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Highlights

The volume of commuting traffic has increased at a more rapid rate in Utah than the nation since 1990. The cause of this is demographic.

Commutes to work are longer in duration for Utah workers than in the past, increasing from a mean travel time of 19.3 minutes in 1980 to 21.3 minutes in 2000.

From 1990 to 2000 the number of Utah workers with commutes of at least 45 minutes increased by 83 percent, from 51,685 to 94,577. This is one of every ten workers.

Utah ranks 21 among all states in the relative use of mass transit by workers. This ranking has probably increased with the addition of the University and soon the Medical Center light rail lines.

An increasing share of Utah workers cross county lines to their jobs. The percent of Utah workers who left their counties of residence to work rose from 13.5 percent (78,482 commuters) in 1980 to 16.6 percent (171,355 workers) in 2000. Counties with high out-commuting rates in 2000 include Morgan (61.1 percent), Davis (45.7 percent), Tooele (45.5 percent), Wasatch (43.8 percent), Juab (40.3 percent), Summit (35.6 percent), and Rich (35.3 percent). Davis County generates nearly one of every three (30.1 percent) inter-county commuters in the state in 2000 with 59,509 residents working in other counties.

Although historically a net exporter of labor, in 2000 there were more out-of-state workers in Utah than vice versa. This was probably a result of 2002 Winter Olympic Games preparations.

Salt Lake County is still the major receiving county for commuters. In 2000, an estimated 73,203 workers commuted into Salt Lake County from other counties. An estimated 27,344 Salt Lake County residents commuted to other counties. This means that, on net, Salt Lake County gained 49,014 workers through inter-county commuting. Commuting volumes to Salt Lake County have increased by around 10,000 for both Utah and Davis counties since 1990.

New and more complicated patterns of commuting are emerging. For example, people are commuting longer distances, particularly from counties in the more rural areas of the state and especially (although not exclusively) to Salt Lake County.

Commuting Patterns in Utah: County Trends for 1980, 1990, and 2000

Pamela S. Perlich
Senior Research Economist

The Utah population and economy have experienced significant growth since 1980. Expansion of urbanized areas, increased traffic volumes, and longer and more time-consuming commutes to work have accompanied this growth. Journey to Work data from each of the last three decennial censuses provide detailed county level data on the trends and patterns of commuting to work. This paper is an examination of these changing county-to-county commute patterns in Utah as recorded in the census data from 1980, 1990, and 2000.

The first section of the paper is an overview of the major demographic trends driving the increased volume of work-related travel over the past 20 years both nationally and in Utah. Next, the Journey to Work data set is briefly described in order to more clearly explain the results that follow. The next section is an analysis of changing patterns of commuting times by county. Finally, the changing Utah county-to-county flows are examined in some detail.

Demographic Trends Affecting the Volume of Commuting to Work

Population growth is ultimately dependent upon economic growth. Over the past two decades these have resulted in more workers, which in turn have translated into increased volumes of commuting. In Utah it is estimated that commuting and work-related travel are about 30 percent of total regional travel.¹ The population growth rate of Utah has been about double that of the nation for the past 20 years. From 1980 to 1990 the Utah population increased by 18 percent (increasing from 1.46 million to 1.72 million) as compared to 10 percent for the nation. Population growth rates accelerated in the 1990s, as population increased by 30 percent in Utah (from 1.72 million to 2.23 million) and 13 percent in the nation. But while the population growth rates accelerated both in Utah and the nation in the 1990s, growth rates in the number of workers followed divergent

growth paths. This divergence is mostly attributable to demographics factors. First, Utah has a significantly higher fertility rate as compared to the nation and this results in a younger population. Second, the national Baby Boom (1946 through 1964) peaked in the late 1950s and generated an Echo Boom beginning in about 1977. In contrast, Utah's post-war Baby Boom never really ended and finally peaked in the early 1980s. This cohort is forming households and creating the Utah Echo Boom.

By 1985 the tail end of the national Baby Boom reached 21 years of age. As a result, the number of workers increased nationally by 19 percent from 1980 to 1990. By the 1990s the national Baby Boom generation was already in the labor force and their children became the Echo Boom. This, in combination with increased international migration, resulted in an acceleration of the growth rate of the national population but a reduction in the growth rate of the labor force as compared to the 1980s.

The story for Utah has been somewhat different because of the relatively high fertility rates and the distinctive pattern of births. Because the Utah Baby Boom peaked in the early 1980s, this cohort entered the labor force in the 1990s. Consequently, the growth rate of the number of Utah workers further accelerated and continued to exceed that of the population in general. The state also experienced a sustained period of net in-migration, about half of which was international in origin. Many of these migrants are young, brought children with them, and continued to have them once in Utah. The net result is that Utah had population and labor force growth rates

substantially higher than those of the nation in the 1990s. The number of workers increased by 41 percent from 1990 to 2000 in Utah as compared to 12 percent nationally. This increase in the population and labor force has resulted in significant increases in the number of commuting trips and use of transportation infrastructure in general. From 1980 to 2000 the state population increased by 772,132 and the number of workers increased by 451,188. Two-thirds of these increases occurred in the 1990s.² (Table 1 and Figure 1)

Journey to Work Data: Sources, Interpretation, and Use

Much of what we have learned about changes in commuting patterns comes from the Journey to Work data. This is a special tabulation of data from the decennial census long form made possible by the inclusion of questions about places of residence and work as well as commute times. Specifically, the commuting questions in the 2000 questionnaire were:

- “At what location did this person work LAST WEEK? (If this person worked more than one location, print where he or she worked most last week.)”
- “How did this person usually get to work LAST WEEK? (If this person usually used more than one method of transportation during the trip, mark the box of the one used most of the distance.)”³

This information is combined with residential location to create a county level origin and destination matrix that becomes the Journey to Work file. Additional tabulations

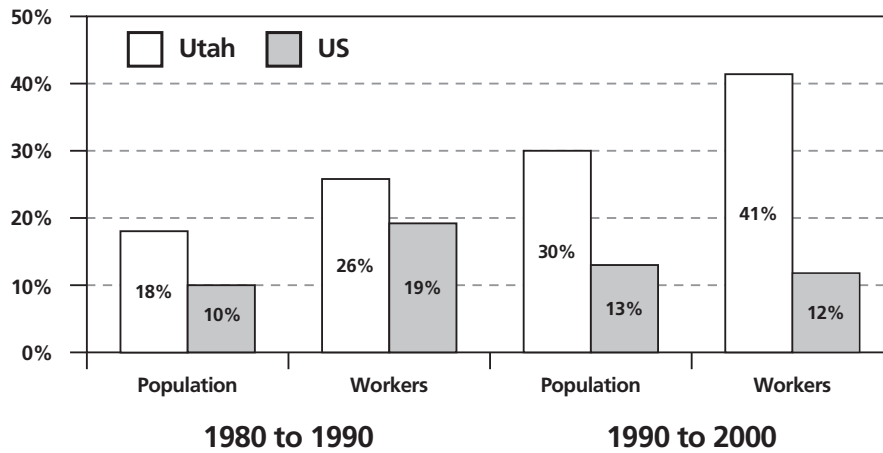
Table 1
Population and Workers: 1980, 1990, 2000

		State of Utah	
		Population	Workers
Totals	2000	2,233,169	1,032,858
	1990	1,722,850	732,376
	1980	1,461,037	581,670
Increases	1990-2000	510,319	300,482
	1980-1990	261,813	150,706
Percent Change	1990-2000	29.6%	41.0%
	1980-1990	17.9%	25.9%

		The Nation	
		Population	Workers
Totals	2000	281,421,906	128,279,230
	1990	248,749,873	115,070,274
	1980	226,542,199	96,617,296
Increases	1990-2000	32,672,033	13,208,956
	1980-1990	22,207,674	18,452,978
Percent Change	1990-2000	13.1%	11.5%
	1980-1990	9.8%	19.1%

Source: Census Transportation Planning Package 2000 (CTTP 2000) Profiles (transportation.org/cttp); Bureau of the Census, *1980 Census of the Population, General Social and Economic Characteristics: Utah*, Table 65.

Figure 1
Percentage Increase in Population
and Workers: Utah and U.S.



Sources: CTPP 2000, Bureau of the Census

are generated for the Department of Transportation in the Census Transportation Planning Package. These are the primary data sources used in this analysis.

Because of the way the questions are asked, people who are out-of-town on business will report their place of work for “LAST WEEK” as this business trip location. This accounts for most of the out-of-state commuting reported in the Journey to Work file. But, in general, the data reflect the commuting patterns of a region in the latter part of March in each of the decennial census years. These data are further disaggregated to smaller units of geography and are used for transportation planning, modeling, and analysis.

Importantly, work trips are a decreasing fraction of total regional travel. According to the 2001 National Household Travel Survey, work trips are only 15 percent of all person trips (down from 25 percent in 1969).⁴ However, commuting to work is generally concentrated in two main windows of time: the morning and evening commutes. These times generally constitute the peak travel time and define peak travel demand for a region. As regional travel becomes more congested (causing travel times to increase), these windows of time expand to both begin earlier and last longer. This has been the case in Utah as well. Over the past 30 years, travel for purposes other than work has grown much more rapidly than has travel to and from work. Besides personal trips (work or non-work based), other types of travel include that of tourists and other visitors, goods and services delivery, freight movement, and through-travel (both personal and

commercial). So, the Journey to Work data discussed here is a fraction, albeit significant, of total regional travel.⁵

Travel Time to Work

Commutes to work are longer in duration for Utah workers than in the past, increasing from a mean travel time of 19.3 minutes in 1980 to 21.3 minutes in 2000.⁶ This ranks Utah in 2000 as the 11th shortest mean commute time among all states. National mean travel times for commutes have increased from 21.7 minutes in 1980 to 25.5 minutes in 2000. States with the longest commute times include New York (31.7 minutes), Maryland (31.2 minutes), New Jersey (30.0 minutes), Illinois (28.0 minutes), and California (27.7 minutes). States with the shortest commute times are in a region extending from Idaho and Utah in the west to Iowa and Wisconsin in the east and extending south to include Oklahoma (excluding Colorado and Minnesota). The metropolitan area populations of the states with shorter commutes are generally much smaller than that of those with longer commutes. (Figures 2 and 3)

Travel times also vary by means of transportation. As reported in the 2000 census for Utah, driving alone is still the most common way to commute (779,440 or 78.8 percent of commuters) and had the second fastest commute (20.1 minutes). Walking or bicycling (33,790 or 3.4 percent of commuters) had the fastest (and undoubtedly shortest distance) commutes with a mean travel time of 12.5 minutes. Carpoolers (145,950 or 14.7 percent of commuters) had an average commute time of

Table 2
Means of Transportation to Work by Travel Time to Work in Minutes
State of Utah Residents: 2000

