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ESTABLISHMENT OF THE UNIVERSITY OF UTAH RESEARCH PARK

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ORIGINATION OF THE RESEARCH PARK

In November of 1964, Secretary of Defense Robert McNamara announced that Fort Douglas, a 102-year-old military reservation in Salt Lake City, would be closed July 1, 1967. All defense missions of the Fort, with the exception of Reserve and National Guard activities, were to be relocated to other military installations and any surplus land transferred to the highest and best nondefense use.

In response to Secretary McNamara's announcement, Governor Rampton created the Fort Douglas Study Committee, chaired by David K. Watkiss. The committee was created to evaluate and prioritize proposals by local groups seeking title to the Fort's surplus land. The Committee evaluated 33 requests by various government agencies and private interests regarding the disposition of the surplus land. In early 1966, the Watkiss Committee recommended that the highest and best use of the "vacant but developable lands" would be for expansion of Pioneer Monument State Park (now known as Pioneer Trails State Park), academic expansion of the University of Utah and a research park associated with the University.

Following the Watkiss Committee recommendations the University of Utah made application to the Bureau of Land Management for title to surplus land for a research park and academic expansion. The purpose of the research park, as stated in the application, was to "strengthen the academic program of the University of Utah" by fostering research, technology and employment interaction between Park tenants and the University.

On October 18, 1968 the University of Utah was granted title to 594 acres of the Fort Douglas Military Reservation for \$2.50/acre. Of the 594 acres, the University was required to grant 65 acres to the Division of State Parks for expansion of Pioneer Monument State Park, approximately eight acres were integral to the campus, and 45 acres were

contiguous to the Medical Center and considered as a reserve for future expansion. The remainder of the grant intended for the development of the research park included approximately 80 acres of steep, mountainous lands, 20 acres set aside for married-student housing, six acres for a city reservoir, 18 acres for the State Arboretum, and 25 acres for roads and rights-of-way. These uses reduced the tract available for the research park to 325 acres. At the time the estimated value of the 325 acres of developable land was \$15,000 to \$20,000 per acre for a total value of between \$5 million and \$6.5 million.

Following the transfer of land to the University of Utah, the 1969 session of the Utah State Legislature passed legislation to "authorize and facilitate establishment of a research park on the property conveyed to the University of Utah under patent from the United States of America dated October 18, 1968".¹ Legislation authorized the University to administer the research park through a nonprofit foundation (the Research Foundation), granted powers to develop, maintain and operate the park and exempt from taxation the land "lying within the research park" as long as the land remains undeveloped. However, "any lands that are leased to persons or parties not otherwise exempt from property tax must, by terms of the lease, make an annual contribution to Salt Lake City in lieu of taxes which otherwise would be imposed of such property."² This "in lieu of" provision was important in the municipal service agreement between the Research Park and Salt Lake City. With the prospect of future in lieu contributions, the city agreed to absorb the front-end costs of the development of roads, water, sewer and drainage systems.

Under the terms of the land transfer the University of Utah could develop a research park but the land could not be sold; only long-term land leases (40 to 50 years) were permitted. At the end of the land lease any building(s) on the property, whether owned by a developer, a private company or government agency would revert to the University of Utah.

This "reversion clause", patterned after a similar clause used by the Stanford Research Park, is very advantageous to the University. Eventually every building in the Research Park will be owned by the University of Utah. Since the first buildings in the Park were not developed until 1972 no buildings have yet reverted to University ownership.

But in time the University will receive substantial revenue from both buildings and lands. Currently, revenue from leased land is used by the Research Foundation to support the operation of the Park and academic activities and projects on campus.

Original Criteria for Occupancy

In the 1968 application to the federal government for surplus lands the University did not establish specific criteria for occupancy, i.e., what type of business activity would be allowed in the park. General instructions were given to screen occupants "to assure that their presence would add to and be consistent with the academic environment—in other words, a high intellectual and research content must be present in any permitted park activities". More specific and detailed criteria for occupancy were developed by the University and approved by the Institutional Council once the land transfer was complete.

The original criteria for occupancy have been modified twice, in 1979 and again in 1997. However, each set of criteria have been consistent in requiring activities that are nuisance-free and clean with respect to smoke, noise, noxious gases, vibration, odors, radiation, etc. Physical facilities are required to be attractive and comply with the protective covenants and be consistent with the current Master Plan for the Research Park. Non-university operations "will be substantially research development and/or technology oriented". In addition, business services, such as a hotel, restaurants, conference center, etc. that provide support to other park tenants are also permitted. "Any product manufacture or assembly shall be limited to prototype development or to the assembly of high technology products which are clearly related to on-site research and development activities. No tenant exclusively engaged in manufacturing or assembly shall be permitted to occupy space in the Park."

It should be noted that the criterion used by the University of Utah Research Park for research and technology companies is more restrictive than most research parks. For example, very few research parks limit manufacturing to manufacturing associated with on-site R&D. Most major parks, including Stanford, allow manufacturing of high technology products even though no R&D is performed on-site. The outcome of the Research Park's restrictive manufacturing criterion is a park

dominated by home-grown research and technology companies with origins at the University, e.g., Evans & Sutherland, ARUP, TheraTech, Myriad Genetics and Terra Tek.

DEVELOPMENT HISTORY OF THE RESEARCH PARK

In 1970, construction began on the first two buildings in the Research Park; a 52,000 square-foot building at 520 Wakara Way and a 14,500 square-foot building at 420 Wakara Way. The following year more than 200 people were employed by the first tenants of the Park; Utah Biological Test Laboratory, Evans & Sutherland and Terra Tek. The Park now has 31 buildings containing almost 2.1 million square feet of space, housing 64 tenants with nearly 4,900 employees. A 1996 statistical profile of the Park is given below:

Statistical Profile

(excludes Bureau of Mines building and land)

Leasable acres	240 acres
Leased acres	156 acres
Acres remaining to develop	84 acres
Average number of acres developed annually (1972-1995)	6 acres
Building square footage	2,073,750
Number of buildings	31
Number of tenants	68
Employment	4,859
Average size of private firm	109
Median size of private firm	20
Estimated turnover rate in square footage	40,000
Estimated vacancy rate	less than 2%
Five largest employers	
ARUP	820
Evans & Sutherland	780
Northwest Energy and subsidiaries	620
Neuropsychiatric Institute	300
TheraTech	187

After 25 years of development, 156 acres of the Park's 240 acres have been leased. The Park is nearly two-thirds completed; only 84 acres of undeveloped land remain. The 240 leasable acres are considerably less than the 325 acres included in the original land transfer of 1968. The difference is due to a transfer of some 40 acres to the Red Butte Arboretum for expansion and that portion of the Park set aside for utility and road

use. Given the amount of undeveloped land in the Park and the current pace of development it will take another 14 years to complete the Park. This build-out period could be two or three years shorter if the proposed new Museum of Natural History requires 15 to 20 acres of undeveloped Park land.

Lands Leased and Employment Growth

The development history of the Park has been characterized by a steady and consistent pace of land absorption, new construction and employment growth. The Park's Master Plan, prepared shortly after the land transfer, emphasized the need for orderly development to "distribute (leases) over several years...so buildings will revert to the University in a continuous flow allowing adequate time for planning and revision of each facility."

During the first ten years of development (1972-1982) 829,000 square feet of building space was leased to Park tenants (Table 1). The annual data show a steady growth in the Park's leased square footage until 1982, when the completion of Northwest Energy's 295,000 square-foot building increased leased space in the Park by more than 50 percent. In the next ten years (1982-1992), the pace of development was at an almost identical rate; 869,250 square feet. During this second ten-year period there was also one year when leased space in the Park surged due to completion of large projects: the University Park Hotel and the Western Institute of Neuropsychiatry. The amount of land leased in each ten-year period was 64.4 acres and 62.1 acres respectively. Since 1992 another 30 acres of Park land have been leased. The pace of development in the Park has been very consistent, averaging between six and seven acres a year. The Park now has 156 leased acres with about 2.1 million square feet of building space.

