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Highlights

- In 2008, farming accounted for just 0.25 percent of total personal income (\$218 million) in Utah and 0.47 percent of gross state product (\$511 million). The number of farms in the state has increased 30 percent since 1975 to 16,500 in 2008.
- In 2007 there were 608,637 acres of farmland in 4,259 farms in the Wasatch Front counties of Weber, Davis, Salt Lake, and Utah. This represented 25.5 percent of the state's farms but just 5.5 percent of its total farmland.
- Despite an overall loss of 434,000 acres of farmland between 1974 and 2007, the total number of farms along the Wasatch Front grew more than 20 percent.
- In 2007, 78 percent of Wasatch Front farms were under 50 acres and only 4 percent were 500 acres or more. Median farm sizes varied from 7 acres in Salt Lake County to 15 acres in Weber County.
- Most farms along the Wasatch Front are sole proprietorships. In 2007, shares ranged from 73 percent of farms in Salt Lake County to 84 percent in Utah County.
- The share of farm operators who are primarily farmers has diminished. In 1974, roughly 42 to 46 percent of Wasatch Front farm operators claimed farming as their primary occupation. By 2007, shares ranged from 33 to 38.5 percent.
- Small family farms—farms with sales under \$250,000 and organized as sole proprietorships, family partnerships, or family corporations—make up almost 93 percent of all farms on the Wasatch Front and account for more than 58 percent of all farmland.
- The Wasatch Front generated 17 percent of Utah's agricultural sales in 2007. Utah County alone accounted for 12 percent of statewide sales, while each of the other three counties provided 2 percent or less.
- In the four Wasatch Front counties, realized net income, net farm proprietors' income, and total farm labor and proprietors' income were all lower in 2007 than in 1974, and have been negative in all but Utah County since at least 2002.
- In 2007, a total of 610 Wasatch Front farms had direct sales to consumers (e.g., farmers' markets, roadside stands, etc.) of \$4.3 million, representing 1.6 percent of the total value of agricultural products sold.
- In 2007, 154 farms in Utah had more than 86,000 acres under organic production, with a total of \$7.3 million of organic products sold. On the Wasatch Front, 44 farms had 7,787 acres under organic production with more than \$586,000 in sales.

Utah's Urban Farmers: Agricultural Activity on the Wasatch Front

John C. Downen, Research Analyst

Agriculture in Utah carries roughly half the relative economic weight that it does nationwide. In 2008, farming accounted for just 0.25 percent of total personal income (\$218 million) in Utah and 0.47 percent of gross state product (\$511 million); nationally it contributed 0.61 percent of personal income and 0.91 percent of gross domestic product (Table 1). Nonetheless, since bottoming out at 12,600 in 1975, the number of farms in Utah has increased 30 percent to 16,500 in 2008. In contrast, the number of farms nationwide has fallen fairly steadily since 1950, reaching a low of less than 2.1 million in 2006 then increasing slightly to 2.2 million in 2008 (Figure 1 and Table 2).

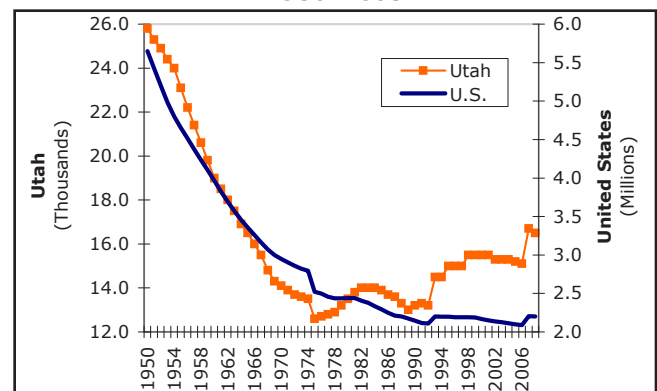
The average farm in Utah is considerably larger than the national average. However, after

Table 1
2008 Farm Share of Personal Income and Gross Domestic Product: Utah and the U.S.
(Millions)

| | Utah | U.S. |
|------------------------|-----------|--------------|
| Total Personal Income | \$87,411 | \$12,225,589 |
| Total Farm Income | \$218 | \$74,498 |
| Farm Share | 0.25% | 0.61% |
| Gross Domestic Product | \$109,777 | \$14,165,565 |
| Farm Production | \$511 | \$128,903 |
| Farm Share | 0.47% | 0.91% |

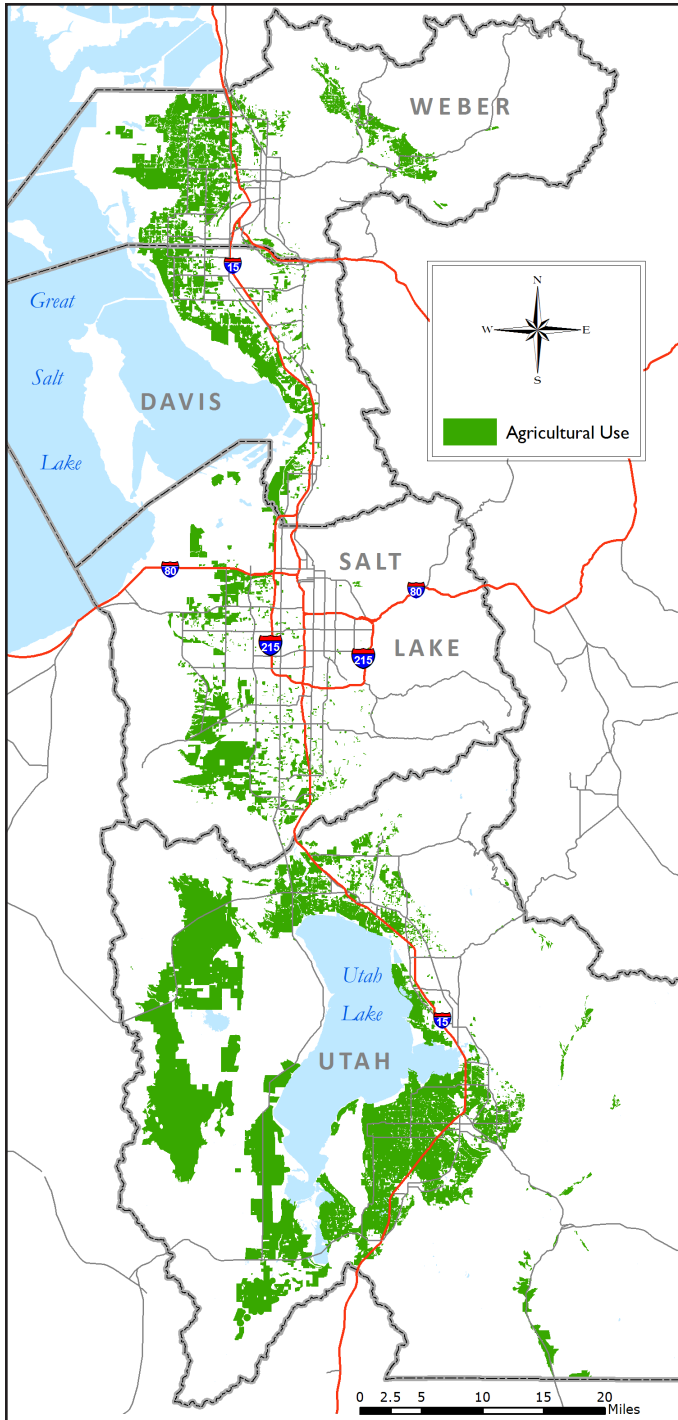
Farm production values are extrapolated from 2007 figures.
Source: U.S. Bureau of Economic Analysis.

Figure 1
Number of Farms: Utah and the United States, 1950–2008



Source: Economic Research Service/USDA Farm Income Data Files.

**Map 1
Wasatch Front Agricultural Land**



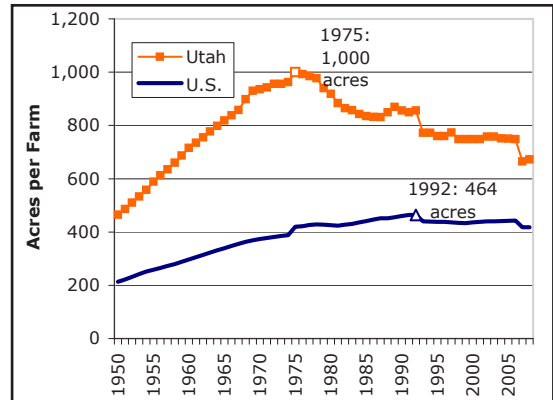
Source: BEBR and Utah Automated Geographic Reference Center.

diverging from at least 1950 through the mid-1970s, average farm sizes have been converging. Utah's farms peaked in 1975 at an average of 1,000 acres and have since shrunk to 673 acres. Nationwide, average farm sizes grew more slowly and peaked in 1992 at 464 acres; they have been relatively stable since, reaching 418 acres in 2008 (Figure 2 and Table 2).

Changes in the amount of land in farms in both Utah and the United States, while sharing the same overall trend, have also exhibited some noticeable differences. From 1950 to their peaks

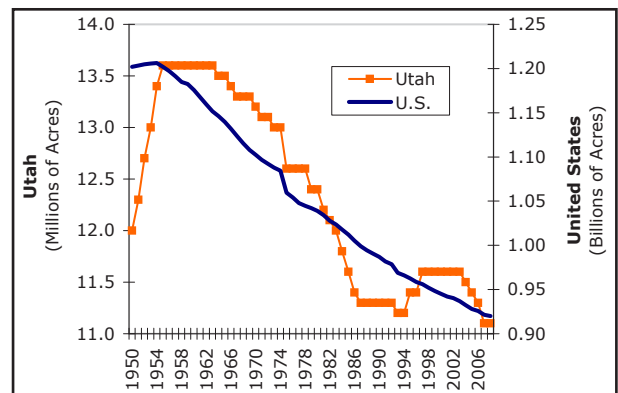
in 1955 and 1954, respectively, Utah farmland grew 13 percent while U.S. farmland increased only 0.4 percent. Both have declined roughly 20 percent since then, though Utah saw an increase in total farm acreage between 1994 and 1997 before falling again from 2003 to 2007 (Figure 3 and Table 2).