	Mean Travel Time to Work	Travel Time to Work					
		Workers Who Did Not Work at Home	Less Than 10 Minutes	10 to 19 Minutes	20 to 29 Minutes	30 to 44 Minutes	45 or More Minutes
Workers who did not work at home	21.3	989,525	187,215	348,135	205,880	153,715	94,575
Workers who did not work at home - Row percent	(X)	100	18.9	35.2	20.8	15.5	9.6
workers who did not work at home - Column percent	(X)	100	100	100	100	100	100
Drove alone	20.1	779,440	149,370	284,930	169,935	116,240	58,970
Drove alone - Row percent	(X)	100	19.2	36.6	21.8	14.9	7.6
Drove alone - Column percent	(X)	78.8	79.8	81.8	82.5	75.6	62.4
Carpooled	25.6	145,950	20,660	45,315	28,805	28,115	23,050
Carpooled - Row percent	(X)	100	14.2	31	19.7	19.3	15.8
Carpooled - Column percent	(X)	14.7	11	13	14	18.3	24.4
Public transportation (including taxicab)	42.2	23,200	705	3,305	2,955	6,385	9,850
Public transportation (including taxicab) - Row percent	(X)	100	3	14.2	12.7	27.5	42.5
Public transportation (including taxicab) - Column percent	(X)	2.3	0.4	0.9	1.4	4.2	10.4
Bicycle or walked	12.5	33,790	14,880	12,630	3,305	1,900	1,070
Bicycle or walked - Row percent	(X)	100	44	37.4	9.8	5.6	3.2
Bicycle or walked - Column percent	(X)	3.4	7.9	3.6	1.6	1.2	1.1
Motorcycle or other means	41.7	7,145	1,595	1,960	880	1,080	1,635
Motorcycle or other means - Row percent	(X)	100	22.3	27.4	12.3	15.1	22.9
Motorcycle or other means - Column percent	(X)	0.7	0.9	0.6	0.4	0.7	1.7

Source: Census Transportation Planning Package 2000 (CTTP 2000) Profiles, (transportation.org/ctpp)

Table 3
Means of Transportation and Travel Time to Work: State of Utah Residents

Means of Transportation to Work

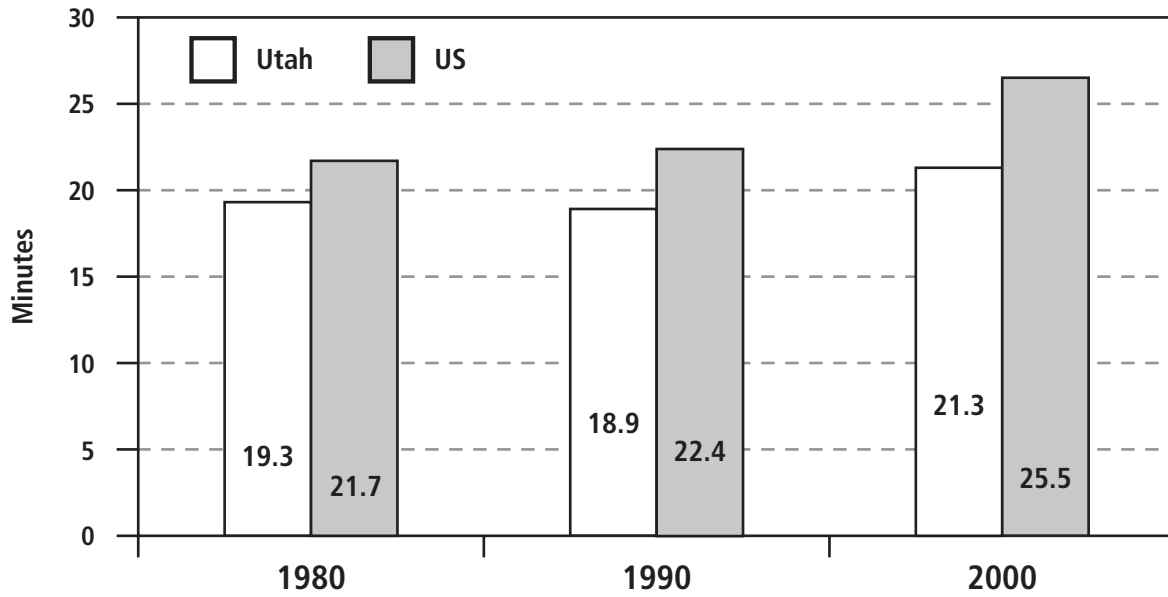
	1990 Census		2000 Census		Change 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Workers 16 years and over	732,376	100.0%	1,032,858	100.0%	300,482	41.0%
Drove alone	541,226	73.9%	779,438	75.5%	238,212	44.0%
Carpooled	111,197	15.2%	145,950	14.1%	34,753	31.3%
Public transportation (including taxicab)	16,971	2.3%	23,199	2.2%	6,228	36.7%
Bicycle or walked	30,090	4.1%	33,790	3.3%	3,700	12.3%
Motorcycle or other means	6,644	0.9%	7,146	0.7%	502	7.6%
Worked at home	26,248	3.6%	43,335	4.2%	17,087	65.1%

Travel Time to Work

	1990 Census		2000 Census		Change 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Workers who did not work at home	706,128	100.0%	989,523	100.0%	283,395	40.1%
Less than 5 minutes	35,377	5.0%	43,896	4.4%	8,519	24.1%
5 to 9 minutes	112,479	15.9%	143,317	14.5%	30,838	27.4%
10 to 14 minutes	132,929	18.8%	175,060	17.7%	42,131	31.7%
15 to 19 minutes	131,876	18.7%	173,076	17.5%	41,200	31.2%
20 to 29 minutes	149,115	21.1%	205,880	20.8%	56,765	38.1%
30 to 44 minutes	92,667	13.1%	153,717	15.5%	61,050	65.9%
45 or more minutes	51,685	7.3%	94,577	9.6%	42,892	83.0%
Mean travel time to work (minutes)	18.9	N/A	21.3	N/A	2.4	N/A

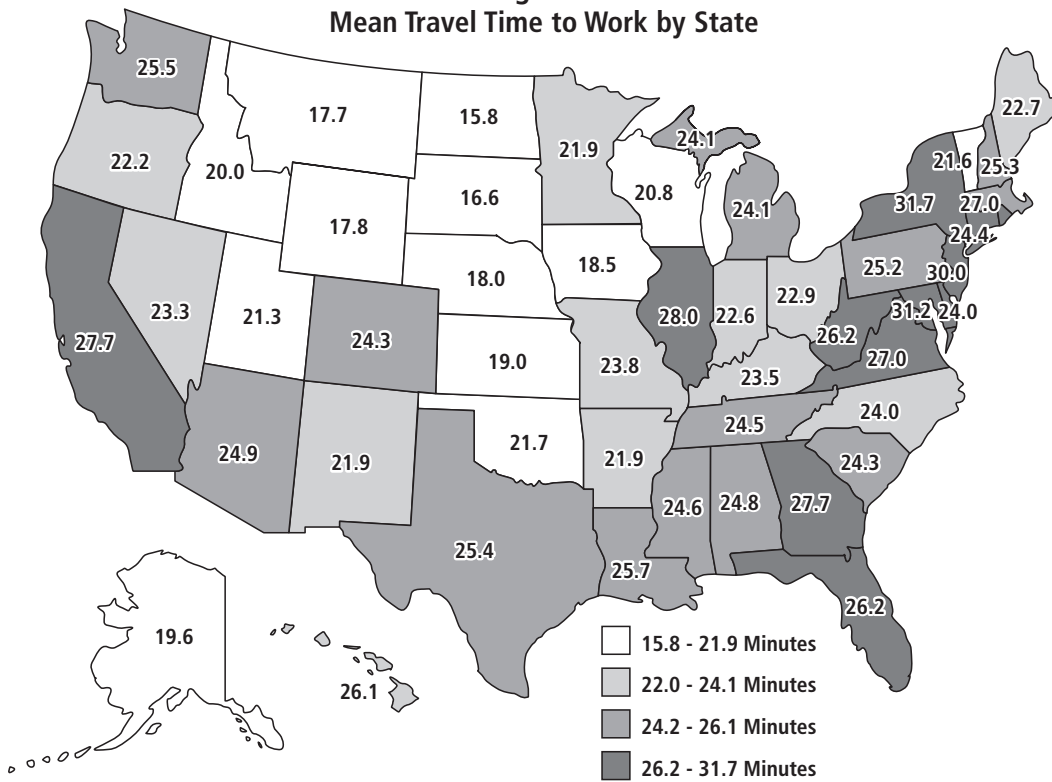
Source: Census Transportation Planning Package 2000 (CTTP 2000) Profiles, (transportation.org/ctpp)

Figure 2
Mean Travel Time to Work
(Minutes)



Sources: CTPP 2000, Bureau of the Census, Pisarski

Figure 3
Mean Travel Time to Work by State



Source: Bureau of the Census

Table 4
Mean Travel Time to Work in Minutes for Utah Residents

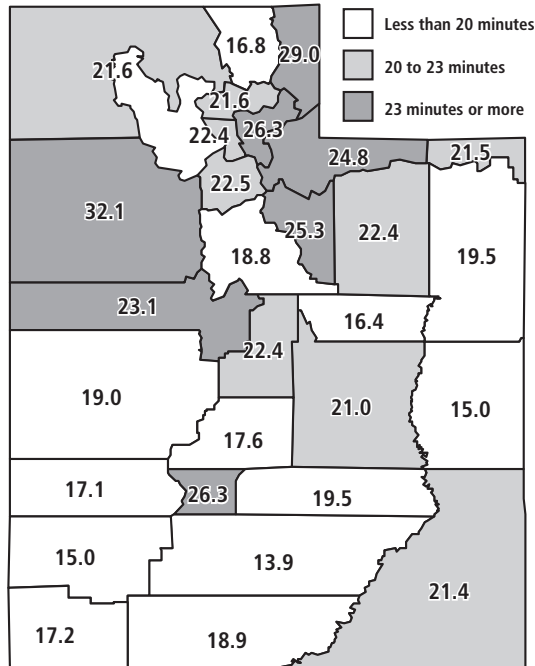
Ordered by 2000 Travel Time				Ordered by 1990 to 2000 Increase			
County of Residence	1990 Census	2000 Census	Change	County of Residence	1990 Census	2000 Census	Change
Tooele	22.0	32.1	10.1	Piute	15.6	26.3	10.7
Rich	19.6	29.0	9.4	Tooele	22.0	32.1	10.1
Morgan	22.4	26.3	4.0	Daggett	11.4	21.5	10.1
Piute	15.6	26.3	10.7	Rich	19.6	29.0	9.4
Wasatch	21.1	25.3	4.2	San Juan	14.3	21.4	7.2
Summit	21.1	24.8	3.7	Duchesne	15.8	22.4	6.6
Juab	20.3	23.1	2.9	Beaver	10.6	17.1	6.5
Salt Lake	20.1	22.5	2.4	Wayne	13.7	19.5	5.8
Davis	18.8	22.4	3.6	Sanpete	16.9	22.4	5.5
Duchesne	15.8	22.4	6.6	Millard	14.6	19.0	4.3
Sanpete	16.9	22.4	5.5	Wasatch	21.1	25.3	4.2
Box Elder	20.8	21.6	0.9	Morgan	22.4	26.3	4.0
Weber	19.4	21.6	2.2	Summit	21.1	24.8	3.7
Daggett	11.4	21.5	10.1	Davis	18.8	22.4	3.6
San Juan	14.3	21.4	7.2	Sevier	14.0	17.6	3.6
State Average	18.9	21.3	2.4	Emery	17.6	21.0	3.3
Emery	17.6	21.0	3.3	Kane	15.8	18.9	3.1
Uintah	17.2	19.5	2.3	Juab	20.3	23.1	2.9
Wayne	13.7	19.5	5.8	Grand	12.2	15.0	2.8
Millard	14.6	19.0	4.3	Salt Lake	20.1	22.5	2.4
Kane	15.8	18.9	3.1	State Average	18.9	21.3	2.4
Utah	17.1	18.8	1.7	Uintah	17.2	19.5	2.3
Sevier	14.0	17.6	3.6	Weber	19.4	21.6	2.2
Washington	15.5	17.2	1.7	Iron	12.8	15.0	2.2
Beaver	10.6	17.1	6.5	Utah	17.1	18.8	1.7
Cache	16.4	16.8	0.4	Washington	15.5	17.2	1.7
Carbon	15.9	16.4	0.5	Box Elder	20.8	21.6	0.9
Grand	12.2	15.0	2.8	Garfield	13.3	13.9	0.6
Iron	12.8	15.0	2.2	Carbon	15.9	16.4	0.5
Garfield	13.3	13.9	0.6	Cache	16.4	16.8	0.4

Source: Census Transportation Planning Package 2000 (CTTP 2000) Profiles, (transportation.org/ctpp)

25.6 minutes while those taking public transportation (23,200 or 2.3 percent of commuters) had a mean travel time of 42.2 minutes. All categories of commuters increased in number of total commutes from 1990 to 2000. In terms of relative shares, all means of transportation lost shares to driving alone, which increased from 76.6 percent to 78.8 percent of commutes. Utah ranks 21 among all states in the relative use of public transportation by workers (2.3 percent of workers). States with the highest shares of commuters using public transportation include New York (24.4 percent of workers), New Jersey (9.6 percent of workers), and Illinois (8.7 percent of workers). In Utah, persons working at home increased as a share of Utah workers from 3.6 percent in 1990 to 4.2 percent in 2000. (Tables 2 and 3) The Utah ranking has probably increased given the subsequent opening of the University and soon the Medical Center light rail lines.

