Texas Intermediate as refiners have bid up the price of crude oil in an effort to secure sufficient supplies. Local crude oil markets have also experienced a tightening of supplies as seen in the refinery utilization rate --- an important measure of the

health of the refining industry. Falling crude oil prices and strong product demand had served to increase utilization rates between 1986 and 1988. However, crude oil runs at Utah refineries are currently running 4.8 percent behind those for the first nine months in 1988 bringing utilization rates to 84.5 percent, down from 86.7 percent in 1988.

Natural Gas Exploration and Development

Continued weak spot market prices for natural gas at the wellhead has contributed to the over all decline of Utah's exploration and drilling indicators and been responsible for the sharp drop in the number of gas wells drilled in Utah through the first nine months of 1989. Of 55 wells completed through September, 14 were identified as gas wells, representing 26 percent of all wells drilled. The type of gas wells drilled were split equally among development (7) and field extension/wildcat wells (7). Uintah County saw the largest amount of drilling activity as 9 of the gas 14 wells drilled through September of this year were completed in this county. For the most part, operators drilling in Uintah County targeted areas outside of known fields as four successful wells were completed as extension wells (wells drilled outside of existing fields which may extend existing field boundaries), and two successful wildcat gas wells were drilled.

While overall drilling activity is expected to increase in Utah during the second half of 1989, soft spot market prices are expected to provide little incentive to drill for gas. An indication of the weakness in the market for Utah natural gas is reflected in the fact that of 14 successful gas wells drilled through September 1989, 12 have been shut-in or temporarily abandoned. Gas completions are projected to increase to 19 wells by year end, a 37 percent drop from the 24 gas wells drilled in 1988 and a 91 percent decrease from the peak of 168 in 1981.

Natural Gas Production

Despite lackluster drilling activity, 629 wells will produce an estimated 280,763 million cubic feet (MMCF) of natural gas in 1989 representing the tenth consecutive year gross production of natural gas increased. Over sixty-five percent of this total will be from the prolific Anschutz Ranch East field in Summit County. The concentration of production among operators in Utah is even more pronounced for natural gas production than it is for crude oil. The top ten producers of natural gas will account for 88 percent of gross production in 1989, with Amoco Rockmount production from the Anschutz Ranch East field contributing 66.5 percent to total production.

The figure of gross production is somewhat misleading as a measure of natural gas production as most of the gas that is defined as gross production is processed at natural gas plants to remove natural gas liquids and reinjected back into the ground to repressurize oil producing formations. Smaller amounts of gross production are vented and flared or used on the lease site for fuel to operate pumps and compression stations. A more accurate measure of natural gas production intended for sale in Utah or interstate natural gas markets is marketed production. Marketed production represents natural gas produced for sale to pipeline companies for distribution to end users. In 1989 marketed production is also projected to increase 17 percent over 1988's production to 118 billion cubic feet.

Natural Gas Consumption

Low spot prices, an upturn in the Utah economy, unusually cold weather, and growth in Mountain Fuel Supply's customer base have contributed to an increase in the demand for natural gas in 1989. Deliveries to end-users are estimated to increase by 5.5 percent in 1989 and total 102.5 thousand decatherms (approximately 102.5 billion cubic feet) by year-end. The residential sector, where natural gas is the dominant heating fuel, remained the single largest consumer of natural gas in 1989, with deliveries estimated to increase by 2,645,628 decatherms to 49,513,541. Colder weather in early 1989 and growth in the customer base in Mountain Fuel's central and southwestern Utah service area are responsible for the 5.3% growth experienced by this market sector.

Utah's economy entered a second year of sustained economic growth in 1989 and deliveries of natural gas to the industrial sector reflected the upturn in economic activity. Deliveries to this sector increased 10.4% over last year as increased economic activity, low prices, and regulatory rulings allowing direct gas purchases by large energy consumers provided natural gas with a significant cost advantage over propane and No. 2 fuel oil on a cost per million BTU basis.

Table 29
Utah Energy
Production, Prices and Value
1988-1989

Year	Oil				Natural Gas				Coal				Uranium (U3O8)			
	Gross Production (Thou. Bbl)	Price ($/Bbl)	Value (Thou. $)	Btu Trillion	Marketed Production (Thou. Mcf)	Price ($/Mcf)	Value (Thou. $)	Btu Trillion	Production (Thou. Tons)	Price ($/Ton)	Value (Thou. $)	Btu Trillion	Production (Thou. lbs.)	Price ($/lb.)	Value (Thou. $)	Btu Trillion
1980	24,887	19.79	492,514	144.35	48,846	1.12	54,708	50.16	13,629	25.63	349,311	305.44	2,397	28.15	67,476	139.04
1981	24,250	34.14	827,895	140.65	60,936	1.10	67,030	62.58	14,115	26.87	379,270	314.78	4,487	34.65	155,475	260.26
1982	22,966	30.50	700,463	133.20	57,537	3.06	176,063	59.15	17,625	29.42	518,528	391.86	2,895	38.37	111,081	167.92
1983	31,043	28.12	872,929	180.05	56,011	3.18	178,115	57.75	11,829	28.32	334,997	260.81	1,372	32.21	44,192	79.58
1984	38,054	27.21	1,035,449	220.71	73,154	3.41	249,455	75.42	12,259	29.20	357,963	269.76	858	32.65	28,014	49.77
1985	40,971	23.98	982,485	237.63	79,903	3.23	258,087	82.46	12,776	27.69	353,767	279.37	1,564	31.43	49,157	90.72
1986	39,172	13.33	522,163	227.20	90,010	2.90	261,029	92.71	14,252	27.64	393,925	312.23	5,767	30.01	173,068	334.51
1987	35,788	17.22	616,269	207.57	96,586	1.82	175,787	99.58	16,521	25.67	424,094	362.11	5,320	27.37	145,608	308.58
1988	33,018	14.24	470,176	191.50	100,958	1.70	171,629	104.09	18,164	22.85	415,047	396.48	2,800	25.07	70,182	162.4
1989(e)	28,330	18.57	526,088	164.31	117,920	1.60	188,672	121.58	19,210	25.11	482,363	419.32	6,211 (p)	NA	NA	360.3

(e) estimates.

Source: Utah Department of Natural Resources, Utah Energy Office, Energy Data Information System.

Table 30
Utah Coal Mine
Production, Productivity and Price

Calendar Year	Number of Active Mines	Production (Thousand Short Tons)	Average Daily Work Force	Average Number of Days Worked	Average Tons per Man Day
1980	29	13,263	3,512	229	15.69
1981	28	13,808	4,166	209	15.92
1982	29	16,912	4,296	223	16.40
1983	25	11,829	2,707	191	20.72
1984	24	12,259	2,525	192	23.52
1985	22	12,831	2,563	213	22.4
1986	21	14,269	2,881	205	24.64
1987	20	16,521	2,650	239	26.00
1988	17	18,164	2,559	240	29.52
1989(e)	16	19,210	2,604	240	30.72

(e) Estimate.

Source: U.S. Department of Interior, Bureau of Mines, Minerals Yearbook, Calendar Years 1960-1976; U.S. Department of Energy, Energy Information Administration, Coal Production, DOE/EIA-0117, 1977-1987; Utah Department of Natural Resources, Utah Energy Office, Survey of Annual Production and Distribution of Coal in Utah, 1988.

Table 31
Utah Oil and Natural Gas Resource Development

	Geophysical Activity Crew-Months	Drilling Permits	Active Rotary Rigs	Exploration and Development Well Completions				Total Footage
				Oil	Gas	Dry	Total	
1980	158	523	43	71	99	140	310	1,793,177
1981	301	678	68	199	168	205	572	3,764,185
1982	127	664	41	172	136	156	464	3,103,363
1983	111	588	36	167	110	150	427	2,681,406
1984	121	622	46	228	80	141	449	3,073,797
1985	29	392	28	201	71	102	374	2,666,858
1986	10	219	13	109	53	57	219	1,596,866
1987	21	195	8	55	23	46	124	785,620
1988	12	165	6	61	24	41	126	735,041
3Q 1989	NA	68	5	29	14	12	55	325,324

SOURCE: Utah Department of Natural Resources, Division of Oil, Gas and Mining, "Utah Oil and Gas Activity", Petroleum Information Corporation, "State of Utah Drilling Success Summary", Utah Energy Office Energy Data Information System.

Table 32
Top 15 Oil Companies and Ten Largest Crude Oil Fields in Utah

Oil Companies Operating in Utah Ranked by Production, 1988

Rank	Operator	Crude Oil Production (barrels)	% of Utah Production
1	Amoco Rockmount	12,084,278	36.60%
2	Chevron, USA	2,193,798	6.64%
3	Mobil Production	2,140,854	6.48%
4	Texaco	2,110,192	6.39%
5	Coastal/ANR	1,974,696	5.98%
6	Pennzoil	1,926,850	5.84%
7	Phillips Petroleum	1,461,339	4.43%
8	Linmar	1,032,083	3.13%
9	GW Petroleum	848,265	2.57%
10	Meridian Oil, Inc.	687,156	2.08%
11	Unocal	582,170	1.76%
12	Union Pacific Resources	562,270	1.70%
13	Exxon	414,503	1.26%
14	Citation Oil	396,754	1.20%
15	Duncan, RT	392,221	1.19%
	Totals	28,807,429	87.25%

Crude Oil Production by the Ten Largest Fields as of Year-End 1988

Rank	Field	Year of Discovery	County	Production (barrels)	Cumulative
1	Greater Aneth	1956	San Juan	5,349,487	354,081,733
2	Bluebell	1967	Duchesne	3,974,573	110,814,064
3	Altamont	1970	Duchesne	2,858,321	89,376,953
4	Anschutz Ranch East	1981	Summit	12,084,278	79,684,530
5	Red Wash	1951	Uintah	1,110,622	77,562,381
6	Lisbon	1960	San Juan	572,231	47,456,777
7	Wonsits Valley	1959	Uintah	1,012,115	40,850,993
8	Upper Valley	1964	Garfield	396,754	22,916,225
9	Pineview	1974	Summit	551,993	26,809,699
10	Walker Hollow	1953	Uintah	396,356	14,414,624

Source: Petroleum Information Corporation, Oil and Gas Production Report-Utah and Nevada, December 1988.

Table 33
Utah Energy Consumption Estimates by Primary Source
1980 to 1989

Year	Coal	Natural Gas	Petroleum: Asphalt and Road Oil	Petroleum: Aviation Fuel	Petroleum: Distillate & Kerosene	Petroleum: Lubricants	Petroleum: LPG	Petroleum: Motor Gasoline	Petroleum: Residual Fuel	Petroleum: Total	Hydro-Electric Power	Geothermal Energy *
	Thousand Short Tons	Thousand Decatherms	Thousand Barrels								Million Kwh	
1980	7,106	117,936	1,477	2,645	8,503	299	1,301	16,478	3,495	36,926	821	0
1981	7,432	107,990	927	2,434	7,253	287	1,546	16,204	1,022	31,435	623	0
1982	6,787	110,753	933	3,240	6,630	262	1,523	16,392	855	31,679	1,024	0
1983	6,873	104,086	820	3,586	6,445	274	1,577	16,453	1,600	33,119	1,394	0
1984	7,905	114,943	1,340	3,791	6,943	292	1,493	16,930	1,645	34,850	1,391	38
1985	8,303	105,062	1,576	4,117	5,977	272	1,610	17,003	1,899	34,685	1,019	110
1986	8,112	89,989	1,295	4,501	7,332	266	1,546	17,318	1,496	35,940	1,413	172
1987	11,806	86,131	1,387	4,909	6,791	301	1,622	17,305	2,167	36,931	893	164
1988	14,513	97,155	1,131	4,861	7,328	286	1,456	17,671	1,302	36,521	593	174
1989(e)	14,589	102,482	1,258	4,861	8,147	296	1,559	17,671	780	37,123	600	180
					Trillion Btu							
1980	168.3	117.9	9.8	0.0	49.5	1.8	4.8	0.0	22.0	104.3	8.5	0.0
1981	175.7	108.0	6.2	0.0	42.2	1.7	5.6	0.0	6.4	73.1	6.5	0.0
1982	159.6	110.8	6.2	0.0	38.6	1.6	5.5	0.0	5.4	68.7	10.7	0.0
1983	160.2	104.1	5.4	0.0	37.5	1.7	5.7	0.0	10.1	71.8	14.7	0.0
1984	185.6	114.9	8.9	0.0	40.5	1.8	5.4	0.0	10.3	81.5	14.4	0.8
1985	199.4	105.1	10.5	0.0	34.8	1.7	5.8	0.0	11.9	78.4	10.5	2.3
1986	189.0	90.0	8.6	0.0	42.7	1.6	5.6	0.0	9.4	81.5	14.5	3.6
1987	273.8	86.1	9.2	0.0	39.5	1.8	5.9	0.0	13.6	85.0	9.2	3.5
1988	336.6	97.2	7.5	0.0	42.7	1.7	5.3	0.0	8.2	80.6	6.1	3.7
1989(e)	338.3	102.5	8.3	0.0	47.4	1.8	5.7	0.0	4.9	83.7	6.2	3.8

(e) Estimate.

Source: Utah Department of Natural Resources, Utah Energy Office, Energy Data Information System.

TAX COLLECTIONS

Historic tax collections and trends are presented in Table 34 for fiscal years 1975 to 1991. Fiscal years 1975 through 1982 were years of strong growth for state tax collections. This was a period of in-migration and relatively high growth in employment and wages. A sharp decrease in the rate of growth in taxes occurred in fiscal year 1983 due to a recession which lingered on during most of that year.

Fiscal year 1984 collections increased dramatically due to economic recovery, tax rate increases and windfall payments. The tax changes included an increase in the sales tax from 4 percent to 4 1/8th percent effective July 1, 1983, and another increase to 4 5/8ths percent effective October 1, 1983; increases in corporate taxes from 4 to 4.65 percent effective January 1, 1983, and an additional increase from 4.65 to 5 percent effective January 1, 1984; an increase from 2 to 4 percent on January 1, 1984 in the oil and gas occupation tax; and, an increase from $4.12 to $11 per barrel in the beer tax effective July 1, 1983. Sales tax and oil occupation tax payments were also accelerated in fiscal year 1984.

Fiscal year 1985 brought moderate growth in taxes as the economic recovery continued. Also contributing to the growth in revenues in fiscal year 1985 was an increase to 14 cents, up from 11 cents, per gallon in motor and special fuels taxes which became effective on July 1, 1984. Fiscal year 1986 showed another sharp decrease in collections. This decline was largely due to the closure of Kennecott Copper, out-migration, depressed oil prices, declining wages and employment, and new sales tax exemptions.

Increased tax collections in fiscal year 1987 resulted from accelerated corporate payments, an income tax surcharge, and windfalls from the 1986 federal income tax reform. These increases were not the result of improvements or growth in the general economy. Without the above mentioned tax changes, revenue receipts would have fallen in fiscal year 1987 due to the ripple effects of the Geneva Steel and Kennecott Copper closures, the construction downturn (particularly the completion of the Intermountain Power Project), lower oil prices, sluggish economic activity in surrounding states, and lower employment, population, and wage growth in general.

Revenue collections in fiscal year 1988 improved as a result of state income tax reform, tax increases, increased oil prices, and the reopening of Geneva and Kennecott. The tax changes which helped increase fiscal year 1988 collections included a 1/2 cent increase in the sales tax effective March 31, 1987; an 11 cents increase per pack in cigarette taxes effective April 27, 1987; a 5 cents per gallon increase in motor and special fuels effective April 1, 1987; and, windfalls from income tax reform.

Effective April 27, 1987, the state income tax system adopted IRS amounts for standard deductions and personal exemptions adjusted by an add back of 25 percent of the personal exemptions claimed. The deduction for retirement income was lowered and the deduction for federal income taxes paid was eliminated. These changes were made retrospective to January 1, 1987.

Because income tax reforms resulted in larger than anticipated tax windfalls, and due to improvements in the economy during fiscal year 1988, a special session of the Legislature met in July 1988 to reduce income taxes by 11.5 percent. Tax rates were cut by 5 percent and 1/3 of federal income taxes paid that could be deducted against state income taxes was restored. A one-time income tax rebate of approximately $71 million was also approved during the July 1988 special session.

The economy continued to improve during fiscal year 1989. Tax collections increased due to one-time mineral lease and inheritance tax windfalls, higher profits and bonus payments at Kennecott and Geneva, strong growth in manufacturing, trade and service sectors, and expansions of new and existing firms in prominent areas such as telecommunications, aerospace, and computer and bio-medical technologies.

The strength in tax collections in fiscal year 1989 prompted another special session of the Legislature in September 1989 to reduce the income tax an additional 5.7 percent. Income tax rates were reduced by 2 percent and the deductibility of federal taxes allowed against state taxes was increased from 33.3 percent to 50 percent. The retirement exemption was increased from $6 thousand to $7.5 thousand, and the retirement income of state employees became taxable.

The economy should remain healthy throughout fiscal year 1990. The growth in tax collections should diminish, however, due to income tax cuts; a reduction in the sales tax rate; declining oil prices and production; a softening in many commodity prices; lower taxable investment spending and corporate profits; slower export growth; lower real defense spending; and fewer anticipated windfalls in inheritance tax and mineral lease payments.

The state's unrestricted general fund sales tax rate drops by 2.15 percent, from 5.09375 percent to 4.984375 percent, as of January 1, 1990. The total state sales tax rate drops to 5.0 percent; but, 1/64ths of this has been designated to fund construction of winter olympic facilities.

Table 34
Selected Annual Forecast and Historic Tax Collections
Fiscal Years 1975 to 1991
November 1989
(Thousands)

	Sales Taxes	Percent Change	Income Taxes	Percent Change	Corporate Taxes	Percent Change	Mineral Production Taxes	Percent Change	Mineral Lease Payments	Percent Change
FY75	173,737		104,919		18,003		na	na	5,532	
FY76	194,799	12.12	140,562	33.97	24,502	36.10	na	na	5,512	-0.36
FY77	225,794	15.91	158,268	12.60	24,867	1.49	na	na	9,018	63.61
FY78	257,988	14.26	183,894	16.19	29,448	18.42	na	na	9,639	6.89
FY79	288,603	11.87	225,956	22.87	32,874	11.63	na	na	12,325	27.87
FY80	320,454	11.04	265,327	17.42	40,377	22.82	na	na	14,933	21.16
FY81	347,382	8.40	294,947	11.16	40,667	0.72	na	na	18,153	21.56
FY82	385,260	10.90	331,139	12.27	40,894	0.56	na	na	26,891	48.14
FY83	388,771	0.91	347,977	5.08	33,763	-17.44	4,341	na	36,162	34.48
FY84	526,158	35.34	390,913	12.34	53,226	57.65	10,812	149.07	37,468	3.61
FY85	555,415	5.56	435,510	11.41	65,918	23.85	18,120	67.59	34,190	-8.75
FY86	558,581	0.57	454,290	4.31	84,048	27.50	22,923	26.51	32,578	-4.71
FY87	559,208	0.11	533,288	17.39	68,898	-18.03	9,519	-58.47	22,385	-31.29
FY88	613,520	9.71	640,894	20.18	78,806	14.38	10,414	9.40	28,836	28.82
FY89	666,943	8.71	615,156	-4.02	92,979	17.98	9,290	-10.79	50,800	76.17
FY90	695,000	4.21	624,200	1.47	90,000	-3.20	8,700	-6.35	34,900	-31.30
FY91	720,000	3.60	656,000	5.09	90,000	0.00	7,500	-13.79	34,300	-1.72

	Mine Occupation Taxes	Percent Change	Motor Fuels Taxes	Percent Change	Special Fuels Taxes	Percent Change	B, C & T Taxes	Percent Change	Insurance Premium Taxes	Percent Change
FY75	5,769		40,485		5,753		8,700		9,520	
FY76	11,259	95.16	43,515	7.48	6,241	8.48	9,197	5.71	8,384	-11.93
FY77	8,489	-24.60	45,694	5.01	6,865	10.00	9,617	4.57	10,098	20.44
FY78	8,446	-0.51	48,808	6.81	7,391	7.66	9,989	3.87	11,917	18.01
FY79	8,423	-0.27	61,372	25.74	9,852	33.30	10,156	1.67	13,452	12.88
FY80	9,821	16.60	60,451	-1.50	10,470	6.27	12,445	22.54	14,718	9.41
FY81	14,757	50.26	56,508	-6.52	10,107	-3.47	13,520	8.64	15,778	7.20
FY82	20,694	40.23	67,734	19.87	12,672	25.38	14,108	4.35	21,494	36.23
FY83	24,329	17.57	68,685	1.40	12,603	-0.54	16,211	14.91	17,102	-20.43
FY84	36,243	48.97	68,979	0.43	14,449	14.65	19,897	22.74	19,986	16.86
FY85	46,880	29.35	89,337	29.51	17,791	23.13	21,309	7.10	22,262	11.39
FY86	43,797	-6.58	92,164	3.16	19,369	8.87	21,503	0.91	26,077	17.14
FY87	21,530	-50.84	99,985	8.49	20,627	6.49	23,995	11.59	27,762	6.46
FY88	29,156	35.42	129,370	29.39	27,554	33.58	29,153	21.50	28,223	1.66
FY89	28,134	-3.51	131,220	1.43	29,305	6.35	30,730	5.41	26,406	-6.44
FY90	25,000	-11.14	133,000	1.36	31,000	5.78	31,000	0.88	29,000	9.82
FY91	23,000	-8.00	135,000	1.50	32,100	3.55	30,000	-3.23	30,800	6.21

1) FY90 and FY91 values are estimates.