The 2.1 million square feet of building space does not include the 109,000 square-foot Bureau of Mines building and associated 18 acres of land located at 729 Arapeen Way. Due to cutbacks in funding the Bureau of Mines discontinued their long-time operation in Salt Lake City and transferred title to their building and land to the Research Foundation. The Bureau of Mines had received this tract of land in 1968 at the same time the University of Utah received land for the Research Park. The building is currently being used by the School of Medicine.

Table 1
Land and Building Use

Year	Square Feet		Acres	Cumulative	
	By Year	By Year		Square Feet	Cumulative Acres Leased
1972	66,500	5.6	5.6	66,500	5.6
1973	53,500	6.6	6.6	120,000	12.2
1974	0	0.0	0.0	120,000	12.2
1975	154,000	13.5	13.5	274,000	25.7
1976	39,500	3.9	3.9	313,500	29.5
1977	54,000	4.7	4.7	367,500	34.2
1978	0	0.0	0.0	367,500	34.2
1979	60,000	4.3	4.3	427,500	38.5
1980	25,000	2.2	2.2	452,500	40.7
1981	84,000	3.9	3.9	536,500	44.6
1982	295,000	19.8	19.8	831,500	64.4
1983	160,000	10.4	10.4	991,500	74.8
1984	0	0.0	0.0	991,500	74.8
1985	30,000	2.9	2.9	1,021,500	77.7
1986	59,250	4.2	4.2	1,080,750	81.8
1987	390,000	25.7	25.7	1,470,750	107.5
1988	64,000	3.6	3.6	1,534,750	111.1
1989	134,000	12.1	12.1	1,668,750	123.1
1990	32,000	3.4	3.4	1,700,750	126.5
1991	0	0.0	0.0	1,700,750	126.5
1992	0	0.0	0.0	1,700,750	126.5
1993	63,000	7.3	7.3	1,763,750	133.8
1994	81,000	10.0	10.0	1,844,750	143.8
1995	135,000	6.7	6.7	1,979,750	150.5
1996	93,000	5.4	5.4	2,072,750	155.9

Source: University of Utah Research Park

Table 2
Employment in Research Park

Year	Annual		Cumulative Employment
	Employment	Increase in Employment	
1973	219	219	219
1974	220	220	439
1975	361	361	800
1976	60	60	860
1977	125	125	985
1978	115	115	1,100
1979	105	105	1,205
1980	155	155	1,360
1981	340	340	1,700
1982	750	750	2,450
1983	215	215	2,665
1984	235	235	2,900
1985	100	100	3,000
1986	300	300	3,300
1987	100	100	3,400
1988	200	200	3,600
1989	350	350	3,950
1990	100	100	4,050
1991	150	150	4,200
1992	0	0	4,200
1993	150	150	4,350
1994	-50	-50	4,300
1995	0	0	4,300
1996	550	550	4,850

Source: University of Utah Research Park

Employment growth in the Park has been less consistent, nevertheless the number of employees in the Park has increased in all but three years of the Park's history. The largest employment increase—750 employees—occurred in 1982 with the completion of the Northwest Energy building (Table 2). Park employment also jumped significantly in 1996 with the completion of the Huntsman Corporate Headquarters and new ARUP building, plus the purchase of Western Institute of Neuropsychiatry by the University of Utah.

During the 1992-1995 period, the Park suffered its worst period of employment growth. This lackluster employment performance is due to downsizing at Evans & Sutherland, Ford, Bacon and Davis, and the Western Institute of Neuropsychiatry. Large employment concentrations in a few firms leaves the Park vulnerable to wide swings in employment and vacancy rates. Fortunately, no major firm in the Park has been subject to downsizing on the scale of Novell and WordPerfect—2,000 to 6,000 employees. Reversals of this magnitude would create several thousand square feet of vacant space in the Park and significantly slow down the pace of development.

Building Ownership

Ownership of the 2.1 million square feet of space in the Park is divided into three categories: (1) owner-occupied (usually single tenant), (2) developer-owned and leased, and (3) University Research Foundation-owned and leased (Table 3). Currently, 39 percent of building space in the Park is owner-occupied, 13 percent is owned by the Research Foundation and the remaining 48 percent is owned by developers and leased to a variety of tenants. Evans & Sutherland has six buildings with 437,000 square feet of space and owns more space than any other landlord in the Park. The Research Foundation's largest building is the 109,000 square-foot Bureau of Mines building. Red Butte Creek Associates owns the largest single building in the park (295,000 square feet).

Research Park Tenants

Park tenants have been grouped into four categories: R&D-based companies, non-technology-based companies, support services firms and University of Utah colleges and departments. Unfortunately there is no time series that lists Park tenants for each year since 1972.

What is most striking from an analysis of the Park tenant data is the increase in employment by University colleges and departments between 1983 and 1996. During that period, University employees located in Research Park increased from 215 to 1,049. As a percent of total park employment University-related activity has increased from 8.0 percent to 21.6 percent (Table 4).

The increase in University employment has been almost entirely concentrated in School of Medicine and University Hospital-related activity. The single largest increase in employment occurred in 1994 when the Research Park Foundation purchased the Western Institute of Neuropsychiatry building for the University of Utah Hospitals and Clinics. The 250 employees of the Western Institute, a non-technology based company, became employees of the University of Utah, thus shifting employment from the non-technology employment sector to the University-related sector. In addition to the purchase of the Neuropsychiatric Institute, there has been University employment expansion in the Park for clinical activities, cancer screening, and long-term care services.

The increasing share of University-related activity in the Park, however, has not come at the expense of technology-based activity. The percent of employees in technology-based companies has been relatively constant; 56.7 percent in 1983 and 57.5 percent in 1996. Rather, it is the non-technology based companies that have lost employment share in the Park, declining from 34.5 percent of total employment in 1983 to 16.8 percent in 1996.

In October 1996, the Park's five non-technology based companies employed 816 people. Northwest Pipeline Corporation and its two subsidiaries; Kern River Gas and Williams Field Service, with a total of 620 employees, accounted for nearly 76 percent of the non-technology based employment in the park. The remaining four non-technology companies are: Huntsman Corporation, 100 employees; Primary Children's Medical Center residential treatment facility, 70 employees; Western States Coordinating Council, 18 employees; and Red Butte Gardens & Arboretum, eight employees.

There are only six support service firms currently located in the park. These firms employ 199 people; 4.1 percent of Park employment. The University Park Hotel, with 150 employees, accounts for 75 percent of service employment in the Park. The next largest service firm is Professional Child Care with 19 employees.

Table 3
Square Footage by Type of Ownership

Type of Ownership	Address	Building Sq. Footage
Research Foundation		
Bureau of Mines Building	729 Arapeen Drive	109,000
Greenhouse	2166 Pollock Rd.	11,250
Neuropsychiatric Institute	501 Chipeta Way	100,000
U of U Telecommunications	606 Blackhawk Drive	16,500
UBTL	520 Wakara Way	52,000
Total		288,750
Percent of Total Square Footage in Park		13%
Owner Occupied		
Evans & Sutherland	540 Arapeen Drive	40,000
Evans & Sutherland (Subleased to Westin Technology)	580 Arapeen Drive	60,000
Evans & Sutherland	560 Arapeen Drive	84,000
Evans & Sutherland	650 Kommas Drive	84,000
Evans & Sutherland	600 Kommas Drive	120,000
Evans & Sutherland	770 Kommas Drive	49,000
Huntsman Corporation	500 Huntsman Way	81,000
Intermountain Health Care	497 Colorow Drive	64,000
Kahler Corporation	480 Wakara Way	170,000
Terra Tek	420 Wakara Way	14,500
TheraTech	575 Chipeta Way	63,000
US Bank	505 Wakara Way	13,500
Total		843,000
Percent of Total Square Footage in Park		39%
Developer Owned		
BF Enterprises	360 Wakara Way	25,000
BGK Realty	420 Chipeta Way	54,000
BGK Realty	410 Chipeta Way	54,000
Boyer Company	310 Wakara Way	45,000
Boyer Company	500 Chipeta Way	85,000
Boyer Company	546 Chipeta Way	135,000
Q&R Investments	390 Wakara Way	25,000
Red Butte Creek Associates	295 Chipeta Way	295,000
Research Park Associates	421 Wakara Way	48,000
Resource Enterprises	400 Wakara Way	23,000
Wakara III	417 Wakara Way	76,000
Wakara III	419 Wakara Way	30,000
Wakara II	423 Wakara Way	48,000
Woodbury Realty	391 Chipeta Way	37,000
Woodbury Realty	375 Chipeta Way	64,000
Total		1,044,000
Percent of Total Square Footage in Park		48%

Source: University of Utah Research Park

A majority of Park employment has traditionally been in R&D based firms. In 1996, R&D employment totalled 2,795; 57.5 percent of Park employment. There are currently 24 R&D firms in the Park but nearly 80 percent of this employment is concentrated in six firms. They are: ARUP, 820 employees; Evans & Sutherland, 780 employees; TheraTech, 187 employees; Myriad Genetics, 170 employees; CEntry, 159 employees; and Natural Product Sciences, 100 employees.