Commute times have increased for all Utah counties from 1990 to 2000. Tooele County ranked first in 2000 with a mean travel time of 32.1 minutes, an increase of 10.1 minutes as compared to 1990. Other counties with long average commute times are Rich (29.0 minutes), Morgan (26.3 minutes), Piute (26.3 minutes), Wasatch (25.3 minutes), Summit (24.8 minutes), and Juab (23.1 minutes). Counties with large increases in commute times from 1990 to 2000 include Piute, Tooele, Daggett, and Rich. (Table 4 and Figure 4) One cause of the increasing commute times is an increase in the number and share of commuters with very long commutes. In 1990 there were an estimated 51,685 persons (7.3 percent of all Utah commuters) who reported commutes of 45 minutes or more. By 2000, an estimated 94,577 or 9.6 percent of commuters in the state reported these long (45 minutes or longer) commutes. In 2000, about one quarter (25.1 percent) of Utah commuters had travel times to work of 30 minutes or more. Tooele County has the highest

Figure 4
Mean Travel Time to Work by County
Mean Travel Time to Work in Minutes: 2000



Source: CTPP 2000

proportion (31.4 percent) of commuters traveling 45 minutes or more reported in the 2000 census. Other counties with large relative shares of very long commutes are Rich (25.0 percent), Juab (20.9 percent), Wasatch (18.6 percent), and Piute (16.7 percent). Counties with the shortest mean travel times to work include Garfield (13.9 minutes), Iron (15.0 minutes), Grand (15.0 minutes), Carbon (16.4 minutes), and Cache (16.8 minutes). (Tables 4 and 5 and Figure 4)

Journey to Work: Commuting Out-of-County

While the great majority (83.4 percent in 2000) of Utahns work in their county of residence, an increasing number and share of workers cross county lines (and also state lines) to their jobs. From 1980 to 2000, the number of workers with jobs in their county of residence increased by 358,334 or 71.2 percent, from 503,169 to 861,503. The number of Utahns crossing county lines to work increased over the same period by 92,873 (118.3 percent) from 78,482 to 171,355. Out-of-county commuting accounted for one out of three (32.8 percent) of the new work commutes in Utah over the past two decades (excluding working at home). This has resulted in an increase in the county out-commuting rate at the state level. In 1980, 13.5 percent of Utah workers left their counties of residence to work. This increased to 15.2 percent in 1990 and 16.6 percent in 2000. Nationally, the share of workers crossing county lines for employment increased to 23 percent in 2000, up from 20 percent in

1990 and 18 percent in 1980. Commuting does tend to be understated by this measure in the western U.S. because counties are so much larger as compared to those in the eastern U.S.⁷ (Figures 5 and 6)

Out-commuting rates vary widely by county. Morgan County has had the highest out-of-county commuting rate for all three decades (1980, 1990, and 2000) with 61.1 percent of the workers who live in Morgan County (or 1,951 of 3,168 workers) commuting outside Morgan to work in 2000. The out-commuting rate of Davis County workers for 2000 is 45.7 percent. Although Davis ranks second in the overall rate, the 59,509 residents working in other counties is the highest number of any county. In fact, Davis County generated nearly one of every three (30.1 percent) inter-county commuters in the state in 2000. Other counties with high ratios of resident workers working out-of-county are Tooele (45.5 percent out-commuting rate), Wasatch (43.8 percent), Juab (40.3 percent), Summit (35.6 percent), and Rich (35.3 percent). Counties experiencing large relative increases in their out-commuting rates from 1980 to 2000 include Tooele (from 15.8 percent to 45.5 percent), Juab (16.4 percent to 40.3 percent), Piute (17.6 percent to 30.8 percent), Emery (12.0 percent to 25.0 percent), San Juan (8.9 percent to 20.3 percent), Duchesne (11.4 percent to 20.8 percent), and Box Elder (15.7 percent to 24.7 percent). Not surprisingly, Salt Lake County, the destination of many of these out-of-county commuters, has the lowest out-commuting rate (6.2 percent in 2000). (Tables 6 and 7)

Journey to Work: Commuting Out-of-State

An estimated 11,569 Utah workers reported working outside Utah in response to the question: "Where did you work LAST WEEK?" on the long form of the 2000 Census questionnaire. Counties with the highest rates of reported out-of-state workers in 2000 include Rich (20.1 percent), Kane (19.1 percent), San Juan (10.4 percent), and Daggett (10.1 percent). These are all relatively small rural counties located on the perimeter of the state. Reported destinations for these out-of-state commuters are Wyoming (Uinta and Lincoln counties) for Rich residents, Arizona (Coconino County) for Kane residents, Colorado (Montezuma County) and Arizona (Apache, Coconino, and Navajo counties) for San Juan residents, and Wyoming (Sweetwater County) for Daggett residents.

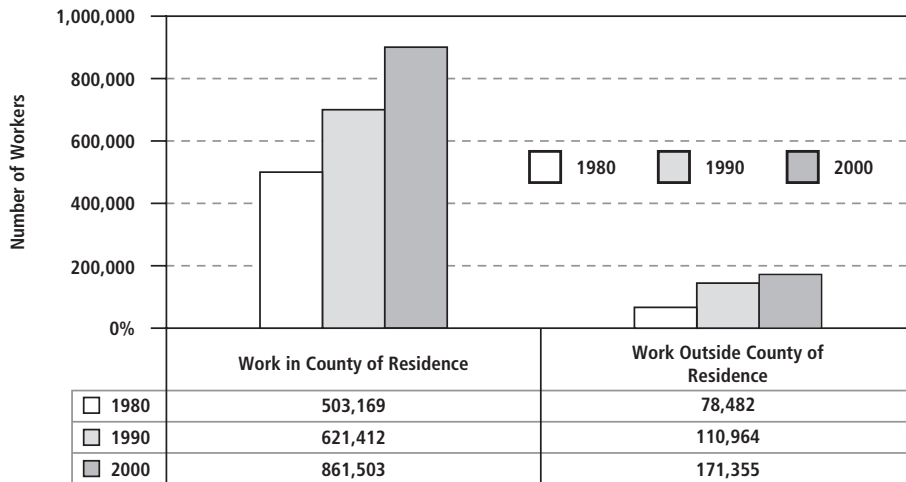
Counties with large numbers of out-of-state workers in 2000 were Salt Lake (3,155), Utah (1,376), Washington (1,372), and Davis (944). Washington County has a relatively low out-commuting rate (6.5 percent). The majority (58 percent) of those reported to have worked out-of-county were commutes to Clark County, Nevada.

**Table 5
Commuters Traveling 45 Minutes or More
Counties Ranked by 2000 Share**

Place of Residence	1990		2000		1990 to 2000 Change	
	Number	Percent	Number	Percent	Number	Percent
Tooele	1,965	18.0	5,434	31.4	3,469	176.5
Rich	88	15.3	181	25.0	93	105.7
Juab	440	19.7	689	20.9	249	56.6
Wasatch	628	15.5	1,208	18.6	580	92.4
Piute	35	8.9	82	16.7	47	134.3
Sanpete	602	11.9	1,278	16.0	676	112.3
Summit	910	13.3	2,243	14.9	1,333	146.5
Morgan	264	12.2	447	14.8	183	69.3
Daggett	11	4.0	46	13.9	35	318.2
Duchesne	300	7.3	668	13.3	368	122.7
San Juan	296	8.6	490	12.5	194	65.5
Davis	4,136	5.3	12,636	11.7	8,500	205.5
Weber	6,091	9.0	9,952	11.2	3,861	63.4
Uintah	768	10.8	1,070	10.9	302	39.3
Wayne	61	8.0	112	10.9	51	83.6
Beaver	77	4.9	250	10.5	173	224.7
Box Elder	1,298	9.4	1,752	10.2	454	35.0
Emery	292	8.5	417	10.1	125	42.8
Kane	191	10.2	232	9.9	41	21.5
State of Utah	51,685	7.3	94,577	9.6	42,892	83.0
Millard	232	6.0	431	9.4	199	85.8
Utah	7,859	7.9	12,934	8.3	5,075	64.6
Sevier	393	7.4	579	8.2	186	47.3
Carbon	601	8.3	667	8.1	66	11.0
Salt Lake	19,706	6.2	34,144	8.1	14,438	73.3
Iron	501	6.2	1,157	7.8	656	130.9
Cache	2,639	9.3	3,119	7.5	480	18.2
Grand	142	5.5	274	7.4	132	93.0
Garfield	96	6.3	130	6.9	34	35.4
Washington	1,063	6.5	1,955	5.9	892	83.9

Source: Census Transportation Planning Package 2000 (CTPP 2000) Profiles, (transportation.org/ctpp)

**Figure 5
Place of Work for Utah Residents
(Includes Those Who Work at Home)**



Sources: CTPP 2000, Bureau of the Census

Table 6
Out-Commuting Rates from Counties in Utah
Share of Resident Workers Leaving the County to
Work Ranked in Descending Order for 2000

Place of Residence	1980	1990	2000
Morgan	52.8%	57.2%	61.6%
Davis	43.9%	45.4%	45.7%
Tooele	15.8%	19.5%	45.5%
Wasatch	35.3%	44.4%	43.8%
Juab	16.4%	26.3%	40.3%
Summit	30.9%	33.8%	35.6%
Rich	31.4%	23.4%	35.3%
Piute	17.6%	24.5%	30.8%
Weber	27.7%	27.9%	29.2%
Kane	27.0%	30.5%	28.8%
Emery	12.0%	16.2%	25.0%
Box Elder	15.7%	17.3%	24.7%
Daggett	15.9%	5.5%	21.2%
Duchesne	11.4%	11.3%	20.8%
Sanpete	15.1%	16.0%	20.3%
San Juan	8.9%	7.7%	20.3%
State Total	13.5%	15.2%	16.6%
Utah	9.7%	10.4%	13.9%
Wayne	12.5%	7.1%	12.4%
Uintah	13.5%	12.6%	12.2%
Carbon	11.4%	9.6%	11.5%
Garfield	8.2%	6.7%	10.4%
Cache	9.0%	11.2%	10.3%
Sevier	6.2%	6.4%	9.8%
Iron	4.5%	6.8%	9.0%
Beaver	4.4%	6.4%	8.2%
Millard	4.1%	3.9%	7.5%
Washington	7.6%	6.9%	6.7%
Grand	13.5%	4.1%	6.5%
Salt Lake	4.8%	6.8%	6.2%