2) The July 1988 special session reduced income taxes by 11.5%, retroactive to Jan. 1, 1988. Tax rates were cut by 5% and 1/3 of the federal deduction was restored. This amounted to $35 and $38MM respectively. 11.5% = ((35+38)/635.3). A $71 million rebate was also approved in the July 1988 session.

3) As a result of the September 1989 special session of the Legislature, FY90 income taxes were reduced a total of $35.2 million or 5.7% =(35.2/615.156). The components of this reduction include:

a) Income tax rates were cut across the board by 2%. The top rate was reduced from 7.35% to 7.2%. This will amount to a $14 million reduction in FY90. However, since the cut was retroactive to January 1, 1989, the State will accrue an overwithholding liability of $12.4 million for FY89.

b) FY90 income taxes were also reduced during the special session by $21 million because the Legislature raised the deductibility of federal taxes, that could be claimed against state income taxes, from 33.3% to 50%.

c) FY90 income taxes were further reduced by $3.5 million due to legislative action which increased the retirement exemption from $6 thousand to $7.5 thousand.

d) Finally, income taxes were RAISED by $3.3 million due to a legislative decision to start taxing state employee pensioners.

4) The general fund sales tax rate drops to 4.984375% from 5.09375% as of Jan. 1, 1990; or 2.15%. The overall rate drops to 5.0%, but 1/64ths of this goes to fund the winter olympics.

Sources: Utah State Tax Commission and Office of Planning and Budget.

REGIONAL COMPARISONS

In this chapter, comparisons will be made between Utah and other states of the mountain division. The Mountain Division (as defined by the Bureau of the Census) includes the states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming.

The past five years (1983 to 1988) have presented the states of the mountain region with conditions that required a significant amount of economic restructuring. This energy rich region has suffered from the drop in energy prices. In addition, the agricultural sector was depressed. Agriculture and energy are major elements in the economy, as are other natural resource based industries such as timber and metal mining. Weakness in these natural resource based industries spread to related industries such as construction and financial services. As a result, many states in the mountain region did not perform as well as the nation during the current economic expansion. Other states in this area, however, have had strong and sustained growth. Nevada has been a leading growth state throughout this entire period. An examination of basic demographic and economic statistics demonstrates the different fortunes of state economies as they adjust to changing conditions.

Population Growth

Population growth in the mountain states was a little more than twice as fast in 1983 than was seen nationally. Significant in-migration from other regions of the country was occurring. Since then, the population growth rate has slowed in this region, while in the nation as a whole it has remained relatively constant.

From 1987 to 1988, there was a 1.2 percent increase in the mountain states population and a 1.0 percent increase nationally. Only 2 of the 8 mountain states experienced net in-migration; Arizona and Nevada. Migration into these two states was high enough, compared to the out-migration in the other states, that the region as a whole had net in-migration of 15,000 people.

The energy bust of the eighties has had a severe impact on Wyoming, losing population in each year since 1983. Montana has lost population in each year since 1985 because of their heavy dependence on natural resource industries. With the recent improvement in agriculture, Idaho has resumed population growth having lost population in 1986 and 1987. In order to sustain a population loss a state's net out-migration must be greater than its natural increase (births minus deaths). Colorado, Idaho, New Mexico, and Utah have growing populations from 1987 to 1988 even in the face of net out-migration because of their natural increase.

Personal Income Growth

Total personal income for the region grew at an average annual rate of 6.9 percent from 1983 to 1988, one-half of a percent below the national rate of 7.4 percent. Utah's average annual growth of personal income was 6.6 percent during this period. Of the eight states in the mountain region, only Arizona and Nevada have had personal income growth rates above the national average since 1983.

From 1987 to 1988 income grew by 6.6 percent in the mountain states compared to 7.6 percent in the U.S. The slower growth in personal income relative to the nation was due primarily to significant economic slowdowns in Arizona and New Mexico. The most recent data show that income growth is increasing somewhat. Income grew by 8.0 percent and by 8.5 percent in the mountain states and the U.S. respectively from the second quarter of 1988 to the second quarter of 1989. During this time personal income in Utah grew at 8.2 percent, slightly above the region wide growth rate but a little below the national rate.

Per capita personal income for a region can change relative to the U.S. average because its total personal income, its population, or both, grow at a faster or slower rate than the U.S. average. From 1983 to 1988 income in the mountain region grew slower than the national rate and population grew at a faster rate. The obvious result is that per capita income for the mountain states has deteriorated relative to national per capita income. In 1983 per capita income in the mountain region was $11,290, or 93 percent

of the national figure of $12,098. By 1988 per capita income for the mountain states was 88 percent of the national figure; $14,559 compared to $16,489.

Seven of the eight mountain states experienced a decrease in per capita personal income relative to the U.S. average from 1983 to 1988. Arizona's per capita income was 91 percent of the national average in both years. Wyoming had the greatest deterioration, going from 98 percent of the U.S. average in 1983, to 83 percent in 1988.

Per capita (or per person) income is one statistic that is used to measure relative economic prosperity between states. In Utah, on average, the birth rate is higher and household size is larger than found in other states. With 37.3 percent of Utah's population under the age of 18 compared to 26 percent nationally, Utah's per capita income is just 74 percent as high as the national figure of $16,489 for 1988. This rate of 74 percent is the lowest of any state in the region.

Another measure of economic prosperity, per household income, recognizes that most people live in households and not as individuals. In 1988 per household income in Utah was fourth out of the eight mountain states at 89 percent of the national figure of $44,290. Per household income in the mountain region was $39,840 or 90 percent of the average for the U.S.

Wages

The most complete measure of relative wages paid between states is average annual pay for all workers covered either by state or federal unemployment insurance programs. Wage growth for the intermountain region averaged 3.3 percent per year from 1983 to 1988 compared to the national growth rate of 4.5 percent. With a slower growth rate in wages for the mountain states, wages dropped from 96 percent of the U.S. average in 1983 to 91 percent by 1988. Average wages dropped in each of the eight mountain states over this five year period when measured as a percent of the U.S. average. In 1983, Colorado and Wyoming had pay greater than the U.S. average. By 1988 none of the mountain states had wages above the national average. In 1988 average pay in Utah was 86 percent of the national average, ranking fifth among the eight mountain states.

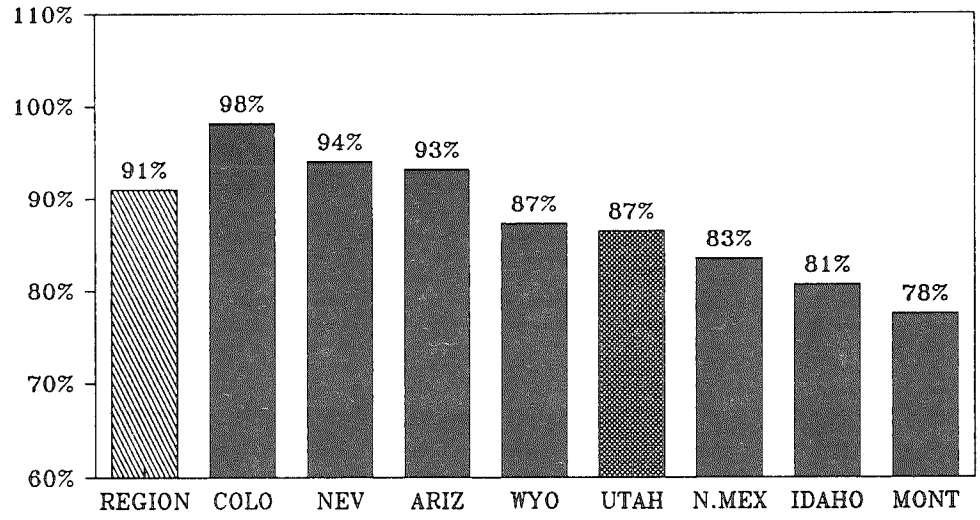
Labor Market Activity

From 1983 to 1988, the mountain region's employment growth rate was a little slower than that of the nation. Nonagricultural job growth in the region averaged 3.0 percent per year, while the national rate was 3.2 percent. Among the eight states of the region, however, job growth varied from a high of 5.9 percent per year in Nevada to a minus 2.0 percent per year in Wyoming. Over this five year period, only Nevada and Arizona increased in employment at a faster rate than the national growth rate. The most recent complete year for which data is available is 1987 to 1988. During this time, nonagricultural employment growth in the mountain region was 2.4 percent compared to the national rate of 3.3 percent.

Current available information, September 1988 to September 1989, indicates that the job picture in the mountain region is improving, growing at 2.9 percent growth, while it has slowed nationally to 2.7 percent. The booming Arizona economy of the early and mid eighties has dramatically slowed with nonagricultural employment growth of just 1.5 percent. This is not only below the national rate, but below the regional job growth rate as well. Among the mountain states, Nevada, Utah and Idaho are producing jobs faster than the nation from September 1988 to September 1989.

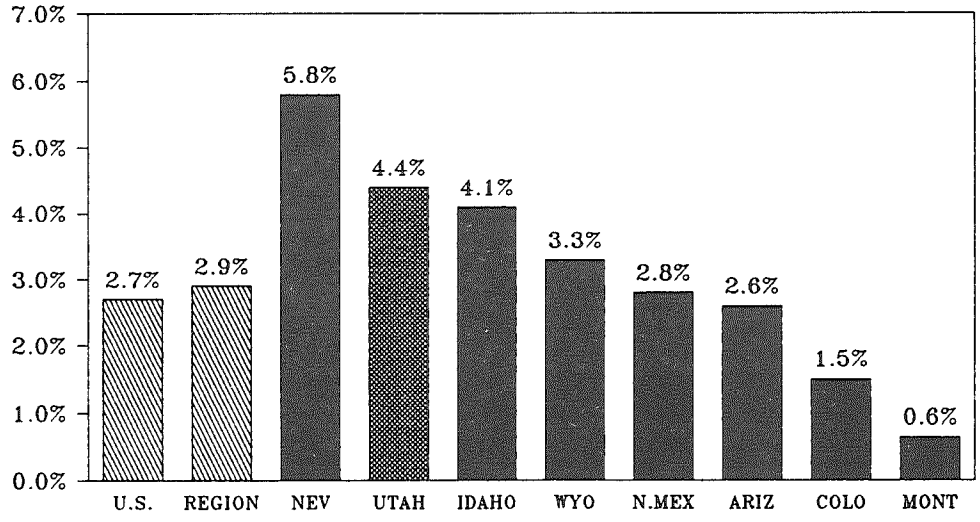
Unemployment in the mountain region has been consistently below the national average during the 1980's. In recent years, the unemployment rate has been dropping nationally, and in the West. This relatively favorable unemployment situation for the mountain states has occurred throughout the decade even in the face of many economic reverses. This low unemployment rate is possible because of the geographic and career mobility exhibited by the labor force. When particular industries have sustained significant declines, many workers have either moved on to where they could gain employment, have changed careers, or both. With the dynamic forces that operate in modern economies, continued restructuring of the economy and in and out-migration flows are essential in order to prevent chronic long-term unemployment problems from developing. This has certainly been the case for the mountain states during the 1980's.

Figure 26
Average Annual Pay* as a Percent of U.S. Average Annual Pay*: 1988



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

Figure 27
Nonag Employment Growth From September 1988 to September 1989



Source: U.S. Bureau Labor Statistics

The weakness in natural resource based industries of recent years has caused a significant amount of economic restructuring among the intermountain states. There continues to be some residual problems, particularly in the construction industries. Energy prices have stabilized, agriculture has rebounded and copper prices are strong. With strong growth in service industry jobs, the economies of Utah and Idaho have climbed out of their mid-decade slumps and have shown strong economic growth during 1989. Nevada's economy has lead all 50 states in job creation over the past three years and has yet to show any significant signs of weakness. The Arizona economy has continued to slow from its high flying days in 1984 and 1985. Colorado and Montana have had job growth, albeit at anemic rates of 1.5 and 0.6 percent respectively.

As an average of the 50 states, the national economy has shown steady growth for the last seven years. The eight mountain states illustrate that such growth, on average, can hide the underlying economic cycles that occur as different regional and state economies adjust to changing economic conditions. The decade of the eighties has shown that "the regional economy" of the mountain west does not grow as a single unit. The mountain region is a complex collection of more localized economies that wax and wane in disparate cycles.

Table 35
U.S. and Mountain Division
Demographics and Economic Performance: 1983, 1987, 1988

	U.S.	REGION	ARIZ	COLO	IDAHO	MONT	NEV	N.MEX	UTAH	WYO
Population in 1983 (in thousands)	234,284	12,319	2,959	3,148	988	816	895	1,401	1,595	516
Population in 1987 (in thousands)	243,419	13,173	3,400	3,293	1,000	809	1,006	1,496	1,680	490
Population in 1988 (in thousands)	245,807	13,328	3,489	3,301	1,003	805	1,054	1,507	1,690	479
Avg Ann Growth Rate 1983-88	1.0%	1.6%	3.4%	1.0%	0.3%	-0.3%	3.3%	1.5%	1.2%	-1.5%
Percent Change 1987 to 1988	1.0%	1.2%	2.6%	0.2%	0.3%	-0.5%	4.8%	0.7%	0.6%	-2.2%
Net Migration 1987 to 1988 (July 1st, in thousands)	685	15	50	-24	-6	-10	38	-5	-16	-15
Net Migra as a Pct of 1987 Pop	0.3%	0.1%	1.5%	-0.7%	-0.6%	-1.2%	3.8%	-0.3%	-1.0%	-3.1%
Pct Distribution of Pop by Age Group 1988										
0-4 (pre-school)	7.5%	8.5%	8.6%	8.0%	8.0%	7.7%	7.7%	8.9%	10.5%	8.1%
5-17 (school age)	18.5%	20.2%	18.7%	18.3%	22.2%	19.8%	17.5%	20.9%	26.8%	21.3%
18-64 (working age)	61.6%	60.5%	59.9%	64.2%	58.1%	59.7%	64.1%	59.9%	54.3%	61.2%
65 & over (retirement age)	12.4%	10.8%	12.8%	9.5%	11.7%	12.8%	10.7%	10.3%	8.4%	9.4%
Median age of pop. in 1988 (years)	32.3	30.7	31.7	31.4	30.7	32.2	32.2	30.4	25.7	29.8
Households in 1988 (in thousands)	91,538	4,870	1,281	1,266	363	304	417	538	524	176
Persons per household in 1988	2.62	2.68	2.67	2.54	2.71	2.58	2.49	2.75	3.17	2.67
Personal Income 1983 (millions $)	$2,834,385	$139,079	$32,750	$41,542	$9,778	$8,504	$11,600	$13,796	$14,998	$6,112
Personal Income 1987 (millions $)	$3,766,075	$181,979	$48,699	$51,638	$11,793	$9,956	$16,460	$17,781	$19,366	$6,286
Personal Income 1988 (millions $)	$4,052,992	$194,036	$52,233	$54,352	$12,698	$10,352	$18,461	$18,814	$20,604	$6,523
Avg Ann Growth Rate 1983-88	7.4%	6.9%	9.8%	5.5%	5.4%	4.0%	9.7%	6.4%	6.6%	1.3%
Percent Change 1987 to 1988	7.6%	6.6%	7.3%	5.3%	7.7%	4.0%	12.2%	5.8%	6.4%	3.8%
Prsnl Income 2nd Qrt 1988 (millions $)	$4,005,952	$192,333	$51,600	$54,066	$12,561	$10,265	$18,095	$18,763	$20,389	$6,594
Prsnl Income 2nd Qrt 1989 (millions $)	$4,347,416	$207,721	$55,999	$57,914	$13,693	$10,866	$20,394	$20,000	$22,068	$6,787
Percent Change 2nd Qrt 87 to 88	8.5%	8.0%	8.5%	7.1%	9.0%	5.9%	12.7%	6.6%	8.2%	2.9%
Per Capital Personal Income 1983	$12,098	$11,290	$11,069	$13,196	$9,894	$10,425	$12,962	$9,844	$9,400	$11,838
Per Capital Personal Income 1987	$15,472	$13,814	$14,322	$15,680	$11,797	$12,304	$16,359	$11,889	$11,530	$12,836
Per Capital Personal Income 1988	$16,489	$14,559	$14,970	$16,463	$12,665	$12,866	$17,511	$12,488	$12,193	$13,609
Avg Ann Growth Rate 1983-88	6.4%	5.2%	6.2%	4.5%	5.1%	4.3%	6.2%	4.9%	5.3%	2.8%
Percent Change 1987 to 1988	6.6%	5.4%	4.5%	5.0%	7.4%	4.6%	7.0%	5.0%	5.8%	6.0%
as a percent of U.S., 1983	100%	93%	91%	109%	82%	86%	107%	81%	78%	98%
as a percent of U.S., 1987	100%	89%	93%	101%	76%	80%	106%	77%	75%	83%
as a percent of U.S., 1988	100%	88%	91%	100%	77%	78%	106%	76%	74%	83%

Table 35 (con't)

	U.S.	REGION	ARIZ	COLO	IDAHO	MONT	NEV	N.MEX	UTAH	WYO
Per Household Personal Income 1983	$33,610	$31,920	$31,010	$35,510	$28,590	$28,540	$33,820	$28,500	$31,050	$33,770
Per Household Personal Income 1987	$41,830	$38,090	$39,310	$41,180	$32,940	$32,860	$41,460	$33,420	$37,390	$35,510
Per Household Personal Income 1988	$44,280	$39,840	$40,780	$42,930	$34,980	$34,050	$44,270	$34,970	$39,320	$37,060
Avg Ann Growth Rate 1983-88	5.7%	4.5%	5.6%	3.9%	4.1%	3.6%	5.5%	4.2%	4.8%	1.9%
Percent Change 1987 to 1988	5.9%	4.6%	3.7%	4.2%	6.2%	3.6%	6.8%	4.6%	5.2%	4.4%
as a percent of U.S., 1983	100%	95%	92%	106%	85%	85%	101%	85%	92%	100%
as a percent of U.S., 1987	100%	91%	94%	98%	79%	79%	99%	80%	89%	85%
as a percent of U.S., 1988	100%	90%	92%	97%	79%	77%	100%	79%	89%	84%
Avg. ann. pay for all workers covered by unemployment insurance - 1983	$17,545	$16,889	$16,667	$18,100	$15,243	$15,215	$17,112	$15,930	$16,513	$17,870
- 1987	$20,857	$19,230	$19,610	$20,830	$17,062	$16,438	$19,521	$17,767	$18,303	$18,817
- 1988	$21,871	$19,897	$20,383	$21,472	$17,648	$16,957	$20,556	$18,259	$18,910	$19,097
Avg Ann Growth Rate 1983-88	4.5%	3.3%	4.1%	3.5%	3.0%	2.2%	3.7%	2.8%	2.7%	1.3%
Percent Change 1987 to 1988	4.9%	3.5%	3.9%	3.1%	3.4%	3.2%	5.3%	2.8%	3.3%	1.5%
as a percent of U.S., 1983	100%	96%	95%	103%	87%	87%	98%	91%	94%	102%
as a percent of U.S., 1987	100%	92%	94%	100%	82%	79%	94%	85%	88%	90%
as a percent of U.S., 1988	100%	91%	93%	98%	81%	78%	94%	83%	86%	87%
Nonag Employment 1983 (in thousands)	90,200	4,650	1,078	1,327	318	276	403	479	567	203
Nonag Employment 1987 (in thousands)	102,200	5,258	1,386	1,413	333	274	500	529	640	183
Nonag Employment 1988 (in thousands)	105,584	5,385	1,411	1,426	349	279	538	540	660	183
Avg Ann Growth Rate 1983-88	3.2%	3.0%	5.5%	1.4%	1.9%	0.2%	5.9%	2.4%	3.1%	-2.0%
Percent Change 1987 to 1988	3.3%	2.4%	1.8%	0.9%	4.6%	1.8%	7.5%	2.1%	3.2%	0.1%
Nonag Employ, Sept 1988 (in thousands)	106,601	5,445	1,406	1,430	360	285	552	547	675	189
Nonag Employ, Sept 1989 (in thousands)	109,453	5,602	1,443	1,451	375	287	585	562	705	196
Percent Change Sept 88 to Sept 89	2.7%	2.9%	2.6%	1.5%	4.1%	0.6%	5.8%	2.8%	4.4%	3.3%
Unemployment Rate 1983	9.6%	8.6%	9.1%	6.6%	9.7%	8.8%	9.8%	10.2%	9.2%	8.3%
Unemployment Rate 1988	5.5%	6.2%	6.3%	6.4%	5.8%	6.7%	5.1%	7.8%	4.9%	6.5%
Unemployment Rate, Sept 1989	5.1%	4.9%	5.8%	4.3%	4.0%	5.1%	5.0%	6.1%	3.6%	5.6%

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, and Utah Office of Planning & Budget.