As shown, employment in the University of Utah Research Park is characterized by job concentration in a few large firms. A look at the median versus average size of the 35 private firms located in the Park emphasizes the employment concentration in a few large firms within the Park. The median size of a private firm in 1996 was 20 employees while the average size was several times larger at 109 employees. The few very large firms act to pull up the average far beyond the median.

	<u>1983</u>	<u>1986</u>	<u>1991</u>	<u>1992</u>	<u>1996</u>
Average	88	58	79	100	109
Median	15	6	16	20	20
Number of Private Firms	28	50	41	36	35

The number of tenants, including University Departments, in the Park in 1996 is 68, only slightly higher than the number ten years ago. During the mid-eighties, the incubator concept resulted in an increase in many small companies in the Park. Consequently, the number of tenants in 1986 was 65 but the median size of private firms, at the time, fell to only 7 employees, down from 15 in 1983. Over the last several years the total number of tenants in the Park has remained in the range of 60-to-70 firms. During this period, a few large firms have expanded employment while there has been considerable turnover in the tenant base of small firms.

Due to insufficient data, turnover rates for the Park can not be calculated. But fragmentary information and impressions of Research Park management indicate that the annual turnover rate is approximately 40,000 square feet. Most of this space is leased by small users. These small high-tech firms have a fairly high mortality rate, contributing to turnover in the Park. There are a few firms that have left the Park and are still

operating in Utah. A survey of some of these firms shows that the principal reasons for leaving the Park were: (1) high rental rates, (2) outgrew space and (3) didn't need proximity to campus.

To summarize:

- The percent of Park employment in R&D-based firms has been slightly less than 60 percent for the past several years.
- There has been a dramatic increase in the percent of Park employment for University-related activity, particularly University of Utah Hospitals and Clinics.
- There are only five firms in the Park that do not qualify as R&D-based, support services or University-related. These firms have about 16 percent of Park employment.
- Park employment is concentrated in a few large firms.
- Of those firms that have left the Park and are still in operation the principal reason for leaving the Park was high rental rates.

Success of the University of Utah Research Park

The success of the University of Utah Research Park is demonstrated by the Park's ranking and prosperity compared to other research parks, complementary role in the local real estate market, higher-than-market lease rates, increasing land values, and the consistently high occupancy rate of its buildings.

The University of Utah Research Park, created by State legislation in 1969, is among the very early research parks in the country.³ The concept was originated by Stanford University, which established its park in 1951. In 1969, the University of Utah's Research Park became the seventeenth university-related research park established in the United States. Today there are over 130 parks in the U.S. that have some affiliation with a university.

The success of the University of Utah Research Park is confirmed by its ranking among existing parks. In terms of leased square footage and total employment the University of Utah Research Park ranked twelfth among all parks in the United States in 1994 (Table 5).

The Research Park, while at times viewed by some developers as unfair competition, has actual-

Table 4
Employment and Percent Distribution by Type of Activity

Year	Technology Based		Non-Technology Based		Support Services		U of U		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1983	1,515	56.7	921	34.5	19	0.7	215	8.1	2,762	100.0
1986	2,077	64.1	773	23.8	62	1.9	330	10.2	3,332	100.0
1991	2,485	58.8	906	21.4	208	4.9	630	14.9	4,314	100.0
1992	2,483	58.9	904	21.4	196	4.6	633	15.0	4,301	100.0
1996	2,795	57.5	816	16.8	199	4.1	1,049	21.6	4,937	100.0

Source: University of Utah Research Park.

Table 5
TOP FIFTEEN UNIVERSITY-RELATED RESEARCH PARKS IN THE UNITED STATES
1994

	Year Est.	Total Acres	Available acres	Terms	Building Sq. Ft.	Type of Ownership	Emp.	Affiliation
1. Irvine Spectrum	1978	2,600	na	na	20,000,000	na	32,000	University of California Irvine
2. Research Triangle Park	1959	6,800	2,300	For sale	14,700,000	Not-for-profit	33,000	Duke, No. Carolina, No. Carolina State
3. Stanford Research Park	1951	735	6	For lease	9,600,000	For-profit	26,000	Stanford University
4. Cummings Research Park	1962	3,600	600	For sale	7,000,000	Not-for-profit	22,000	University of Alabama
5. University Research Park	1968	3,200	800	Lease	6,100,000	Not-for-profit	11,000	U.N.C. at Charlotte
6. Louisiana Biomedical Res.	1991	116	na	na	6,000,000	Not-for-profit	15,000	Tulane University, LSU
7. Oakland Technology Park	1983	1,800	280	Sale or Lease	5,600,000	na	6,000	Oakland University
8. Princeton Forrestal Center	1974	2,150	479	Sale	4,900,000	na	10,000	Princeton University
9. Metro Tech	1986	16	3	Lease	3,650,000	na	14,000	Polytechnic University
10. Tri-Cities Science Park	1990	2,600	na	na	2,401,700	Not-for-profit	7,000	Washington State University
11. University City Science Ctr.	1963	17	na	na	2,000,000	Not-for-profit	6,500	Area
12. University of Utah Res. Park	1970	320	112	Lease	1,850,000	Not-for-profit	4,750	University of Utah
13. Oak Ridge/Knoxville	1982	6,000	na	na	1,560,455	na	4,500	University of Tennessee
14. Central Florida Res. Park	1980	1,027	313	Sale or Lease	1,300,000	Not-for-profit	4,000	University of Central Florida
15. Minnesota Technology Ctr.	1986	129	na	na	1,158,000	Not-for-profit	2,000	University of Minnesota

Source: Worldwide Research and Science Park Directory 1993/1994, Association of University Related Research Parks.

ly played a relatively minor role in the Salt Lake County real estate market. Since 1975, the leasing activity in the Park has accounted for only about 8 percent of all office space leased in the county. Rather than posing unfair competition, the Research Park has, with its unique location, complemented the local real estate market. There is no substitute for the Research Park. Without the Park there would be no commercial/office space located within close proximity of the University. The unique location does result in slightly higher commercial lease rates in the Park. A lease-rate premium of about 10 percent is attributable to the location, access, parking and amenities of the Research Park.

Another measure of the success of the Park is the increasing value of the land in the Park. The appraised value of Research Park land has increased from \$20,000 per acre in 1971 to \$165,000 per acre in 1995. Land values are determined by independent appraisals and form the basis from which land leases are derived. Land leases are adjusted for inflation every five years using the Consumer Price Index.

The success of the Park is also demonstrated by the consistently high occupancy rate for buildings in the Park. Seldom have occupancy rates dipped below 95 percent. Building space in the Park generally outperforms space in the local market. For example, during the 1986-1989 recession, office building occupancy rates in Salt Lake County fell to as low as 80 percent. In contrast, during this period occupancy rates in the Park held up very well, never falling below 95 percent.