**Figure 2
Average Farm Size: Utah and the United States, 1950–2008**



Source: Economic Research Service/USDA Farm Income Data Files.

**Figure 3
Land in Farms: Utah and the United States, 1950–2008**



Source: Economic Research Service/USDA Farm Income Data Files.

Organic and locally produced foods have grown in popularity in recent years, both at restaurants and on grocery store shelves. Farmers' markets too have grown in number and attendance. And with the economic downturn home gardens have gained popularity as a source of food. All of this has brought more attention to the role of agriculture in urban areas.

In the fall of 2009, the Salt Lake County Council approved a plan to convert unused and underused county-owned land to community gardens until it is needed for parks or infrastructure. A press release from Utah State University Cooperative Extension quoted County Mayor Peter Corroon as saying, "In the new parks Salt Lake County purchased, we will set aside land for farming or gardening. In our existing regional parks, we are now master planning in areas for community gardens."¹

1. "USU Extension Co-Sponsors Urban Farming Conference," available at <http://extension.usu.edu/htm/news/articleID=7137>.

This study examines urban farming along Utah's Wasatch Front. It covers agricultural activity in Weber, Davis, Salt Lake, and

| | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2008 | Change |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| Number of Farms | | | | | | | | |
| Utah | 25,800 | 19,000 | 14,100 | 13,500 | 13,200 | 15,500 | 16,500 | -7.5% |
| U.S. | 5,647,800 | 3,962,520 | 2,949,140 | 2,439,510 | 2,145,820 | 2,166,780 | 2,200,000 | -23.5% |
| Average Farm Size | | | | | | | | |
| Utah | 465 | 716 | 936 | 919 | 856 | 748 | 673 | -36.0% |
| U.S. | 213 | 297 | 374 | 426 | 460 | 436 | 418 | -61.0% |
| Land in Farms (000s of Acres) | | | | | | | | |
| Utah | 12,000 | 13,600 | 13,200 | 12,400 | 11,300 | 11,600 | 11,100 | 44.6% |
| U.S. | 1,202,019 | 1,175,646 | 1,102,371 | 1,038,885 | 986,850 | 945,080 | 919,900 | 96.5% |

Source: Economic Research Service/USDA Farm Income Data Files.

71 percent were under 50 acres and 11 percent were 180 acres or larger. These shares were fairly constant for the next decade, but by 2007 78 percent of Wasatch

Utah counties using data from the USDA's Census of Agriculture from 1974 to 2007. It begins by looking at the amount of farmland and farms, as well as the distribution of farm sizes. Next we consider farm ownership and operator characteristics, noting that most farms on the Wasatch Front are sole proprietorships. The study then turns to farm finances, based on data from the U.S. Bureau of Economic Analysis, and an analysis of direct sales and current organic practices. A summary concludes the piece.

Farmland and Farms

The Census of Agriculture defines a farm as any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. The definition has changed nine times since it was established in 1850. The current definition was first used for the 1974 census and has been used in each subsequent agricultural census.

In 2007 there were 608,637 acres of farmland in 4,259 farms in the Wasatch Front counties of Weber, Davis, Salt Lake, and Utah. This represented 25.5 percent of the state's farms but just 5.5 percent of its total farmland, indicating that these urban farms are much smaller than in the rest of the state. The average Wasatch Front farm is 143 acres, compared with the statewide average of 664 acres. The median Wasatch Front farm is between 7 and 15 acres versus the statewide median of 36 acres.

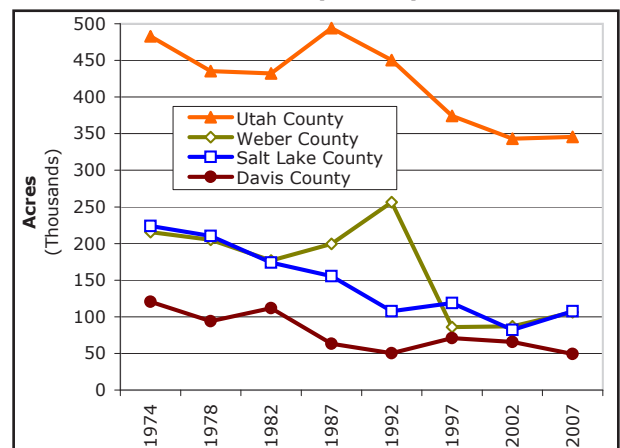
The total amount of land in farms on the Wasatch Front shrank by 464,500 acres between 1974 and 2002, from over 1 million acres to 578,100. However, from 2002 to 2007 there was a small rebound, with a net increase of 30,500 acres of farmland. This is rather remarkable considering it took place in the context of nearly continuous growth in new residential construction. Between 2002 and 2007 more than 92,600 new dwelling units were constructed along the Wasatch Front to accommodate an additional 245,100 residents.

Despite the overall decline in farmland between 1974 and 2007, the total number of farms along the Wasatch Front grew more than 20 percent, from 3,490 to 4,259. However, this was not steady growth. The number of farms peaked in 1997 at 4,476 and has been declining since. Average farm size fell from 299 acres in 1974 to 143 acres in 2007, which was larger than in 2002 because of the recent growth in farmland. Most farms are much smaller. In 1974, 58 percent of Wasatch Front farms were less than 50 acres and less than 15 percent were 180 acres or larger. By 1982

Front farms were under 50 acres and only 4 percent were 500 acres or more. The median farm sizes in 2007 were 15 acres in Weber County, 13 acres in Utah County, 10 acres in Davis County, and just 7 acres in Salt Lake County.

Looking at the individual counties reveals some significant variation in trends (Table 3). While all four counties lost farmland over the study period—137,100 acres in Utah County, 116,500 in Salt Lake County, 109,200 in Weber County, and 71,200 acres in Davis County—three of the counties contributed to the growth in farmland that occurred between 2002 and 2007 (Figure 4). Salt Lake County added 25,200 acres in farms,² Weber County farmland increased by 19,300 acres, and Utah County saw an additional 2,600 agricultural acres. Davis was the only county to miss out on this trend, losing 16,600 farm acres from 2002 to 2007.

**Figure 4
Total Land in Farms by County, 1974–2007**



Source: U.S. Department of Agriculture, 1974–2007 Censuses of Agriculture.

Utah County has had and continues to have the largest amount of farmland by far, with 345,600 acres in 2007. Salt Lake and Weber counties have less than one-third as much, with 107,500 and 106,200 acres, respectively. Finally, Davis County has less than half as much as these, with just 49,300 acres in 2007. In 1974 the share of counties' total land area that was in agriculture ranged

2. Note that this is based on the USDA's Census of Agriculture. According to the Salt Lake County Assessor, "greenbelt" acres have declined steadily since at least 1995, with increases of only 770 acres from 2000 to 2001 and 600 acres from 2008 to 2009. In order for land to be considered greenbelt, it must be at least five contiguous acres and the owner must receive some benefit from agricultural activity.