ECONOMIC OUTLOOK

NATIONAL OUTLOOK

Positive Current Conditions

Many economic indicators point to a moderately strong economy. Real GNP has averaged a 3 percent annual rate of growth over the first three quarters of 1989. Inflation adjusted GNP grew at 2.7 percent, consumer spending increased at a brisk annual rate of 6.2 percent, inflation increased at an annual rate of only 2.9 percent, and the trade deficit improved in the third quarter.

Although much of the third quarter increase in consumer spending can be attributed to discounts and incentives which helped boost auto sales, personal consumption spending, exclusive of auto sales, still grew a healthy 4 percent in the third quarter. The ratio of inventory to sales has remained manageable, personal income grew 0.9 percent in October after a 0.3 percent increase in September, and retail sales increased by 0.8 percent in November after decreasing 1.3 percent in October.

Even though hurricane Hugo and high mortgage rates knocked September housing starts to a seven-year low, rebuilding efforts and lower mortgage rates helped housing starts rebound 12 percent in October. Fixed-rate mortgages fell steadily from 10.10 percent to 9.82 percent during October. Rates were as high as 11.2 percent last spring. Construction activity rose 1 percent in October bolstered by the first gain in single-family construction in nine months.

Worker productivity increased while labor costs decreased in the third quarter. The National Federation of Independent Businesses conducted a survey in October which showed that its small business members actually felt that the economic outlook was improving. A mid-November survey by the National Association of Business Economists found that 62 percent of its members felt that the expansion would continue another three years.

Negative Current Conditions

Other indicators point to a slowing economy. The Index of Leading Indicators fell at an annual rate of 0.1 percent for the first nine months of 1989 compared to the same period in 1988. The index continued to fall by 0.4 percent in October. The index has fallen five times, risen four times, and remain constant once in the last ten months. Export growth has continued to weaken due to the growing strength of the dollar, and sales of new single-family homes fell 0.5 percent in October after dropping 10.2 percent in September and 1.6 percent in August.

The National Association of Purchasing Management index declined for the seventh consecutive month in November. Factory orders stopped growing in the first half of the year, declined in the third quarter, and continued to fall by 0.2 percent in October. Manufacturers have scaled back on capital spending plans and have cut back production. Factory output grew at annual rates of 3.3 percent in the first quarter, 3.5 percent in the second quarter, and 1.4 percent in the third quarter.

Fourth quarter output will be dragged down by car sales which decreased by 4.9 percent in October and increased by only .5 percent in November. Auto makers have cut 50,000 jobs from their payrolls since January. Industrial production dropped by 0.7 percent in October, the steepest fall in more than three years. Unemployment climbed to a 10-month high of 5.4 percent in November and manufacturing employment has declined every month from March to November.

After-tax corporate profits fell by 7.2 percent in the third quarter after declining by 7.2 percent in the second quarter. Corporations are caught in a profits squeeze. They must pay higher wages in a tight labor market but are unable to pass these costs onto consumers in higher prices due to strong international competition. Corporations are also heavily in debt. They must now devote 25 percent of their cash-flow to interest payments on debt service.

Many analysts are hoping that consumer spending will offset the weakness in the other three components that comprise GNP. Recent data shows continued growth in personal income, but consumer spending may be flagging. Consumer spending grew at 0.2 percent in September, the smallest monthly

increase during 1989. Personal consumption expenditures then declined 0.2 percent in October for the first time in more than a year. Consumer credit growth slowed in September to 1 percent, one of the weakest monthly increases in years. More importantly, consumer confidence as measured by the Conference Board decreased in November to its lowest level in a year. There were broad regional discrepancies. Confidence was up in the mountain states and down in New England were the high-tech boom is over.

Outlook

Chairman of the Federal Reserve Board Alan Greenspan has stated that long-term economic expansion can best occur under an environment of stable prices. The Federal Reserve adopted a near zero-inflation monetary policy through June 1989 as evidenced by the slow growth in the money supply and higher interest rates. Growth in the inflation adjusted money supply is expected to be negative in 1989.

The Federal Reserve seems determined to keep interest rates high enough to maintain capital inflows and to combat inflation. Market forces and the Federal Reserve are unlikely to bring down interest rates unless inflationary expectations and the federal deficit are held in check. The flip side of this strategy is the danger that, in the short-run, failure to lower interest rates could dampen economic activity.

The longest expansion in peacetime history could be derailed if lower investment spending and slower growth in exports and government spending are not offset by reductions in real interest rates. Higher real interest rates over the past two years have helped improve the profitability of the banking industry and have helped to attract foreign capital to finance the deficit.

Inflation adjusted interest rates increased during 1988 and 1989, but are forecast to decline during 1990. Real rates should decline in 1990 as a result of moderating inflation, slower economic growth in general, and Congressional efforts to bring the federal deficit under control. Foreign investors should accept lower real interest rates on U.S. securities if they see progress being made on reducing the federal deficit.

The U.S. economy appears to be weakening and the risk of recession in 1990 cannot be ruled out. The Federal Reserve has attempted to stabilize a weakening economy, by gradually reducing interest rates since last June, and has adopted a less restrictive monetary stance after the October decline in stock market prices. On November 7 the Federal Reserve eased policy for the fifth time in as many months bringing the federal funds rate down to 8.5 percent.

Nevertheless, if the U.S. suffers a recession, tight money would likely be the culprit. In the past six recessions the Fed fought inflation head on and ended up throwing the economy into a tailspin. Chairman Greenspan stated on July 20, 1989, before a House subcommittee that the Fed's policy was not oriented toward avoiding a slowdown in demand, and that the Fed might fail to recognize that reserves are held too tight for too long. Still, the Fed has been easing since last June and additional easing coupled with moderate consumer spending, and a lack of inventory imbalance could be enough to prevent a recession in 1990.

Unprecedented levels of debt make continued worldwide economic growth essential. The expansion became seven years old this November which is 51 months longer than the average for the previous 30 business cycles. Although a recession is possible in 1990 most economists are forecasting real GNP growth in the 1 to 2.5 percent range. A slowdown in export growth, lower government and investment spending, and a softening in consumer spending, are cited as reasons for the expected sluggishness. The onset of a recession would require a sharp contraction in consumer spending, failure by the Fed to adequately ease monetary policy, massive defaults on debt, or some other unforeseen financial crisis.

UTAH OUTLOOK

Positive Current Conditions

Utah's economy grew significantly in 1989. Nonagricultural jobs grew at a year-over-year rate of 4.58 percent for the first six months of 1989 and continued to show strong growth through October. The 3.9 percent unemployment rate in October was the lowest level of the decade. Utah led the West in services growth through August, and ranked second in the nation, with a 6.9 percent gain.

The services industry continued a year-over growth of 6.7 percent in October. Business services growth was particularly strong. Year-over growth for wholesale and retail trade through October was strong. Manufacturing growth was moderate, and there were modest increases in construction, mining, government, transportation, communications, and public utilities jobs through October.

Utah's Index of Leading Indicators rose in September for the fourth consecutive month. Second quarter home sales in Utah registered a year-over growth of 7.9 percent, the sixth highest in the nation. Home sales along the Wasatch Front continued an upward trend in the third quarter of 1989. Retail sales were up 11.1 percent in the second quarter following a 9.4 percent year-over gain in the first quarter. Business failures were down 52 percent for the first nine months of 1989 compared to the same period last year.

Utah's economy has continued to improve steadily since the first quarter of 1987. The year-over growth in personal income increased steadily from 3.28 percent in the first quarter of 1987 to 8.23 percent in the second quarter of 1989. The year-over percent changes for nonfarm wages during the same period increased from 0.51 percent to 8.32 percent. Employment increased from 0.5 percent year-over growth to 4.77 percent growth, and the average wage accelerated from a year-over growth of 0.01 percent to 3.39 percent over this period.

Much of the growth in the Utah economy that has occurred since the spring of 1987 can be attributed to the reopening of Geneva Steel and Kennecott Copper in the second half of 1987. The ripple effects of these successful reopenings has helped boost the state's economy in 1988 and 1989. Many new firms and expansions of existing firms also contributed to the strong economic performance.

New openings and major expansions in 1989 included, but were not limited to, Lucus Technologies, CPS, McDonnell Douglas, Eastern Airlines, Compeq Mfg. Ltd., Automated Language Processing, WECCO, Penney's Telemarketing, Sears' Telemarketing, NCR, Holiday Inn Reservations Center, Hecla Germanium Mining, AutoMeter, American Gourmet, Sunnyside Mining, Barney's Canyon Mining, Hoyt USA, Investors Diversified Services, Roadway Package Systems, US West, Valley Camp Mining, and Marriott Travelers Services.

Negative Current Conditions

There are a few signs of weakness in the Utah economy. Closures in 1989 included, but were not limited to, layoffs at Grubb and Ellis, Castle Gate Mining, Fort Douglas, Thrifty Drug, First Security Financial, Beehive International, Rio Algom Mining, American Greetings, Western Savings of Arizona, and Hecla Silver Mining Company. Contractions included, but were not limited to, Wicat Systems, Thiokol, First Interstate, National Semiconductor, Hercules, Signetics, Umetco Mining, and Morris Travel.

The finance, insurance and real estate employment sector did not grow in October and remained at its lowest level since May 1986. Oil production declined rapidly in Utah in 1989 and the state continued to experience out-migration (although at a reduced level). Out-migration contributed to the low unemployment rate in 1989.

The economic climate for smokestack industries deteriorated in 1989. Export growth began to slow due to the strength of the dollar. Basic industries operated under favorable conditions prior to 1989. Exports increased as the dollar declined in value by 40 percent from its February 1985 peak to its December 1988 trough. Voluntary restraint agreements limiting imports were in effect, prices were up, and real GNP grew

3.7 percent in 1987 and 4.4 percent in 1988. In 1989, the dollar rose in value, export growth declined, GNP growth slowed, prices began to trend downwards, and new plant capacity came on stream.

The strong dollar makes Utah products less competitive with foreign goods. Exports accounted for $1.6 billion in Utah for 1988 and 13 percent of manufacturing employment in 1986. As a case in point, steel prices and production started to decline nationwide in 1989. Steel mills in November were operating at 80 percent of capacity, down from 90 percent during 1988, and profits decreased in the third quarter. Geneva Steel, the second largest exporter of steel in the nation, announced production cutbacks of 25 percent. Subsequently, Geneva announced a $70 million modernization plan to reduce pollutants and to become more competitive.

Copper prices also began to trend down in 1989, as did prices for other industrial materials. The Commodity Research Bureau's spot price index fell from 330 at the start of October to 317 in early November. A November survey of business leaders in the West by the San Francisco Federal Reserve found deteriorating expectations for investments, with 59 percent of the respondents expecting weaker capital spending next year.

Outlook

The economic outlook for Utah in 1990 is more favorable than the outlook for the national economy. A youthful and educated workforce, inexpensive housing and labor, and a strong work ethic should continue to attract companies to Utah. Expansions of new and existing firms in computer and related software, bio-medical technologies, and telecommunications should continue into 1990.

Residential and nonresidential construction should improve in 1990 due to declining mortgage rates and plans to construct new office buildings, a sports arena, and winter olympic facilities. On the downside, Utah will likely experience declining oil prices and production, slower export growth, a softening in many commodity prices, and both lower corporate profits and real defense spending.

Defense accounts for about 20 percent of Utah's industrial output. Congress is looking toward reductions as it prepares the fiscal year 1991 budget which begins on October 1, 1990. Inflation adjusted defense/aerospace spending peaked in Utah in 1986 and declined in 1987 and 1988. Real expenditures for 1989 will not be known until next February, but could be down again. Defense contracts often span many years and the economic impact of anticipated reductions may not be felt for several years.

Utah population, employment, wages, and incomes should all grow moderately in 1990. Out-migration is expected to continue, however, for the seventh consecutive year. Population is projected to grow by 1.3 percent in 1990 compared to an increase of 1.2 percent in 1989. Nonagricultural employment is expected to increase by 3.4 percent, or about 23,500 jobs. The average wage is expected to increase by 2.5 percent, and total nonagricultural wages should increase by about 6.0 percent in 1990.

Table 36
Utah and United States
Actual and Estimated Economic Indicators
December 1989

U.S. AND UTAH INDICATORS	UNITS	1987 Actual	1988 Actual	1989 Estimate	1990 Estimate	% CHG 87-88	% CHG 88-89	% CHG 89-90
PRODUCTION AND SPENDING								
U.S. Gross National Product	Billion Dollars	4,524.3	4,880.6	5,235.1	5,565.8	7.9	7.3	6.3
U.S. Real Gross National Product	Billion 1982$	3,853.7	4,024.4	4,142.7	4,226.8	4.4	2.9	2.0
U.S. Real Personal Consumption	Billion 1982$	2,513.7	2,598.4	2,669.8	2,739.1	3.4	2.7	2.6
U.S. Real Bus. Fixed Investment	Billion 1982$	455.5	493.8	509.9	515.3	8.4	3.3	1.1
U.S. Real Defense Spending	Billion 1982$	265.2	261.5	256.2	250.5	-1.4	-2.0	-2.2
U.S. Real Exports	Billion 1982$	450.9	530.1	585.3	611.5	17.6	10.4	4.5
U.S. Industrial Production	1967=100	129.8	137.2	141.4	143.2	5.7	3.1	1.3
Utah Coal Production	Million Tons	16.5	18.2	19.2	19.2	10.3	5.5	0.0
Utah Energy Off. Oil Production	Million Barrels	35.8	33.0	28.3	24.3	-7.8	-14.2	-14.1
Utah Copper Production	Million Pounds	120.0	489.0	489.0	489.0	307.5	0.0	0.0
SALES AND CONSTRUCTION								
U.S. New Auto and Truck Sales	Millions	15.0	15.5	14.9	14.7	3.3	-3.9	-1.3
U.S. Housing Starts	Millions	1.63	1.49	1.40	1.41	-8.6	-6.0	0.7
U.S. Residential Construction	Billion Dollars	226.4	232.5	234.5	248.1	2.7	0.9	5.8
U.S. Nonresidential Structures	Billion Dollars	133.8	140.4	145.0	151.0	4.9	3.3	4.1
Utah New Auto and Truck Sales	Thousands	58.3	60.7	62.6	64.0	4.1	3.1	2.2
Utah Dwelling Unit Permits	Thousands	7.3	5.7	5.5	6.5	-21.9	-3.5	18.2
Utah Residential Permit Value	Million Dollars	495.2	413.0	440.0	469.0	-16.6	6.5	6.6
Utah Nonresidential Permit Value	Million Dollars	413.4	272.1	350.0	400.0	-34.2	28.6	14.3
Utah Retail Sales	Million Dollars	6,982	7,376	7,985	8,348	5.6	8.3	4.5
Utah Gross Taxable Sales	Million Dollars	12,189	13,018	13,859	14,433	6.8	6.5	4.1
DEMOGRAPHICS AND SENTIMENT								
U.S. Population	Millions	244.0	246.4	248.8	251.3	1.0	1.0	1.0
U.S. Consumer Sentiment	1966=100	90.6	93.7	93.1	92.6	3.4	-0.6	-0.5
Utah Population	Thousands	1,680.0	1,695.0	1,715.0	1,737.0	0.9	1.2	1.3
Utah Migration	Thousands	(11.7)	(11.5)	(6.3)	(4.0)	na	na	na
Utah Consumer Sentiment	1966=100	77.9	80.0	82.3	81.9	2.7	2.9	-0.5
PROFITS AND PRICES								
U.S. Corp. Profits Before Tax	Billion Dollars	266.8	306.8	285.8	297.6	15.0	-6.8	4.1
U.S. Oil Ref. Acquis. Cost	$ Per Barrel	17.9	14.7	18.1	16.3	-17.6	22.8	-10.1
U.S. Coal Price Index	1982=100	97.1	95.4	95.5	97.7	-1.8	0.1	2.3
U.S. Ave. Copper Cathode Price	$ Per Pound	0.82	1.21	1.25	1.05	47.6	3.3	-16.0
U.S. Steel Melting Scrap Price	$ Per Long Ton	85.8	109.0	107.6	100.0	27.1	-1.2	-7.1
Utah Energy Off. Oil Prices	$ Per Barrel	17.2	14.2	18.6	16.8	-17.4	31.0	-9.7
Utah Coal Prices	$ Per Short Ton	25.7	22.9	25.1	25.6	-10.9	9.6	2.0
INFLATION, MONEY AND INTEREST								
U.S. CPI Urban Consumers	1982-84=100	113.6	118.3	124.0	128.6	4.1	4.8	3.7
U.S. GNP Implicit Deflator	1982=100	117.4	121.3	126.4	131.7	3.3	4.2	4.2
U.S. Money Supply (M2)	Billion Dollars	2,863.2	3,009.5	3,122.0	3,348.1	5.1	3.7	7.2
U.S. Real Money Supply (M2)	Billion 1982$	2,438.8	2,481.0	2,469.9	2,542.2	1.7	-0.4	2.9
U.S. Federal Funds Rate	Percent	6.66	7.57	9.22	8.17	13.7	21.8	-11.4
U.S. Bank Prime Rate	Percent	8.20	9.32	10.85	10.00	13.7	16.4	-7.8
U.S. Prime Less GNP Inflation	Percent	5.10	6.02	6.65	5.80	18.0	10.5	-12.8
U.S. 3-Month Treasury Bills	Percent	5.78	6.67	8.11	7.56	15.4	21.6	-6.8
U.S. T-Bond Rate, 30-Year	Percent	8.58	8.96	8.45	8.23	4.4	-5.7	-2.6
U.S. Mortgage Rates, Effective	Percent	9.30	9.29	10.10	9.86	-0.1	8.7	-2.4
EMPLOYMENT, WAGES AND INCOME								
U.S. Nonagricultural Employment	Millions	102.20	105.58	108.58	110.29	3.3	2.8	1.6
U.S. Unit Labor Cost Indexes	1977=100	174.2	178.8	186.9	194.3	2.6	4.5	4.0
U.S. Personal Income	Billion Dollars	3,777.6	4,064.5	4,423.8	4,717.6	7.6	8.8	6.6
Utah Nonagricultural Employment	Thousands	640.3	660.1	692.0	715.5	3.1	4.8	3.4
Utah Average Nonagriculture Wage	Dollars	18,015	18,590	19,079	19,560	3.2	2.6	2.5
Utah Total Nonagriculture Wages	Million Dollars	11,535	12,271	13,203	13,995	6.4	7.6	6.0
Utah Personal Income	Million Dollars	19,366	20,604	22,200	23,550	6.4	7.7	6.1

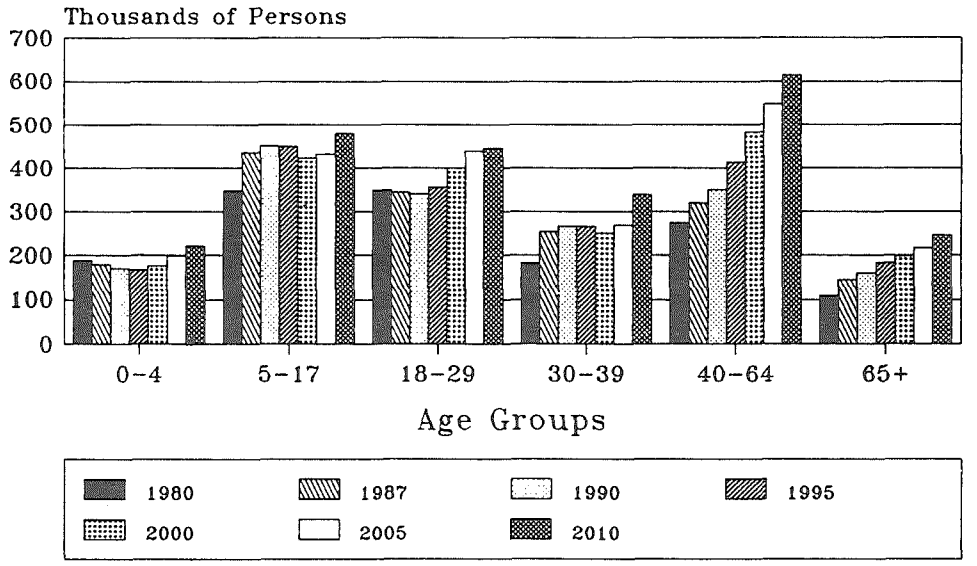
Source: State Economic Coordinating Committee.