BENEFITS TO THE UNIVERSITY

In the University of Utah's application for the Research Park a list of ten ways the Park would benefit the academic programs of the University was included. The potential benefits listed were:

- (1) Greater research opportunities for faculty and graduate students.
- (2) Faculty consultantships.
- (3) New sources of faculty for seminars and classes.
- (4) Greater opportunities for joint University-industry research and development proposals.
- (5) More engineers and scientists available for "brainstorming".

- (6) More employment opportunities for graduates.
- (7) Added research and other equipment availability.
- (8) More users of University equipment such as computers, thus permitting the addition of more sophisticated and expensive instruments and other equipment.
- (9) More corporate donations to the University.
- (10) The buildings will revert to the University.

Periodically, the Research Park management has conducted surveys to evaluate the interaction between firms in the Park and the University. The first such survey was completed in January 1979. The seventeen non-university organizations located in the Park were surveyed; all firms responded. Since 1979, the Research Park administration has surveyed non-university tenants regarding their interaction with the University in 1987, 1993 and 1995. Unfortunately there was not complete consistency between the surveys, nevertheless, the results do give an indication of the interaction, over time, between private firms in Research Park and the University of Utah.

	<u>1979</u>	<u>1987</u>	<u>1993</u>	<u>1995</u>
Private firms surveyed who:				
(1) use faculty as consultants	76%	81%	75%	76%
(2) participate in joint research projects with University Depts.	65%	65%	50%	67%
(3) hire students or faculty in research projects	82%	81%	75%	90%
(4) make equipment/financial contributions to the University	41%	70%	60%	70%
(5) have specialized equipment used in Univ. research	59%	35%	na	23%
(6) have staff teaching classes or support graduate research	na	50%	na	43%
(7) have employees directly involved in research projects (scientists, engineers, M.D.s)	46%	40%	na	49%
(8) employ University of Utah graduates	19%	12%	na	22%

It is clear that the Research Park has benefitted University of Utah academic departments. As anticipated in the 1968 application, the Research

Park has provided expanded research and consulting opportunities for faculty, an additional teaching resource, joint public/private research projects and employment opportunities for University graduates.

The interaction between firms in the Research Park and the University has been sustained at very high levels for nearly 20 years. The number of firms in the park using faculty members as consultants, participating in joint research projects and hiring students or faculty has been well above 50 percent and in some cases reaching as high as 80 to 90 percent.

Technology Transfer

Another measure of the University/Research Park interaction is the number of firms in the Park whose technological origins can be traced to the University of Utah. Of the 23 private firms that are R&D based, only eight in 1996 do not have University of Utah origins.⁴ Most of these firms are smaller companies and therefore account for less employment. The Park's five largest employers in the R&D sector all have their origins at the University of Utah. They are: ARUP, Evans & Sutherland, TheraTech, Myriad Genetics and NPS, Inc. In terms of employment, the 15 firms with University origins employ 2,300 people or 88 percent of those working in the park's R&D firms. The 2,300 employees in 15 firms provide convincing evidence of the technology transfer role of the Research Park.

Although not all those companies "founded upon or licensees of University of Utah technology" have been tenants of Research Park, a substantial number have been. Some technology transfer of the University has been independent of the Park but the Park's singular role in technology transfer is demonstrated by the fact that nearly every major R&D company in the Park's history has been founded upon or been a licensee of University technology.

There have been a few out-of-state R&D firms locate in the Park; most notably the Westin Technologies Center. Another out-of-state company, Fansteel, a Chicago-based manufacturer of electronic and metal products and advanced structures located a research facility in the Park in 1973. The primary functions of the Salt Lake facility was materials R&D. The operation had close ties to the University; the research director, Dr. Guy Alexan-

der, served as an adjunct professor in the College of Mines and Earth Sciences. The company hired about 20 Utahns, many with University degrees in mining or metallurgy. There have been other small out-of-state R&D companies; Endotek (biomedical devices), Miami Serpenterium Laboratory (harvesting snake venom), and Newmont Metallurgical Services (metallurgy research lab). In most cases, these out-of-state R&D firms have also maintained a high level of interaction with the University.

The interaction between the Research Park and the University has been a fundamental ingredient in the emergence of many of Utah's most important high technology companies. These companies now either own or lease several hundred thousand square feet of space in the Park. The success of these companies and the commercialization of their technology has meant increased revenues from licensing agreements for the University Research Foundation. The final benefit from the success of Research Park companies will ultimately come when ownership of a particular company's physical facility reverts to the University. At that point the University will not only be receiving royalties from product sales but will also, as owner and landlord, receive rental revenue. When all buildings of the fully developed Park have reverted to the University significant amounts of rental income will be generated from the ownership of more than 3 million square feet of building space valued in today's market at close to \$400 million.

Notes

¹ Utah Code annotated 53-31-57.

² Utah Code annotated 53-31-61.

³ Research parks as defined by the Association of University Related Research Parks are not necessarily University-owned parks. The parks all have an affiliation with a university but may be privately owned and operated for-profit. The five categories of ownership used by the association are: university, government, for-profit, private not-for-profit, and joint venture.

⁴ Information regarding a firm's origins and association with the University of Utah was taken from surveys of Utah's high technology firms conducted bi-annually by the Bureau of Economic and Business Research, David Eccles School of Business, University of Utah, and from the University Technology Transfer Office.

Utah Business Statistics

UTAH DATA	Jan. 1996	Jan. 1997	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Total Personal Income (seas. adj. at ann. rates, mil. of dol., qnty.)	37,055	NA	NA	NA	35,782	NA
New Corporations (no.)	943	918	-2.7	736	726	1.3
New Car, Truck, and Motor Home Sales (no.)	6,509	NA	NA	NA	6,524	NA
Agriculture -----						
Average Prices Received by Farmers (dol.)						
Lambs (cwt.)	75.00	95.00	26.7	89.58	77.89	15.0
Milk, All (cwt.) 1	13.30	12.20	-8.3	14.15	12.45	13.7
Barley (per bushel)	3.26	2.63	-19.3	3.14	2.68	17.0
Alfalfa Hay, Baled (per ton) 2	63.00	83.00	31.7	77.85	77.33	0.7
Commercial Red Meat Production (thous. of lbs.)	35,900r	34,500r	-3.9	34,482	35,199	-2.0
Construction -----						
Total Permit Construction (thous. of dol.)	229,091.5	196,493.9	-14.2	284,167.0	260,495.2	9.1
Residential	141,413.1	114,203.0	-19.2	173,108.7	157,506.9	9.9
Nonresidential	63,661.0	57,364.0	-9.9	78,790.1	68,857.0	14.4
Additions, Alterations, and Repairs	24,017.4	24,926.9	3.8	32,268.2	34,131.2	-5.5
New Dwelling Units (no.)	1,723	1,220	-29.2	1,936	1,837	5.4
Employment 3 -----						
Civilian Labor Force (thous.)	993.3	1,023.6	3.1	1,013.0	989.0	2.4
Employed	961.7	989.7	2.9	979.9	955.8	2.5
Unemployed	31.7	33.9	6.9	33.1	33.3	-0.5
Percent of Labor Force	3.2	3.3	3.1	3.3	3.4	-3.5
Nonagricultural Jobs (thous.)	920.9	959.7	4.2	960.4	912.0	5.3
Mining	7.8	7.9	1.3	7.9	8.1	-2.3
Contract Construction	55.0	56.3	2.4	61.9	55.5	11.6
Manufacturing	127.4	129.8	1.9	130.0	124.4	4.5
Transportation, Communications, and Utilities	52.0	54.8	5.4	53.8	51.6	4.3
Wholesale Trade	46.7	48.4	3.6	48.2	46.0	4.8
Retail Trade	175.0	182.4	4.2	183.1	175.0	4.7
Finance, Insurance, and Real Estate	48.9	50.9	4.1	50.9	47.9	6.2
Services 4	242.7	260.3	7.3	257.2	239.6	7.4
Federal Government	30.6	29.9	-2.3	31.0	31.8	-2.7
State Government 5	51.7	52.8	2.1	52.2	50.8	2.9
Local Government 5	83.1	86.2	3.7	84.1	81.3	3.5
Average Weekly Hours						
Mining	44.2	44.0	-0.5	44.9	44.7	0.6
Manufacturing	39.6	39.1	-1.3	40.3	39.7	1.3
Wholesale Trade	35.2	36.1	2.6	36.7	36.4	0.8
Retail Trade	27.8	27.1	-2.5	28.3	28.4	-0.4
Amount of Unemployment Compensation (thous. of dol.)	8,113.1	8,076.9	-0.4	5,905.8	5,258.2	12.3
Finance (qnty.) -----						
Total State and National Chartered In-State Banks (no.)	33	NA	NA	NA	33	NA
Total Assets (mil. of dol.)	17,557.1	NA	NA	NA	16,509.8	NA
Total Liabilities (mil. of dol.)	16,133.2	NA	NA	NA	15,161.0	NA
Total Equity Capital (mil. of dol.)	1,423.9	NA	NA	NA	1,348.8	NA
Capital to Assets 6	9.16	NA	NA	NA	9.29	NA
Loan Loss Reserve Ratio	1.76	NA	NA	NA	1.85	NA
Loans to Assets	59.60	NA	NA	NA	60.83	NA
Temporary Investment Ratio	12.89	NA	NA	NA	15.32	NA
Return on Assets	0.38	NA	NA	NA	0.34	NA
Production -----						
Crude Oil (thous. of bbls.)	1,661.6	1,624.2	-2.3	1,618.2	1,652.4	-2.1
Natural Gas (mil. of cu. ft.)	25,848.1	24,341.1	-5.8	24,058.4	25,127.9	-4.3
Coal (thous. short tons)	2,545p	2,671e	5.0	2,332	2,137	9.1
Crude Oil to Refineries, Barrels Received (thous. of bbls.)	3,580	3,902	9.0	3,871	3,853c	0.5
Travel/Tourism -----						
Air Passengers (total no. on and off, S.L. Int'l. Airport)	1,515,886	1,720,588	13.5	1,773,182	1,545,132	14.8
Highway Traffic Count Across State Lines (both directions)	41,628	NA	NA	NA	56,011	NA
Visits to State and National Parks and Monuments	372,432	348,709p	-6.4	1,447,024	1,387,687	4.3
Utilities -----						
Electric Customers (residential active meters)	558,965	NA	NA	NA	549,507	NA
Electric Customers (commercial active meters)	56,747	NA	NA	NA	55,749	NA
Natural Gas Customers (residential and commercial)	586,799	612,282	4.3	597,846	573,539	4.2
Natural Gas Customers (industrial)	654	805	23.1	741	657	12.8
Telephone Lines in Service (U.S. West, residential access)	652,508	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	278,223	NA	NA	NA	NA	NA