Source: U.S. Bureau of the Census, BEBR Calculations

In the cases of the large urban counties (Salt Lake, Utah, and Davis), people were most likely on out-of-state business trips. While there are certainly a few isolated cases of people living in Utah on the weekends who are working elsewhere during the week on a regular basis, this is highly unusual. (Table 8)

Utah has historically been a net exporter of labor. In 1980 there were 8,100 Utah residents working outside the state while an estimated 3,017 non-Utah residents worked in Utah for a net labor export of 5,083. In 1990, the net export of Utah labor was estimated to be 7,826 with 11,154 Utahns working out-of-state and 3,328 non-Utahns working in-state. Then, in 2000, Utah apparently became a net importer of labor with the number of Utahns working out-of-state estimated to be up slightly to 11,569 and the number of non-Utah residents working in-state estimated to be up dramatically to 12,482. The number of out-of-state workers reporting working in Salt

Lake County increased from 1,071 in 1990 to 5,294 in 2000, accounting for nearly half (46.1 percent) of the increase. In fact, if Salt Lake is excluded from the statewide calculation, Utah is again a net exporter of labor. By 2000, preparations were well underway for the 2002 Winter Olympic Games. Although further investigation is necessary in order to definitively establish the connection, it is likely that many of the reported out-of-state workers in Utah during this time were associated with the Olympic Games preparation. If this is indeed the case, then in the absence of the ramp-up to the Olympic Games, Utah again would have been a net exporter of labor. Because the data source for this analysis is the Census questionnaire, non-U.S. residents working in Utah are not counted. This underestimates imported labor. (Table 9)

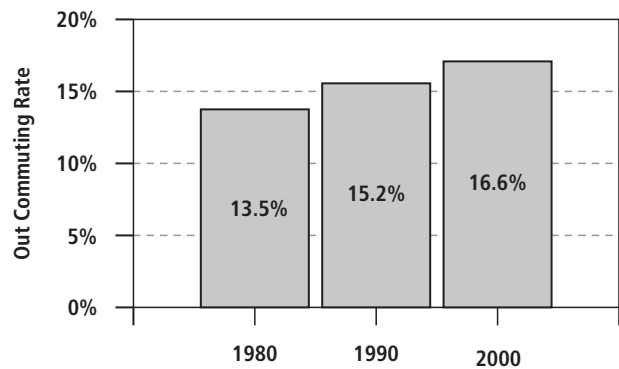
County-to-County Commuting Patterns

Salt Lake is Still the Center

Salt Lake County has long been the center of employment in the state and consequently it is the county that receives the greatest number of inter-county commuters. On net, nearly 50,000 more commuters traveled to Salt Lake County than vice versa as reported in the 2000 Census. Twenty other counties had net out-commuting while eight other counties had small net in-commuting. (Tables 10 – 12)

Salt Lake County provided nearly half the total employment of the state in 2000 (47.4 percent), although this share has fallen from 49.4 percent in 1980.⁸ In 2000, Salt Lake County was home to 438,627 workers, 411,283 of whom reported working in the county. Total employment generated in Salt Lake County grew by

Figure 6
County Out-Commuting
Rates for Utah
(Share of Workers Who
Work Outside Their Resident County)



Sources: Bureau of the Census

Table 7
Total Workers Residing in County: Place of Work
Share of State Commuters and Inter-County Commuters

County of Residence	2000			Shares of State		1990			Shares of State		1980			Shares of State	
	Total Resident Workers	Working in County of Residence	Working Outside County of Residence	Workers	Commute Out-of-County	Total Resident Workers	Working in County of Residence	Working Outside County of Residence	Workers	Commute Out-of-County	Total Resident Workers	Working in County of Residence	Working Outside County of Residence	Workers	Commute Out-of-County
Beaver	2,460	2,258	202	0.2%	0.1%	1,660	1,554	106	0.2%	0.1%	1,420	1,357	63	0.2%	0.1%
Box Elder	18,030	13,570	4,460	1.7%	2.6%	14,438	11,938	2,500	2.0%	2.3%	12,751	10,755	1,996	2.2%	2.5%
Cache	43,731	39,235	4,496	4.2%	2.6%	30,003	26,643	3,360	4.1%	3.0%	22,325	20,306	2,019	3.8%	2.6%
Carbon	8,460	7,489	971	0.8%	0.6%	7,429	6,718	711	1.0%	0.6%	8,322	7,376	946	1.4%	1.2%
Daggett	377	297	80	0.0%	0.0%	289	273	16	0.0%	0.0%	271	228	43	0.0%	0.1%
Davis	112,717	61,208	51,509	10.9%	30.1%	81,054	44,256	36,798	11.1%	33.2%	58,893	33,019	25,874	10.1%	33.0%
Duchesne	5,370	4,255	1,115	0.5%	0.7%	4,443	3,941	502	0.6%	0.5%	4,175	3,699	476	0.7%	0.6%
Emery	4,293	3,220	1,073	0.4%	0.6%	3,626	3,040	586	0.5%	0.5%	3,784	3,330	454	0.7%	0.6%
Garfield	1,983	1,776	207	0.2%	0.1%	1,568	1,463	105	0.2%	0.1%	1,248	1,146	102	0.2%	0.1%
Grand	3,958	3,699	259	0.4%	0.2%	2,758	2,645	113	0.4%	0.1%	3,466	2,997	469	0.6%	0.6%
Iron	15,249	13,882	1,367	1.5%	0.8%	8,366	7,798	568	1.1%	0.5%	6,547	6,252	295	1.1%	0.4%
Juab	3,369	2,011	1,358	0.3%	0.8%	2,340	1,724	616	0.3%	0.6%	1,989	1,662	327	0.3%	0.4%
Kane	2,621	1,867	754	0.3%	0.4%	1,939	1,347	592	0.3%	0.5%	1,324	967	357	0.2%	0.5%
Millard	4,820	4,457	363	0.5%	0.2%	4,165	4,004	161	0.6%	0.1%	3,165	3,034	131	0.5%	0.2%
Morgan	3,168	1,217	1,951	0.3%	1.1%	2,287	979	1,308	0.3%	1.2%	1,794	847	947	0.3%	1.2%
Piute	523	362	161	0.1%	0.1%	417	315	102	0.1%	0.1%	408	336	72	0.1%	0.1%
Rich	791	512	279	0.1%	0.2%	637	488	149	0.1%	0.1%	865	593	272	0.1%	0.3%
Salt Lake	438,627	411,283	27,344	42.5%	16.0%	329,238	306,801	22,437	45.0%	20.2%	266,549	253,728	12,821	45.8%	16.3%
San Juan	4,117	3,283	834	0.4%	0.5%	3,619	3,340	279	0.5%	0.3%	3,546	3,229	317	0.6%	0.4%
Sanpete	8,412	6,706	1,706	0.8%	1.0%	5,346	4,489	857	0.7%	0.8%	4,626	3,929	697	0.8%	0.9%
Sevier	7,444	6,714	730	0.7%	0.4%	5,563	5,209	354	0.8%	0.3%	5,299	4,973	326	0.9%	0.4%
Summit	16,295	10,486	5,809	1.6%	3.4%	7,338	4,856	2,482	1.0%	2.2%	4,592	3,175	1,417	0.8%	1.8%
Tooele	17,966	9,784	8,182	1.7%	4.8%	11,228	9,041	2,187	1.5%	2.0%	10,249	8,633	1,616	1.8%	2.1%
Uintah	10,145	8,910	1,235	1.0%	0.7%	7,453	6,516	937	1.0%	0.8%	7,348	6,353	995	1.3%	1.3%
Utah	163,577	140,834	22,743	15.8%	13.3%	104,035	93,254	10,781	14.2%	9.7%	75,860	68,491	7,369	13.0%	9.4%
Wasatch	6,860	3,857	3,003	0.7%	1.8%	4,276	2,379	1,897	0.6%	1.7%	3,208	2,074	1,134	0.6%	1.4%
Washington	35,064	32,708	2,356	3.4%	1.4%	17,023	15,853	1,170	2.3%	1.1%	8,383	7,744	639	1.4%	0.8%
Wayne	1,087	952	135	0.1%	0.1%	792	736	56	0.1%	0.1%	617	540	77	0.1%	0.1%
Weber	91,344	64,671	26,673	8.8%	15.6%	69,046	49,812	19,234	9.4%	17.3%	58,627	42,396	16,231	10.1%	20.7%
State Total	1,032,858	861,503	171,355	100.0%	100.0%	732,376	621,412	110,964	100.0%	100.0%	581,651	503,169	78,482	100.0%	100.0%

Source: U.S. Bureau of the Census, BEBR Calculations

137,046 over the past decade. About one-fourth (23.8 percent) of these additional jobs were taken by nonresidents of the county. The number of nonresidents commuting into Salt Lake County grew from 29,640 in 1980, to 40,639 in 1990, and to 73,203 in 2000.

While most of the increase in commuter traffic in Salt Lake County has come from people who both live and work in the county, there have been significant increases in inter-county commuters. The number of commuters to Salt Lake County reported in the 2000 census were 33,851 from Davis County, 18,159 from Utah County, 7,031 from Tooele County, 6,425 from Weber County, and 4,501 from Summit County. Out-commuting from both Davis and Utah counties to Salt Lake County each increased by about 10,000 over the past decade. Other significant increases in out-commuting to Salt Lake County from 1990 to 2000 were Tooele (increased by 5,574), Summit (increased by 2,566), and Weber

(increased by 2,531). Commuters to Salt Lake County have come from increasingly distant counties. By 2000, significant volumes of commuters have come from Box Elder, Cache, Morgan, Wasatch, and Sanpete counties. Reverse flows from Salt Lake County have grown as well. In 2000, the number of out-commuters from Salt Lake County was significant in Davis (8,370), Utah (8,075), Summit (2,678), Weber (2,084), and Tooele (1,656) counties. (Tables 13-14 and Figures 7-10)

Labor Force Growth and Job Growth Imbalances

Counties where labor force growth has exceeded employment growth have generally experienced large increases in out-commuting. For example, the number of workers in Tooele County rose from 11,228 in 1990 to 17,966 in 2000, an increase of 6,738. Over the same period, employment (Census measure) increased by only 825, from 11,434 to 12,259. Consequently, out-

Table 8
Out-of-State Workers by County of Residence
Numbers and Shares Ranked in Descending Order for 2000

Share of County Workers Working Outside Utah				Number of County Workers Working Outside Utah			
Place of Residence	1980	1990	2000	Place of Residence	1980	1990	2000
Rich	31.4%	23.4%	20.1%	Statewide Total	8,100	11,154	11,569
Kane	26.2%	22.7%	19.1%	Salt Lake	2,478	3,816	3,155
San Juan	6.7%	6.0%	10.4%	Utah	731	1,216	1,376
Daggett	11.8%	5.5%	10.1%	Washington	417	842	1,372
Washington	5.0%	4.9%	3.9%	Davis	620	965	944
Summit	4.0%	3.0%	3.1%	Weber	734	685	699
Uintah	3.7%	4.9%	3.0%	Tooele	308	656	527
Tooele	3.0%	5.8%	2.9%	Cache	334	376	509
Grand	2.0%	1.9%	2.7%	Kane	347	441	501
Piute	4.9%	4.8%	2.7%	Summit	182	220	501
Iron	1.5%	2.1%	1.8%	San Juan	237	216	429
Wayne	6.0%	4.9%	1.5%	Uintah	272	364	306
Garfield	7.0%	2.8%	1.4%	Iron	95	177	274
Emery	1.5%	1.6%	1.3%	Rich	272	149	159
Cache	1.5%	1.3%	1.2%	Box Elder	109	153	130
Duchesne	3.3%	2.1%	1.1%	Grand	71	52	108
Millard	1.9%	1.7%	1.1%	Sanpete	73	72	89
Statewide Total	1.4%	1.5%	1.1%	Sevier	89	103	65
Sanpete	1.6%	1.3%	1.1%	Duchesne	137	93	61
Sevier	1.7%	1.9%	0.9%	Carbon	59	74	60
Utah	1.0%	1.2%	0.8%	Emery	56	57	54
Davis	1.1%	1.2%	0.8%	Millard	61	71	54
Beaver	3.7%	3.9%	0.8%	Daggett	32	16	38
Weber	1.3%	1.0%	0.8%	Wasatch	89	96	35
Box Elder	0.9%	1.1%	0.7%	Garfield	87	44	28
Salt Lake	0.9%	1.2%	0.7%	Juab	48	35	24
Juab	2.4%	1.5%	0.7%	Morgan	52	42	21
Carbon	0.7%	1.0%	0.7%	Beaver	53	64	20
Morgan	2.9%	1.8%	0.7%	Wayne	37	39	16
Wasatch	2.8%	2.2%	0.5%	Piute	20	20	14