UTAH'S LONG TERM OUTLOOK

Utah is projected to have almost one million more inhabitants in the year 2010 than were counted during the census in 1980. The projected population of 2,346,000 represents an average annual growth of 1.6 percent from 1980 to 2010. While this rate of growth is significantly lower that Utah's rate of 2.5 percent from 1950 to 1980, it is still double the national growth rate for the same projection period.

These projections show slightly lower (approximately 4 percent in the year 2010) population projections for the state as a whole than the earlier projections. Even though projections are lower on the state level, there are some individual multi-county districts which show more growth, while others show less growth. This is primarily due to lower economic growth rates of the 1980's, which created a lower starting point and affects the long term data base used to make the projections. However, Utah will still experience growth rates larger than the U.S., and larger than most other states.

Figure 28
Utah Population by Age Group
for Selected Years



Source: Ut Off of Planning & Budget

Births

Population change in any area over time results from three phenomena: (1) Births, (2) Deaths, and (3) Net in- or out-migration. Utah's birth rate has historically been the highest in the nation. Total fertility (a measure of average births per woman) in Utah is still very high relative to the national average. However, Utah's rate has declined steadily during the 1980's, while the national rate has held fairly constant for the last decade and a half, at about 1.8 births per woman . After a historical comparison of Utah and

U.S. fertility rates it seems reasonable to assume that the Utah total fertility rate will stabilize at a level above that of the U.S. average. For the purpose of these projections, Utah's total fertility rate was assumed to remain constant at approximately 2.5 births per woman through the projection period.

It is projected that 840,000 births will occur to Utah residents between 1988 and 2010. The number of births is expected to taper off for the next few years, and then another surge of births is expected in the late 1990's as another generation begins to age into the childbearing years.

Deaths

Not surprisingly, the number of deaths in the state is expected to rise continually through 2010, even though the survival rates for each age level are assumed to remain constant. The reason for this increase is that the population as a whole becomes more heavily concentrated in the older, lower survival rate age groups. For example, in 1980, 10.5 percent of the population was 60 years old or older. By 2010, this age group is projected to increase to 14.2 percent.

Net Migration

Migration is typically the most volatile component of population change because it varies with demographic changes and economic conditions. There was a period of net out-migration in the 1950's and into the 1960's. However net in-migration was experienced in Utah in every year from 1968 until 1983. Utah has now experienced six consecutive years of out-migration (1984 to 1989), totalling over 47,000 people.

During the period 1988 to 2010, over 136,000 net in-migration is expected to occur in the state (i.e., in-migration is expected to exceed out-migration by 136,000). Although out-migration is created when the economy is not growing fast enough to provide enough jobs for the growing labor force, population growth frequently occurs during these periods of net out-migration.

School Age Population

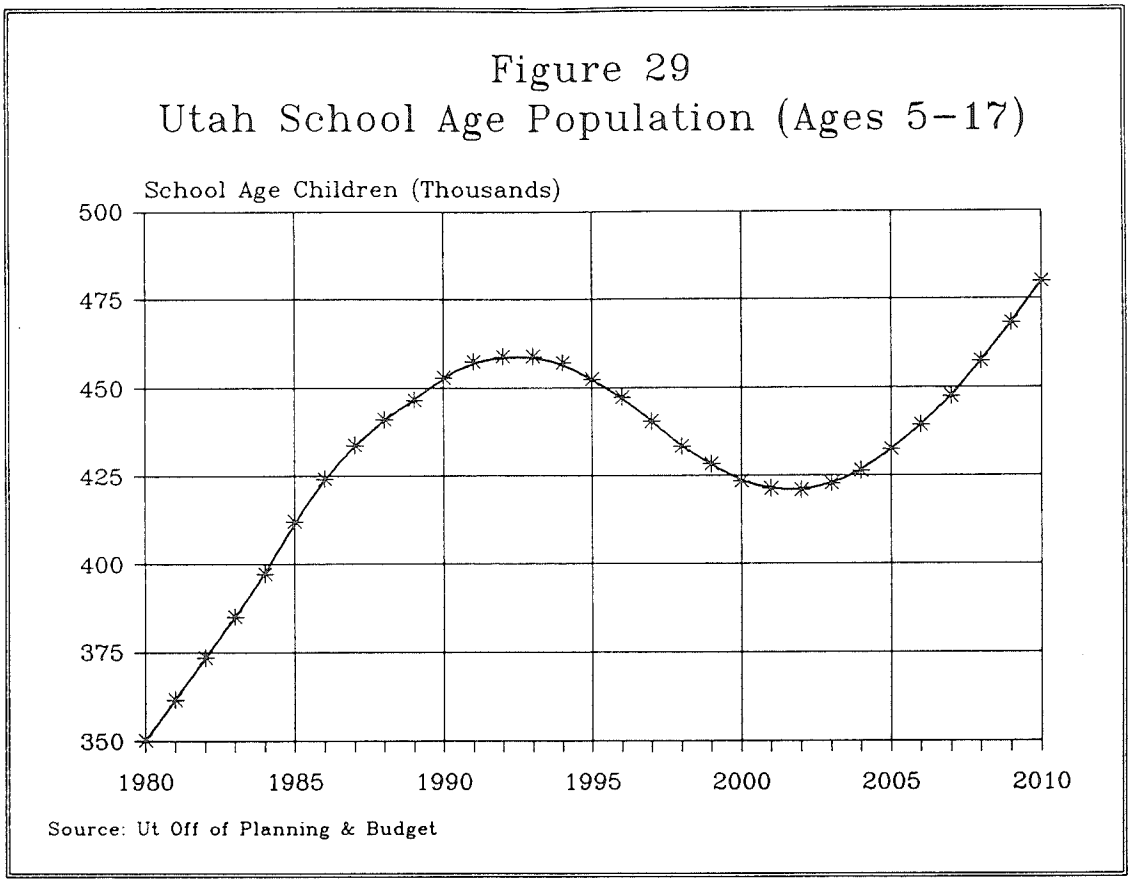
Although school age population is still increasing, it is expected to grow at an average of less than 1 percent per year from 1988 through 1993. This is substantially less growth than the 3.2 percent annual rate of growth experienced from 1980 to 1987. The decline in fertility rates, the age structure of women in the childbearing years and the recent out-migration are responsible for the slowdown in the growth of the school age population. After 1993, there are nine consecutive years that are expected to show an actual decline in the school age population. In 2003 growth resumes, as a new demographic cycle begins when larger age cohorts of women enter the childbearing years. Between 1988 and 2010, school age population is projected to increase by almost 40,000 children, an increase of 9 percent.

Employment

Total state employment is projected to increase from 617,300 jobs in 1980 to 1,225,000 jobs in 2010. This increase of over 600,000 jobs represents an average annual growth rate of 2.3 percent. The overall pattern appears to be one of significant movement away from dependence on the state's traditional extractive-heavy manufacturing-government economic base and toward services and trade as driving sectors in the Utah economy.

The more specific industries (2-digit SIC code) which are projected to have the fastest growth rates are:

machinery and electronic equipment
air transportation
transportation services
hotels and lodging
business services
health services



Summary of Long Term Projections

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

The total fertility rate of Utah women is assumed to remain constant at approximately 2.5 average births per woman throughout her childbearing years. Total fertility rates nationally are projected to remain in the 1.8 to 1.9 range.

Due to lower fertility and lower economic growth, the projected rates of population and employment growth are not only lower than previous projections, but significantly lower than growth rates of some earlier decades.

Projected rates of population growth in Utah are higher than the rest of the nation. Utah is projected to have a 1.6 percent rate of growth between now and 2010 while the nation is projected to growth at less than half that rate.

Utah's population projections indicate that the state would be the eighth fastest growing state in the 1990's.

Utah ranked thirty-sixth among all 50 states in population in 1980 and is expected to rise to thirty-fourth place by the year 2000.

Utah is projected to continue to have the youngest population in the nation. Utah's median age in the year 2010 is projected to be 29 years, while the nation's median age is projected to be 39 years. The differences in age between Utah and the U.S. are projected to actually increase over the next two decades.

Utah school age population will continue to grow over the next four years. It will then peak and begin to decline until the year 2003, when it begins to increase again. The temporary decline in this age group is primarily due to Utah's declining fertility rate. However, Utah will still have a nine percent increase in school age population during the period 1988-2010, while the national growth rate will be less than one percent.

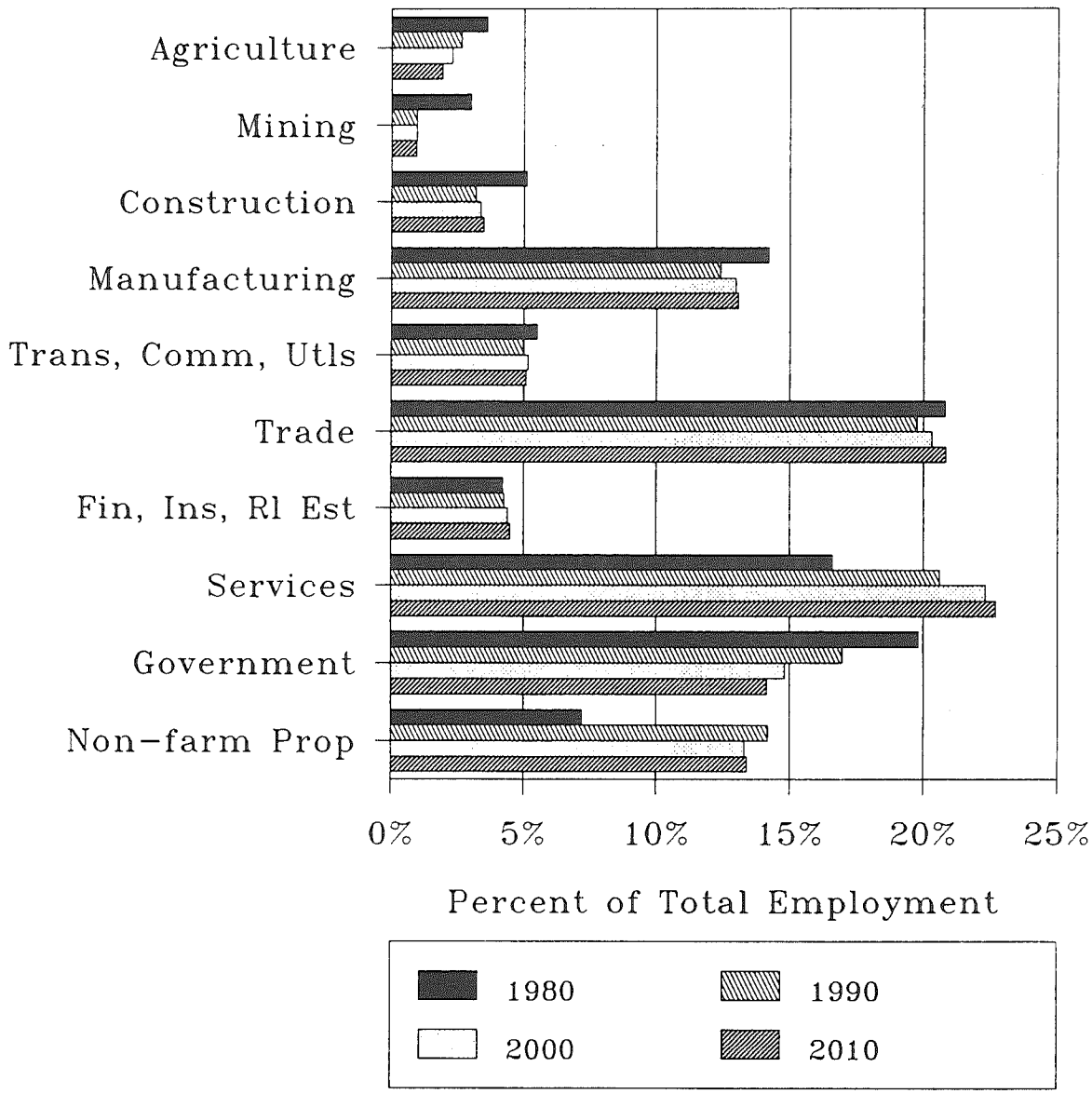
Utah's labor force will see periods of rapid increase over the next two decades. Utah will continue to have the youngest labor force in the nation. Nationally, labor shortages are occurring now in many parts of the U.S. and will become more prevalent in the future.

The current out-migration is not expected to continue every year for the next two decades. However, the large increase in the labor force will create periods of some out-migration in Utah's future unless job growth is larger than has been historically experienced.

Implication of the Projections

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

Figure 30
Utah Employment by Industry for Selected Years



Source: Ut Off of Planning & Budget

Table 37
Utah Economic and Demographic Projections Summary
1987 to 2010

	Population			School Age Population			Employment			Households		
Year	Total	Change	% Change	Total	Change	% Change	Total	Change	% Change	Total	Change	% Change
1987	1,679,720	--	--	436,698	--	--	781,564	--	--	534,562	--	--
1988	1,695,157	15,437	0.92	440,920	4,222	0.97	802,323	20,759	2.66	543,088	8,526	1.59
1989	1,720,307	25,150	1.48	446,631	5,711	1.30	820,651	18,328	2.28	554,943	11,855	2.18
1990	1,743,067	22,760	1.32	452,885	6,254	1.40	839,363	18,712	2.28	566,514	11,571	2.09
1991	1,765,643	22,576	1.30	457,360	4,475	0.99	856,675	17,312	2.06	578,079	11,565	2.04
1992	1,785,745	20,102	1.14	458,733	1,373	0.30	873,254	16,579	1.94	588,458	10,379	1.80
1993	1,804,303	18,558	1.04	458,845	112	0.02	890,116	16,862	1.93	598,047	9,589	1.63
1994	1,825,579	21,276	1.18	456,915	(1,930)	-0.42	908,171	18,055	2.03	609,128	11,081	1.85
1995	1,842,131	16,552	0.91	452,324	(4,591)	-1.00	923,735	15,564	1.71	619,272	10,144	1.67
1996	1,855,050	12,919	0.70	447,317	(5,007)	-1.11	937,542	13,807	1.49	628,434	9,162	1.48
1997	1,869,070	14,020	0.76	440,495	(6,822)	-1.53	952,168	14,626	1.56	638,009	9,575	1.52
1998	1,887,415	18,345	0.98	433,340	(7,155)	-1.62	968,586	16,418	1.72	648,998	10,989	1.72
1999	1,911,422	24,007	1.27	428,271	(5,069)	-1.17	987,123	18,537	1.91	662,255	13,257	2.04
2000	1,935,583	24,161	1.26	423,437	(4,834)	-1.13	1,005,096	17,973	1.82	675,710	13,455	2.03
2001	1,959,267	23,684	1.22	421,269	(2,168)	-0.51	1,021,690	16,594	1.65	688,666	12,956	1.92
2002	1,987,771	28,504	1.45	420,876	(393)	-0.09	1,040,028	18,338	1.79	703,059	14,393	2.09
2003	2,024,296	36,525	1.84	422,693	1,817	0.43	1,061,009	20,981	2.02	719,713	16,654	2.37
2004	2,064,725	40,429	2.00	426,289	3,596	0.85	1,083,437	22,428	2.11	737,786	18,073	2.51
2005	2,106,819	42,094	2.04	432,424	6,135	1.44	1,105,833	22,396	2.07	756,260	18,474	2.50
2006	2,148,566	41,747	1.98	439,363	6,939	1.60	1,127,302	21,469	1.94	774,271	18,011	2.38
2007	2,192,170	43,604	2.03	447,448	8,085	1.84	1,149,065	21,763	1.93	792,562	18,291	2.36
2008	2,243,003	50,833	2.32	457,437	9,989	2.23	1,174,229	25,164	2.19	813,261	20,699	2.61
2009	2,294,417	51,414	2.29	468,246	10,809	2.36	1,199,272	25,043	2.13	834,086	20,825	2.56
2010	2,346,854	52,437	2.29	479,873	11,627	2.48	1,224,910	25,638	2.14	855,254	21,168	2.54

Note: The population projection for 1989 is slightly higher than the Utah Population Estimates Committee estimate of 1,715,000. These projections were developed before the final 1989 population estimate was available. These projections are intended to provide a long term perspective which is relatively unaffected by the level at which they begin.

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

Table 38
Utah Projected Population by Age Group

Age Group	1980	1987	1990	1995	2000	2005	2010
0-4	189,962	179,714	170,494	168,893	177,042	198,688	221,112
5-17	350,143	436,698	452,885	452,324	423,437	432,424	479,873
18-29	351,391	345,005	341,077	356,878	401,312	440,327	447,901
30-39	184,866	253,812	266,225	265,533	251,906	269,702	338,828
40-64	275,455	319,302	350,917	414,414	482,531	548,680	613,601
65+	109,220	145,189	161,469	184,089	199,355	216,998	245,539
15-44	678,160	772,914	800,754	856,766	886,971	933,803	1,019,785
Total	1,461,037	1,679,720	1,743,067	1,842,131	1,935,583	2,106,819	2,346,854
Median Age	24	24	25	26	27	28	29
Percent of Total							
Age Group	1980	1987	1990	1995	2000	2005	2010
0-4	13.0%	10.7%	9.8%	9.2%	9.1%	9.4%	9.4%
5-17	23.9%	26.1%	25.9%	24.5%	22.0%	20.6%	20.5%
18-29	24.0%	20.5%	19.6%	19.4%	20.7%	20.9%	19.1%
30-39	12.7%	15.1%	15.3%	14.4%	13.0%	12.8%	14.4%
40-64	18.9%	19.0%	20.1%	22.5%	24.9%	26.0%	26.1%
65+	7.5%	8.6%	9.3%	10.0%	10.3%	10.3%	10.5%
15-44	46.4%	46.0%	45.9%	46.5%	45.8%	44.3%	43.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Table 39
Utah Population Projections by County