Table 3
Wasatch Front Farms, Land in Farms, and Farm Size: 1974-2007

| | 1974 | | 1978 | | 1982 | | 1987 | | 1992 | | 1997 | | 2002 | | 2007 | | Change | |
|-------------------------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|----------|---------|
| | Number | Share | Number | Share | Number | Share | Number | Share | Number | Share | Number | Share | Number | Share | Number | Share | Number | Percent |
| Weber County | | | | | | | | | | | | | | | | | | |
| Farms | 712 | | 777 | | 905 | | 891 | | 945 | | 1,081 | | 1,012 | | 1,001 | | 289 | 40.6% |
| Land in Farms* (acres) | 215,421 | 57.9% | 205,236 | 55.2% | 176,953 | 48.9% | 199,496 | 55.1% | 256,522 | 69.6% | 85,781 | 23.3% | 86,913 | 23.6% | 106,247 | 28.9% | -109,174 | -50.7% |
| Average Size | 303 | | 264 | | 196 | | 224 | | 271 | | 79 | | 86 | | 106 | | -196 | -64.9% |
| Farms by Size | | | | | | | | | | | | | | | | | | |
| 1-9 acres | 98 | 13.8% | 131 | 16.9% | 226 | 25.0% | 218 | 24.5% | 238 | 25.2% | 378 | 35.0% | 359 | 35.5% | 355 | 35.5% | 257 | 262.2% |
| 10-49 acres | 287 | 40.3% | 327 | 42.1% | 400 | 44.2% | 405 | 45.5% | 401 | 42.4% | 440 | 40.7% | 397 | 39.2% | 429 | 42.9% | 142 | 49.5% |
| 50-179 acres | 225 | 31.6% | 216 | 27.8% | 193 | 21.3% | 176 | 19.8% | 201 | 21.3% | 169 | 15.6% | 166 | 16.4% | 147 | 14.7% | -78 | -34.7% |
| 180-499 acres | 65 | 9.1% | 75 | 9.7% | 60 | 6.6% | 57 | 6.4% | 71 | 7.5% | 73 | 6.8% | 62 | 6.1% | 47 | 4.7% | -18 | -27.7% |
| 500-999 acres | 25 | 3.5% | 13 | 1.7% | 14 | 1.5% | 20 | 2.2% | 21 | 2.2% | 13 | 1.2% | 15 | 1.5% | 12 | 1.2% | -13 | -52.0% |
| 1,000+ acres | 12 | 1.7% | 15 | 1.9% | 12 | 1.3% | 15 | 1.7% | 13 | 1.4% | 8 | 0.7% | 13 | 1.3% | 11 | 1.1% | -1 | -8.3% |
| Davis County | | | | | | | | | | | | | | | | | | |
| Farms | 581 | | 565 | | 660 | | 647 | | 582 | | 653 | | 582 | | 496 | | -85 | -14.6% |
| Land in Farms* (acres) | 120,441 | 63.4% | 94,151 | 49.5% | 111,721 | 58.3% | 63,244 | 33.0% | 50,357 | 25.8% | 70,796 | 36.3% | 65,857 | 33.8% | 49,279 | 25.8% | -71,162 | -59.1% |
| Average Size | 207 | | 167 | | 169 | | 98 | | 87 | | 108 | | 113 | | 99 | | -108 | -52.1% |
| Farms by Size | | | | | | | | | | | | | | | | | | |
| 1-9 acres | 96 | 16.5% | 139 | 24.6% | 219 | 33.2% | 205 | 31.7% | 192 | 33.0% | 258 | 39.5% | 229 | 39.3% | 230 | 46.4% | 134 | 139.6% |
| 10-49 acres | 265 | 45.6% | 218 | 38.6% | 251 | 38.0% | 256 | 39.6% | 221 | 38.0% | 238 | 36.4% | 239 | 41.1% | 182 | 36.7% | -83 | -31.3% |
| 50-179 acres | 152 | 26.2% | 144 | 25.5% | 122 | 18.5% | 126 | 19.5% | 116 | 19.9% | 88 | 13.5% | 63 | 10.8% | 51 | 10.3% | -101 | -66.4% |
| 180-499 acres | 44 | 7.6% | 44 | 7.8% | 51 | 7.7% | 44 | 6.8% | 42 | 7.2% | 51 | 7.8% | 37 | 6.4% | 26 | 5.2% | -18 | -40.9% |
| 500-999 acres | 15 | 2.6% | 16 | 2.8% | 11 | 1.7% | 9 | 1.4% | 7 | 1.2% | 16 | 2.5% | 8 | 1.4% | 4 | 0.8% | -11 | -73.3% |
| 1,000+ acres | 9 | 1.5% | 4 | 0.7% | 6 | 0.9% | 7 | 1.1% | 4 | 0.7% | 2 | 0.3% | 6 | 1.0% | 3 | 0.6% | -6 | -66.7% |
| Salt Lake County | | | | | | | | | | | | | | | | | | |
| Farms | 592 | | 660 | | 805 | | 734 | | 686 | | 705 | | 712 | | 587 | | -5 | -0.8% |
| Land in Farms* (acres) | 223,957 | 45.8% | 210,478 | 43.0% | 174,172 | 36.0% | 155,398 | 32.1% | 107,663 | 22.8% | 118,657 | 25.1% | 82,267 | 17.4% | 107,477 | 22.8% | -116,480 | -52.0% |
| Average Size | 378 | | 319 | | 216 | | 212 | | 157 | | 168 | | 116 | | 183 | | -195 | -51.6% |
| Farms by Size | | | | | | | | | | | | | | | | | | |
| 1-9 acres | 173 | 29.2% | 239 | 36.2% | 360 | 44.7% | 353 | 48.1% | 310 | 45.2% | 367 | 52.1% | 372 | 52.2% | 316 | 53.8% | 143 | 82.7% |
| 10-49 acres | 216 | 36.5% | 233 | 35.3% | 279 | 34.7% | 244 | 33.2% | 236 | 34.4% | 204 | 28.9% | 214 | 30.1% | 151 | 25.7% | -65 | -30.1% |
| 50-179 acres | 134 | 22.6% | 121 | 18.3% | 114 | 14.2% | 85 | 11.6% | 96 | 14.0% | 77 | 10.9% | 75 | 10.5% | 57 | 9.7% | -77 | -57.5% |
| 180-499 acres | 35 | 5.9% | 32 | 4.8% | 26 | 3.2% | 28 | 3.8% | 24 | 3.5% | 33 | 4.7% | 29 | 4.1% | 28 | 4.8% | -7 | -20.0% |
| 500-999 acres | 10 | 1.7% | 11 | 1.7% | 11 | 1.4% | 7 | 1.0% | 4 | 0.6% | 6 | 0.9% | 7 | 1.0% | 14 | 2.4% | 4 | 40.0% |
| 1,000+ acres | 24 | 4.1% | 24 | 3.6% | 15 | 1.9% | 17 | 2.3% | 16 | 2.3% | 18 | 2.6% | 15 | 2.1% | 21 | 3.6% | -3 | -12.5% |
| Utah County | | | | | | | | | | | | | | | | | | |
| Farms | 1,605 | | 1,612 | | 1,848 | | 1,723 | | 1,696 | | 2,037 | | 2,046 | | 2,175 | | 570 | 35.5% |
| Land in Farms* (acres) | 482,754 | 37.5% | 435,317 | 33.8% | 432,326 | 33.5% | 493,902 | 38.2% | 450,315 | 35.2% | 374,086 | 29.2% | 343,072 | 26.8% | 345,634 | 27.0% | -137,120 | -28.4% |
| Average Size | 301 | | 270 | | 234 | | 287 | | 266 | | 184 | | 168 | | 159 | | -142 | -47.2% |
| Farms by Size | | | | | | | | | | | | | | | | | | |
| 1-9 acres | 273 | 17.0% | 319 | 19.8% | 542 | 29.3% | 475 | 27.6% | 475 | 28.0% | 665 | 32.6% | 821 | 40.1% | 857 | 39.4% | 584 | 213.9% |
| 10-49 acres | 633 | 39.4% | 638 | 39.6% | 712 | 38.5% | 655 | 38.0% | 644 | 38.0% | 777 | 38.1% | 684 | 33.4% | 793 | 36.5% | 160 | 25.3% |
| 50-179 acres | 430 | 26.8% | 396 | 24.6% | 342 | 18.5% | 360 | 20.9% | 333 | 19.6% | 344 | 16.9% | 292 | 14.3% | 276 | 12.7% | -154 | -35.8% |
| 180-499 acres | 157 | 9.8% | 150 | 9.3% | 146 | 7.9% | 129 | 7.5% | 134 | 7.9% | 139 | 6.8% | 142 | 6.9% | 133 | 6.1% | -24 | -15.3% |
| 500-999 acres | 45 | 2.8% | 51 | 3.2% | 44 | 2.4% | 51 | 3.0% | 46 | 2.7% | 50 | 2.5% | 54 | 2.6% | 70 | 3.2% | 25 | 55.6% |
| 1,000+ acres | 67 | 4.2% | 58 | 3.6% | 62 | 3.4% | 53 | 3.1% | 64 | 3.8% | 62 | 3.0% | 53 | 2.6% | 46 | 2.1% | -21 | -31.3% |

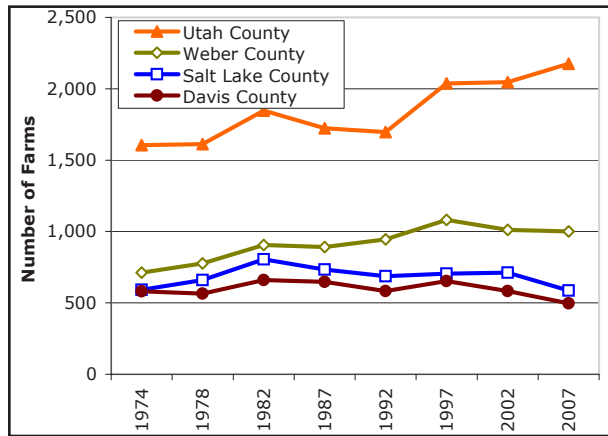
* The entire acreage of a farm is tabulated as in the county in which the headquarters is located, even though a part of the farm may be situated in an adjoining county. Counties are arranged from north to south.
Source: U.S. Department of Agriculture, 1974-2007 Censuses of Agriculture.

from 37.5 percent in Utah County to 46 percent in Salt Lake County, 58 percent in Davis County, and 63 percent in Weber County. By 2007 these shares had shrunk and converged to within six percentage points of each other. Farmland accounted for just 23 percent of Salt Lake County's land area and only 29 percent of Weber County's. Davis and Utah counties were in the middle at 26 and 27 percent, respectively.

Utah and Weber counties were the only counties to see overall growth in the number of farms over the study period. The number of Utah County farms increased from 1,605 in 1974 to 2,175 in 2007, and those in Weber County grew from 712 to 1,001. The number of farms in Salt Lake County grew from 592 in 1974 to 805 in 1982, fell to 686 in 1992, grew modestly to 712 in 2002, then fell again to 587 in 2007 for a net loss over the period. Davis County underwent a similar pattern, beginning with 581 farms in 1974, peaking at 660 in 1982, declining then peaking again at 653 in 1997, and ultimately finishing lower with 496 farms in 2007 (Figure 5).