Source: U.S. Bureau of the Census, BEBR Calculations

Table 9
Workers Crossing State Lines for Work
State Level and Salt Lake County

State Level	1980	1990	2000
Utah Residents Working Out of State (Export Labor)	8,100	11,154	11,569
U.S. Residents (Excluding Utahns) Working in Utah (Import Labor)	3,017	3,328	12,482
Net Exports Labor / (Imports)	5,083	7,826	(913)
Salt Lake	1980	1990	2000
Salt Lake Residents Working Out of State (Export Labor)	2,478	3,816	3,155
U.S. Residents (Not Utah Residents) Working in Salt Lake County (Import Labor)	1,011	1,071	5,294
Net Exports Labor / (Imports)	1,467	2,745	(2,139)
Difference	1980	1990	2000
Utah Residents Excluding Salt Lake County Working Out of State	5,622	7,338	8,414
U.S. Residents (Excluding Utahns) Working in Utah (Excluding Salt Lake County)	2,006	2,257	7,188
Net Exports Labor / (Imports)	3,616	5,081	1,226

Source: U.S. Bureau of the Census, BEBR Calculations

commuters increased from 2,187 to 8,187. Mean travel times to work increased (from 22.0 minutes to 32.1 minutes), as did the out-commuting rate (from 19.5 percent to 45.5 percent). This is the classic case of a “bedroom community.” Similarly, in Davis County the number of workers residing in the county increased by 31,663 from 1990 to 2000 while the amount of employment only increased 22,891 over the same period, a deficit of 8,772.

In many cases, counties with high out-commuting rates also have not generated enough jobs to accommodate the number of resident workers needing employment. But this is not always the case and exceptions to this illustrate that commuting patterns are becoming much more complicated than in the past. Counties with out-commuting rates of greater than 28 percent in 2000 include Morgan (61.6 percent), Davis (45.7 percent), Tooele (45.5 percent), Wasatch (43.8 percent), Juab (40.3 percent), Summit (35.6 percent), Rich (35.3 percent), Piute (30.8 percent), Weber (29.2 percent), and Kane (28.8 percent). If out-commuting were based on a shortage of employment within the county for workers residing in the county, then we would expect this to be reflected in a high resident worker to available employment ratio. Counties with a resident worker to available employment ratio exceeding 1.2 in 2000 include Morgan (1.81), Tooele (1.47), Rich (1.44), Wasatch (1.35), Kane (1.33), Juab (1.32), Davis (1.26), and Piute (1.22). Absent from this list are Summit and Weber counties. As it turns out, 5,808 residents of Summit County report working out of the county while 4,991 nonresidents of Summit County report working in the county for a net difference of 817. Summit County residents out-commute mostly to Salt Lake County while the in-commuters to Summit County come primarily from Salt Lake and Wasatch counties. Similarly, in Weber County the number of residents working out of the county is reported in 2000 to be 26,673 while 21,555 people work at jobs in Weber County and live in other counties for a net difference of 5,118. Weber residents out-commute to Davis, Salt Lake, and Box Elder counties in large numbers. In-commuters to Weber County are coming mainly from Davis, Salt Lake, Box Elder, and Morgan counties. Commuting patterns in Utah are not explained simply by residential proximity to employment centers. The location of housing types (and associated costs), the industrial and occupational distribution of job opportunities in different areas, the skill sets of workers in different locations, and transportation costs (time and money) between locations all impact commuting patterns of a region. (Figures 11 and 12)

More Volume, Longer Distances, More Complex Patterns

Over the past 10 years, the volume of commuting to work has increased in all counties of the state. This is the result of a significant increase in the number of workers in Utah. Areas of rapid population and/or employment growth have had the most rapid rates of increase in work-related commuting traffic. These include Utah County, counties in the southwestern area of the state (Washington and Iron), and counties in the expanding urban area of the state (Summit, Tooele, and Wasatch).

In addition to the increased volumes, people are commuting longer distances, particularly from counties in the more rural areas of the state and especially (although not exclusively) to Salt Lake County. For example, significant numbers of Sanpete County residents commute to Juab, Salt Lake, Sevier, and Utah counties. Residents of Morgan County commute in increasing numbers to Davis, Salt Lake, Summit, and Weber counties. New patterns of cross-commuting are emerging as well. For example, an estimated 803 commuters make the drive from Davis to Utah County while 842 make the reverse commute. All of this makes planning for transportation needs even more challenging. (Figures 13 and 14)

Footnotes

¹ Quality Growth Efficiency Tools (QGET) Workgroup, “Transportation,” pages 35-44, from *2003 Baseline Scenario*, May 2003.

² Structural increases in female labor force participation rates beginning in the 1960s had mostly run their course by 1990 and explain some of this increase in the national and state labor force. In Utah, similar increases in the aggregate female labor participation rates occurred, although age specific rates were different. For further information see Pam Perlich, “Labor Force Participation Rates in Utah,” Bureau of Economic and Business Research, University of Utah, unpublished memorandum, January 2, 2003.

³ Bureau of the Census, Form D-61B, OMB No. 0607-0856, 2000.

⁴ U.S. Department of Transportation, *Changes in the Purpose of Travel Over Time. A Snapshot Analysis of the National Household Travel Survey 2001*, downloaded May, 2003 from <http://nhts.ornl.gov/2001/>

⁵ Alan E. Pisarski, *Commuting in America II: The Second National Report on Commuting Patterns and Trends*, Eno Transportation Foundation, Inc., 1996, pages 1-12.

⁶ The travel time data in the Journey to Work file refer only to the morning commute. Often the evening commute is combined with other trips.

⁷ Laurent Beisie, “Even with Jobs in Suburbs, Commutes Get Longer,” *Christian Science Monitor*, March 7, 2003, online from csmonitor.com.

⁸ This measure of employment is lower than job counts produced by the Bureau of Labor Statistics and Bureau of Economic Analysis. Among other reasons, the results differ because the census questionnaire does not allow for multiple job holding.

Table 10
County Employment: Workers Identified by Residence

Total Employment in the County

Total Place of Work	Employment			Changes	
	2000	1990	1980	1990-2000	1980-1990
Beaver	2,549	1,649	1,377	900	272
Box Elder	18,078	16,124	12,808	1,954	3,316
Cache	40,800	27,354	20,699	13,446	6,655
Carbon	8,657	7,378	7,973	1,279	-595
Daggett	356	302	228	54	74
Davis	89,311	66,420	50,170	22,891	16,250
Duchesne	5,084	4,467	4,330	617	137
Emery	4,091	3,872	4,794	219	-922
Garfield	1,896	1,537	1,224	359	313
Grand	4,203	2,821	3,232	1,382	-411
Iron	14,824	8,028	6,413	6,796	1,615
Juab	2,552	1,938	2,017	614	-79
Kane	1,973	1,347	1,021	626	326
Millard	4,826	4,434	3,169	392	1,265
Morgan	1,746	1,303	1,205	443	98
Piute	429	315	336	114	-21
Rich	550	488	617	62	-129
Salt Lake	484,486	347,440	283,368	137,046	64,072
San Juan	3,574	3,542	3,563	32	-21
Sanpete	7,201	4,614	4,019	2,587	595
Sevier	7,311	5,528	5,204	1,783	324
Summit	15,477	7,458	4,281	8,019	3,177
Tooele	12,259	11,434	10,770	825	664
Uintah	9,742	6,885	6,689	2,857	196
Utah	152,950	97,688	70,267	55,262	27,421
Wasatch	5,072	2,666	2,238	2,406	428
Washington	33,965	16,383	7,857	17,582	8,526
Wayne	1,101	776	553	325	223
Weber	86,226	67,233	53,270	18,993	13,963
Total	1,021,289	721,424	573,692	299,865	147,732

Employment in the County Held by Residents of the County

Place of Work	Employment			Changes	
	2000	1990	1980	1990-2000	1980-1990
Beaver	2,258	1,554	1,357	704	197
Box Elder	13,570	11,938	10,755	1,632	1,183
Cache	39,235	26,643	20,306	12,592	6,337
Carbon	7,489	6,718	7,376	771	-658
Daggett	297	273	228	24	45
Davis	61,208	44,256	33,019	16,952	11,237
Duchesne	4,255	3,941	3,699	314	242
Emery	3,220	3,040	3,330	180	-290
Garfield	1,776	1,463	1,146	313	317
Grand	3,699	2,645	2,997	1,054	-352
Iron	13,882	7,798	6,252	6,084	1,546
Juab	2,011	1,724	1,662	287	62
Kane	1,867	1,347	967	520	380
Millard	4,457	4,004	3,034	453	970
Morgan	1,217	979	847	238	132
Piute	362	315	336	47	-21
Rich	512	488	593	24	-105
Salt Lake	411,283	306,801	253,728	104,482	53,073
San Juan	3,283	3,340	3,229	-57	111
Sanpete	6,706	4,489	3,929	2,217	560
Sevier	6,714	5,209	4,973	1,505	236
Summit	10,486	4,856	3,175	5,630	1,681
Tooele	9,784	9,041	8,633	743	408
Uintah	8,910	6,516	6,353	2,394	163
Utah	140,834	93,254	68,491	47,580	24,763
Wasatch	3,857	2,379	2,074	1,478	305
Washington	32,708	15,853	7,744	16,855	8,109
Wayne	952	736	540	216	196
Weber	64,671	49,812	42,396	14,859	7,416
Total	861,503	621,412	503,169	240,091	118,243

Employment in the County Held by Nonresidents of the County

Place of Work	Employment			Changes	
	2000	1990	1980	1990-2000	1980-1990
Beaver	291	95	20	196	75
Box Elder	4,508	4,186	2,053	322	2,133
Cache	1,565	711	393	854	318
Carbon	1,168	660	597	508	63
Daggett	59	29	0	30	29
Davis	28,103	22,164	17,151	5,939	5,013
Duchesne	829	526	631	303	-105
Emery	871	832	1,464	39	-632
Garfield	120	74	78	46	-4
Grand	504	176	235	328	-59
Iron	942	230	161	712	69
Juab	541	214	355	327	-141
Kane	106	0	54	106	-54
Millard	369	430	135	-61	295
Morgan	529	324	358	205	-34
Piute	67	0	0	67	0
Rich	38	0	24	38	-24
Salt Lake	73,203	40,639	29,640	32,564	10,999
San Juan	291	202	334	89	-132
Sanpete	495	125	90	370	35
Sevier	597	319	231	278	88
Summit	4,991	2,602	1,106	2,389	1,496
Tooele	2,475	2,393	2,137	82	256
Uintah	832	369	336	463	33
Utah	12,116	4,434	1,776	7,682	2,658
Wasatch	1,215	287	164	928	123
Washington	1,257	530	113	727	417
Wayne	149	40	13	109	27
Weber	21,555	17,421	10,874	4,134	6,547
Total	159,786	100,012	70,523	59,774	29,489