Area	1980	1985	1986	1987	1988	1990	1995	2000	2005	2010	AARC 1980-2010
Bear River MCD	93,350	105,400	107,150	108,950	110,450	114,300	117,600	120,800	128,700	140,800	1.4%
Box Elder	33,500	36,600	37300	37800	38,000	38,900	40,000	40,500	42,600	46,300	1.1%
Cache	57,700	66,700	67800	69200	70,600	73,400	75,400	77,900	83,600	91,900	1.6%
Rich	2,150	2,100	2050	1950	1,850	2,100	2,200	2,300	2,500	2,600	0.6%
Wasatch Front MCD	949,150	1,047,750	1,062,600	1,070,750	1,080,500	1,109,600	1,179,700	1,244,400	1,361,000	1,524,300	1.6%
Davis	148,000	170,000	175000	179000	184,000	194,900	212,400	229,300	255,100	289,600	2.3%
Morgan	4,950	5,450	5500	5650	5,700	5,800	6,100	6,500	7,500	8,600	1.9%
Salt Lake	625,000	689,000	697000	701000	705,000	718,600	760,600	799,500	874,500	979,400	1.5%
Tooele	26,200	28,300	28100	28100	27,800	28,500	30,400	32,000	35,000	39,200	1.4%
Weber	145,000	155,000	157000	157000	158,000	161,700	170,300	177,200	188,900	207,400	1.2%
Mountainland MCD	239,050	271,600	275,150	281,000	285,200	294,000	310,900	326,300	353,700	392,100	0
Summit	10,400	12,400	12700	13300	13,400	14,000	15,200	16,300	18,200	20,800	2.3%
Utah	220,000	250,000	253000	258000	262,000	269,700	284,900	298,800	323,600	358,100	1.6%
Wasatch	8,650	9,200	9450	9700	9,800	10,300	10,800	11,200	11,900	13,200	1.4%
Central Mcd	47,600	57,200	55,350	54,800	54,850	55,800	57,000	57,500	59,600	63,400	1.0%
Juab	5,550	6,250	5800	5700	5,700	5,800	5,900	5,950	6,200	6,600	0.6%
Millard	9,050	14,200	13600	13000	12,900	13,200	13,400	13,500	14,100	14,900	1.7%
Piute	1,350	1,550	1550	1550	1,550	1,600	1,600	1,650	1,700	1,800	1.0%
Sanpete	14,800	16,900	16500	16600	16,700	17,000	17,300	17,500	18,100	19,300	0.9%
Sevier	14,900	16,200	15800	15900	15,900	16,200	16,500	16,700	17,200	18,400	0.7%
Wayne	1,950	2,100	2100	2050	2,100	2,150	2,200	2,200	2,300	2,400	0.7%
Southwest MCD	56,050	68,900	72,400	74,600	75,950	80,100	85,400	93,600	103,700	115,500	2.4%
Beaver	4,400	5,050	4950	4900	4,800	5,000	5,450	5,550	5,900	6,350	1.2%
Garfield	3,700	4,050	4050	4050	4,050	4,200	4,300	4,450	4,600	4,950	1.0%
Iron	17,500	19,400	19500	19500	19,200	20,400	21,800	22,900	24,600	26,800	1.4%
Kane	4,050	4,700	4800	4850	4,900	5,100	5,550	5,900	6,400	7,100	1.9%
Washington	26,400	35,700	39100	41300	43,000	45,400	48,300	54,800	62,300	70,300	3.3%
Uintah Basin MCD	34,150	39,400	38,000	36,200	35,300	36,100	38,200	39,700	43,500	49,100	1.2%
Daggett	750	700	700	700	700	700	700	700	700	700	-0.2%
Duchesne	12,700	14,700	14300	13700	13,100	13,600	14,400	15,000	16,500	18,600	1.3%
Uintah	20,700	24,000	23000	21800	21,500	21,800	23,100	24,100	26,300	29,800	1.2%
Southeast MCD	54,650	54,750	54,350	53,700	52,750	53,100	53,400	53,200	56,600	61,700	0.4%
Carbon	22,400	23,400	23000	22500	22,000	22,200	22,300	22,200	23,500	25,800	0.5%
Emery	11,600	11,800	11800	11600	11,300	11,300	11,300	11,300	12,000	12,900	0.4%
Grand	8,250	7,050	6850	6700	6,550	6,600	6,700	6,800	7,300	8,000	-0.1%
San Juan	12,400	12,500	12700	12900	12,900	13,000	13,100	13,000	13,800	15,100	0.7%
Total	1,474,000	1,645,000	1,665,000	1,680,000	1,695,000	1,743,100	1,842,100	1,935,600	2,106,800	2,346,900	1.6%

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

Table 40
Utah Employment Projections
By Industry

	Agricul-ture (1)	Mining	Construction	Manufac-Turing	TCPU (2)	Trade	FIRE (3)	Services (4)	Government (5)	Non-Farm Proprietors	Total Employ	Total Wage & Salary
1980												
Number of Jobs	21,966	18,500	31,549	87,700	34,120	128,678	25,768	102,232	122,240	44,626	617,379	550,787
% of Total	3.6%	3.0%	5.1%	14.2%	5.5%	20.8%	4.2%	16.6%	19.8%	7.2%	100.0%	
1987												
Number of Jobs	21,972	7,997	26,676	92,456	37,890	152,550	33,751	154,806	137,503	116,478	782,079	643,629
% of Total	2.8%	1.0%	3.4%	11.8%	4.8%	19.5%	4.3%	19.9%	17.6%	14.9%	100.0%	
1990												
Number of Jobs	22,100	8,000	26,700	104,000	41,800	165,700	35,700	174,100	142,400	119,000	839,500	698,200
% of Total	2.6%	1.0%	3.2%	12.4%	5.0%	19.7%	4.3%	20.6%	17.0%	14.2%	100.0%	
1995												
Number of Jobs	22,500	9,000	30,200	117,800	47,200	185,800	40,000	201,400	146,600	123,200	923,700	778,000
% of Total	2.4%	1.0%	3.3%	12.8%	5.1%	20.1%	4.3%	21.8%	15.9%	13.3%	100.0%	
2000												
Number of Jobs	22,900	9,700	33,800	130,400	51,800	204,600	44,000	224,800	149,500	133,700	1,005,200	848,500
% of Total	2.3%	1.0%	3.4%	13.0%	5.2%	20.3%	4.4%	22.3%	14.8%	13.3%	100.0%	
2005												
Number of Jobs	23,200	10,500	37,900	144,400	56,700	227,700	48,900	250,100	158,800	147,500	1,105,700	935,100
% of Total	2.1%	0.9%	3.4%	13.0%	5.1%	20.6%	4.4%	22.6%	14.4%	13.3%	100.0%	
2010												
Number of Jobs	23,600	11,500	42,500	160,100	62,200	255,100	54,900	277,800	173,100	164,200	1,225,000	1,037,100
% of Total	1.9%	0.9%	3.5%	13.1%	5.1%	20.8%	4.5%	22.7%	14.1%	13.4%	100.0%	
Avg. Annual Growth												
1980-1986	0.0%	-13.0%	-2.8%	0.9%	1.8%	2.9%	4.6%	7.2%	2.0%	17.3%	4.0%	
1986-2010	0.3%	1.5%	2.0%	2.3%	2.1%	2.2%	2.0%	2.5%	1.0%	1.4%	1.9%	

(1) Includes Agricultural Services
(2) Transportation, Communication, Public Utilities
(3) Finance, Insurance, Real Estate
(4) Includes Private Household Employees and State/Local Hospitals
(5) Excludes State/Local Hospitals
(6) Includes IPP construction

Sources: 1980-1987, Utah Department of Employment Security and U.S. Bureau of Economic Analysis.
1990-2010, Utah Office of Planning and Budget, UPED Model.

Table 41
Utah and United States
Median Age

Year	Utah	U.S.
1980	24	30
1988	26	32
1990	25	33
1995	26	35
2000	27	36
2005	28	38
2010	29	39

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

SPECIAL STUDIES

AGRICULTURE

The following information was derived from the recently-released 1987 Census of Agriculture, the Bureau of Economic Analysis, U.S. Department of Commerce and the 1989 Statistical Abstract of the United States. The purpose of this chapter is to view the current status of agriculture in Utah with respect to other states, and on a county by county basis, in a comparable fashion.

Utah Agriculture: The National Perspective

It would be difficult to find an industry that has increased in economic efficiency over time comparable to agriculture. Most of Utah's pioneers worked on farms. But in 1987, the Bureau of Economic Analysis reports that only 2.4 percent (19,500) of all workers in Utah were employed on farms. The dramatic change is the result of constantly improving technology. Nationally, approximately three percent of the workforce were employed in the production of food and related goods for consumption and inventory here and for export.

In 1987, Utah produced the third-largest quantities of tart cherries (20 million pounds) and apricots (340,225 pounds) in the nation. Utah's mink-pelt production was second in the nation, with 711,087 pelts valued at $29 million selling in 1987. Of the total market value of agricultural goods produced nationwide, Utah yielded .37 percent of the total, ranking 37th among states.

The size of the average Utah farm is approximately twice the national average at 850 acres per farm. Larger, more valuable farms are typical of the relatively sizeable, less-densely populated mountain states as shown in Table 42. Accordingly, the average value of land and buildings in Utah is also higher than the national average by 43 percent, at $372,308 per farm. For each of the mountain district states, marketing receipts for cattle were higher than for any other agricultural product.

Farm Income: Utah and the Nation

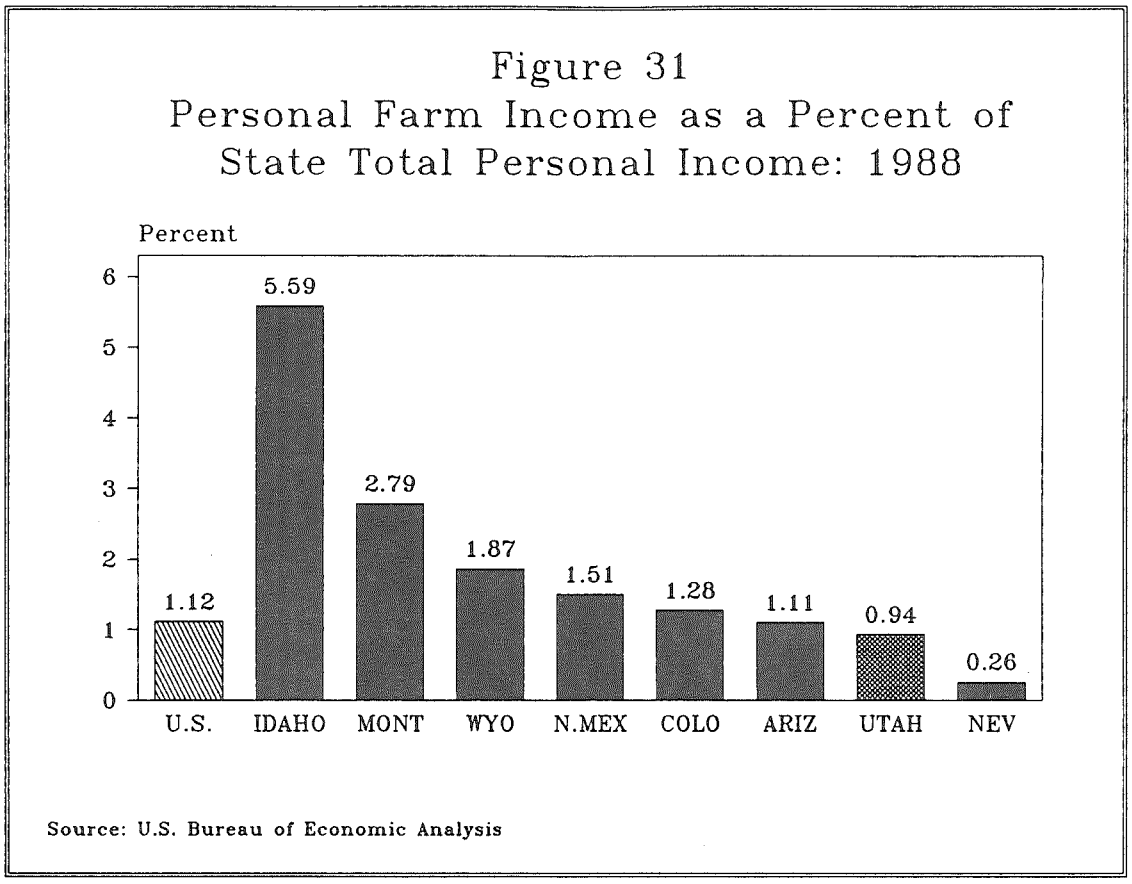
The Bureau of Economic Analysis derives figures for state and county total personal farm income from farm activities. This data is based on total agricultural receipts (including agricultural goods sold, government subsidies and other farm-related income) minus farm production expenses. Personal farm income for Utah in 1987 was $195 million, which is nearly double the 1982 figure of $101 million. Farm income as a percent of total personal income for Utah increased slightly from .7 percent in 1982, to 1.0 percent in 1987. On an annual basis, farm income fluctuates substantially. The general trend however, is upward. Income figure by county are shown in Table 43.

Nationally in 1988, 1.12 percent of total personal income was derived from farming. Utah ranked 32nd in the nation that year, earning 0.94 percent of its total personal income on the farm. Utah ranked 2nd lowest among the nine mountain states (see Figure 31). Income data for Utah and other states are found in Table 42.

Agricultural Value

Based on the 1989 Statistical Abstract of the United States, Utah's farm assets (including real estate, livestock, poultry, crops, machinery, motor vehicles and other assets) totaled $6.4 billion in 1987. Total real estate and non-real estate debt was $799 million. Total debt was therefore 12.6 percent of equity. This is a financially improved position from the 1986 figure of 13.6 percent.

According to the 1987 Census of Agriculture, the value of agricultural products sold in Utah that year totaled $618 million. Nearly 80 percent of the total was from livestock, poultry, sheep, lambs, hogs, pigs and their related goods, such as milk, eggs and wool. All crops including grains, nursery and greenhouse products, and fruits and nuts made up the remaining 20 percent. The total was an 11.6 percent increase over 1982.



The net cash return per farm averaged $8,402 in Utah, in 1987. County averages ranged from $1,381 in Kane county to $19,682 in Rich county. Table 44 details net cash return per farm, and income, by county.

Land Use

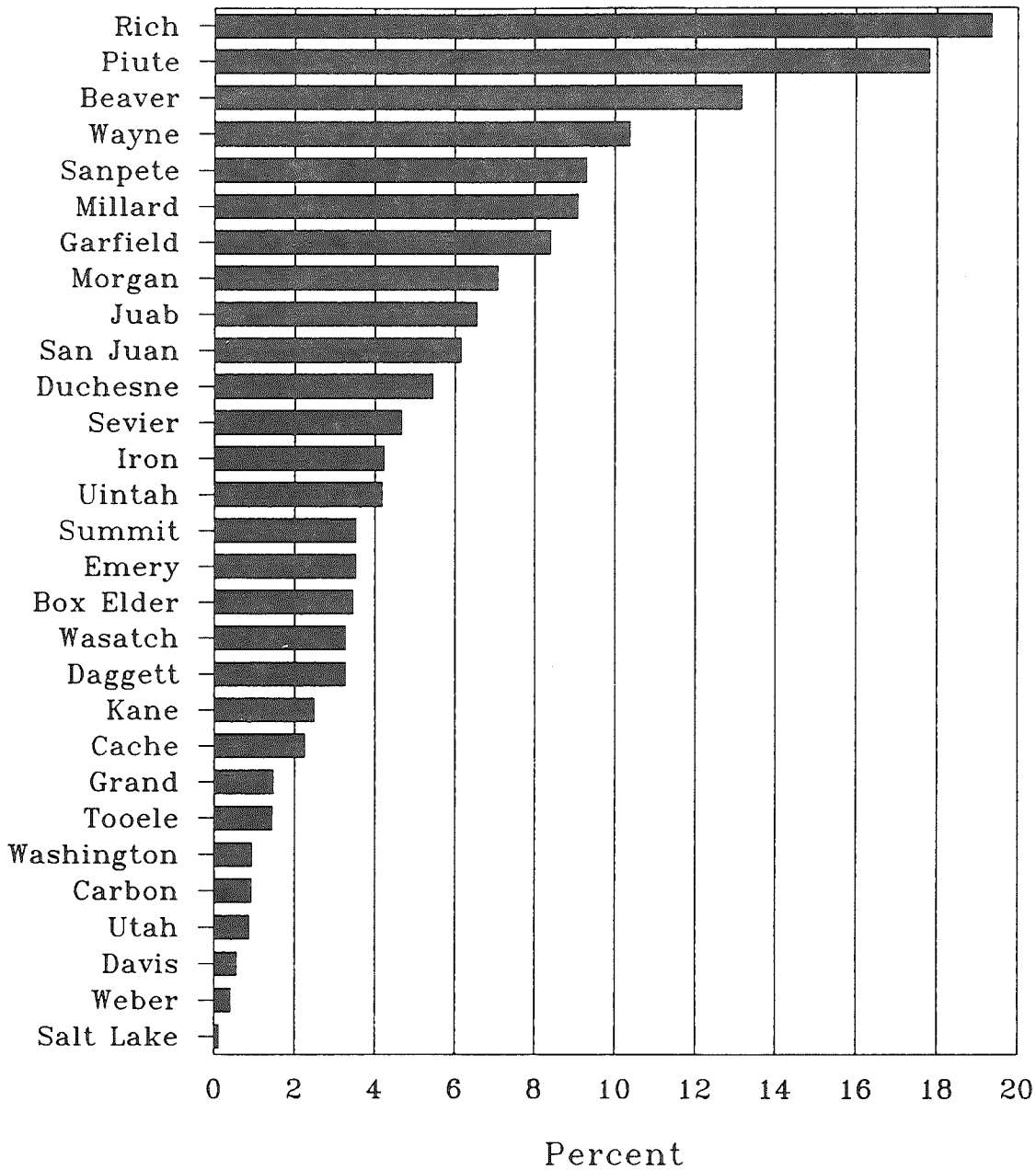
Farmland in Utah makes up 19 percent of total land, or about 10 million acres; Total cropland comprises 2,028,537 acres; woodland 713,375 acres and pastureland and rangeland 7,010,858 acres. Of total farmland, twelve percent, or over one million acres are irrigated. Since 1982, farmland in irrigation increased 78,879 acres. Between 1982 and 1987, total land in farms increased 216,131 acres, or two percent. One-half of the increase was in cropland.

County Farm Dependency

In 1987, Rich county received the greatest share (19.35 percent) of total personal income from farming. It also has the largest share of its total land in farms, 77.8 percent. Box Elder county however, farmed approximately three times the land and earned about four times the farm income that Rich county did. Utah county's total farm income was the largest at $18.7 million. As might be expected, the metropolitan counties of Salt Lake, Weber and Davis received the smallest shares of income from farming. Farm sizes, sales and expenses, by county, are shown in Table 44.

By Planning District, Bear River has the greatest percentage of its land in farms, 48.4 percent. Central District receives the highest proportion of its income from farming, 7.77 percent. The metropolitan Wasatch Front receives the least. Only 0.3 percent of its total income is dependent on farm income.

Figure 32
Personal Farm Income as a Percent of County Total Personal Income: 1987



Source: U.S. Bureau of Economic Analysis

Conclusion

Farming in Utah between 1982 and 1987 grew in terms of total acreage, market value of goods sold, personal income and as a percentage of total personal income. By nature, farming is land intensive. In Utah, 19 percent of the land is farmed, while farm income is one percent of total personal income. Nevertheless, farming contributed $195 million to the Utahns' personal income in 1987. Other Utah businesses also earn income as a result of sales to, or purchases from farms.