To provide some context for these recent changes, between 2002 and 2007 Salt Lake County's population grew by 91,300 residents, Weber County grew by 17,400, Utah County grew by 95,500, and Davis County added 40,900 people. Davis is the smallest of the four counties in land area, with 191,200 acres, and has a relatively high population density with 1.55 persons per acre. This makes it difficult for the county to accommodate both population growth and expanding agriculture. Weber and Salt Lake counties are roughly comparable in land area, with 368,100 acres and 471,900 acres respectively. Weber was able to increase both its population and its farmland because of its low population density, with just 0.6 person per acre in 2007. Salt Lake County

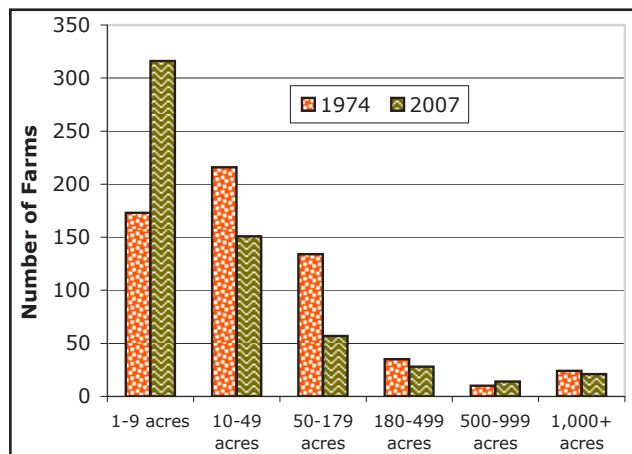
Figure 5
Number of Farms by County, 1974–2007



Source: U.S. Department of Agriculture, 1974–2007 Censuses of Agriculture.

of the Wasatch Front counties has grown, the size of their farms has tended to shrink. This becomes particularly evident when we examine the change in distribution of farms by size over time (Table 3). As noted above, the median farm sizes along the Wasatch Front in 2007 were 15 acres in Weber County, 13 acres in

Figure 6
Size Distribution of Salt Lake County Farms, 1974 and 2007



Source: U.S. Department of Agriculture, 1974 and 2007 Censuses of Agriculture.

has the highest population density at 2.16 persons per acre; thus it is all the more remarkable that agricultural land increased in the county from 2002 to 2007 (but see footnote 2, above). Utah County is the largest of the four, with almost 1.3 million acres, and its density is the lowest, with only 0.39 person per acre, providing plenty of room for the growth of both agriculture and population (Table 4).

Agricultural activity in urban settings is constrained by competing demands for scarce land. Not surprisingly, then, most urban farms are quite small. As the population of the Wasatch Front counties has grown, the size of their farms has tended to shrink. This becomes particularly evident when we examine the change in distribution of farms by size over time (Table 3). As noted above, the median farm sizes along the Wasatch Front in 2007 were 15 acres in Weber County, 13 acres in Utah County, 10 acres in Davis County, and just 7 acres in Salt Lake County.

In Salt Lake County more than half (54 percent) of all farms in 2007 were smaller than 10 acres; almost 80 percent were under 50 acres. This was not the case in 1974. Then, 29 percent of Salt Lake County farms were under 10 acres and fewer than two-thirds were under 50 acres. More than one-fifth, almost 23 percent, were between 50 and 179 acres. Interestingly, both the number and share of very large farms, those 1,000 acres and more, were similar in 1974 and 2007. In 1974 there were 24 of these largest farms,

representing 4.1 percent of all farms in the county; in 2007 there were 21, representing 3.6 percent of all farms—the largest share of the four Wasatch Front counties. And the number of large farms in 2007 was 40 percent more than in 2002, when there were 15. In addition, the number of Salt Lake County farms between 500 and 999 acres peaked in 2007 with 14 farms. This was 40

Table 4
Population Change Along the Wasatch Front, 1974–2007

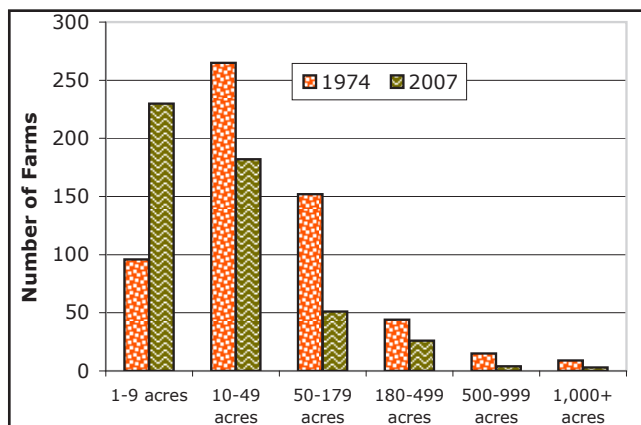
| County | 1974 | 1978 | 1982 | 1987 | 1992 | 1997 | 2002 | 2007 | Change | | '07 Density pers. per acre |
|------------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-------------------------------|
| | | | | | | | | | Number | Percent | |
| Davis County | 119,900 | 134,900 | 158,000 | 179,000 | 201,158 | 224,356 | 255,099 | 296,029 | 176,129 | 146.9% | 1.55 |
| Salt Lake County | 504,500 | 576,600 | 659,000 | 710,000 | 775,306 | 858,306 | 927,564 | 1,018,904 | 514,404 | 102.0% | 2.16 |
| Utah County | 171,100 | 203,100 | 232,000 | 252,000 | 279,635 | 334,658 | 405,977 | 501,447 | 330,347 | 193.1% | 0.39 |
| Weber County | 130,100 | 138,800 | 151,000 | 156,000 | 166,390 | 186,993 | 203,377 | 220,781 | 90,681 | 69.7% | 0.60 |
| Wasatch Front | 925,600 | 1,053,400 | 1,200,000 | 1,297,000 | 1,422,489 | 1,604,313 | 1,792,017 | 2,037,161 | 1,111,561 | 120.1% | 0.88 |

Source: Utah Population Estimates Committee and U.S. Department of Agriculture 2007 Census of Agriculture (land area).

percent more than in 1974 and twice as many as in 2002 (Table 3 and Figure 6).

Farms in Davis County also shifted toward smaller operations. In 1974 just 16.5 percent of the county's farms, 96 farms, were smaller than 10 acres and 62 percent were under 50 acres; almost 46 percent, 265 farms, were between 10 and 49 acres, the most populous category. By 2007 the share of farms under 10 acres had nearly tripled to 46 percent and the number had more than doubled to 230, while 37 percent, 182 farms, were between 10 and 49 acres. Thus the share of farms in Davis County that were smaller than 50 acres had increased to 83 percent over the study period. Unlike in Salt Lake County, the number and share of farms that were larger decreased between 1974 and 2007. There were 15 farms of 500 to 999 acres each and 9 farms of 1,000 acres or more in 1974. These represented 2.6 percent and 1.5 percent of all farms, respectively. In 2007 there were only 4 farms in the 500–999-acre range and 3 in the 1,000-plus range; together, these represented less than 1.5 percent of all farms (Table 3 and Figure 7).

Figure 7
Size Distribution of Davis County Farms, 1974 and 2007



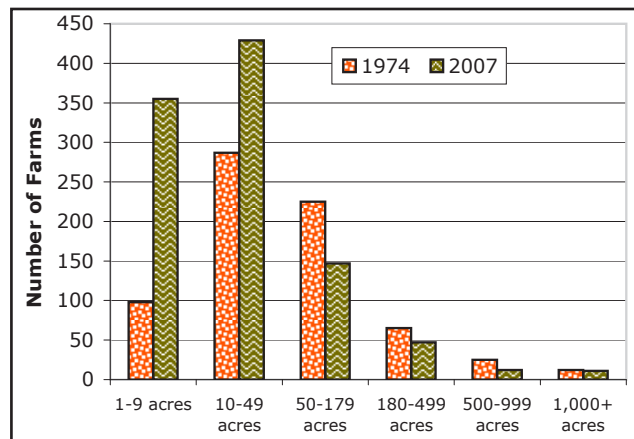
Source: U.S. Department of Agriculture, 1974 and 2007 Censuses of Agriculture.

The move toward smaller farms in Weber County was not quite as dramatic as in Salt Lake and Davis counties. The share of Weber farms in the smallest category, those less than 10 acres, grew from 14 percent in 1974 to 35.5 percent in 2007, from 98 farms to 355. However, the share of farms between 10 and 49 acres was not much different in 2007 than in 1974, at 43 percent and 40 percent, respectively. This remained the most populous category, with an increase from 287 to 429 farms. At the larger end of the distribution, the number of farms in the 500–999-acre range fell from 25 to 12, and from 3.5 percent to 1.2 percent of the total. The number of very large farms, those 1,000 acres or more, was practically unchanged in 2007 at 11. Their share of the total shrank slightly from 1.7 percent to 1.1 percent (Table 3, above, and Figure 8).

Utah County had the second-fastest growth in very small farms over the study period, behind only Weber County. The number of farms under 10 acres increased 214 percent, from 273 in 1974 to 857 in 2007. In fact, Utah County was the only Wasatch Front county in which the number of farms increased in three of the five size categories. Like Salt Lake County, Utah County saw significant growth in the 500–999-acre range, from 45 farms in

1974 to 70 in 2007. Not only did Utah County have the most farms of this size, it also had the largest share of farms this size at 3.2 percent. The number of farms between 10 and 49 acres also grew, from 633 to 793. The share of farms smaller than 50 acres increased from 56 percent in 1974 to 76 percent in 2007, with the share under 10 acres more than doubling from 17 percent to 39 percent (Table 3, above, and Figure 9).