Source: U.S. Bureau of the Census, BEBR Calculations

**Table 11
Utah Journey to Work by County: 2000**

Place of Residence	Place of Work																										Total				
	Beaver	Box Elder	Cache	Carbon	Daggett	Davis	Duchesne	Emery	Garfield	Grand	Iron	Juab	Kane	Millard	Morgan	Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier	Summit	Tooele	Uintah	Utah	Wasatch		Washington	Wayne	Weber	Outside Utah
Beaver	2,258	0	0	0	0	0	0	0	3	0	104	1	0	9	0	15	0	15	0	2	9	0	5	0	0	0	19	0	0	20	2,460
Box Elder	0	13,570	631	0	0	660	0	0	4	5	0	0	0	2	7	0	2	401	0	0	0	22	26	0	26	0	14	1	2,529	130	18,030
Cache	2	2,383	39,235	7	2	334	9	5	0	8	1	0	10	6	16	0	25	463	0	0	0	3	8	0	94	0	5	0	606	509	43,731
Carbon	0	2	0	7,489	0	5	13	679	0	25	9	3	0	4	0	0	0	67	10	2	0	3	0	6	72	11	0	0	0	60	8,460
Daggett	0	0	0	0	297	6	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	13	5	0	0	0	1	38	377
Davis	0	313	199	0	0	61,208	12	0	0	0	16	0	0	0	96	0	0	33,851	0	21	8	83	178	6	803	31	44	28	14,876	944	112,717
Duchesne	0	0	2	19	3	13	4,255	2	0	2	4	0	0	3	0	0	0	109	0	2	6	62	11	692	25	86	8	0	5	61	5,370
Emery	2	0	3	795	0	2	0	3,220	2	98	2	0	0	2	0	11	0	43	9	2	18	1	0	0	19	3	7	0	0	54	4,293
Garfield	0	0	0	3	0	0	0	4	1,776	0	45	0	4	0	0	2	0	10	52	0	16	0	0	0	26	0	12	5	0	28	1,983
Grand	0	0	6	2	0	8	0	37	0	3,699	5	0	0	0	0	0	0	16	60	0	0	0	0	0	5	0	0	12	0	108	3,958
Iron	187	0	0	14	0	10	0	0	14	0	13,882	0	37	35	8	14	0	19	0	9	9	0	0	0	32	7	677	8	13	274	15,249
Juab	0	8	0	10	0	4	6	0	0	2	0	2,011	0	72	0	0	0	143	0	37	4	6	73	0	959	3	1	6	0	24	3,369
Kane	4	0	0	0	0	0	0	0	27	0	11	0	1,867	0	6	0	0	2	109	8	0	3	0	0	0	0	78	5	0	501	2,621
Millard	23	0	0	1	0	5	0	2	3	0	13	29	0	4,457	0	0	0	80	0	17	33	2	9	0	88	0	0	0	4	54	4,820
Morgan	0	8	0	0	0	604	0	0	0	0	0	0	0	0	1,217	0	0	273	0	0	0	107	3	0	9	4	0	0	922	21	3,168
Piute	0	0	0	7	0	0	0	0	30	0	7	0	0	0	0	362	0	10	0	8	71	0	0	0	2	0	6	5	1	14	523
Rich	0	2	41	0	0	10	0	0	0	0	0	0	0	0	6	0	512	37	0	0	0	5	3	0	6	0	0	0	10	159	791
Salt Lake	46	80	224	47	17	8,370	47	0	12	27	45	27	7	44	81	0	0	411,283	36	57	6	2,678	1,656	74	8,075	246	194	9	2,084	3,155	438,627
San Juan	0	0	15	11	0	8	0	0	0	310	0	0	0	0	0	0	0	43	3,283	0	0	0	0	0	7	0	8	3	0	429	4,117
Sanpete	0	0	2	134	0	18	2	81	2	0	1	208	4	15	0	0	0	265	0	6,706	315	12	4	2	488	20	27	15	2	89	8,412
Sevier	23	0	5	2	0	9	0	2	9	2	89	30	0	29	0	13	0	91	0	260	6,714	4	0	0	46	0	21	30	0	65	7,444
Summit	0	17	0	0	2	105	0	0	0	0	3	0	0	0	81	0	6	4,501	0	0	0	10,486	26	14	127	302	4	0	120	501	16,295
Tooele	0	6	5	4	0	339	4	0	9	0	6	0	0	10	0	0	0	7,031	0	0	0	47	9,784	0	165	2	0	0	27	527	17,966
Uintah	0	4	0	25	35	20	696	3	0	0	0	0	0	0	0	0	5	82	0	0	0	12	10	8,910	37	0	0	0	0	306	10,145
Utah	0	14	12	75	0	842	35	29	0	16	28	242	3	135	71	0	0	18,159	6	50	36	337	369	25	140,834	461	101	4	317	1,376	163,577
Wasatch	0	0	2	0	0	65	5	0	0	2	3	0	0	0	0	0	0	824	0	0	0	1,509	11	0	498	3,857	0	11	38	35	6,860
Washington	4	0	37	0	0	7	0	12	0	2	544	0	41	1	0	6	0	207	0	7	18	19	7	0	38	27	32,708	7	0	1,372	35,064
Wayne	0	0	2	0	0	0	0	12	5	0	6	1	0	2	0	0	0	19	9	6	46	3	0	0	6	0	2	952	0	16	1,087
Weber	0	1,671	379	12	0	16,659	0	3	0	5	0	0	0	0	163	0	0	6,425	0	7	2	73	76	0	458	12	29	0	64,671	699	91,344
In-State Total	2,549	18,078	40,800	8,657	356	89,311	5,084	4,091	1,896	4,203	14,824	2,552	1,973	4,826	1,746	429	550	484,486	3,574	7,201	7,311	15,477	12,259	9,742	152,950	5,072	33,965	1,101	86,226	11,56	1,032,858
Outside Utah	59	651	1,979	217	110	537	49	17	22	89	68	7	269	39	31	0	63	5,294	363	10	50	389	403	104	562	27	781	6	286	9	12,482

Source: U.S. Bureau of the Census, BEBR Calculations

Table 12
Net Commuting Between Counties in Utah: 2000

Place of Residence	Place of Work																												
	Beaver	Box Elder	Cache	Carbon	Daggett	Davis	Duchesne	Emery	Garfield	Grand	Iron	Juab	Kane	Millard	Morgan	Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier	Summit	Tooele	Uintah	Utah	Wasatch	Washington	Wayne	Weber
Beaver	0	0	(2)	0	0	0	0	(2)	3	0	(83)	1	(4)	(14)	0	15	0	(31)	0	2	(14)	0	5	0	0	0	15	0	0
Box Elder	0	0	(1,752)	(2)	0	347	0	0	4	5	0	(8)	0	2	(1)	0	0	321	0	0	0	5	20	(4)	12	0	14	1	858
Cache	2	1,752	0	7	2	135	7	2	0	2	1	0	10	6	16	0	(16)	239	(15)	(2)	(5)	3	3	0	82	(2)	(32)	(2)	227
Carbon	0	2	(7)	0	0	5	(6)	(116)	(3)	23	(5)	(7)	0	3	0	(7)	0	20	(1)	(132)	(2)	3	(4)	(19)	(3)	11	0	0	(12)
Daggett	0	0	(2)	0	0	6	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(2)	0	(22)	5	0	0	0	1
Davis	0	(347)	(135)	(5)	(6)	0	(1)	(2)	0	(8)	6	(4)	0	(5)	(508)	0	(10)	25,481	(8)	3	(1)	(22)	(161)	(14)	(39)	(34)	37	28	(1,783)
Duchesne	0	0	(7)	6	3	1	0	2	0	2	4	(6)	0	3	0	0	0	62	0	0	6	62	7	(4)	(10)	81	8	0	5
Emery	2	0	(2)	116	0	2	(2)	0	(2)	61	2	0	0	0	0	11	0	43	9	(79)	16	1	0	(3)	(10)	3	(5)	(12)	(3)
Garfield	(3)	(4)	0	3	0	0	0	2	0	0	31	0	(23)	(5)	(493)	8	0	(2)	52	(2)	7	0	(9)	0	26	0	12	0	0
Grand	0	(5)	(2)	(23)	0	8	(2)	(61)	0	0	5	(2)	0	0	0	0	0	(11)	(250)	0	(2)	0	0	0	(11)	(2)	(2)	12	(5)
Iron	83	0	(1)	5	0	(6)	(4)	(2)	(31)	(5)	0	0	26	22	8	7	0	(26)	0	8	(80)	(3)	(6)	0	4	4	133	2	13
Juab	(1)	8	0	7	0	4	6	0	0	2	0	0	0	43	0	0	0	116	0	(171)	(26)	6	73	0	717	3	1	5	0
Kane	4	0	(10)	0	0	0	0	0	23	0	(26)	0	0	0	0	6	0	(5)	109	4	0	3	0	0	(3)	0	37	5	0
Millard	14	(2)	(6)	(3)	0	5	(3)	0	3	0	(22)	(43)	0	0	0	0	0	36	0	2	4	2	(1)	0	(47)	0	(1)	(2)	4
Morgan	0	1	(16)	0	0	508	0	0	0	0	(8)	0	0	0	0	0	(6)	192	0	0	0	26	3	0	(62)	4	0	0	759
Piute	(15)	0	0	7	0	0	0	(11)	28	0	(7)	0	(6)	0	0	0	0	10	0	8	58	0	0	0	2	0	0	5	1
Rich	0	0	16	0	0	10	0	0	0	0	0	0	0	0	6	0	0	37	0	0	0	(1)	3	(5)	6	0	0	0	10
Salt Lake	31	(321)	(239)	(20)	0	(25,481)	(62)	(43)	2	11	26	(116)	5	(36)	(192)	(10)	(37)	0	(7)	(208)	(85)	(1,823)	(5,375)	(8)	(10,084)	(578)	(13)	(10)	(4,341)
San Juan	0	0	15	1	0	8	0	(9)	(52)	250	0	0	(109)	0	0	0	0	7	0	0	0	0	0	0	1	0	8	(6)	0
Sanpete	(2)	0	2	132	0	(3)	0	79	2	0	(8)	171	(4)	(2)	0	(8)	0	208	0	0	55	12	4	2	438	20	20	9	(5)
Sevier	14	0	5	2	0	1	(6)	(16)	(7)	2	80	26	0	(4)	0	(58)	0	85	0	(55)	0	4	0	0	10	0	3	(16)	(2)
Summit	0	(5)	(3)	(3)	2	22	(62)	(1)	0	0	3	(6)	(3)	(2)	(26)	0	1	1,823	0	(12)	(4)	0	(21)	2	(210)	(1,207)	(15)	(3)	47
Tooele	(5)	(20)	(3)	4	0	161	(7)	0	9	0	6	(73)	0	1	(186)	(70)	(3)	5,375	0	(4)	0	21	0	(10)	(204)	(9)	(7)	0	(49)
Uintah	0	4	0	19	22	14	4	3	0	0	0	0	0	0	0	0	5	8	0	(2)	0	(2)	10	0	12	0	0	0	0
Utah	0	(12)	(82)	3	(5)	39	10	10	(26)	11	(4)	(717)	3	47	62	(2)	(6)	10,084	(1)	(438)	(10)	210	204	(12)	0	(37)	63	(2)	(141)
Wasatch	0	0	2	(11)	0	34	(81)	(3)	0	2	(4)	(3)	0	0	(4)	0	0	578	0	(20)	0	1,207	9	0	37	0	(27)	11	26
Washington	(15)	(14)	32	0	0	(37)	(8)	5	(12)	2	(133)	(1)	(37)	1	0	0	0	13	(8)	(20)	(3)	15	7	0	(63)	27	0	5	(29)
Wayne	0	(1)	2	0	0	(28)	0	12	0	(12)	(2)	(5)	(5)	2	0	(5)	0	10	6	(9)	16	3	0	0	2	(11)	(5)	0	0
Weber	0	(858)	(227)	12	(1)	1,783	(5)	3	0	5	(13)	0	0	(4)	(759)	(1)	(10)	4,341	0	5	2	(47)	49	0	141	(26)	29	0	0
Net In-Commuting	109	178	(2,422)	257	17	(22,462)	(225)	(148)	(59)	353	(151)	(793)	(147)	60	(1,401)	(80)	(82)	49,014	(114)	(1,122)	(68)	(317)	(5,180)	(97)	(9,251)	(1,753)	273	30	(4,419)