Table 42
State Personal Income, Personal Farm Income, Acreage and Value
By State
1988

State	Total Personal Income (Mill.)	Personal Farm Income (Mill.)	Percent of Total	Percent Rank	Total Farm Acreage (Mill.)	Acres Per Farm (number)	Farms (number) (000)	Total Value Land & Buildings	Average Value Land & Buildings Per Farm
Alabama	$52,720	$1,075	2.04%	13	11	224	49	$8,042	$164,122
Alaska	$10,006	$11	0.11%	50	1	2,123	1	NA	NA
Arizona	$52,233	$579	1.11%	30	37	4,506	8	$7,915	$989,375
Arkansas	$29,263	$1,483	5.07%	4	15	319	47	$9,931	$211,298
California	$530,968	$6,288	1.18%	28	33	417	78	$43,701	$560,269
Colorado	$54,352	$694	1.28%	26	34	1,234	27	$12,386	$458,741
Connecticut	$74,553	$178	0.24%	46	<.5	119	4	$2,162	$540,500
Delaware	$11,659	$203	1.74%	18	1	197	3	$1,194	$398,000
Florida	$204,788	$2,502	1.22%	27	13	325	40	$20,750	$518,750
Georgia	$96,779	$1,348	1.39%	25	13	265	49	$11,241	$229,408
Hawaii	$18,399	$275	1.49%	22	2	443	4	NA	NA
Idaho	$12,698	$710	5.59%	3	14	609	23	$8,166	$355,043
Illinois	$204,115	$1,189	0.58%	36	29	345	83	$31,850	$383,735
Indiana	$82,924	$621	0.75%	35	16	228	72	$15,918	$221,083
Iowa	$41,551	$1,915	4.61%	6	34	313	107	$29,803	$278,533
Kansas	$39,320	$1,367	3.48%	8	48	694	69	$17,637	$255,609
Kentucky	$47,784	$970	2.03%	14	15	146	99	$11,403	$115,182
Louisiana	$54,179	$784	1.45%	23	10	271	35	$6,865	$196,143
Maine	$18,206	$139	0.76%	34	2	192	8	$1,879	$234,875
Maryland	$90,071	$396	0.44%	40	2	147	16	$4,834	$302,125
Massachusetts	$122,593	$193	0.16%	49	1	111	6	$2,403	$400,500
Michigan	$152,934	$623	0.41%	41	11	193	58	$9,639	$166,190
Minnesota	$71,807	$1,577	2.20%	12	30	319	94	$16,889	$179,670
Mississippi	$29,123	$1,040	3.57%	7	14	314	43	$9,080	$211,163
Missouri	$79,440	$801	1.01%	31	30	9	113	$17,503	$154,894
Montana	$10,352	$289	2.79%	9	61	2,605	23	$9,948	$432,522
Nebraska	$23,670	$1,819	7.68%	2	47	856	55	$17,280	$314,182
Nevada	$18,461	$48	0.26%	45	9	3,667	2	$1,698	$849,000
New Hampshire	$21,090	$66	0.31%	42	1	158	3	$1,059	$353,000
New Jersey	$169,810	$338	0.20%	47	1	112	7	$5,260	$751,429
New Mexico	$18,814	$285	1.51%	20	45	3,333	14	$5,870	$419,286
New York	$345,741	$682	0.20%	48	9	213	40	$8,223	$205,575
North Carolina	$92,822	$1,764	1.90%	16	11	150	70	$11,471	$163,871
North Dakota	$8,560	$415	4.85%	5	40	1,243	33	$11,846	$358,970
Ohio	$168,635	$769	0.46%	39	16	186	84	$15,461	$184,060
Oklahoma	$43,192	$1,074	2.49%	10	33	478	69	$13,893	$201,348
Oregon	$41,180	$972	2.36%	11	18	488	37	$8,334	$225,243
Pennsylvania	$194,819	$920	0.47%	38	8	150	56	$15,462	$276,107
Rhode Island	$16,769	$47	0.28%	44	<.5	96	1	$455	$455,000
South Carolina	$44,855	$356	0.79%	33	5	200	27	$4,546	$168,370
South Dakota	$9,095	$722	7.94%	1	44	1,278	35	$8,333	$238,086
Tennessee	$67,909	$769	1.13%	29	13	136	94	$13,914	$148,021
Texas	$245,647	$3,428	1.40%	24	132	846	156	$62,113	$398,160
Utah	$20,604	$194	0.94%	32	11	850	13	$4,840	$372,308
Vermont	$8,530	$128	1.50%	21	2	223	7	$2,151	$307,286
Virginia	$106,315	$583	0.55%	37	10	196	49	$10,972	$223,918
Washington	$76,561	$1,331	1.74%	19	16	421	38	$11,038	$290,474
West Virginia	$22,018	$65	0.30%	43	4	176	21	$2,004	$95,429
Wisconsin	$75,362	$1,439	1.91%	15	18	215	82	$11,024	$134,439
Wyoming	$6,523	$122	1.87%	17	35	4,000	9	$4,877	$541,889
U.S.	$4,052,992	$45,586	1.12%	---	999	463	2,159	$563,265	$260,892

SOURCES: Survey of Current Business, Bureau of Economic Analysis, 1989 and Statistical Abstract of the United States, 1989.

Table 43
Total Personal Income and Farm Income
By County: 1987

District County	Total Personal Income (000)	Personal Farm Income (000)	Percent of Total	Percent Rank
Bear River	$1,166,085	$35,856	3.07%	---
Box Elder	$475,961	$16,500	3.47%	17
Cache	$667,912	$15,058	2.25%	21
Rich	$22,212	$4,298	19.35%	1
Wasatch Front	$13,417,779	$39,807	0.30%	---
Davis	$2,022,922	$11,463	0.57%	27
Morgan	$66,181	$4,686	7.08%	8
Salt Lake	$8,970,026	$10,444	0.12%	29
Tooele	$335,460	$4,858	1.45%	23
Weber	$2,023,190	$8,356	0.41%	28
Mountainlands	$2,458,186	$29,492	1.20%	---
Summit	$212,888	$7,529	3.54%	15
Utah	$2,144,980	$18,675	0.87%	26
Wasatch	$100,318	$3,288	3.28%	18
Central	$501,210	$38,936	7.77%	---
Juab	$48,621	$3,187	6.55%	9
Millard	$122,577	$11,122	9.07%	6
Piute	$12,082	$2,150	17.80%	2
Sanpete	$138,173	$12,859	9.31%	5
Sevier	$158,333	$7,396	4.67%	12
Wayne	$21,424	$2,222	10.37%	4
Southwest	$687,327	$21,508	3.13%	---
Beaver	$46,093	$6,062	13.15%	3
Garfield	$41,455	$3,484	8.40%	7
Iron	$168,935	$7,150	4.23%	13
Kane	$49,044	$1,223	2.49%	20
Washington	$381,800	$3,589	0.94%	24
Uintah Basin	$364,972	$16,971	4.65%	---
Daggett	$8,940	$292	3.27%	19
Duchesne	$140,838	$7,665	5.44%	11
Uintah	$215,194	$9,014	4.19%	14
Southeast	$533,771	$12,507	2.34%	---
Carbon	$268,718	$2,506	0.93%	25
Emery	$102,008	$3,602	3.53%	16
Grand	$77,708	$1,146	1.47%	22
San Juan	$85,337	$5,253	6.16%	10
State	$19,129,330	$195,077	1.02%	---

SOURCE: U.S. Bureau of Economic Analysis.

Table 44
1987 Utah Agricultural Statistical Summary
Farm Size, Sales, Expenses and Value

District County	Number of Farms	Average Size Farm (acres)	Total Land in Farms (acres)	Total Farm-Land Rank	Percent Total Land in Farms	Percent Farmland in Irrigation	Value of Products Sold (000)	Livestock, Poultry & Goods Sold* (000)	Percent of Total	Farm Production Expenses (000)	Net Cash Return Per Farm (dollars)	Avg. Value Land and Buildings $ Per Farm
Bear River	2,477	978	2,423,067	---	48.4%	10.1%	$139,615	$110,242	79.0%	$108,696	$12,178	$343,337
Box Elder	1,088	1,456	1,584,194	1	44.1%	6.7%	$60,089	$39,722	66.1%	$50,689	$8,568	$408,718
Cache	1,223	265	324,105	12	43.2%	25.8%	$66,629	$58,485	87.8%	$48,670	$14,370	$213,371
Rich	166	3,101	514,768	3	77.8%	10.5%	$12,897	$12,035	93.3%	$9,337	$19,682	$872,331
Wasatch Front	2,832	420	1,188,670	---	20.3%	8.5%	$102,209	$73,371	71.8%	$81,490	$6,228	$280,342
Davis	647	98	63,244	27	33.0%	38.8%	$28,592	$14,550	50.9%	$22,666	$7,320	$192,927
Morgan	261	1,085	283,105	13	73.4%	3.7%	$13,032	$12,339	94.7%	$9,124	$15,016	$437,395
Salt Lake	734	212	155,398	24	32.1%	10.3%	$23,794	$15,787	66.3%	$20,927	$3,875	$358,488
Tooele	299	1,630	487,427	5	11.0%	3.9%	$10,516	$8,413	80.0%	$8,440	$6,320	$417,270
Weber	891	224	199,496	18	55.1%	15.8%	$26,275	$22,282	84.8%	$20,333	$4,767	$187,487
Mountainland	2,460	408	1,002,583	---	30.9%	12.5%	$96,621	$76,714	79.4%	$77,684	$8,174	$275,406
Summit	439	795	348,827	10	29.2%	8.4%	$15,481	$14,989	96.8%	$11,899	$8,265	$328,770
Utah	1,723	287	493,902	4	38.2%	15.9%	$72,853	$53,978	74.1%	$59,304	$8,073	$255,683
Wasatch	298	536	159,854	23	21.0%	10.6%	$8,287	$7,747	93.5%	$6,481	$8,622	$310,829
Central	2,425	627	1,521,024	---	14.0%	20.1%	$159,036	$135,455	85.2%	$129,288	$11,546	$290,506
Juab	215	1,274	273,876	14	12.6%	8.3%	$8,221	$5,471	66.5%	$5,875	$8,396	$324,549
Millard	630	762	480,195	7	11.0%	19.5%	$40,248	$27,012	67.1%	$31,334	$13,238	$327,938
Piute	126	447	56,310	28	11.6%	31.5%	$4,895	$4,575	93.5%	$3,955	$7,959	$271,976
Sanpete	761	588	447,526	8	44.1%	24.7%	$62,791	$59,513	94.8%	$53,732	$12,032	$298,264
Sevier	476	339	161,495	22	13.2%	26.9%	$36,039	$32,590	90.4%	$29,956	$11,222	$224,653
Wayne	217	468	101,622	26	6.5%	18.0%	$6,842	$6,294	92.0%	$4,436	$10,847	$276,111
Southwest	1,435	832	1,194,382	---	10.8%	11.9%	$56,739	$38,968	68.7%	$46,829	$7,287	$380,643
Beaver	226	828	187,041	19	11.3%	18.7%	$19,489	$14,778	75.8%	$15,015	$18,464	$281,522
Garfield	263	527	138,559	25	4.2%	16.5%	$5,927	$5,173	87.3%	$5,285	$3,190	$336,586
Iron	380	1,271	483,118	6	22.9%	12.8%	$24,522	$11,310	46.1%	$18,892	$11,722	$493,879
Kane	152	1,365	207,495	17	8.3%	3.7%	NA	$2,181	NA	$2,040	$1,381	$414,454
Washington	414	430	178,169	20	11.5%	8.1%	$6,801	$5,526	81.3%	$5,597	$1,887	$346,392
Uintah Basin	1,482	1,154	1,710,263	---	31.8%	10.6%	$38,349	$35,643	92.9%	$32,140	$5,318	$268,037
Daggett	36	698	25,120	29	5.6%	32.8%	NA	$1,149	NA	$1,010	$4,782	$276,528
Duchesne	753	487	366,471	9	17.7%	26.5%	$19,641	$17,901	91.1%	$14,556	$7,603	$214,971
Uintah	693	1,903	1,318,672	2	46.0%	5.8%	$18,708	$16,593	88.7%	$16,574	$2,864	$325,257
Southeast	955	994	949,084	---	8.6%	6.4%	$21,758	$17,048	78.4%	$18,513	$4,130	$303,577
Carbon	210	1,065	223,549	15	23.6%	4.0%	$2,761	$2,373	85.9%	$2,214	$2,086	$332,752
Emery	446	484	215,761	16	7.6%	18.0%	$7,757	$6,794	87.6%	$6,399	$2,646	$208,348
Grand	81	2,090	169,325	21	7.2%	2.6%	$1,870	$1,411	75.5%	$1,733	$1,685	$425,481
San Juan	218	1,562	340,449	11	6.9%	2.5%	$9,370	$6,470	69.1%	$8,167	$10,042	$425,005
State	14,066	710	9,989,073	---	19.0%	11.6%	$617,882	$487,442	78.9%	$494,641	$8,402	$302,838

*Includes all cattle, calves, hogs, pigs, sheep, lambs, poultry and their products.

SOURCE: 1987 Census of Agriculture, U.S. Department of Commerce.

OCCUPATIONAL OUTLOOK

The Utah Job Outlook is a biennial publication prepared by the Utah Department of Employment Security. Primarily, the report defines occupations in demand for the state and each of its nine Service Delivery Areas. This planning document aids vocational and higher education, Job Training Partnership Act (JTPA), and other public and private users in planning educational curricula and employment training programs for occupations in demand. Other users of the information contained in the Outlook include education and employment counselors, job seekers, and employers. In addition to presenting labor demand information, the report also provides other labor market information including labor supply, wages, and training levels.

This chapter presents information on the occupations in Utah. Topics include: the occupational composition of employment in Utah now and how it has changed over the past few years; occupational trends for 1990 to 1995; labor demand and job openings; occupations in demand - the top 50 demand occupations for the next five years; volume occupations; and occupations with the highest numbers of new jobs.

The Occupational Composition Reflects Utah Economy and Jobs

The occupational composition of Utah jobs is slowly changing, reflecting changes in consumer demand for goods and services, technological advances, and changes in local, regional, national, and global markets. In Utah, thousands of employers conduct business in literally hundreds of different industries. These employers produce a wide variety of products and services each requiring work forces with different occupational "mixes." The economy determines what products and services will be produced. Industry decides the type and number of occupations that will be required to produce the goods and services for the market place. This "market driven" demand is reflected in the occupational composition of Utah jobs.

Current Occupational Composition

Seven broad occupational groups make up the 834,300 total jobs in Utah (see Figure 33 and Table 45). The **production, operating, and maintenance** category contributes the largest amount of employment accounting for just over one-fourth or 217,400 of the total. This category contains occupations in skilled trades, production workers, and other semi-skilled and unskilled workers employed mainly in the mining, construction, manufacturing, and transportation and utilities industries.

The **professional, paraprofessional, and technical** group provides the next largest number of jobs claiming 168,600 positions, or a 20 percent slice of the employment pie. Workers in professional occupations encompass engineers, accountants, computer programmers/analysts, nurses, and teachers. This category also includes a number of different technician occupations.

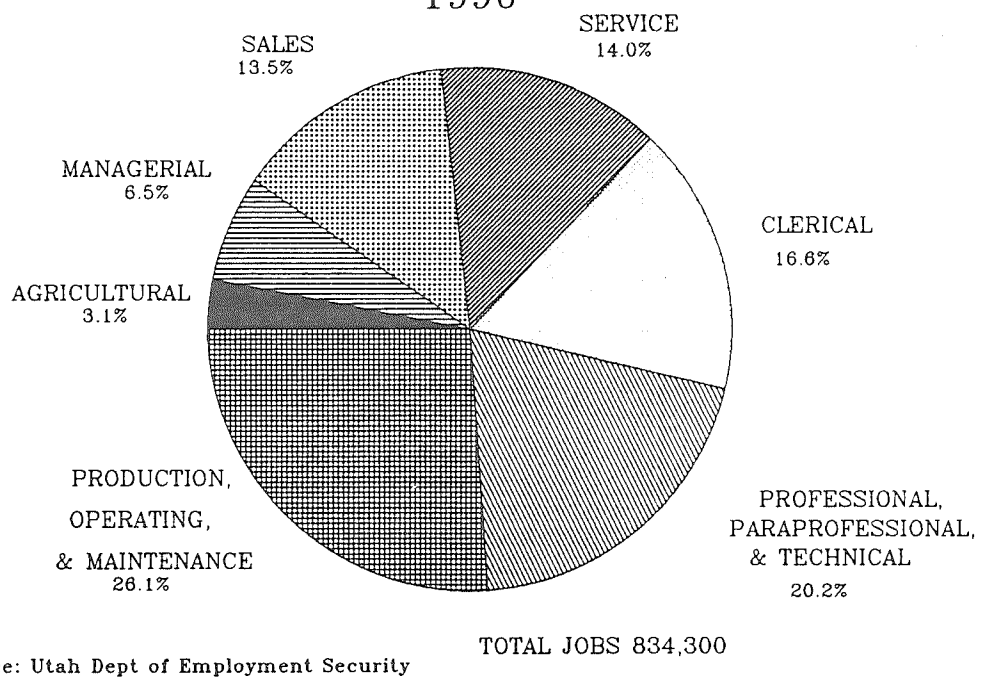
One out of every six jobs in the Utah falls in the **clerical and administrative support** occupational category which accounts for 138,400 jobs. Significant job titles in this group consist of clerical supervisors, accounting clerks, secretaries, general office clerks, word processor operators and shipping and receiving clerks.

The **service** occupational sector holds the fourth position in the number of jobs with 14 percent or 116,600 of the total employment count. Service occupations such as fast food workers, waiter/waitresses, and cooks, are concentrated in the food service industry. In the hotel/motel industry significant service occupations are maids and housekeepers. Protective service jobs include police, fire fighters and guards. Also in the service group are nurse aides, janitors, hairdressers, and child care workers.

The **sales and related** category captures 112,900 or about 14 percent of total jobs. Prominent occupations in this group include sales supervisors, sales agents, sales clerks, and cashiers.

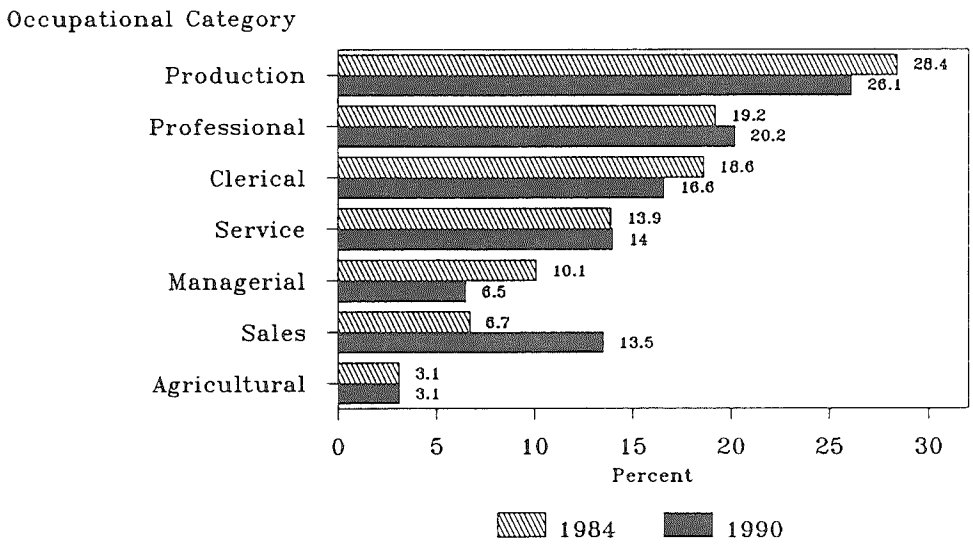
Employment in the **managerial and administrative** occupational category contributes 6.5 percent of total employment or about 54,600 jobs. This group covers all professional management and administrative

Figure 33
Occupational Composition of Utah Jobs 1990



Source: Utah Dept of Employment Security

Figure 34
Changing Occupational Composition of Utah Jobs: 1984 and 1990



Source: Utah Dept of Employment Security

occupations above the first line supervisors level. General managers and financial managers make up the largest specific occupations in this group.

Occupations in the **agriculture, forestry, and fishing** job group continue to claim the smallest slice of the employment pie with about three percent (25,900) of the total 834,000 jobs. This group includes occupations in agriculture and agricultural services industries with the largest occupations being farmers, farm workers, and gardeners and groundskeepers.

Changing Occupations in Utah

The occupational composition of Utah jobs is continually changing, mirroring the changing economy. Although over the last six years no occupational category has suffered an actual decline in employment, the share of total jobs in the seven occupational categories has changed. Figure 34 presents the share of total jobs for each of the seven categories for 1984 and 1990.

Managerial and administrative employment has experienced a marked decline in its relative share of total jobs since 1984. During that year, about 10 percent of all jobs fell in the managerial category; but by 1990, the percent declined to about 6.5. This decline may be partly due to the shifting of employment from goods-producing to service-producing industries. Also fewer managers may be needed to oversee activity in the trade and services industry sectors.