Figure 8
Size Distribution of Weber County Farms, 1974 and 2007



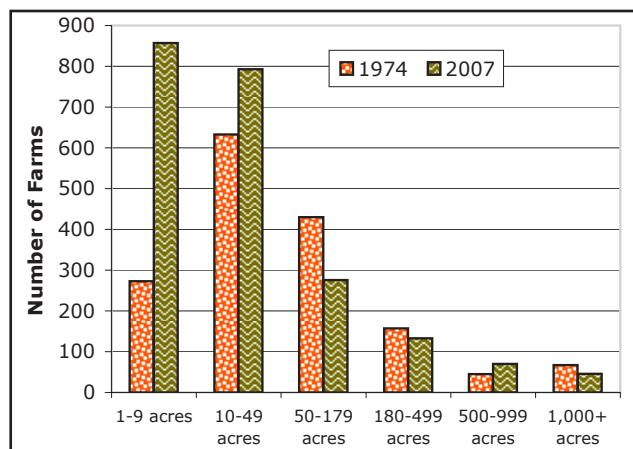
Source: U.S. Department of Agriculture, 1974 and 2007 Censuses of Agriculture.

Farm Ownership and Operations

Table 5 provides data on farm ownership and farm operator characteristics. Most farms along the Wasatch Front are sole proprietorships owned by individuals or families. The lowest share of sole proprietorships in 2007 was in Salt Lake County, where 73 percent of farms were individual or family owned. In Davis County the share was 81 percent; 82.5 percent of farms in Weber County were sole proprietorships; and in Utah County the share was 84 percent. The national average was 86.5 percent.

These rates are also lower than they were in 1974, with Salt Lake County seeing the largest reduction. Note that the number of

Figure 9
Size Distribution of Utah County Farms, 1974 and 2007



Source: U.S. Department of Agriculture, 1974 and 2007 Censuses of Agriculture.

**Table 5
Wasatch Front Farm Ownership and Operations: 1974–2007**

| | 1974* No. Share | 1978 No. Share | 1982 No. Share | 1987 No. Share | 1992 No. Share | 1997 No. Share | 2002 No. Share | 2007 No. Share | Change Amount Percent |
|------------------------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|
| Weber County | | | | | | | | | |
| Total Farms | 712 | 777 | 905 | 891 | 945 | 1,081 | 1,012 | 1,001 | 289 40.6% |
| Individual or Family-Owned Farms | 389 89.6% | 661 85.1% | 756 83.5% | 751 84.3% | 783 82.9% | 898 83.1% | 887 87.6% | 826 82.5% | 437 112.3% |
| Principal Operator Characteristics | | | | | | | | | |
| Full Owner | 460 64.6% | 477 61.4% | 583 64.4% | 575 64.5% | 598 63.3% | 716 66.2% | 717 70.8% | 708 70.7% | 248 53.9% |
| Farming is Primary Occupation | 319 46.4% | 312 40.2% | 329 36.4% | 353 39.6% | 387 41.0% | 370 34.2% | 424 41.9% | 338 33.8% | 19 6.0% |
| Live on Farm Operated | 455 66.1% | 563 72.5% | 667 73.7% | 659 74.0% | 694 73.4% | 826 76.4% | 780 77.1% | 801 80.0% | 346 76.0% |
| Average Age | 53.9 | 53.2 | 52.9 | 55.2 | 55.9 | 55.5 | 57.0 | 58.7 | |
| Davis County | | | | | | | | | |
| Total Farms | 581 | 565 | 660 | 647 | 582 | 653 | 582 | 496 | -85 -14.6% |
| Individual or Family-Owned Farms | 299 86.4% | 465 82.3% | 545 82.6% | 543 83.9% | 474 81.4% | 500 76.6% | 479 82.3% | 401 80.8% | 102 34.1% |
| Principal Operator Characteristics | | | | | | | | | |
| Full Owner | 346 59.6% | 328 58.1% | 397 60.2% | 408 63.1% | 351 60.3% | 401 61.4% | 383 65.8% | 329 66.3% | -17 -4.9% |
| Farming is Primary Occupation | 235 41.6% | 230 40.7% | 249 37.7% | 245 37.9% | 244 41.9% | 217 33.2% | 291 50.0% | 191 38.5% | -44 -18.7% |
| Live on Farm Operated | 356 63.0% | 391 69.2% | 449 68.0% | 445 68.8% | 392 67.4% | 434 66.5% | 446 76.6% | 364 73.4% | 8 2.2% |
| Average Age | 55.3 | 54.2 | 54.9 | 56.5 | 58.1 | 57.0 | 58.0 | 61.1 | |
| Salt Lake County | | | | | | | | | |
| Total Farms | 592 | 660 | 805 | 734 | 686 | 705 | 712 | 587 | -5 -0.8% |
| Individual or Family-Owned Farms | 344 84.5% | 533 80.8% | 661 82.1% | 605 82.4% | 571 83.2% | 564 80.0% | 612 86.0% | 426 72.6% | 82 23.8% |
| Principal Operator Characteristics | | | | | | | | | |
| Full Owner | 378 63.9% | 421 63.8% | 530 65.8% | 489 66.6% | 446 65.0% | 488 69.2% | 557 78.2% | 453 77.2% | 75 19.8% |
| Farming is Primary Occupation | 257 46.2% | 251 38.0% | 256 31.8% | 256 34.9% | 228 33.2% | 234 33.2% | 290 40.7% | 192 32.7% | -65 -25.3% |
| Live on Farm Operated | 360 64.7% | 444 67.3% | 535 66.5% | 505 68.8% | 462 67.3% | 478 67.8% | 539 75.7% | 405 69.0% | 45 12.5% |
| Average Age | 53.6 | 51.9 | 51.5 | 53.8 | 55.5 | 56.8 | 57.1 | 58.8 | |
| Utah County | | | | | | | | | |
| Total Farms | 1,605 | 1,612 | 1,848 | 1,723 | 1,696 | 2,037 | 2,046 | 2,175 | 570 35.5% |
| Individual or Family-Owned Farms | 959 90.4% | 1,387 86.0% | 1,574 85.2% | 1,466 85.1% | 1,442 85.0% | 1,750 85.9% | 1,832 89.5% | 1,826 84.0% | 867 90.4% |
| Principal Operator Characteristics | | | | | | | | | |
| Full Owner | 1,088 67.8% | 1,097 68.1% | 1,216 65.8% | 1,106 64.2% | 1,044 61.6% | 1,369 67.2% | 1,436 70.2% | 1,590 73.1% | 502 46.1% |
| Farming is Primary Occupation | 670 43.3% | 621 38.5% | 709 38.4% | 691 40.1% | 687 40.5% | 712 35.0% | 906 44.3% | 740 34.0% | 70 10.4% |
| Live on Farm Operated | 854 55.2% | 1,026 63.6% | 1,209 65.4% | 1,132 65.7% | 1,104 65.1% | 1,411 69.3% | 1,489 72.8% | 1,626 74.8% | 772 90.4% |
| Average Age | 52.2 | 52.1 | 52.0 | 53.9 | 55.4 | 55.2 | 55.8 | 56.6 | |

* In 1974, figures for individual or family-owned farms are only for those farms with sales of \$2,500 or more. Thus the reported numbers most likely underestimate the actual numbers. The reported share of individual or family-owned farms in 1974 is the percent of farms with sales of \$2,500 or more, not of all farms. Principal operator characteristics in 1974, other than the figures for full owners, apply only to individual or family operations (sole proprietorships) and partnerships. These represented 93.9% to 97.2% of all farms. Counties are listed north to south.
Source: U.S. Department of Agriculture, 1974–2007 Censuses of Agriculture.

individual and family farm proprietorships in 1974 counts only farms with sales of \$2,500 or more. Such farms represented 60 to 70 percent of all farms in each of the counties. The remaining farms, those with sales less than \$2,500, are more likely to be sole proprietorships than partnerships or corporations. Thus, the actual number and share of sole proprietorships in 1974 are most likely even higher than indicated.

In 1974, at least 84.5 percent of Salt Lake County's farms were individual or family proprietorships, and in 2002 the share was even higher at 86 percent. As noted above, between 2002 and 2007 there was a gain of 25,200 acres of farmland in Salt Lake County but a loss of 125 farms. This loss was entirely among small and medium-sized farms. The number of farms smaller than 500 acres fell by 138 over the five-year period, but the number of farms 500 acres or larger increased by 13. These larger farms are more likely to be corporately owned, whereas smaller farms are more likely sole proprietorships. Thus, the decline in individual and family ownership could account for the shift in the size distribution of Salt Lake County farms between 2002 and 2007.

At least 86 percent of farms in Davis County were individual or family proprietorships in 1974. This fell to about 77 percent in 1997, then rebounded to 82 percent in 2002 before reaching its current share of 81 percent. Utah and Weber counties had the highest rates of sole proprietorship in 1974, accounting for at least 90 percent of their farms. In Utah County proprietors' share shrank to 85 percent in 1992, then jumped back up to almost 90 percent in 2002 before settling to its current rate of 84 percent. Weber County saw individual and family ownership decline to 83 percent of all farms in 1992, rebound to almost 88 percent in 2002, then shrink again to its current level of 82.5 percent.

Despite the decline in sole proprietorships, the share of farms run by operators who are full owners—that is, individually owned farms—was higher in 2007 than in 1974. According to the USDA's definition, “the operator may be the owner, a member of the owner's household, a hired manager, a tenant, a renter, or a sharecropper.” Beginning in 2002 the agricultural census began collecting data on multiple operators. Thus the principal operator is “the person primarily responsible for the on-site, day-to-day operation of the farm or ranch business. This person may be a hired manager or business manager.”³

In 1974, the share of farms run by operators who were full owners ranged from less than 60 percent in Davis County to just under 68 percent in Utah County. In Salt Lake and Weber counties the shares were 64 percent and almost 65 percent, respectively. By 2007 the share of farms that are individually owned had increased in every county. In Davis County nearly two-thirds of all farms are owned by their principal operator. In Weber County 71 percent are, and in Utah County 73 percent are. More than three-quarters, 77 percent, of farms in Salt Lake County are owned by their principal operator. This is larger than the share under family or individual ownership, which implies that some individual owner-operators may be organized as corporations. Although the share of farms run by owner-operators grew in all

four counties, the number actually shrank in Davis County, from 346 to 329 after reaching as high as 408 in 1987. This is not surprising considering that Davis County also saw the largest decline in the number of farms over the study period.