Source: U.S. Bureau of the Census, BEBR Calculations

Table 13
Utah Journey to Work by County: 1990

Place of Residence	Place of Work																											Total			
	Beaver	Box Elder	Cache	Carbon	Daggett	Davis	Duchesne	Emery	Garfield	Grand	Iron	Juab	Kane	Millard	Morgan	Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier	Summit	Tooele	Uintah	Utah	Wasatch	Washington		Wayne	Weber	Outside Utah
Beaver	1,554	0	0	0	0	0	0	0	0	0	22	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	1,660
Box Elder	0	11,938	319	0	0	486	0	0	0	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	16	0	0	0	1,321	153	14,438
Cache	0	2,070	26,643	0	0	254	0	0	25	0	0	0	0	0	0	0	220	0	10	0	0	0	0	27	0	0	0	0	378	376	30,003
Carbon	0	0	0	6,718	0	0	538	0	0	0	0	0	0	0	0	0	32	11	0	14	0	0	0	42	0	0	0	0	0	74	7,429
Daggett	0	0	0	0	273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	289	
Davis	0	282	48	0	0	44,256	0	0	0	0	0	0	13	59	0	0	23,862	0	0	0	102	101	0	179	0	0	0	11,187	965	81,054	
Duchesne	0	0	0	10	0	0	3,941	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	327	31	11	0	0	0	93	4,443	
Emery	0	0	0	380	0	0	0	3,040	0	88	0	0	0	0	0	0	38	0	0	0	0	0	0	12	0	0	11	0	57	3,626	
Garfield	0	0	0	0	0	0	0	0	1,463	0	17	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	18	0	44	1,568	
Grand	0	0	0	14	0	0	33	0	2,645	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	52	2,758	
Iron	71	0	0	0	0	0	0	0	18	0	7,798	0	14	0	0	0	31	0	0	0	0	0	0	0	0	0	257	0	177	8,366	
Juab	0	0	0	0	0	0	0	0	0	0	0	1,724	149	0	0	0	57	0	13	0	0	115	0	247	0	0	0	0	35	2,340	
Kane	0	0	0	0	0	0	0	0	0	0	0	0	1,347	0	0	0	0	151	0	0	0	0	0	0	0	0	0	0	441	1,939	
Millard	24	0	0	0	0	0	0	0	0	0	21	0	4,004	0	0	0	35	0	0	10	0	0	0	0	0	0	0	0	71	4,165	
Morgan	0	15	0	0	0	417	0	0	0	0	0	0	0	979	0	0	159	0	0	0	36	0	0	0	0	0	0	639	42	2,287	
Piute	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	315	0	0	0	42	0	0	0	0	0	0	0	0	20	417	
Rich	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	488	0	0	0	0	0	0	0	0	0	0	0	0	149	637	
Salt Lake	0	38	81	0	0	8,105	0	0	0	25	0	0	35	0	0	0	306,801	0	28	1,305	1,840	28	3,249	84	112	0	3,691	3,816	329,238		
San Juan	0	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	0	3,340	0	0	0	0	0	0	0	0	0	0	216	3,619	
Sanpete	0	0	0	166	0	0	160	0	0	0	58	0	0	0	0	0	122	0	4,489	186	0	0	72	0	10	11	0	72	5,346		
Sevier	0	0	0	11	0	0	54	0	0	0	0	0	23	0	0	0	73	0	49	5,209	0	0	25	0	16	0	0	103	5,563		
Summit	0	0	0	0	0	57	0	0	0	0	0	0	0	52	0	0	1,935	0	0	0	4,856	0	0	73	65	0	80	220	7,338		
Tooele	0	12	0	0	0	62	0	0	0	0	0	0	0	0	0	0	1,457	0	0	0	0	9,041	0	0	0	0	0	656	11,228		
Uintah	0	0	0	0	29	0	526	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	6,516	0	0	0	0	364	7,453		
Utah	0	20	16	79	0	351	0	47	16	0	135	0	85	0	0	0	8,043	0	25	40	99	313	93,254	109	106	0	81	1,216	104,035		
Wasatch	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	342	0	0	0	998	0	372	2,379	0	44	96	4,276			
Washington	0	0	0	0	0	0	0	0	0	166	0	0	0	0	0	0	86	0	0	10	0	11	0	37	18	15,853	0	842	17,023		
Wayne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	736	39	792		
Weber	0	1,749	247	0	0	12,387	0	0	0	0	0	0	0	102	0	0	3,894	0	0	0	62	13	14	52	0	29	0	49,812	685	69,046	
In-State Total	1,649	16,124	27,354	7,378	302	66,420	4,467	3,872	1,537	2,821	8,028	1,938	1,347	8,438	2,282	630	488	347,440	3,542	4,614	5,528	7,458	11,434	6,885	97,688	2,666	16,383	776	67,233	11,154	732,376
Outside Utah	0	375	964	0	12	50	14	52	0	0	0	0	165	0	0	0	14	1,071	181	0	0	10	124	0	129	10	98	0	59	3,328	

Source: U.S. Bureau of the Census, BEBR Calculations

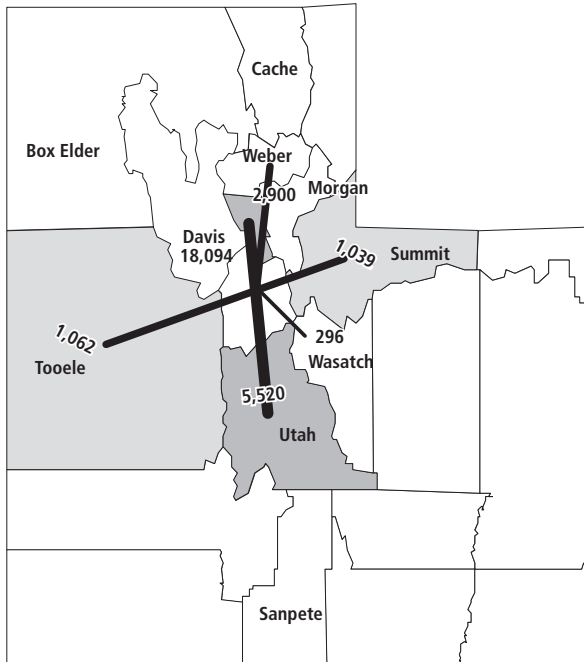
**Table 14
Utah Journey to Work by County: 1980**

Place of Residence	Place of Work																										Total				
	Beaver	Box Elder	Cache	Carbon	Daggett	Davis	Duchesne	Emery	Garfield	Grand	Iron	Juab	Kane	Millard	Morgan	Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier	Summit	Tooele	Uintah	Utah	Wasatch		Washington	Wayne	Weber	Outside Utah
Beaver	1,357	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	1,420
Box Elder	0	10,755	286	0	0	392	0	0	0	22	0	0	0	0	0	0	124	0	0	0	0	0	0	0	0	0	0	0	1,063	109	12,751
Cache	0	921	20,306	0	0	145	0	0	0	0	0	0	0	0	0	0	157	0	0	0	0	0	35	13	0	0	0	0	414	334	22,325
Carbon	0	11	0	7,376	0	0	11	791	0	0	0	0	0	0	0	0	48	0	0	0	0	0	0	26	0	0	0	0	0	59	8,322
Daggett	0	0	0	0	228	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	271
Davis	0	49	0	0	0	33,019	0	0	0	23	0	0	0	0	19	24	18,094	0	0	0	23	24	0	105	0	0	0	6,893	620	58,893	
Duchesne	0	0	0	0	0	0	3,699	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	248	17	38	0	0	26	137	4,175	
Emery	0	0	0	294	0	0	0	3,330	0	74	0	0	0	0	0	0	14	0	0	0	0	0	0	16	0	0	0	0	56	3,784	
Garfield	0	0	0	0	0	0	0	0	1,146	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	1,248	
Grand	0	0	0	0	0	0	0	73	14	2,997	0	0	0	0	0	0	15	296	0	0	0	0	0	0	0	0	0	0	71	3,466	
Iron	20	0	0	0	0	0	0	0	30	0	6,252	0	14	14	0	0	32	0	0	0	0	0	0	0	0	0	90	0	95	6,547	
Juab	0	0	0	24	0	0	0	0	0	0	0	1,662	0	0	0	0	44	0	37	0	0	28	0	146	0	0	0	0	48	1,989	
Kane	0	0	0	0	0	0	0	0	10	0	0	0	967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	347	1,324	
Millard	0	0	0	0	0	0	0	0	0	0	0	30	0	3,034	0	0	17	0	0	11	0	0	0	12	0	0	0	61	3,165		
Morgan	0	0	0	0	0	265	0	0	0	0	0	0	0	0	847	0	115	0	0	0	46	0	0	0	0	0	0	469	52	1,794	
Piute	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	336	0	0	0	52	0	0	0	0	0	0	0	0	20	408	
Rich	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	593	0	0	0	0	0	0	0	0	0	0	0	272	865	
Salt Lake	0	123	0	0	0	4,829	37	53	0	0	0	47	0	0	0	0	253,728	0	0	0	513	1,876	0	1,037	49	0	0	1,779	2,478	266,549	
San Juan	0	0	0	0	0	0	0	12	0	53	0	0	15	0	0	0	0	3,229	0	0	0	0	0	0	0	0	0	0	237	3,546	
Sanpete	0	0	0	20	0	0	264	0	0	0	53	0	10	0	0	38	0	3,929	152	0	0	0	87	0	0	0	0	73	4,626		
Sevier	0	0	0	0	0	0	98	0	0	0	10	0	40	0	0	24	13	29	4,973	0	0	0	0	0	23	0	0	89	5,299		
Summit	0	0	0	13	0	0	24	0	0	0	0	0	0	86	0	1,039	0	0	0	3,175	0	0	10	22	0	0	41	182	4,592		
Tooele	0	25	12	0	0	40	0	0	32	0	0	0	0	0	0	1,062	0	0	0	18	8,633	0	0	0	0	0	119	308	10,249		
Uintah	0	0	0	0	0	0	583	11	0	0	0	0	14	0	0	12	0	0	0	16	0	6,353	0	38	0	13	36	272	7,348		
Utah	0	0	31	246	0	104	0	127	0	31	18	215	0	21	0	0	5,520	25	24	0	16	209	0	68,491	17	0	0	34	731	75,860	
Wasatch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	296	0	0	0	439	0	19	291	2,074	0	0	0	89	3,208		
Washington	0	0	0	0	0	0	0	0	0	0	133	0	10	0	0	79	0	0	0	0	0	0	0	0	0	7,744	0	0	417	8,383	
Wayne	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	540	0	37	617		
Weber	0	924	64	0	0	11,376	0	0	0	0	0	0	0	148	0	2,900	0	0	0	35	0	34	16	0	0	0	42,396	734	58,627		
In-State Total	1,377	12,808	20,699	7,973	228	50,170	4,330	4,794	1,224	3,232	6,413	2,017	1,021	3,133	1,100	336	617	283,368	3,563	4,019	5,204	4,281	10,770	6,689	70,267	2,238	7,857	553	53,270	8,100	581,651
Outside Utah	17	174	516	14	31	71	11	63	13	66	12	0	64	27	0	0	20	1,011	273	76	0	64	117	34	242	0	16	14	71	3,017	