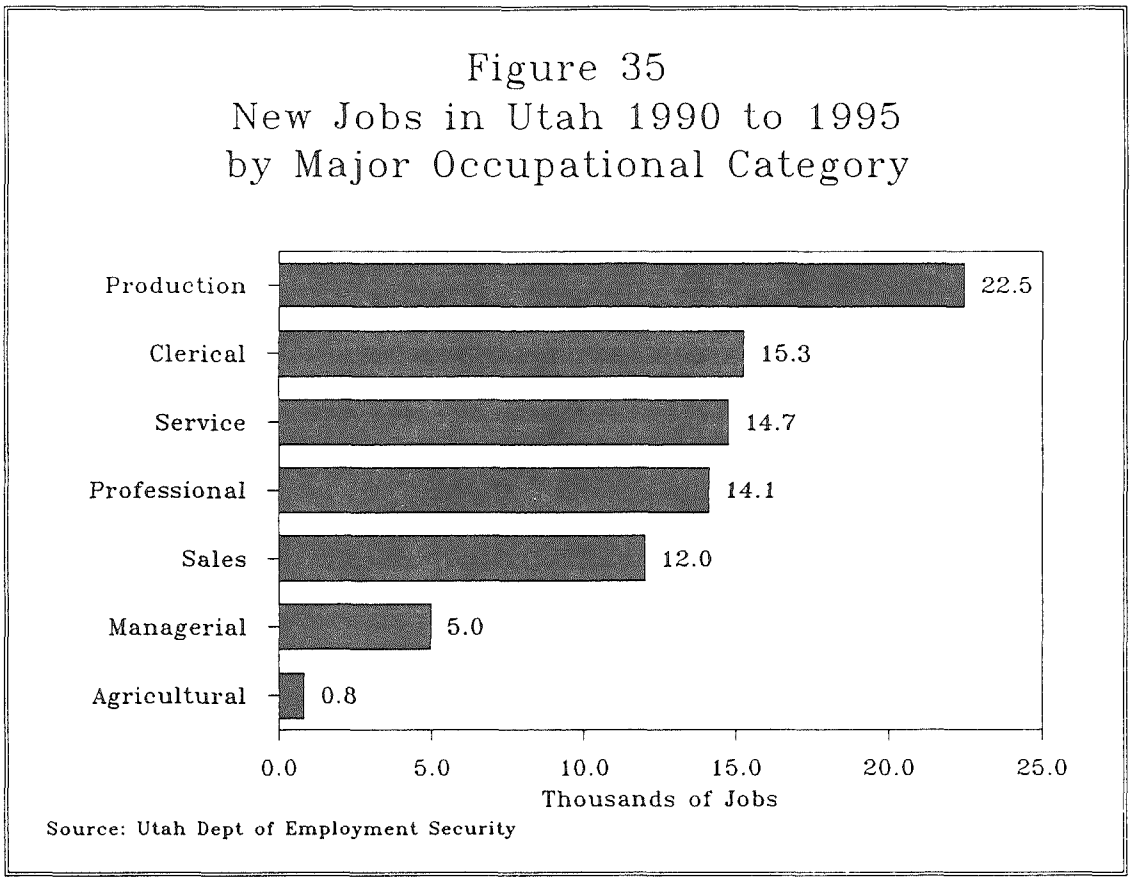
The clerical job group has also experienced a modest two percent decline in its share of total jobs. In 1984, 18.6 percent of all employment was in the clerical group. In 1990, that percent will slip to 16.6 percent. Technological change in the work place has had a fairly dramatic effect on the types and numbers of workers. This effect becomes most apparent in the clerical and administrative support occupations. Here, fewer workers are needed because of the increase in productivity through personal computers. Additionally, many non-clerical workers are now doing their own word processing, data manipulation, and graphic preparation - tasks which were previously accomplished by clerical workers. Again, this change can be attributed to the infusion of personal computer technology in the work place.

Sales occupations have shown a consistent increase in their share of total employment over the same period. The percent of sales occupations in the job market has increased from 6.7 percent in 1984 to 13.5 percent in 1990. Much of this rise is tied to the significant growth in employment in the trade industry. In this industry more products are sold and different marketing techniques such as telemarketing have been introduced.

The production, operating, and maintenance group experienced a slight, but continued loss in its share of total employment over the last six years. In 1984, 28.4 percent of all employment fell in this category. By 1990, the percent had edged downward to 26.1 percent. A number of factors influenced this decline. Technological changes in the manufacturing processes increased productivity allowing output to remain the same or even actually increase in certain industries. For example, this productivity enhancement was evident in the copper industry where high output has been reached with fewer workers. Also, some labor-intensive manufacturing activity has moved "off shore" or out of the country.

The remaining job categories - professional/paraprofessional/technical, service, and agriculture - are generally holding their own. These groups show less than two percent variations, either up or down, in their share of total employment.

A number of factors affect the trends in employment and occupations. Technological change in the work place has had an effect on the types and numbers of workers. The most visible impact occurs in the office where fewer workers are needed because of the influx of personal computer technology. Productivity enhancements through technological change in goods-producing industries have enabled fewer workers to produce the same or even higher levels of output. Structural changes in the economy impact the mix of occupations. The shift of employment from good-producing industries to service-producing industries provides a prime example as evidenced by the increases in sales and service related occupations.



Occupational Trends Over the Next Five Years

Looking at the next five years, projections indicate the Utah economy will create over 84,000 new jobs. Employment will increase from 834,300 to nearly 918,700 by 1995. The employment growth rate will average about 2.0 percent per year. In occupational terms, the sales, clerical, service, and production/operating/maintenance categories will grow faster than the average for all occupations (see Figure 35). The managerial/administrative, professional/paraprofessional/technical, and agriculture/forestry/fishing groups will experience growth rates below the State average of 2.0 percent per year.

Of the 84,000 new jobs projected in the next five years, the production, operating, and maintenance category will claim about 22,500, or one-fourth of the total. Clerical occupations will feel an increase of 15,300 new jobs and an annual rate of growth of 2.2 percent. The service occupations will add another 14,700 new employment positions and experience the fastest job growth rate (2.5 percent per year). Nearly as many new jobs (14,100) will be added by the professional, paraprofessional, and technical occupations. This group will also grow but at a slower 1.7 percent rate per year. Over the five year period, sales jobs will increase by 12,000, or 2.1 percent per year. The managerial group will boost total jobs by nearly 5,000 at a 1.8 percent per year pace.

Jobs in the agricultural sector will increase by only 800 over the half decade period with all the growth in this category originating from the agricultural services industry.

Labor Demand and Job Openings

In each of the five years, an average of 42,000 job openings will occur. More job opportunities will arise to fill positions vacated by workers who leave the labor force than openings due to growth in the economy. Sixty percent of the total 42,000 job opportunities will occur to replace current workers who leave the labor force and 40 percent will be the result of job growth.

Planners often discuss the demand for labor in the context of meeting the needs of a growing economy. Many of the job openings in the labor market are indeed generated by the expansion of current firms and the arrival of new companies into the area. The demand for workers, however, does not stop here. The second, and larger component - replacement demand - contributes more employment opportunities than created from growth in the economy. Growth openings exceed replacement openings only in extremely high growth or boom periods in economic expansion.

The demand for labor is derived from a number of factors in the labor market and economy. The need to define or identify occupations with the best prospects for the future has resulted in the development of a demand index. This index helps education and employment training program planners select which occupations will offer the best opportunity for employment. The indexing method takes into account four primary factors affecting the demand for an occupation: volume of current employment, new number of projected jobs, the rate of employment growth, and the number of replacement job openings estimated for the occupation. Indexing results in a ranking of hundreds of occupations and the assignment of a Composite Job Prospect Grade to occupations in the labor market. Occupations with high volume of current jobs, large numbers of projected new jobs, higher rates of job growth, and high numbers of replacement job openings are assigned higher positions in the index. This method identified occupations in demand in Utah for the 1990 to 1995 period.

Occupations in Demand - The Top 50 Demand Occupations 1990 -1995

The occupations in demand for Utah encompasses one or more of the following characteristics: high volume of current employment, high growth rates and numbers of projected new jobs, high numbers of job openings resulting from the need to replace workers who leave current jobs. The Top 50 Occupations in Demand are shown in Table 46. Just these 50 job titles account for half of all current and projected employment, new jobs, and growth and replacement job openings.

Volume Occupations

Volume occupations - those with large numbers of workers - provide substantial job opportunities. The top five single occupations with the largest number of workers in Utah include sales clerks, secretaries, truck drivers, general managers, and general office clerks. Just these job titles alone account for one out of every eight Utah workers.

Occupations with the Most New Jobs

The occupations adding more new jobs in the next five years are sales clerks, secretaries, general managers, general office clerks, and janitors. These five job titles will contribute 11,500 of the 84,000 total new jobs between 1990 and 1995.

Summary

Occupations in the Utah economy reflect the needs of industry in the state. As the demand for goods and services in the market place changes, so does the occupational mix of jobs. Productivity enhancements through technological changes and structural changes in the economy will continue to affect occupations in Utah. The trends in occupational composition reflect a slow ongoing shift of the economy from a goods-producing profile to a service-producing posture. Utah occupations, in the next five years, will experience consistent moderate growth.

Table 45
Utah Jobs and Job Opening Summary
1990 to 1995

Occupational Category	1990 Jobs	1995 Jobs	Annual Average Job Openings Total	Due to Growth	Due to Replacement
Total - All Categories	834,300	918,670	16,860	24,960	41,820
Managerial & Administrative	54,610	59,570	990	2,100	3,090
Professional, Paraprofessional, & Technical	168,580	182,690	2,820	4,490	7,310
Sales & Related	112,910	124,920	2,400	4,590	6,990
Clerical & Administrative Support	138,350	153,610	3,050	3,790	6,840
Service	116,550	131,290	2,950	3,890	6,840
Agriculture, Forestry, Fishing	25,870	26,690	160	830	990
Production, Operating, & Maintenance	217,430	239,900	4,490	5,270	9,760

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

Table 46
Utah's Top 50 Occupations in Demand
1990 to 1995

Accountants and Auditors	Janitors and Cleaners, Except Maids
Accounting and Bookkeeping Clerks	Licensed Practical Nurses
Carpenters	Machinists
Cashiers	Maids & Housekeeping Cleaners
Computer Programmers	Maintenance Repairers, General
Cooks, Restaurant	Managers, Engineering, Math & Related
Cooks, Specialty Fast Food	Managers, Financial
Designers, Except Interior Designers	Managers, General & Top Executives
Electrical & Electronic Technicians	Managers, Marketing, Advertising, Public Relations
Electricians	Nurses Registered
Engineers, Electrical & Electronic	Nursing Aids & Orderlies
Engineers, Mechanical	Precision Inspectors Testers, & Graders
Farmers*	Receptionists, & Information Clerks
Fast Food Workers	Sales Agents, Business Services
First Line Supervisors, Production	Sales Clerks
First Line Supervisors, Construction or Mining	Sales Representatives, Technical
First Line Supervisors, Mechanics	Sales Representatives, Retail
First Line Supervisors, Clerical	Secretaries
First Line Supervisors, Sales	Shipping & Receiving Clerks
Food Preparation Workers	Stock Clerks, Sales Floor
Gardeners and Groundskeepers	Stock Clerks, Stockroom or Warehouse
General Office Clerks	Teachers, Secondary
Guards and Watch Guards	Truck Drivers
Hand Packers and Packagers	Vendors, Solicitors, Door-to-Door
Housekeepers, Institutional	Waiters & Waitresses

* Unlike the other occupations listed, farmers are specific to and dominate employment in the agricultural industry. This accounts for a high level of employment relative to the other occupations listed. The demand for farmers in the future results from the need to replace current workers who will leave the labor force, not from the growth in the industry.

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

BUSINESS AND HOUSEHOLD TAXES IN SELECTED STATES

Introduction

Every two years since 1980-81, the Economic and Statistical Unit of the Utah State Tax Commission has attempted to analyze the business and household tax burdens in the West. Although only "initial" tax burdens are surveyed, the seven states which are studied here are fairly homogenous with respect to their ability to export portions of their tax base: Arizona, California, Colorado, Idaho, Oregon, Utah, and Washington.

Thus, four western states were omitted from the study (Montana, Nevada, New Mexico and Wyoming) due to the ability of these states to export large portions of their business tax burden in the form of severance or gambling taxes.

Another significant improvement in the comparability of the data is the usage of "gross state product" in the denominator of business taxes. In 1988, the Bureau of Economic Analysis, U.S. Department of Commerce, compiled a history of estimates of gross state products (GSP) from 1960 to 1986. These estimates significantly improve our ability to accurately compare the overall initial tax burdens, since the "yardstick" for comparison attempts to measure each state's total production value.

In addition, the GSP estimates enabled us to accurately compare 1984-85 business tax burdens with 1988-89 burdens. This may enable readers to ascertain the results of more recent taxation policies in their respective states.

Methodology

Over the decade of the 1980's our methodology has remained basically unchanged. We have been primarily concerned with statutory or initial tax incidence. In other words, the initial impact of taxes is determined according to who nominally pays the tax except in cases where final incidence can clearly be determined. For example, cigarette and tobacco taxes, though remitted by the wholesaler, are in most cases borne by households.

In our view, determination of final incidence can be very complicated and somewhat perilous. To the extent that those who bear the initial tax burden can shift or pass taxes on to someone else, initial incidence will diverge from final incidence. The ability to shift tax burdens is dependent upon the prevailing market structure and can occur in one of two ways:

1) Forward shifting to consumers through higher prices, or

2) Backward shifting to sellers of capital and labor.

Attempts to measure the shifting would involve a great expense by each state's revenue department economists. Although some estimates have been made for their states by economists in Washington and New Mexico, it would have been impossible to accurately estimate final incidence for all the states. This report assumes the extent and composition of tax exporting to be uniform throughout the seven, selected Western states.

Data Sources and Assumptions

Data on state and local taxes were obtained primarily from:

1) Telephone and FAX communications with other states' tax economists,

2) Annual reports and revenue forecasts of other states' revenue departments or forecasting publications.

Simplifying assumptions were used to break down taxes between business and households. For the sales tax apportionment, each state was polled to agree or change their prior apportionment ratio. Research in Utah and California indicated that 35 percent of motor vehicle sales, not 20 percent, was attributable to businesses. Utah's business/household apportionment was recomputed by applying estimated weights to each Standard Industrial Classification.

With respect to property taxes, each state was asked to confirm or alter prior years' estimated apportionment factors. Most made minor adjustments. Utah's property tax apportionment to consumers and business was based on estimates from the 1988 Annual Statistical Report of the Tax Commission's Property Tax Division.

The apportionment of selective taxes, i.e., gasoline, diesel, liquor, beer, and cigarette taxes was a bit more painstaking. Beer, liquor and cigarette taxes were assumed to fall totally on households. Twenty percent of gasoline taxes and motor vehicle registration taxes were assigned to business and all diesel and other interstate trucking taxes were assumed to fall upon business. By assigning 20 percent of gasoline and 100 percent of diesel fuel taxes to business, the overall business tax burden will approximate 35 percent, consistent with the research referred to above.

For the remaining taxes, the breakdown was comparatively easy. Individual income taxes were apportioned to households (although business income certainly could be factored out). Corporate income and franchise taxes, as well as Washington's Business and Occupation Tax were pegged under the business income tax category. Finally, severance and unemployment taxes were assumed to fall initially upon business.

Since 1988 estimates of gross state product were unavailable from the Bureau of Economic Analysis (BEA), each state's gross state product was factored up by growth in its personal income, as estimated by the BEA for 1988.

Business Tax Burdens in Utah Remain Very Competitive

Results from fiscal year 1988-89 survey of initial business tax burdens reveal several interesting facts. First, of no surprise, the property tax was the heaviest business tax in the selected Western states (Table 47).

Second, Washington and Arizona had significantly higher business tax burdens than the five other states (Figure 36). Washington's high business tax burden is due to its substituting corporate net income taxes for a low rate gross income tax, called the Business and Occupation Tax. Arizona's high ranking stems from its heavy reliance on business property taxes.

The third important finding is that the business tax burden of the remaining five states, California, Colorado, Idaho, Oregon and Utah clustered between 3.2 percent and 3.6 percent of gross state product. This clustering represents a reasonable range within which all states are economically competitive from a tax standpoint.

Five states reduced their business tax burden between 1984-85 and 1988-89:

1) Utah reduced its rate by 0.57 percent of GSP, amounting to a savings of $157 million.

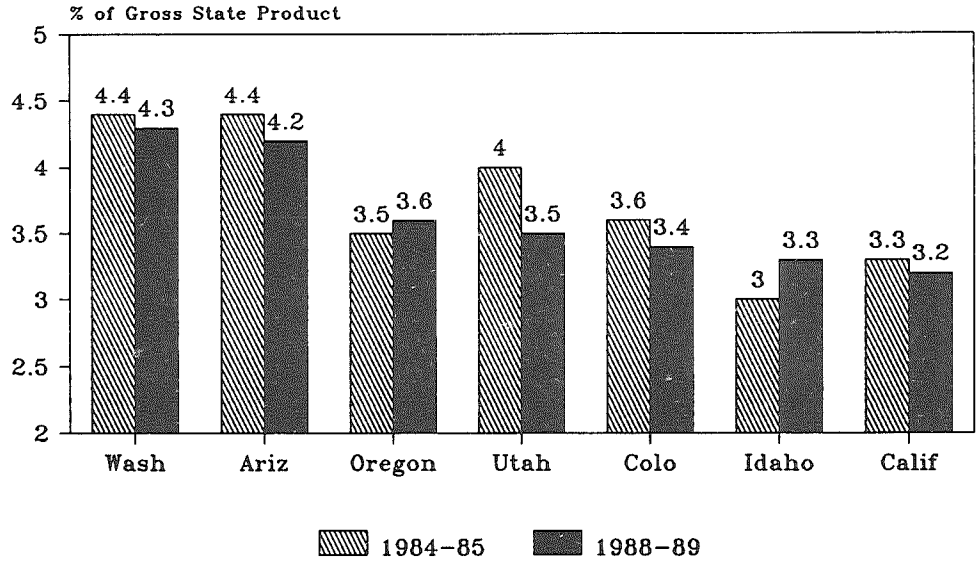
2) Colorado reduced its rate by 0.23 percent of GSP, amounting to a savings of $150 million.

3) Arizona reduced its initial tax burden on business by 0.20 percent of GSP, saving businesses $124 million.

4) Washington reduced its business tax burden by 0.16 percent or $144 million.

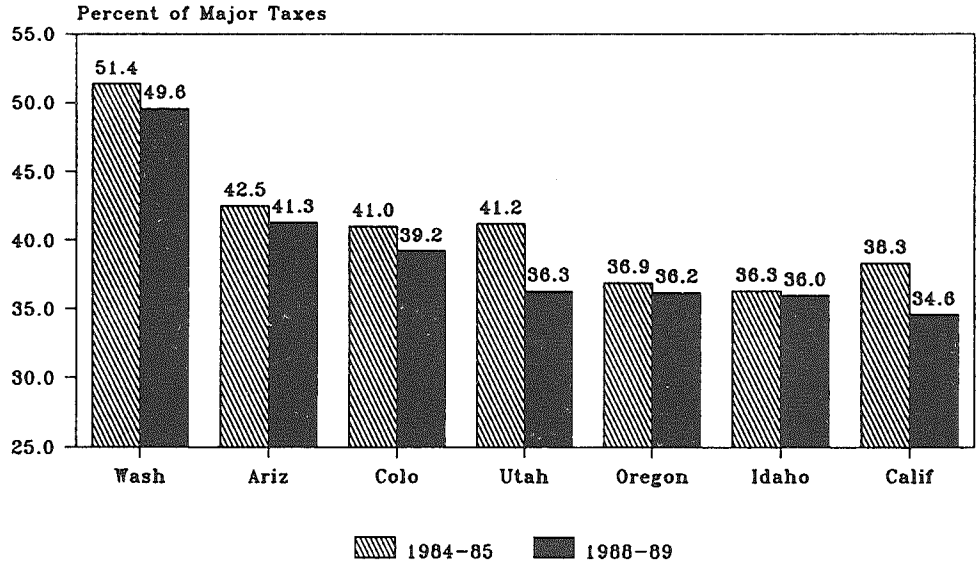
5) California's business tax burden dropped 0.10 percent, for a savings of $625 million.

Figure 36
Business Tax Burdens for Selected States
(Initial direct taxes as a % of GSP)



Source: Utah State Tax Commission

Figure 37
Share of Major Taxes Paid Initially by Business



Source: Utah State Tax Commission

Only one of the selected Western states increased its business tax burden in the last four years. Idaho's effective business tax burden rose from 3.03 percent of GSP in 1984-85 to 3.34 percent of GSP in 1988-89. This calculates out to $46 million more in business taxes. While Idaho's GSP rose 5 percent per year over the four year period key taxes incurred the following yearly growth rates:

1) Property taxes - 8.7 percent,
2) Sales taxes - 9 percent, and
3) Corporate income taxes - 14 percent.

It is entirely possible that Idaho's recovering farm, mining and high-tech industries were responsible for some of the increase.

Oregon's business tax burden at 3.61 percent of GSP remained virtually constant over the four year period.

Historically, we have also measured each state's business tax burden as a share of total, major taxes, as another way of assessing the extent of business/household tax burdens. Table 48 and Figure 37 depict this measure. Washington, as it has over the entire decade of the 1980's, continues to have its businesses pay about 50 percent of its major tax burden. Arizona (41.3 percent) and Colorado (39.2 percent) make up a second tier. A definite third tier comprises Idaho, Oregon and Utah whose businesses paid between 36.0 and 36.3 percent of the major tax burden.

Finally, California, with its vast and divergent economy exacted the lowest share - 34.6 percent - of its taxes from business. Alternatively, then, the percent of major taxes that are not paid by business are paid by households.