Looking at some of the characteristics of these farm operators, the share who are primarily farmers has diminished over time. In 1974, roughly 42 percent to 46 percent of Wasatch Front farm operators claimed farming as their primary occupation.⁴ By 2007, the largest share was in Davis County, where 38.5 percent of principal operators were primarily farmers. In Weber and Utah counties, 34 percent of farm operators declared farming as their primary occupation, and in Salt Lake County the share was less than 33 percent. On the one hand as revenues from farming have shrunk, farmers have had to look off the farm for additional sources of income. On the other hand, the growth in the number and share of very small farms along the Wasatch Front, those under 10 acres, indicates an increasing number of “hobby” farmers and those who farm to augment incomes from other jobs and for their own consumption.

This is supported by the fact that, despite the decline in farm operators for whom farming is their primary occupation, there has been an increase in the share of principal operators who live on the farms they operate. In 1974, 55 percent (in Utah County) to 66 percent (in Weber County) of farm operators lived on the farm they operated. By 2007 this had grown to between 69 percent (in Salt Lake County) and 80 percent (in Weber County). While the shares in Weber and Utah (75 percent) counties are the highest they've been over the study period, those in Davis (73 percent) and Salt Lake are below their shares in 2002.

The average age of principal operators declined slightly in all four counties between 1974 and 1982, then saw a marked rise between 1982 and 1987. Since 1987 the average age of farm operators has continued to increase. In 2007, the average principal operator in Utah County was over 56 years old, about four-and-a-half years older than in 1982. In Weber and Salt Lake counties the average age was almost 59 years, six and seven years older, respectively, than in 1982. At 61, Davis County farm operators were also about six years older than in 1982, and the oldest on the Wasatch Front. Note, however, that the population as a whole has also been aging. Between 1980 and 2000, median ages increased by 1.2 years in Utah County, 3.3 years in Weber County, 3.5 years in Salt Lake County, and 4.3 years in Davis County. Also, except in Utah County, the share of the population aged 50 years and older has been increasing.

For the first time in 2007 the *Census of Agriculture* included data cross-tabulated by the USDA Economic Research Service's farm typologies. These are divided into two major groups: small family farms with sales of less than \$250,000, and other farms. Within the small family farm group there are five subcategories. These are defined as follows:

Limited-resource farms have market value of agricultural products sold of less than \$100,000, and total principal operator household income of less than \$20,000.

3. USDA, National Agricultural Statistics Service, *2007 Census of Agriculture*, Appendix B, pp. B-17 and B-20; available at http://www.agcensus.usda.gov/Publications/2007/Full_Report/index.asp.

4. Note that 1974 data on operator characteristics—primary occupation, place of residence, and age—apply only to individual or family operations (sole proprietorships) and partnerships. These represented 94 to 97 percent of all farms.

**Table 6
Small Family Farms and Nonfamily Farms on the Wasatch Front in 2007**

| Typology | Weber | | Davis | | Salt Lake | | Utah | | Wasatch Front | |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|
| | Farms | Share | Farms | Share | Farms | Share | Farms | Share | Farms | Share |
| Small Family Farms | 947 | 94.6% | 457 | 92.1% | 537 | 91.5% | 2,008 | 92.3% | 3,949 | 92.7% |
| Limited-Resource | 138 | 13.8% | 43 | 8.7% | 108 | 18.4% | 307 | 14.1% | 596 | 14.0% |
| Retirement | 247 | 24.7% | 158 | 31.9% | 129 | 22.0% | 472 | 21.7% | 1,006 | 23.6% |
| Residential/Lifestyle | 452 | 45.2% | 198 | 39.9% | 258 | 44.0% | 995 | 45.7% | 1,903 | 44.7% |
| Farming Occupation/Lower Sales | 96 | 9.6% | 50 | 10.1% | 38 | 6.5% | 212 | 9.7% | 396 | 9.3% |
| Farming Occupation/Higher Sales | 14 | 1.4% | 8 | 1.6% | 4 | 0.7% | 22 | 1.0% | 48 | 1.1% |
| Nonfamily Farms | 35 | 3.5% | 22 | 4.4% | 42 | 7.2% | 112 | 5.1% | 211 | 5.0% |
| Farmland | Acres | Share | Acres | Share | Acres | Share | Acres | Share | Acres | Share |
| Small Family Farms | 56,231 | 52.9% | 13,782* | 28.0% | 77,424* | 72.0% | 207,855 | 60.1% | 355,292* | 58.4% |
| Limited-Resource | 6,792 | 6.4% | 902 | 1.8% | 10,110 | 9.4% | 24,454 | 7.1% | 42,258 | 6.9% |
| Retirement | 14,418 | 13.6% | 4,563 | 9.3% | 6,750 | 6.3% | 44,213 | 12.8% | 69,944 | 11.5% |
| Residential/Lifestyle | 27,340 | 25.7% | 5,875 | 11.9% | 60,564 | 56.4% | 67,212 | 19.4% | 160,991 | 26.5% |
| Farming Occupation/Lower Sales | 4,707 | 4.4% | (D) | NA | (D) | NA | 32,791 | 9.5% | 37,498* | 6.2% |
| Farming Occupation/Higher Sales | 2,974 | 2.8% | 2,442 | 5.0% | (D) | NA | 39,185 | 11.3% | 44,601* | 7.3% |
| Nonfamily Farms | (D) | NA | (D) | NA | 21,980 | 20.5% | 63,834 | 18.5% | 85,814* | 14.1% |

Shares are of all farms and of all farmland, respectively. * Actual amounts and associated shares are larger due to nondisclosed data. (D) Withheld to avoid disclosing data for individual farms. NA: Not applicable.
Source: U.S. Department of Agriculture, 2007 Census of Agriculture.

Retirement farms have sales of less than \$250,000 and a principal operator who is retired.

Residential/lifestyle farms have sales of less than \$250,000 and a principal operator whose primary occupation is not farming. *Farming occupation/lower-sales* farms have agricultural product sales of less than \$100,000 and a principal operator whose primary occupation is farming.

Farming occupation/higher-sales farms have sales of between \$100,000 and \$249,999 and a principal operator whose primary occupation is farming.

The other farm types are large family farms with sales of \$250,000 to \$499,999, very large family farms with sales of \$500,000 or more, and nonfamily farms organized as corporations or operated by hired managers.⁵ Note that family farms can be organized as family partnerships or family corporations, as well as sole proprietorships.

Table 6 shows the distribution of small family farms and farmland by type and county. Small family farms make up almost 93 percent of all farms on the Wasatch Front and account for more than 58 percent of all farmland. Weber County has the largest share of family farms at almost 95 percent, while Salt Lake County, with the lowest share, is not far behind at 91.5 percent. However, the greatest share of land in small family farms is in Salt Lake County, where they account for more than 72 percent of all farmland.⁶ Weber County, on the other hand, has only 53 percent of its farmland in small family farms. In Davis County 92 percent of all farms are small family farms, but they represent only slightly more than 28 percent of the county's farmland.⁷ In Utah County also, 92 percent of its farms are small family farms, but they represent 60 percent of the county's farmland.

5. USDA, National Agricultural Statistics Service, *2007 Census of Agriculture*, Appendix B, p. B-9; available at http://www.agcensus.usda.gov/Publications/2007/Full_Report/index.asp.

6. Acreage was not disclosed for the two farming occupation categories, of which there is a total of 42 farms.

7. Acreage was not disclosed for farming occupation/lower sales farms in Davis. There are 50 such farms, but because they have lower sales they likely have smaller acreage.

Within small family farms, the largest subcategory across all counties is residential/lifestyle farms. These are 40 percent of all farms in Davis County, 44 percent of Salt Lake County farms, 45 percent of Weber County farms, and almost 46 percent of farms in Utah County. While they are also the largest subcategory of farmland, their shares show much more variation by county. Along the Wasatch Front about 161,000 acres are in residential farms, just 26.5 percent of all farmland. In Salt Lake County, residential farms represent 56 percent of all land in farms. They account for more than 25 percent of the farmland in Weber County and almost 20 percent of the agricultural land in Utah County. In Davis County, just 12 percent of the farmland is in residential farms.

Retirement farms are the second largest type of small family farm. They represent almost 24 percent of the farms on the Wasatch Front, but only 11.5 percent of the agricultural land. Retirement farms in Davis County make up 32 percent of all farms, but account for just 9 percent of the county's farmland. In Weber and Utah counties, retirement farms compose 22 to 25 percent of the farms and 13 to 14 percent of the agricultural land. In Salt Lake County they also represent 22 percent of all farms, but just 6 percent of the county's farmland.

Limited-resource farms, where the principal operator's household income is less than \$20,000 and agricultural sales are under \$100,000, make up significant shares of farms in Salt Lake, Utah, and Weber counties. They represent 18 percent of Salt Lake County's farms and 14 percent of the farms in both Utah and Weber counties. Not surprisingly, their shares of the farmland are much smaller, at 9 percent of Salt Lake County's agricultural land, 7 percent of Utah County's, and 6 percent of Weber County's.

Farm Finances

The Bureau of Economic Analysis tracks annual farm income and expenses at the county level back to 1969. To facilitate comparisons with the Census of Agriculture data, we confined our analysis to the period 1974 to 2007. All dollar amounts are adjusted for inflation.