Source: U.S. Bureau of the Census, BEBR Calculations

Figure 7
In-Commuting to Salt Lake County: 1980

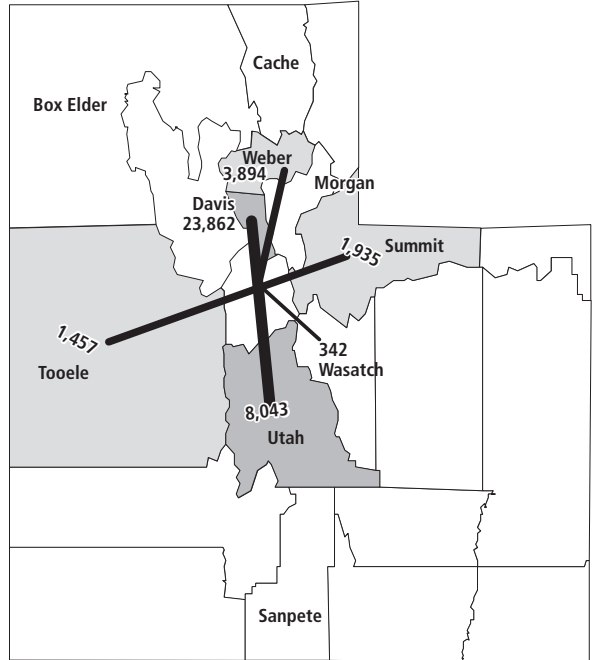
For Values of 250 or Greater



Source: Bureau of the Census; and Avenue Script by Adam Sobek, Digit Lab, University of Utah

Figure 8
In-Commuting to Salt Lake County: 1990

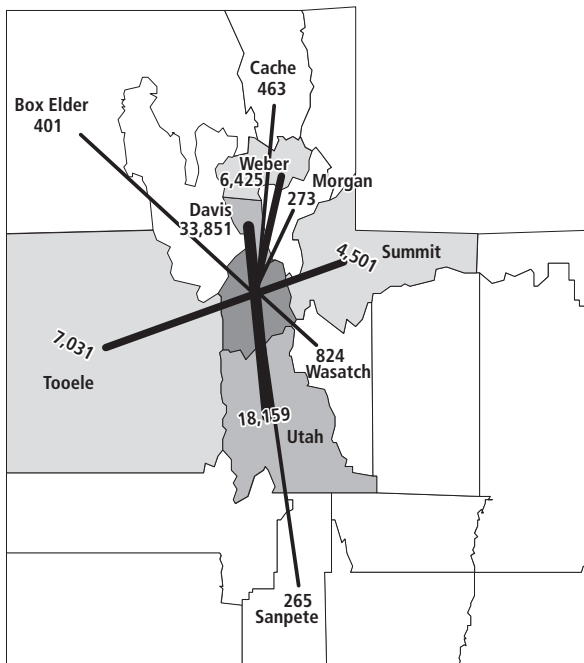
For Values of 250 or Greater



Source: Bureau of the Census; and Avenue Script by Adam Sobek, Digit Lab, University of Utah

Figure 9
In-Commuting to Salt Lake County: 2000

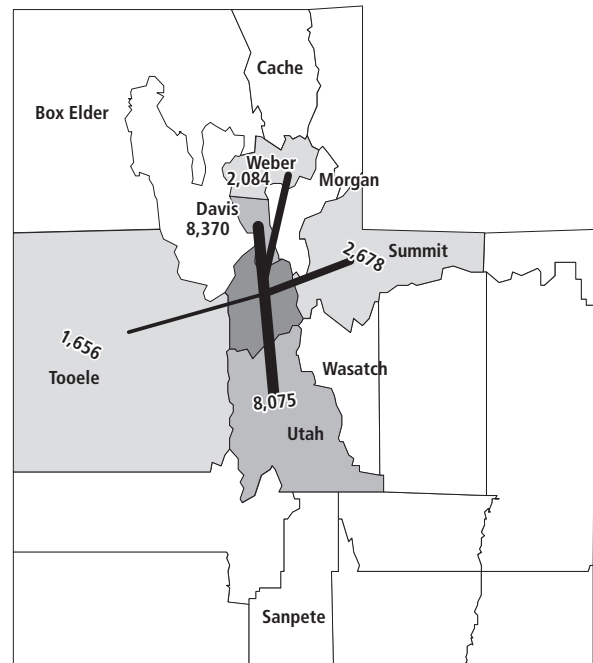
For Values of 250 or Greater



Source: Bureau of the Census; and Avenue Script by Adam Sobek, Digit Lab, University of Utah

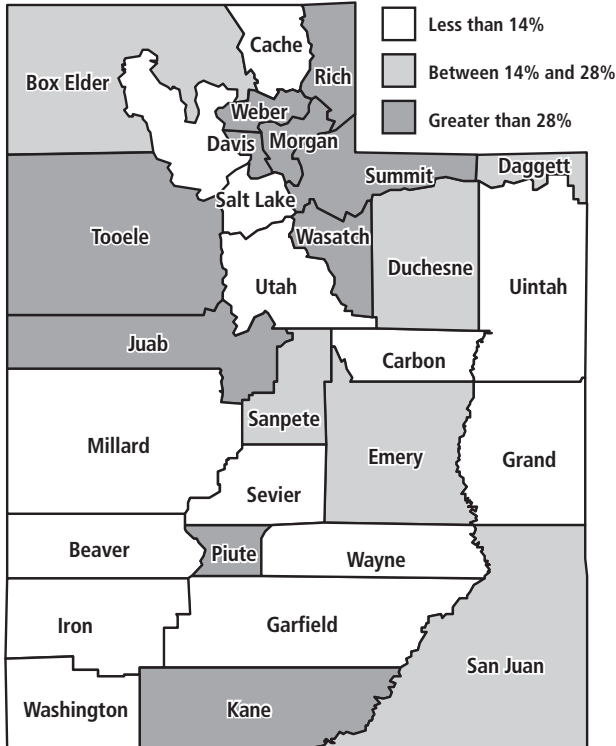
Figure 10
Out-Commuting from Salt Lake County: 2000

For Values of 250 or Greater



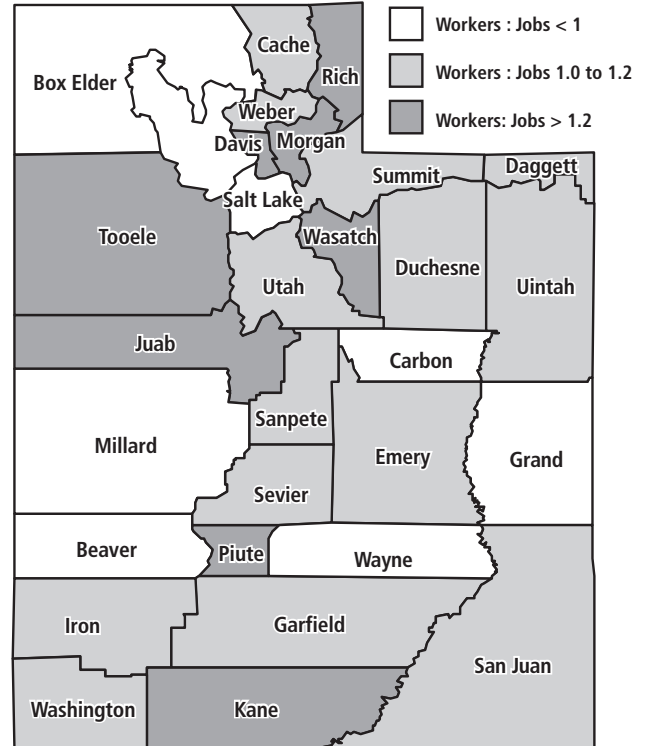
Source: Bureau of the Census; and Avenue Script by Adam Sobek, Digit Lab, University of Utah

Figure 11
Out-Commuting Rates: 2000



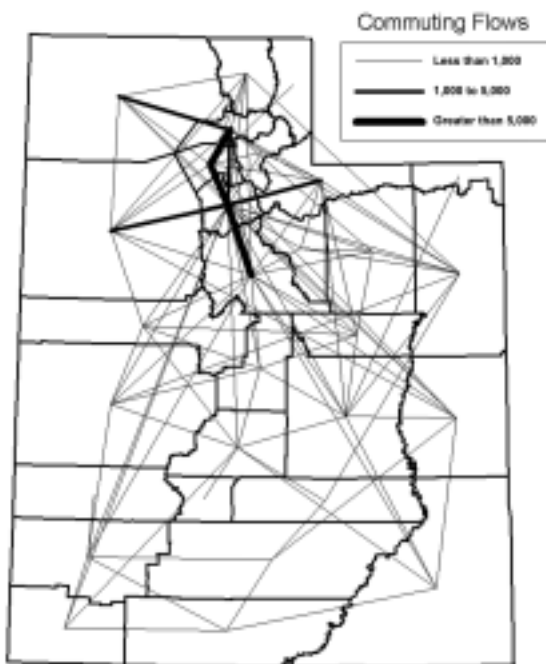
Source: Bureau of the Census data, BEBR Calculations

Figure 12
Worker to Job Ratios by County: 2000



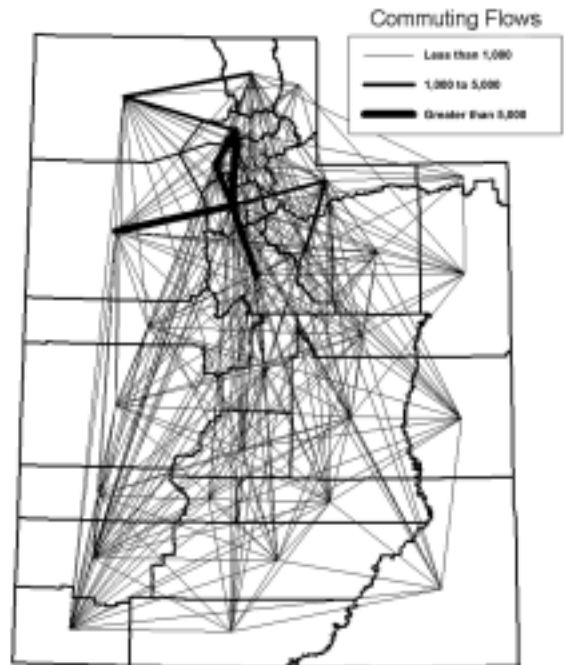
Source: Bureau of the Census data, BEBR Calculations

Figure 13
In-State County-to-County Commuting: 1980



Sources: Bureau of the Census; and Avenue Script by Adam Sobek, Digit Lab, University of Utah

Figure 14
In-State County-to-County Commuting: 2000



Sources: Bureau of the Census; and Avenue Script by Adam Sobek, Digit Lab, University of Utah

Bureau of Economic and Business Research
University of Utah
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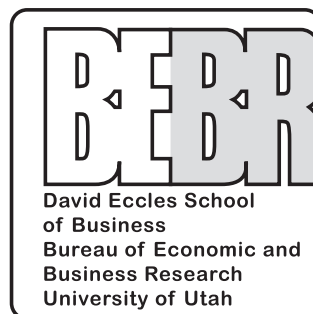
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