Household Tax Burdens in Utah Remain the Highest in the West

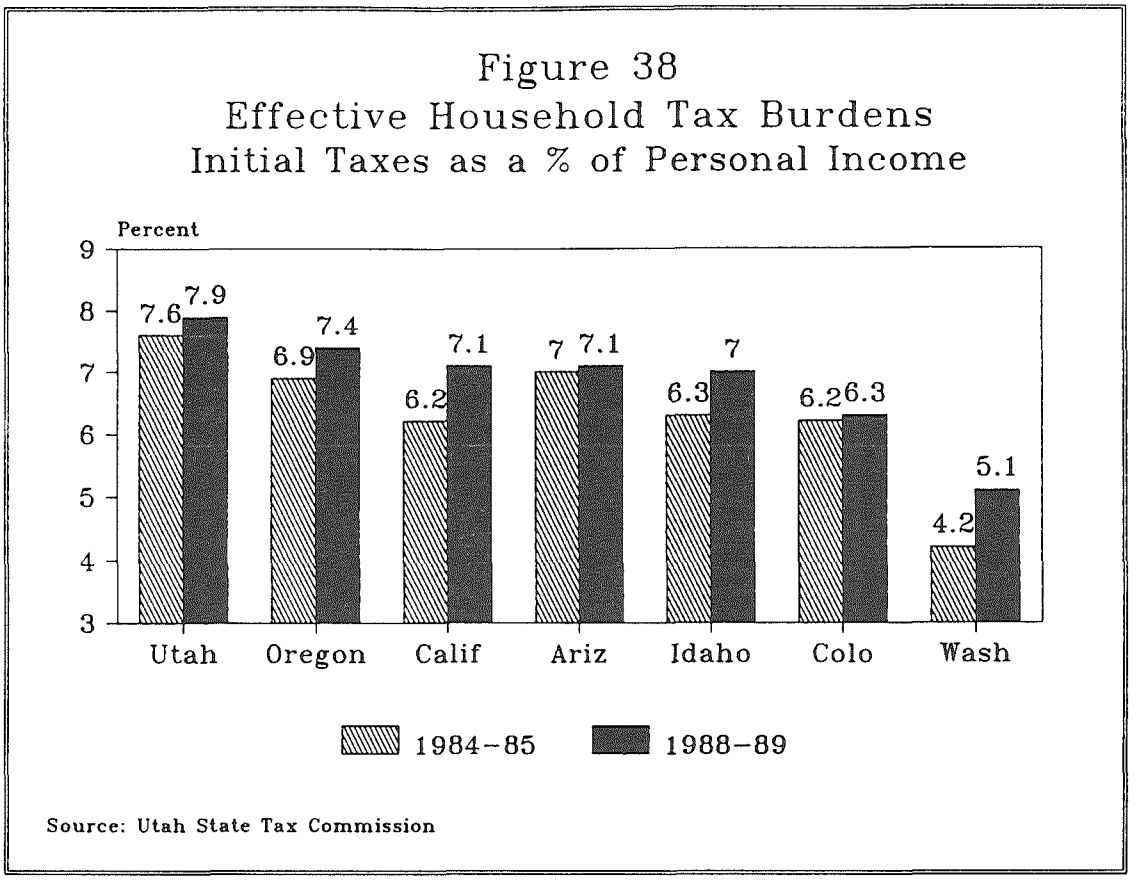
At 7.9 percent of personal income, Utah's household tax burden remains number one among the seven Western states (Table 48 and Figure 38). Steady increases in sales tax rates during the 1980's together with a $50 million plus income tax increase in 1987 assured that Utah's household tax burden would increase. If the 1988 Utah legislature had not granted a $71 million special income tax refund, the effective initial tax burden on Utah households would have been 8.3 percent in 1988-89.

Oregon, which imposes relatively heavy personal income and property taxes to offset not levying a sales tax, ranked second. Its effective tax burden rose from 6.57 percent in 1984-85 to 7.44 percent in 1986-87, and then fell to 7.41 percent in 1988-89.

Clustering in a second tier were California, Arizona and Idaho who had respective effective household tax burdens of 7.13, 7.12 and 6.98 percent. California's tax burden on households has risen 0.9 percent, from 6.23 percent of personal income in 1984-85 to 7.13 percent in 1988-89. A 0.9 percent increase in California's household tax burden represents a $4.8 billion increase in taxes over the past four years. A booming economy coupled with a broader personal income tax base by tying more closely to the 1986 Tax Reform Act may be partially responsible for the jump in effective taxes. While California's personal income grew 8.1 percent per year from 1984-85 to 1988-89 (Table 49), three of its major taxes grew at faster rates:

Sales taxes - 14.6 percent per year.
Personal income taxes - 10.1 percent per year, and
Property taxes - 9.2 percent per year.

Ranking fifth, Colorado's effective household tax burden was relatively flat over the four year period. Personal income growth, at only 4.9 percent per year, was the lowest among the seven states. Sales taxes rose only $22 million, from $1.359 billion to $1.381 billion since 1984-85. In addition, the Colorado Legislature adopted a flat rate income tax, discarding the concept of progressivity, in favor of simplicity.



Notwithstanding the adoption of the flat tax, personal income taxes rose 8.7 percent per year over the four year period, as the effects of the 1986 Tax Reform Act expanded the taxable income base in Colorado too.

Washington's reliance on the Business and Occupation Tax, instead of a combination of personal and corporate income taxes, continued to pull down its household tax burden into last place. However, its 5.09 percent effective household tax rate was 0.9 percent, or effectively $808 million higher than it was in 1984-85. It appears that Washington's property tax which grew from $1.5 billion in 1984-85 to $2.15 billion in 1988-89 was partially responsible for the increase in effective rate from 4.19 percent to 5.09 percent of personal income.

In summary, effective household tax burdens increased in all of the seven Western states that were examined. Effective rate increases of almost 1 percent occurred in California and Washington. Both states experienced rapid economic growth since fiscal year 1984-85. Less dramatic, but significant, effective tax rate increase occurred in Idaho and Oregon, which experienced increases of about 1/2 of 1 percent.

Conclusions

Despite recent personal income tax reductions, Utahn's household effective tax burden remains the highest in the West. Tax increases during the near recession in 1986 steered away from business and kept household tax burdens from slipping. Recent personal income tax reductions, however, lowered the overall household burden to slightly under 8 percent. The latest July 1989 Special Session income tax cut would only lower Utah's household burden to 7.78 percent of personal income.

In contrast to a high household tax burden, Utah's business tax burden dropped 0.5 percent since fiscal year 1984-85. Utah's corporate income tax rate has traditionally ranked near the bottom in the past twenty years (Figure 36). Yet, it is likely that a large portion of this tax is exported to owners of capital outside the state's boundaries. Recent mergers have probably exacerbated the trend.

Table 47
Household and Business Direct Taxes, FY 1989-90
(in millions of dollars)

	Income Tax	Property Tax	General Sales Tax	Selective Sales Tax	Severance Tax	Unemployment Insurance	Total Major Taxes
Arizona							
Business	201	1,144	849	272	29	117	2,612
Household	912	975	1,386	444	0	0	3,717
Total	1,113	2,119	2,235	716	29	117	6,329
% Business	18.1%	54.0%	38.0%	38.0%	100.0%	100.0%	41.3%
California							
Business	5,110	6,258	5,780	964	0	1,879	19,991
Household	15,890	9,064	10,734	2,145	0	0	37,833
Total	21,000	15,322	16,514	3,109	0	1,879	57,824
% Business	24.3%	40.8%	35.0%	31.0%	0.0%	100.0%	34.6%
Colorado							
Business	164	1,180	539	112	11	222	2,228
Household	1,299	1,005	842	301	0	0	3,447
Total	1,463	2,185	1,381	413	11	222	5,675
% Business	11.2%	54.0%	39.0%	27.1%	100.0%	100.0%	39.3%
Idaho							
Business	73	190	104	39	0	93	499
Household	346	214	243	83	0	0	886
Total	419	404	347	122	0	93	1,385
% Business	17.4%	47.0%	30.0%	32.0%	0.0%	100.0%	36.0%
Oregon							
Business	157	1,162	0	55	36	317	1,727
Household	1,725	1,031	0	294	0	0	3,050
Total	1,882	2,193	0	349	36	317	4,777
% Business	8.3%	53.0%	0.0%	15.8%	100.0%	100.0%	36.2%
Utah							
Business	94	371	293	72	28	76	934
Household	615	342	520	159	0	0	1,636
Total	709	713	813	231	28	76	2,570
% Business	13.3%	52.0%	36.0%	31.2%	100.0%	100.0%	36.3%
Washington							
Business	1,007	901	1,097	140	19	674	3,838
Household	0	1,245	1,789	861	0	0	3,895
Total	1,007	2,146	2,886	1,001	19	674	7,733
% Business	100.0%	42.0%	38.0%	14.0%	100.0%	100.0%	49.6%
Total							
Business	6,507	11,018	8,377	1,744	132	2,780	30,558
Household	20,787	13,876	15,514	4,288	0	0	54,465

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

Table 48
Direct Taxes as a Percent of Personal Income or Gross State Product

	Personal Income 1988 ($Mill)	Household Tax Burden	Gross State Product 1988 Est. ($Mill)	Business Taxes as a % of GSP	Households 1988 (000)	Taxes Per Household	Income Per Household
Arizona							
Business			62,136	4.20%			
Household	52,233	7.12%			1,281	$2,901	$40,775
California							
Business			625,731	3.19%			
Household	530,968	7.13%			10,326	$3,664	$51,420
Colorado							
Business			65,091	3.42%			
Household	54,352	6.34%			1,266	$2,724	$42,932
Idaho							
Business			14,933	3.34%			
Household	12,698	6.98%			353	$2,510	$35,972
Oregon							
Business			47,882	3.61%			
Household	41,180	7.41%			1,102	$2,768	$37,368
Utah							
Business			26,897	3.47%			
Household	20,604	7.94%			524	$3,124	$39,321
Washington							
Business			89,756	4.28%			
Household	76,561	5.09%			1,817	$2,144	$42,136

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

Table 49
Changes in Taxes, Gross State Product and Personal Income
Fiscal Years 1985 and 1989
(In Millions of Dollars)

	Sales	Property	Personal Income	Selective Sales	Corporate Income	Severance	Unemployment Insurance	Total	GSP	Personal Income
Arizona										
1984-85	1,652	1,384	626	479	202	22	125	4,490	43,442	36,800
1988-89	2,235	2,119	912	716	201	29	117	6,329	62,136	52,233
% Change*	7.8%	11.2%	9.9%	10.6%	-0.1%	7.2%	-1.6%	9.0%	9.4%	9.2%
California										
1984-85	9,571	10,767	10,806	2,422	3,665	19	2,041	39,291	456,874	389,183
1988-89	16,513	15,322	15,890	3,109	5,110	0	1,879	57,823	625,731	530,968
% Change*	14.6%	9.2%	10.1%	6.4%	8.7%	-100.0%	-2.0%	10.1%	8.2%	8.1%
Colorado										
1984-85	1,359	1,765	929	322	98	30	247	4,750	53,373	44,947
1988-89	1,381	2,185	1,299	413	164	11	222	5,675	65,091	54,352
% Change*	0.4%	5.5%	8.7%	6.4%	13.7%	-22.2%	-2.6%	4.5%	5.1%	4.9%
Idaho										
1984-85	238	289	253	123	43	1	82	1,029	12,299	10,357
1988-89	347	404	346	122	73	0	93	1,385	14,933	12,698
% Change*	9.9%	8.7%	8.1%	-0.2%	14.1%	-100.0%	3.2%	7.7%	5.0%	5.2%
Oregon										
1984-85	0	1,546	1,311	238	154	32	253	3,534	36,882	32,302
1988-89	0	2,193	1,725	349	157	36	317	4,777	47,882	41,180
% Change*	0.0%	9.1%	7.1%	10.0%	0.5%	3.0%	5.8%	7.8%	6.7%	6.3%
Utah										
1984-85	685	588	436	168	66	49	140	2,132	21,739	16,426
1988-89	813	713	615	231	94	28	76	2,570	26,897	20,604
% Change*	4.4%	4.9%	9.0%	8.3%	9.2%	-13.1%	-14.2%	4.8%	5.5%	5.8%
Washington										
1984-85	2,405	1,508	0	768	669	36	424	5,810	67,347	58,416
1988-89	2,886	2,146	0	1,001	1,007	19	674	7,733	89,756	76,561
% Change*	4.7%	9.2%	0.0%	6.8%	10.8%	-14.8%	12.3%	7.4%	7.4%	7.0%

* Compounded annually.

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

EVALUATION OF UTAH'S BUSINESS TAXES

During 1989, an evaluation of Utah's business tax competitiveness was completed by Price Waterhouse Washington Tax Service. The purpose of this study is to provide an objective measure for comparing Utah's overall business taxes on investment in selected industries with those of competitor states. In addition to providing a current comparison of taxes under present law, the Price Waterhouse Business Tax Model can be used to simulate the effects of future tax policy proposals on Utah's multistate business tax position.

This analysis of business taxes covers nine states and nine industries. The nine industries include both traditional mainstays of the Utah economy as well as industries with rapid growth potential. Manufacturing industries that are included in the study are primary metals, missiles, machinery and equipment, and aircraft. Five service-producing industries are also included: retail trade, wholesale trade, computer services, hotels, and hospitals.

Types of Taxes

The Price Waterhouse Business Tax Model calculates the combined impact of four state and local business taxes -- property, corporate income, sales, and franchise taxes -- for representative firms in each industry. Careful attention has been given to accurately reflect tax base as well as tax rate differentials among the states. In the property tax area, property assessment policies have been taken into account. The treatment of the corporate income tax includes the nuances of apportionment formulas and depreciation rules. Sales taxes include only those applied to business purchases, such as building materials and machinery and equipment. Sales taxes on final business products are not included since they are assumed to be passed through to consumers.

Focus on Investment

The Business Tax Model is designed to measure the state and local tax burden on investment in a new or expanded facility. It is important to recognize that the tax burden associated with a new investment differs from the average tax burden on an existing facility. The Business Tax Model is designed to measure the impact of taxes "at the margin" on return on investment.

The Model measures the cumulative impact of major state and local taxes (after accounting for the deductibility of state taxes against the federal income tax) on effective tax rates. Effective tax rates are shown both as a percentage of pretax income and as dollars per $100 of investment. The methodology for calculating business tax burdens is described in detail in Section III of the report.

The study reflects the laws of each state enacted as of October 1, 1989 and in effect for the 1990 tax year.

States and Locations

Nine states are covered by this study. In addition to Utah, the states are Arizona, California, Colorado, Idaho, Michigan, New Mexico, Texas and Washington. Specific locations were selected in each state since property and sales tax rates vary among localities. The locations that were selected are appropriate for industrial expansion and have property tax rates that are consistent with the norms for urban areas in each state.

Key Findings

Figure 39 indicates that Utah business taxes on the nine industries included in the study are 24 percent below the nine-state average at the Provo location and 19 percent below-average at the West Valley City location.

Relatively low business property taxes and corporate income taxes account for Utah's below-average overall business tax burden. Sales tax on business purchases are close to the nine-state average.

Property taxes are the single most important state-local tax on the industries included in the study. Business property taxes are highest in Arizona, Michigan and Texas. The lowest property taxes on businesses for the nine states are found in New Mexico, California and Washington.

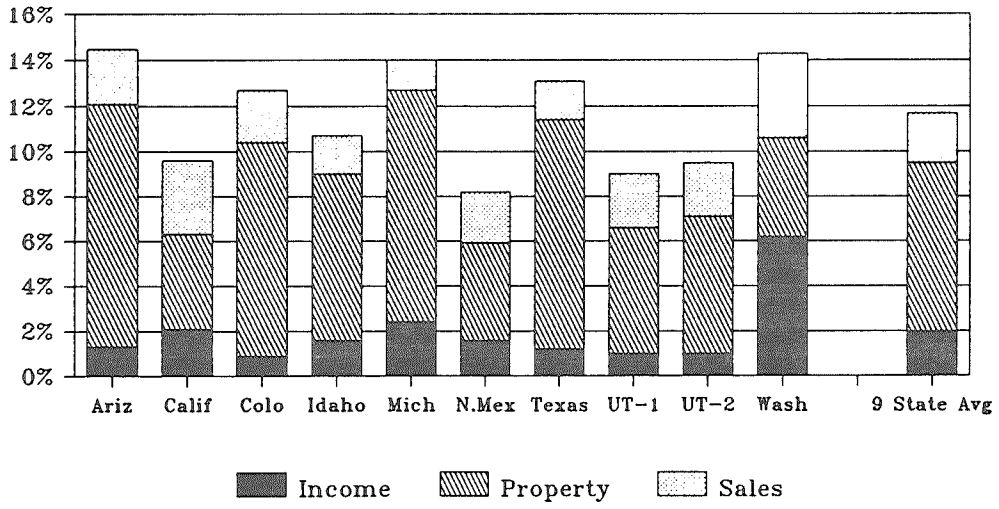
New Mexico has the lowest business taxes of the nine states.

The three states with the highest effective tax rates are Arizona, Washington and Michigan.

Effective tax rates vary greatly among industries. Of the nine industries, hotels and for-profit hospitals bear the heaviest burdens because of the relative importance of the property tax and their higher-than-average shares of taxable property (structures and equipment).

The study industries with the lowest burdens in Utah are three of the four manufacturing industries (missiles, aircraft, and machinery and equipment), wholesale trade and computer services.

Figure 39
Average Tax Rates on Business
Pretax Income by Type of Tax, by State



Utah-1=Provo Utah-2=West Valley City

Source: Study by Price Waterhouse-Dec89

Policy Implications

Utah taxes on business expansion are currently competitive with those of neighboring states. Thus, current state business tax policy is a positive factor supporting economic development.

Manufacturing industries are generally favored in comparison with most of the service-producing industries included in the study. However, the potential impact on investment of these differences between industries is reduced to the extent that service industries operating in local markets are more likely to be able to shift the ultimate tax burden to consumers. Although the inter-industry differences may raise concerns, it should be recognized that an argument can be made for tax policies that are favorable to export industries that compete in national or international markets. Thus these inter-industry differentials may be examined by Utah officials in the context of both the state's tax and economic development policies.

APPENDIX

Select Publications of the Agencies Comprising the State Economic Coordinating Committee*

Utah Office of Planning and Budget

Regular Reports
State of Utah Revenue Forecast (Quarterly, published jointly with Utah State Tax Commission)
Utah Data Guide (Quarterly)
Economic and Demographic Projections Report (Annually)
Executive Budget (Annually)
Utah Economic and Demographic Profiles (Annually)
Governor's Summary of Legislative Action (Annually)

Special Reports
Migration in Utah
Issues of Fertility in Utah
The Impact of Tax Limitation in Utah
Economic and Financial Summary of the Utah Winter Olympics
The Impact of Lake Powell Tourism on State and Local Tax Revenues
Analysis of the Demand for Recreational Uses in the Wasatch Front Canyons
Historic Analysis of Property Taxes 1989 Update

Utah Department of Community and Economic Development

Regular Reports
Utah Facts (Annually)
Utah Directory of Business and Industry (Annually)
Utah Export Directory (Annually)

Special Reports
Utah's Rural Development Strategy
Governor's Blueprint for Utah's Economic Future
Going Into Business in Utah

Utah Department of Employment Security

Regular Reports
Utah Labor Market Report (Monthly)
Labor Market Information (Quarterly, by District)
Job Service Statistical Abstract 1988 (Annually)
Affirmative Action (Annually)
Employment, Wages and Reporting Units by Firm Size (Annually)
Occupations in Demand (Quarterly)
Utah Job Outlook for Occupations (Biennially)

Special Reports
Utah Workforce 2000
Women in the Utah Labor Force

Utah State Tax Commission

Regular Reports
Annual Report of the Utah State Tax Commission (Annually)
Utah Statistics of Income (Annually)
New Car and Truck Sales (Quarterly)
Gross Taxable Retail Sales and Purchases (Quarterly)

Statistical Study of Assessed Valuations (Annually)
Hotel Sales, Room Rents and Transient Room Taxes in Utah (Annually)

Special Reports
Initial Tax Burdens on Business and Households in Ten Western States
Broadening the Base: An Evaluation of a Sales Tax on Services
Selected State Tax Rates in the U.S.
An Evaluation of Utah's Business Tax Competitiveness

Bureau of Economic and Business Research

Regular Reports
Utah Economic and Business Review (Monthly)
Construction Report (Quarterly)
Statistical Abstract of Utah (Triennially)

Utah Energy Office

Regular Reports
Data Source (Semiannually)
Utah Energy Statistical Abstract

First Security Bank Corporation

Regular Reports
Insights (Quarterly)
Local Consumer Price Index (Monthly)
Local Index of Leading Economic Indicators (Monthly)

*This list includes only the reports which are particularly relevant to the Economic Report to the Governor. To obtain a complete list of the publications of each agency or copies of reports, contact the applicable agencies.