Utah Business Statistics

UTAH DATA	Jan. 1996	Jan. 1997	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Davis County						
Nonagricultural Employment (thous.)	69.3	74.4p	7.4	73.8	69.9	5.6
Unemployment Rate (seasonally adjusted)	2.9	3.0p	3.4	2.9	3.3	-10.4
Authorized Permit Construction (thous. of dol.)	18,469.4	23,447.9	27.0	29,044.0	25,399.1	14.4
New Dwelling Units (no.)	122	129	5.7	220	168	31.4
New Car, Truck, and Motor Home Sales, Owner's County (no.)	348	NA	NA	NA	517	NA
Electric Customers (residential active meters)	56,780	NA	NA	NA	56,178	NA
Electric Customers (commercial active meters)	4,795	NA	NA	NA	4,651	NA
Natural Gas Customers (residential and commercial)	62,232	64,875	4.2	63,387	61,078	3.8
Natural Gas Customers (industrial)	70	78	11.4	75	72	3.8
Telephone Lines in Service (U.S. West, residential access)	75,991	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	19,989	NA	NA	NA	NA	NA
Salt Lake County						
Nonagricultural Employment (thous.)	472.1	489.2p	3.6	489.6	466.0	5.1
Unemployment Rate (seasonally adjusted)	2.5	2.6p	4.0	2.7	3.0	-9.9
Authorized Permit Construction (thous. of dol.)	110,106.7	75,708.4	-31.2	112,101.7	103,624.4	8.2
New Dwelling Units (no.)	743	344	-53.7	673	663	1.5
New Car, Truck, and Motor Home Sales, Owner's County (no.)	3,353	NA	NA	NA	3,076	NA
Electric Customers (residential active meters)	275,088	NA	NA	NA	270,499	NA
Electric Customers (commercial active meters)	24,395	NA	NA	NA	23,917	NA
Natural Gas Customers (residential and commercial)	259,442	268,027	3.3	263,160	255,378	3.0
Natural Gas Customers (industrial)	279	362	29.7	325	279	16.3
Telephone Lines in Service (U.S. West, residential access)	299,833	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	160,115	NA	NA	NA	NA	NA
Utah County						
Nonagricultural Employment (thous.)	124.8	131.2p	5.1	130.6	123.6	5.7
Unemployment Rate (seasonally adjusted)	2.4	2.8p	16.7	2.7	2.9	-6.1
Authorized Permit Construction (thous. of dol.)	40,184.2	23,951.9	-40.4	49,878.3	47,453.9	5.1
New Dwelling Units (no.)	389	198	-49.1	305	362	-15.9
New Car, Truck, and Motor Home Sales, Owner's County (no.)	609	NA	NA	NA	571	NA
Electric Customers (residential active meters)	64,131	NA	NA	NA	62,852	NA
Electric Customers (commercial active meters)	7,535	NA	NA	NA	7,332	NA
Natural Gas Customers (residential and commercial)	81,365	85,478	5.1	83,300	79,124	5.3
Natural Gas Customers (industrial)	97	111	14.4	106	94	12.3
Telephone Lines in Service (U.S. West, residential access)	87,818	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	34,368	NA	NA	NA	NA	NA
Weber County						
Nonagricultural Employment (thous.)	80.0	84.6p	5.7	83.6	78.6	6.4
Unemployment Rate (seasonally adjusted)	3.9	3.9p	0.0	3.8	4.2	-9.5
Authorized Permit Construction (thous. of dol.)	10,524.6	18,581.9	76.6	19,270.6	15,829.0	21.7
New Dwelling Units (no.)	61	99	62.3	126	110	13.9
New Car, Truck, and Motor Home Sales, Owner's County (no.)	284	NA	NA	NA	387	NA
Electric Customers (residential active meters)	60,610	NA	NA	NA	59,940	NA
Electric Customers (commercial active meters)	5,655	NA	NA	NA	5,611	NA
Natural Gas Customers (residential and commercial)	58,050	60,191	3.7	58,860	57,183	2.9
Natural Gas Customers (industrial)	80	86	7.5	85	80	6.7
Telephone Lines in Service (U.S. West, residential access)	56,619	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	18,179	NA	NA	NA	NA	NA

- 1 Before deductions for hauling and government withholding, but includes quality, quantity and other premiums. Excludes hauling subsidies.
- 2 Mid-month prices.
- 3 Some figures are not strictly comparable due to reclassification.
- 4 Includes services by nonprofit and religious organizations.
- 5 Includes public schools and college institutions.
- 6 Includes allowance for loan losses.

NA Not Available.
 r Rounded to the nearest hundred thousand.
 p Preliminary.
 e Estimate.
 c Calculated using an estimate for February 1995.