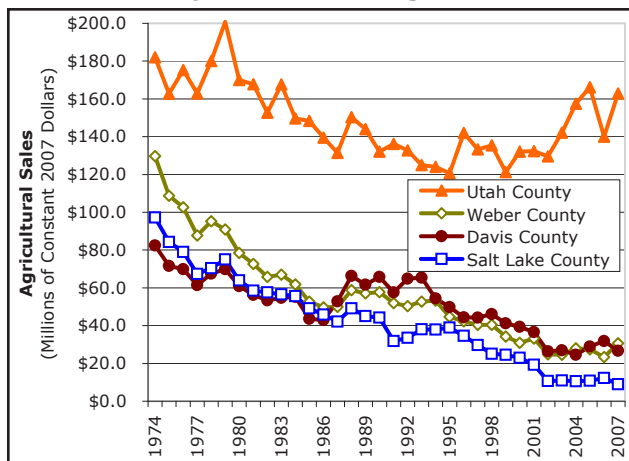
The Wasatch Front generated 17 percent of Utah's agricultural sales in 2007. Utah County alone accounts for 12 percent of statewide sales, while each of the other counties account for 2 percent or less. However, in 1974 Wasatch Front farms received 31 percent of gross agricultural sales in the state. Utah County's share was slightly lower at 11 percent, but Weber, Salt Lake, and Davis counties' shares were all considerably higher at 8 percent, 6 percent, and 5 percent respectively (Table 7).

Every Wasatch Front county has seen a decline in revenues from the sale of agricultural products (what the BEA calls "cash receipts from marketings") over the study period. Salt Lake County's 2007 farming revenues of \$9.0 million were less than one-tenth of their 1974 level. Weber County's revenues declined more than three-quarters to \$30.6 million, and Davis County's fell more than two-thirds to \$26.7 million. Utah County, however, was down only 10.5 percent from 1974 to \$162.9 million.

Despite this long-run decline, three of the four counties saw sales growth between 2002 and 2007. In Utah County agricultural sales grew by \$33.3 million, 26 percent, over the five-year period and in Weber County sales were \$5.7 million, 23 percent, higher in 2007 than in 2002. Davis County's 2007 farm sales were up by just \$321,000 over 2002 but were about \$5.1 million lower than in 2006 (Table 7 and Figure 10).

The sources of farms' sales have changed over time (Table 7 and Figures 11 to 14). In Davis and Salt Lake counties, where the change has been most dramatic, agricultural activity has shifted from primarily livestock, poultry, and their products to crops. In 1974 livestock and poultry accounted for more than two-thirds of the total value of agricultural products sold in Davis County, with the remainder coming from crops. By 2007, livestock and poultry provided just 5 percent of sales, with crops accounting for 95 percent (Figure 11). In Salt Lake County the change has been similar. Livestock and poultry also supplied more than two-

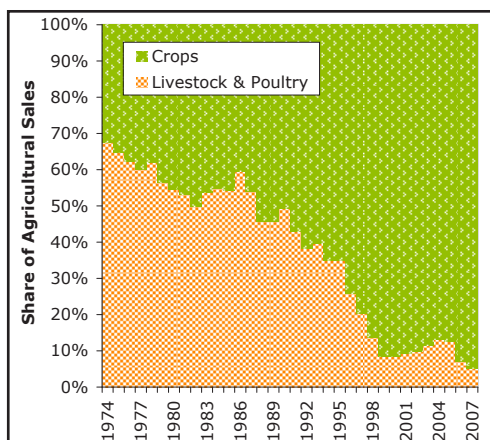
Figure 10
Cash Receipts from Marketings, 1974–2007



Source: Bureau of Economic Analysis, Regional Economic Information System.

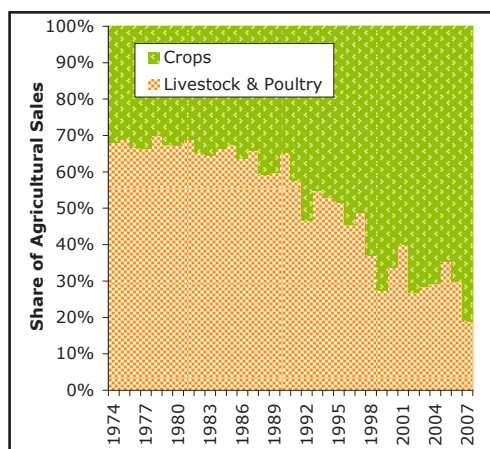
with crops providing the remaining 40 percent. From the late 1970s through 1990, livestock and poultry's share of sales was between 70 and 75 percent. It then fell to less than half in 2003 but by 2007 had returned to 60 percent (Figure 14).

Figure 11
Sources of Sales in Davis County, 1974–2007



Source: BEBR calculations based on BEA data.

Figure 12
Sources of Sales in Salt Lake County, 1974–2007



Source: BEBR calculations based on BEA data.

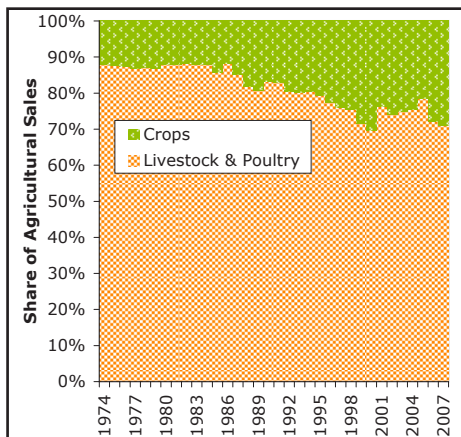
thirds of total agricultural product sales in 1974, but by 2007 accounted for only about one-fifth (Figure 12).

In Weber County, while crops have increased their share of total agricultural sales, livestock and poultry remain the major source of receipts. In 1974, livestock and poultry accounted for nearly 90 percent of the value of farm sales; in 2007 they supplied 70 percent of sales receipts (Figure 13).

Utah County has seen a somewhat different pattern. In 1974, livestock and poultry and their products contributed 60 percent of the value of all agricultural products sold, with crops providing the remaining 40 percent. From the late 1970s through 1990, livestock and poultry's share of sales was between 70 and 75 percent. It then fell to less than half in 2003 but by 2007 had returned to 60 percent (Figure 14).

Detailed commodity sales data were not reported in a consistent format over the study period, so we analyzed only those from the most recent census (Table 8). As noted above, in 2007 agricultural sales in Davis and Salt Lake counties were primarily crops. In Davis County, nurseries, greenhouses, floriculture, and sod brought in \$24.9 million in sales, representing two-thirds of total sales. Vegetables, melons, potatoes, and sweet potatoes accounted for \$3.0 million (8 percent of total sales) and grains, oilseeds, dry beans, and dry peas accounted for \$1.3 million (3.5 percent). There were also \$2.4 million of cattle and calves sold and \$2.1 million of horses, ponies, mules, and donkeys, representing roughly 6 percent of total sales each. Similarly, Salt Lake County's largest disclosed category was nurseries, greenhouses, floriculture, and sod, whose \$14.7 million in sales represented 69 percent of total agricultural sales. Sales of grains, oilseeds, and dry beans and peas amounted to \$566,000 and less than 3 percent of total sales. Within animal products, the largest disclosed categories were \$1.3 million in sales of other animals and other animal products (6 percent of the total) and \$891,000 of horses, ponies, mules, and donkeys (4 percent). There were 100 farms with cattle and calf sales and 37 with sheep and goat sales, but the dollar amounts were not disclosed.

Figure 13
Sources of Sales in Weber County,
1974–2007



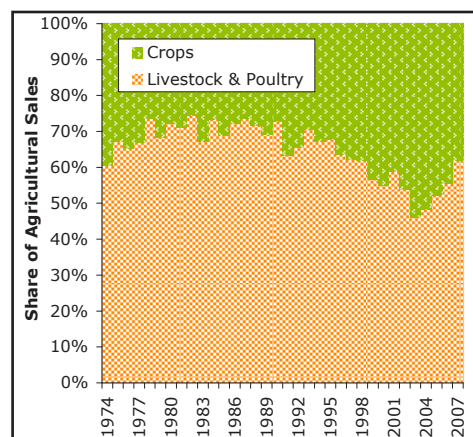
Source: BEBR calculations based on BEA data.

Agricultural sales in Weber and Utah counties were primarily from animals and animal products. Total livestock and poultry sales in Weber County amounted to \$20.8 million in 2007. Of this, \$14.8 million was from milk and other dairy products from cows, representing 45 percent of total sales in Weber County. The next largest reported animal category was horses, ponies, mules, and donkeys, with \$380,000 of sales, just 1 percent of sales. There were 312 farms with cattle and calf sales, 60 with poultry and egg sales, 24 with other animal sales, and 1 with aquaculture sales, but the dollar amounts were not disclosed. Nurseries, greenhouses, floriculture, and sod accounted for 14 percent of Weber's agricultural sales with \$4.5 million of goods sold. Hay and other crops represented 13 percent with \$4.1 million in sales. There were also \$1.7 million of vegetables, melons, potatoes, and sweet potatoes sold (5 percent of total sales) and \$1.4 million of grains, oilseeds, and dry beans and peas (4 percent). Utah County's largest reported categories were milk and other dairy products from cows, at \$55.7 million and 31 percent of total sales; nursery, greenhouse, floriculture, and sod, with \$37.4 million and 21

percent; and cattle and calves, with \$25.3 million and 14 percent. There was also \$13.4 million of other animals and other animal products sold and \$12.8 million of fruits, berries, and tree nuts; both categories represented about 7 percent of total sales.