Sources:

Personal Income	U.S. Department of Commerce, Bureau of Economic Analysis.
New Corporations	Utah Department of Commerce, Division of Corporations and Commercial Code.
New Car and Truck Sales	Utah State Tax Commission, Economic and Statistical Unit, <i>Utah Car and Truck Sales Quarterly Report</i> .
Agriculture	U.S. Department of Agriculture, Utah Agricultural Statistics Service, <i>Utah Agriculture</i> .
Construction Data	Bureau of Economic and Business Research, <i>Utah Construction Report</i> .
Employment Data	Utah Department of Employment Security, <i>Utah Labor Market Report</i> .
Finance Data	Utah Department of Financial Institutions.
Crude Oil Production	Utah Division of Oil, Gas and Mining, <i>Oil and Gas Production Report</i> , and Utah Office of Energy and Resource Planning.
Natural Gas Production	Utah Division of Oil, Gas and Mining, <i>Oil and Gas Production Report</i> .
Coal Production	U.S. Department of Energy, Energy Information Administration.
Air Passengers	Salt Lake City International Airport, Statistics Division, <i>Air Traffic Statistics and Activity Report</i> .
Highway Traffic Count	Utah Department of Transportation, <i>Automatic Traffic Recorder Data Report</i> .
Visits to State and National Parks and Monuments	U.S. Forest Service and Utah State Parks and Recreation Department.
Utilities Data	Cooperating Utility Companies.

NATIONAL DATA	Jan. 1996	Jan. 1997	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
U.S. Gross Domestic Product (seas. adj. at ann. rates, bil., qly.)	7,426.8	7,866.0a	5.9	7,612.7	7,276.9	4.6
Total Personal Income (seas. adj. at ann. rates, bil. of dol.)	6,270.1	6,654.8	6.1	6,484.4	6,138.5	5.6
Industrial Production Index (seasonally adjusted, 1992=100)	112.4	117.6	4.6	115.6	112.1	3.1
Capacity Utilization Rate (seasonally adjusted, percent)	82.4	83.2	1.0	83.2	83.6	-0.5
Net Exports of Goods & Services (seas. adj. at ann. rates, bil., qly.)	-86.3	-111.4a	29.1	-100.8	-92.8	8.6
Exports of Goods & Services (seas. adj. at ann. rates, bil., qly.)	839.5	899.3a	7.1	860.2	812.6	5.9
Imports of Goods & Services (seas. adj. at ann. rates, bil., qly.)	925.8	1,010.6a	9.2	960.9	905.5	6.1
Composite Index of 11 Leading Indicators (1992=100)	100.5	103.0	2.5	102.3	100.8	1.5
Price Indexes						
Consumer Price Indexes (not seasonally adjusted, 1982-84=100)						
CPI-U (All Urban Consumers) All Items	154.4	159.1	3.0	157.2	152.7	3.0
CPI-U (All Urban Consumers) Food and Beverages	151.4	156.9	3.6	154.2	149.2	3.4
CPI-U (All Urban Consumers) Housing	150.6	155.1	3.0	153.2	148.8	2.9
CPI-U (All Urban Consumers) Transportation	139.9	145.0	3.6	143.5	139.3	3.0
CPI-U (All Urban Consumers) Medical Care	225.2	231.8	2.9	228.8	221.2	3.4
CPI-U (All Urban Consumers) Energy	105.0	113.3	7.9	110.8	105.3	5.2
Producer Price Index (not seasonally adjusted, 1982=100)						
Producer Price Index, All Finished Goods	129.4	132.6p	2.5	131.6	128.2	2.6
GDP Implicit Price Deflator (seasonally adjusted, 1992=100, qly.)	109.0	111.0a	1.8	109.8	107.8	1.9
Corporate Profits (seas. adj. at ann. rates, bil., qly.)						
Profits Before Taxes	642.2	NA	NA	NA	602.9	NA
Profits-Tax Liability	233.4	NA	NA	NA	220.0	NA
Profits After Taxes	408.8	NA	NA	NA	382.8	NA
Civilian Employment (seasonally adjusted)						
Labor Force (mil.)	132.9	135.8	2.2	134.2	132.4	1.4
Employment (mil.)	125.3	128.6	2.6	127.0	124.9	1.6
Unemployment Rate	5.7	5.4	-5.3	5.4	5.6	-4.5
Value of New Construction Put In Place						
Total Construction (seas. adj. at ann. rates, bil. of dol.)	559.0	590.1	5.6	569.9	548.5	3.9
Private Const.: Residential (seas. adj. at ann. rates, bil. of dol.) ^b	242.5	250.6	3.3	246.8	236.9	4.2
New Housing Units (seas. adj. at ann. rates, bil. of dol.)	169.2	177.2	4.7	176.0	163.2	7.8
Private Const.: Nonresidential (seas. adj. at ann. rates, bil. of dol.)	137.4	154.6	12.5	141.8	134.8	5.2
Interest Rates						
Federal Funds Rate	5.56	5.25	-5.6	5.27	5.84	-9.7
Discount Rate on New 91-Day Treasury Bills	5.02	5.05	0.6	5.03	5.45	-7.7
Yield on Long-Term Treasury Bonds	6.07	6.89	13.5	6.86	6.78	1.2
Average Prime Rate Charged by Banks	8.50	8.25	-2.9	8.25	8.83	-6.6
Mortgage Rate (conventional 1st mortgage, new home, U.S. avg.)	7.15	7.65	7.0	7.60	7.59	0.2

a advance. p Preliminary. NA Not Available. b Includes residential improvements, not shown separately.

Sources: *Survey of Current Business*, U.S. Department of Commerce: U.S. Gross Domestic Product, Total Personal Income, Export/Import Data, GDP Implicit Price Deflator, Corporate Profits. *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System: Industrial Production Index, Capacity Utilization Rate, Interest Rates. The Conference Board, Inc.: Composite Index of 11 Leading Indicators. *Monthly Labor Review*, U.S. Department of Labor, Bureau of Labor Statistics: Consumer Price Indexes, Producer Price Index, National Employment Data. *Value of New Construction Put in Place*, U.S. Department of Commerce Bureau of the Census: National Construction Data.

Utah Business Statistics

UTAH DATA	Feb. 1996	Feb. 1997	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Total Personal Income (seas. adj. at ann. rates, mil. of dol., qnty.)	37,055	NA	NA	NA	35,986	NA
New Corporations (no.)	929	768	-17.3	722	743	-2.7
New Car, Truck, and Motor Home Sales (no.)	6,237	NA	NA	NA	6,543	NA
Agriculture -----						
Average Prices Received by Farmers (dol.)						
Lambs (cwt.)	83.00	95.00	14.5	90.58	78.73	15.1
Milk, All (cwt.) 1	13.30	12.60	-5.3	14.09	12.56	12.2
Barley (per bushel)	3.32	2.59	-22.0	3.08	2.76	11.4
Alfalfa Hay, Baled (per ton) 2	59.00	83.00	40.7	79.85	75.17	6.2
Commercial Red Meat Production (thous. of lbs.)	34,200r	26,500r	-22.5	33,842	35,190	-3.8
Construction -----						
Total Permit Construction (thous. of dol.)	176,858.1	190,129.6	7.5	285,272.9	260,274.6	9.6
Residential	113,605.0	123,655.1	8.8	173,946.2	157,387.3	10.5
Nonresidential	43,427.2	44,833.2	3.2	78,907.3	68,929.0	14.5
Additions, Alterations, and Repairs	19,825.9	21,641.3	9.2	32,419.5	33,958.3	-4.5
New Dwelling Units (no.)	1,318	1,277	-3.1	1,933	1,824	6.0
Employment 3 -----						
Civilian Labor Force (thous.)	971.6	1,020.2p	5.0	1,015.4	988.8	2.7
Employed	933.7	984.7p	5.5	982.2	955.6	2.8
Unemployed	37.9	35.5p	-6.3	33.2	33.1	0.2
Percent of Labor Force	3.9	3.5p	-10.3	3.3	3.4	-3.0
Nonagricultural Jobs (thous.)	927.8	966.6p	4.2	963.7	915.9	5.2
Mining	7.7	7.8p	1.3	7.9	8.1	-2.2
Contract Construction	53.8	56.3p	4.6	62.2	56.1	10.9
Manufacturing	127.9	129.9p	1.6	130.3	125.0	4.2
Transportation, Communications, and Utilities	52.2	55.1p	5.6	54.0	51.8	4.4
Wholesale Trade	46.9	48.6p	3.6	48.4	46.2	4.8
Retail Trade	174.4	181.6p	4.1	183.7	175.6	4.6
Finance, Insurance, and Real Estate	49.4	51.3p	3.8	51.0	48.2	5.9
Services 4	246.6	264.6p	7.3	258.6	240.9	7.4
Federal Government	31.8	30.3p	-4.7	30.9	31.8	-2.8
State Government 5	52.9	54.0p	2.1	52.3	50.9	2.9
Local Government 5	84.2	87.1p	3.4	84.3	81.5	3.5
Average Weekly Hours						
Mining	44.1	44.5p	0.9	45.0	44.5	0.9
Manufacturing	40.1	40.0p	-0.2	40.2	39.7	1.3
Wholesale Trade	35.7	37.1p	3.9	36.8	36.4	1.2
Retail Trade	27.7	27.8p	0.4	28.3	28.4	-0.4
Amount of Unemployment Compensation (thous. of dol.)	8,228.7	8,037.9	-2.3	5,884.5	5,335.8	10.3
Finance (qnty.) -----						
Total State and National Chartered In-State Banks (no.)	33	NA	NA	NA	33	NA
Total Assets (mil. of dol.)	17,557.1	NA	NA	NA	16,688.0	NA
Total Liabilities (mil. of dol.)	16,133.2	NA	NA	NA	15,325.4	NA
Total Equity Capital (mil. of dol.)	1,423.9	NA	NA	NA	1,362.5	NA
Capital to Assets 6	9.16	NA	NA	NA	9.28	NA
Loan Loss Reserve Ratio	1.76	NA	NA	NA	1.83	NA
Loans to Assets	59.60	NA	NA	NA	60.59	NA
Temporary Investment Ratio	12.89	NA	NA	NA	15.08	NA
Return on Assets	0.38	NA	NA	NA	0.34	NA
Production -----						
Crude Oil (thous. of bbls.)	1,555.4	NA	NA	NA	1,652.9	NA
Natural Gas (mil. of cu. ft.)	32,522.8	NA	NA	NA	25,680.9	NA
Coal (thous. short tons)	2,312p	2,813e	21.7	2,373	2,168	9.5
Crude Oil to Refineries, Barrels Received (thous. of bbls.)	3,656	NA	NA	NA	3,875	NA
Travel/Tourism -----						
Air Passengers (total no. on and off, S.L. Int'l. Airport)	1,657,885	1,598,683	-3.6	1,768,249	1,567,178	12.8
Highway Traffic Count Across State Lines (both directions)	44,848	NA	NA	NA	56,061	NA
Visits to State and National Parks and Monuments	436,562	402,929p	-7.7	1,444,221	1,383,645	4.4
Utilities -----						
Electric Customers (residential active meters)	NA	NA	NA	NA	NA	NA
Electric Customers (commercial active meters)	NA	NA	NA	NA	NA	NA
Natural Gas Customers (residential and commercial)	590,071	616,722	4.5	600,067	575,459	4.3
Natural Gas Customers (industrial)	665	816	22.7	753	658	14.5
Telephone Lines in Service (U.S. West, residential access)	653,952	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	270,842	NA	NA	NA	NA	NA

Utah Business Statistics

UTAH DATA	Feb. 1996	Feb. 1997	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
Davis County -----						
Nonagricultural Employment (thous.)	70.4	74.2p	5.4	74.2	70.2	5.7
Unemployment Rate (seasonally adjusted)	3.2	3.0p	-6.3	3.0	3.3	-10.4
Authorized Permit Construction (thous. of dol.)	23,106.6	22,377.2	-3.2	28,983.2	25,946.0	11.7
New Dwelling Units (no.)	116	179	54.3	225	170	32.9
New Car, Truck, and Motor Home Sales, Owner's County (no.)	442	NA	NA	NA	513	NA
Electric Customers (residential active meters)	NA	NA	NA	NA	NA	NA
Electric Customers (commercial active meters)	NA	NA	NA	NA	NA	NA
Natural Gas Customers (residential and commercial)	62,504	65,561	4.9	63,642	61,243	3.9
Natural Gas Customers (industrial)	73	79	8.2	75	72	4.6
Telephone Lines in Service (U.S. West, residential access)	76,220	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	20,220	NA	NA	NA	NA	NA
Salt Lake County -----						
Nonagricultural Employment (thous.)	473.1	492.9p	4.2	491.0	467.9	4.9
Unemployment Rate (seasonally adjusted)	3.0	2.6p	-13.3	2.7	3.0	-9.4
Authorized Permit Construction (thous. of dol.)	74,349.7	65,844.2	-11.4	111,392.9	103,956.6	7.2
New Dwelling Units (no.)	504	384	-23.8	663	658	0.8
New Car, Truck, and Motor Home Sales, Owner's County (no.)	2,881	NA	NA	NA	3,055	NA
Electric Customers (residential active meters)	NA	NA	NA	NA	NA	NA
Electric Customers (commercial active meters)	NA	NA	NA	NA	NA	NA
Natural Gas Customers (residential and commercial)	260,953	269,872	3.4	263,903	255,995	3.1
Natural Gas Customers (industrial)	280	372	32.9	332	280	18.9
Telephone Lines in Service (U.S. West, residential access)	300,309	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	151,483	NA	NA	NA	NA	NA
Utah County -----						
Nonagricultural Employment (thous.)	127.9	133.1p	4.1	131.3	124.3	5.6
Unemployment Rate (seasonally adjusted)	2.8	2.7p	-3.6	2.7	2.9	-4.7
Authorized Permit Construction (thous. of dol.)	27,291.2	33,923.3	24.3	50,431.0	46,128.4	9.3
New Dwelling Units (no.)	271	204	-24.7	299	347	-13.8
New Car, Truck, and Motor Home Sales, Owner's County (no.)	472	NA	NA	NA	568	NA
Electric Customers (residential active meters)	NA	NA	NA	NA	NA	NA
Electric Customers (commercial active meters)	NA	NA	NA	NA	NA	NA
Natural Gas Customers (residential and commercial)	81,881	86,040	5.1	83,647	79,453	5.3
Natural Gas Customers (industrial)	98	111	13.3	107	95	12.7
Telephone Lines in Service (U.S. West, residential access)	88,043	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	34,769	NA	NA	NA	NA	NA
Weber County -----						
Nonagricultural Employment (thous.)	81.5	85.2p	4.5	84.0	78.9	6.4
Unemployment Rate (seasonally adjusted)	4.2	3.8p	-9.5	3.8	4.2	-8.2
Authorized Permit Construction (thous. of dol.)	9,575.6	13,490.6	40.9	19,596.9	16,140.4	21.4
New Dwelling Units (no.)	78	99	26.9	127	113	12.9
New Car, Truck, and Motor Home Sales, Owner's County (no.)	325	NA	NA	NA	386	NA
Electric Customers (residential active meters)	NA	NA	NA	NA	NA	NA
Electric Customers (commercial active meters)	NA	NA	NA	NA	NA	NA
Natural Gas Customers (residential and commercial)	58,361	60,708	4.0	59,056	57,306	3.1
Natural Gas Customers (industrial)	81	86	6.2	86	80	7.0
Telephone Lines in Service (U.S. West, residential access)	56,755	NA	NA	NA	NA	NA
Telephone Lines in Service (U.S. West, business access)	18,370	NA	NA	NA	NA	NA

- 1 Before deductions for hauling and government withholding, but includes quality, quantity and other premiums. Excludes hauling subsidies.
- 2 Mid-month prices.
- 3 Some figures are not strictly comparable due to reclassification.
- 4 Includes services by nonprofit and religious organizations.
- 5 Includes public schools and college institutions.
- 6 Includes allowance for loan losses.

NA Not Available.
 r Rounded to the nearest hundred thousand.
 p Preliminary.
 e Estimate.

Sources:

Personal Income	U.S. Department of Commerce, Bureau of Economic Analysis.
New Corporations	Utah Department of Commerce, Division of Corporations and Commercial Code.
New Car and Truck Sales	Utah State Tax Commission, Economic and Statistical Unit, <i>Utah Car and Truck Sales Quarterly Report</i> .
Agriculture	U.S. Department of Agriculture, Utah Agricultural Statistics Service, <i>Utah Agriculture</i> .
Construction Data	Bureau of Economic and Business Research, <i>Utah Construction Report</i> .
Employment Data	Utah Department of Employment Security, <i>Utah Labor Market Report</i> .
Finance Data	Utah Department of Financial Institutions.
Crude Oil Production	Utah Division of Oil, Gas and Mining, <i>Oil and Gas Production Report</i> , and Utah Office of Energy and Resource Planning.
Natural Gas Production	Utah Division of Oil, Gas and Mining, <i>Oil and Gas Production Report</i> .
Coal Production	U.S. Department of Energy, Energy Information Administration.
Air Passengers	Salt Lake City International Airport, Statistics Division, <i>Air Traffic Statistics and Activity Report</i> .
Highway Traffic Count	Utah Department of Transportation, <i>Automatic Traffic Recorder Data Report</i> .
Visits to State and National Parks and Monuments	U.S. Forest Service and Utah State Parks and Recreation Department.
Utilities Data	Cooperating Utility Companies.

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NATIONAL DATA	Feb. 1996	Feb. 1997	% Change from Year Ago	12-Month Average This Year	12-Month Average Last Year	12-Month Average % Change
U.S. Gross Domestic Product (seas. adj. at ann. rates, bil., qtrly.)	7,426.8	7,866.0a	5.9	7,649.3	7,299.9	4.8
Total Personal Income (seas. adj. at ann. rates, bil. of dol.)	6,315.2	6,712.6p	6.3	6,517.5	6,164.6	5.7
Industrial Production Index (seasonally adjusted, 1992=100)	113.8	118.1p	3.8	116.0	112.3	3.3
Capacity Utilization Rate (seasonally adjusted, percent)	83.2	83.3p	0.1	83.2	83.5	-0.3
Net Exports of Goods & Services (seas. adj. at ann. rates, bil., qtrly.)	-86.3	-111.4a	29.1	-102.9	-91.0	13.1
Exports of Goods & Services (seas. adj. at ann. rates, bil., qtrly.)	839.5	899.3a	7.1	865.2	817.9	5.8
Imports of Goods & Services (seas. adj. at ann. rates, bil., qtrly.)	925.8	1,010.6a	9.2	968.0	908.9	6.5
Composite Index of 11 Leading Indicators (1992=100)	101.4	103.5	2.1	102.4	100.8	1.6
Price Indexes						
Consumer Price Indexes (not seasonally adjusted, 1982-84=100)						
CPI-U (All Urban Consumers) All Items	154.9	159.6	3.0	157.6	153.1	3.0
CPI-U (All Urban Consumers) Food and Beverages	151.3	156.9	3.7	154.6	149.5	3.5
CPI-U (All Urban Consumers) Housing	151.2	155.8	3.0	153.5	149.2	2.9
CPI-U (All Urban Consumers) Transportation	140.4	144.8	3.1	143.8	139.6	3.1
CPI-U (All Urban Consumers) Medical Care	226.2	232.7	2.9	229.3	221.9	3.4
CPI-U (All Urban Consumers) Energy	104.9	113.1	7.8	111.5	105.4	5.8
Producer Price Index (not seasonally adjusted, 1982=100)						
Producer Price Index, All Finished Goods	129.4	132.2p	2.2	131.8	128.4	2.7
GDP Implicit Price Deflator (seasonally adjusted, 1992=100, qtrly.)	109.0	111.0a	1.8	110.0	108.0	1.9
Corporate Profits (seas. adj. at ann. rates, bil., qtrly.)						
Profits Before Taxes	642.2	NA	NA	NA	606.8	NA
Profits-Tax Liability	233.4	NA	NA	NA	221.4	NA
Profits After Taxes	408.8	NA	NA	NA	385.5	NA
Civilian Employment (seasonally adjusted)						
Labor Force (mil.)	133.1	135.6	1.9	134.4	132.4	1.5
Employment (mil.)	125.7	128.4	2.1	127.2	125.0	1.8
Unemployment Rate	5.5	5.3	-3.6	5.3	5.6	-4.8
Value of New Construction Put in Place						
Total Construction (seas. adj. at ann. rates, bil. of dol.)						
Private Const.: Residential (seas. adj. at ann. rates, bil. of dol.) ^b	238.6	253.7p	6.3	248.0	236.8	4.8
New Housing Units (seas. adj. at ann. rates, bil. of dol.)	166.9	181.6p	8.8	177.2	163.2	8.6
Private Const.: Nonresidential (seas. adj. at ann. rates, bil. of dol.)	134.9	158.5p	17.5	143.8	135.0	6.4
Interest Rates						
Federal Funds Rate	5.22	5.19	-0.6	5.27	5.78	-8.8
Discount Rate on New 91-Day Treasury Bills	4.87	5.00	2.7	5.04	5.37	-6.2
Yield on Long-Term Treasury Bonds	6.28	6.76	7.6	6.90	6.66	3.6
Average Prime Rate Charged by Banks	8.25	8.25	0.0	8.25	8.77	-5.9
Mortgage Rate (conventional 1st mortgage, new home, U.S. avg.)	7.00	7.61	8.7	7.65	7.50	2.1

a advance. p Preliminary. NA Not Available. b Includes residential improvements, not shown separately.

Sources: *Survey of Current Business*, U.S. Department of Commerce: U.S. Gross Domestic Product, Total Personal Income, Export/Import Data, GDP Implicit Price Deflator, Corporate Profits. *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System: Industrial Production Index, Capacity Utilization Rate, Interest Rates. The Conference Board, Inc.: Composite Index of 11 Leading Indicators. *Monthly Labor Review*, U.S. Department of Labor, Bureau of Labor Statistics: Consumer Price Indexes, Producer Price Index, National Employment Data. *Value of New Construction Put in Place*, U.S. Department of Commerce Bureau of the Census: National Construction Data.

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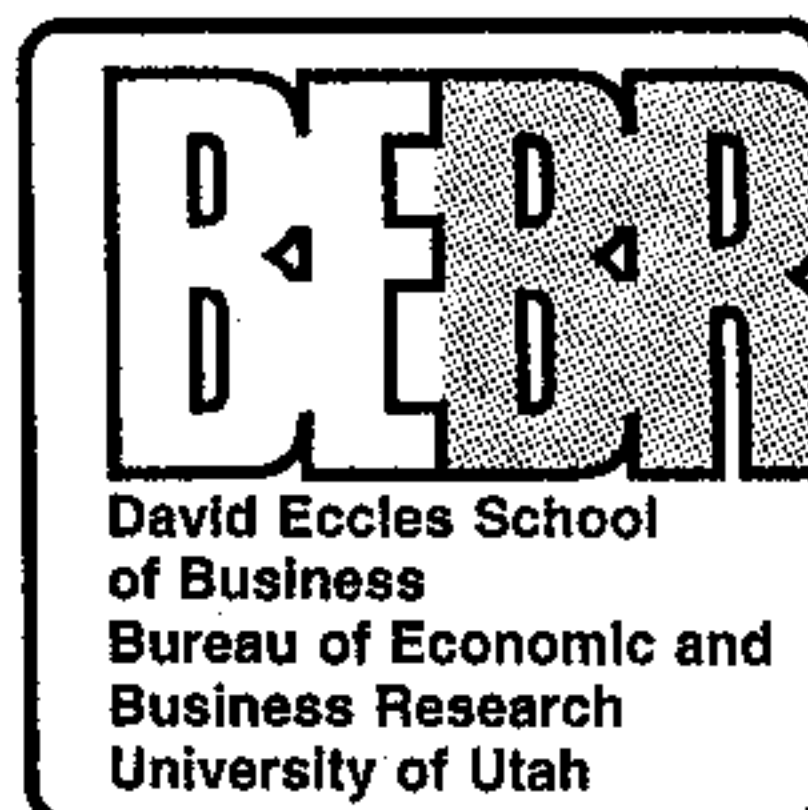
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