Despite the decline in income from sales of farm products, other farm-related income rose between 1974 and 2007, with increases ranging from 12 percent in Salt Lake County to almost 170 percent in Utah County (Table 7, above). Other income includes government payments, the value of home consumption, and other farm-related sources such as machine hire and income from custom work. Over time these have become more significant sources of total farm-related income. In 1974, other income accounted for 3 percent or less of total farm income in the four study counties; in 2007 it represented 9 percent of total farm-related income in Davis and Utah, 14 percent in Weber, and 21 percent in Salt Lake. Of these shares, government payments are a small fraction, ranging from 0.3 percent of total farm income in Davis in 2007 to 1 percent in Utah and Weber to 2 percent in Salt Lake.

Figure 14
Sources of Sales in Utah County,
1974–2007



Source: BEBR calculations based on BEA data.

Table 8
Detailed Commodity Sales by County, 2007
(Thousands of Dollars)

| Commodity | Weber County | | | Davis County | | | Salt Lake County | | | Utah County | | |
|--|--------------|----------|-------|--------------|----------|-------|------------------|----------|-------|-------------|-----------|-------|
| | Farms | Sales | Share | Farms | Sales | Share | Farms | Sales | Share | Farms | Sales | Share |
| Total Sales | 1,001 | \$32,681 | 100% | 496 | \$37,246 | 100% | 587 | \$21,380 | 100% | 2,175 | \$181,729 | 100% |
| Crops | 529 | \$11,889 | 36.4% | 222 | \$31,280 | 84.0% | 209 | \$17,866 | 83.6% | 1,119 | \$68,795 | 37.9% |
| Grains, oilseeds, dry beans, dry peas | 90 | \$1,376 | 4.2% | 34 | \$1,288 | 3.5% | 19 | \$566 | 2.6% | 196 | \$6,995 | 3.8% |
| Vegetables, melons, potatoes | 41 | \$1,670 | 5.1% | 53 | \$3,029 | 8.1% | 54 | (D) | NA | 113 | (D) | NA |
| Fruits, berries, tree nuts | 34 | \$159 | 0.5% | 43 | (D) | NA | 22 | \$23 | 0.1% | 221 | \$12,792 | 7.0% |
| Nursery, greenhouse, floriculture, sod | 24 | \$4,526 | 13.8% | 33 | \$24,903 | 66.9% | 35 | \$14,669 | 68.6% | 36 | \$37,395 | 20.6% |
| Cut Christmas trees, woody crops | 7 | \$12 | 0.0% | 4 | (D) | NA | 4 | (D) | NA | 5 | \$2 | 0.0% |
| Hay and other crops | 451 | \$4,145 | 12.7% | 137 | (D) | NA | 123 | (D) | NA | 757 | (D) | NA |
| Livestock, Poultry, and Their Products | 463 | \$20,792 | 63.6% | 226 | \$5,966 | 16.0% | 261 | \$3,514 | 16.4% | 1,151 | \$112,935 | 62.1% |
| Poultry and eggs | 60 | (D) | NA | 38 | \$53 | 0.1% | 62 | \$58 | 0.3% | 173 | (D) | NA |
| Cattle and calves | 312 | (D) | NA | 102 | \$2,398 | 6.4% | 100 | (D) | NA | 666 | \$25,300 | 13.9% |
| Milk and other dairy from cows | 23 | \$14,776 | 45.2% | 3 | (D) | NA | 9 | \$39 | 0.2% | 35 | \$55,729 | 30.7% |
| Hogs and pigs | 12 | \$4 | 0.0% | 6 | \$6 | 0.0% | 19 | \$12 | 0.1% | 89 | \$619 | 0.3% |
| Sheep, goat, and their products | 53 | \$63 | 0.2% | 40 | \$61 | 0.2% | 37 | (D) | NA | 211 | (D) | NA |
| Horses, ponies, mules, donkeys | 120 | \$380 | 1.2% | 76 | \$2,071 | 5.6% | 80 | \$891 | 4.2% | 296 | \$1,967 | 1.1% |
| Aquaculture | 1 | (D) | NA | 0 | \$0 | 0.0% | 0 | \$0 | 0.0% | 4 | \$186 | 0.1% |
| Other animals and products | 24 | (D) | NA | 32 | (D) | NA | 37 | \$1,308 | 6.1% | 108 | \$13,395 | 7.4% |

Source: U.S. Department of Agriculture, 2007 Census of Agriculture.

While income from agricultural sales shrank over the study period, so too did total production expenses in most counties. In Weber and Salt Lake, expenses were more than 60 percent lower in 2007 than in 1974, and in Davis County they were about 40 percent lower (Table 7, above). These declines were led by reductions in feed and livestock purchased. In Utah County, total production expenses increased by 3 percent between 1974 and 2007, led by increased hired farm labor expenses. Despite the general decline in total expenses, there was one expense that increased in every county: seed purchased. Even in Utah and Weber counties, where crops are not the main source of

agricultural sales, expenditures on seed grew by 77 percent and 27 percent, respectively. Overall, the reductions in expenses were less than the declines in sales receipts in each of the counties.

In the four Wasatch Front counties, realized net income, net farm proprietors' income, and total farm labor and proprietors' income⁸ were all lower in 2007 than in 1974, and have been negative in all but Utah County since at least 2002 (Table 7, above). Farm proprietors' income declined in each county from 1974 into the mid-1980s and was often negative before improving in the early 1990s. It peaked in 1992–93 and has declined steadily since, in all but Utah County. In Utah County farm proprietors' income fell between 1992 and 1995, but has been generally higher since then, though with considerable volatility. In 2007 Davis, Salt Lake, and Weber county farm proprietors endured net losses of between \$11 and \$17 million, while in Utah County they earned net income of almost \$19 million (Figure 15). It is important to note, however, that net farm proprietors' income does not include the salaries received by the owner-operators of farm sole proprietorships, partnerships, and family-held

corporations. This is treated as an expense that is added back to total farm labor and proprietors' income. Unfortunately, the data do not allow the extraction of proprietors' salaries from hired workers' wages.

Agricultural product sales increased in Weber and Utah counties from 2006 to 2007, and this likely continued into 2008 due to rising commodity prices. Higher prices probably also raised cash receipts in Davis and Salt Lake counties in 2008. However, in 2009 the recession caught up with farmers, and preliminary data show incomes again declining.

It is evident that farm households, particularly the small farms of the Wasatch Front, rely on off-farm sources

of income. There are no data available at the state or county level, but the USDA does provide current and historical national estimates of farm operator household income based on its Agricultural Resource Management Survey and its predecessor, the Farm Costs and Returns Survey. In 1974 roughly 55 percent of farm household income came from nonfarm sources; in 2007 nonfarm sources provided 90 percent of total farm household income.

Obviously, in Davis, Salt Lake, and Weber counties, all of farm household income is currently from nonfarm sources, offset by farm-related income losses.

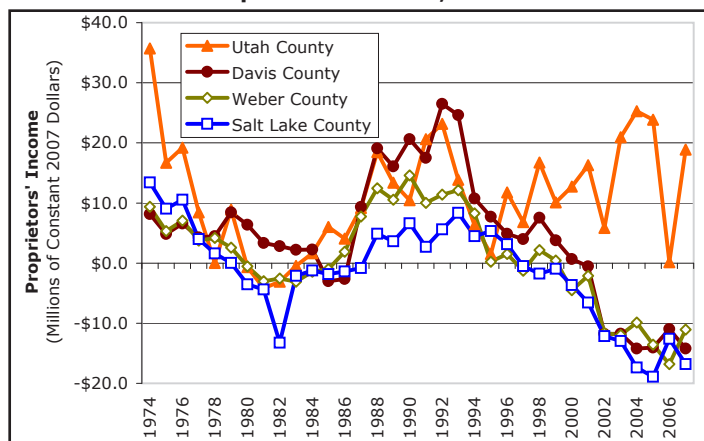
Despite the widespread decline in farm proprietors' income over the study period, in each county there were more farm proprietors⁹ in 2007 than in 1974. As Figure 16 reveals, all four counties saw significant growth in the number of proprietors between 1974 and 1983, followed by a decline through the end of the decade. In Utah and Weber counties,

proprietors' numbers grew again through about 1995 and have been fairly steady since, at roughly 1,850 and 1,050 respectively. In Salt Lake and Davis counties the number of farm proprietors was flat through the early 1990s, saw a small uptick in 1993 followed by a decline, and has hovered around 600 in each county since 1997.

Farm wages and salaries consist of the cash wages and pay-in-kind of hired laborers and the salaries received by the owner-operators of farm sole proprietorships, partnerships, and family-held corporations. In Utah and Davis counties wages and salaries grew

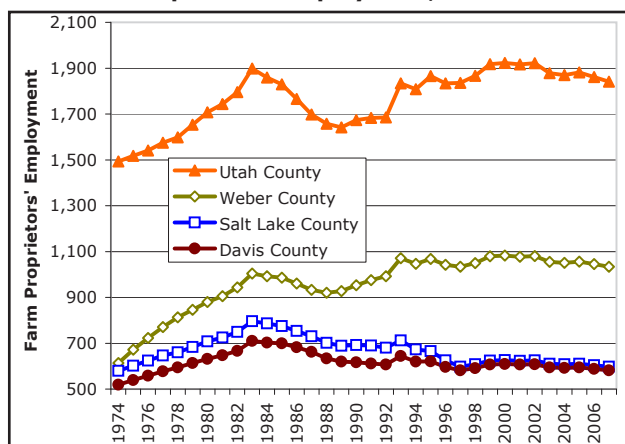
9. Note that the BEA defines farm proprietors as the number of non-corporate farm operators, which covers individual and family sole proprietorships as well as partnerships.

Figure 15
Farm Proprietors' Income, 1974–2007



Source: Bureau of Economic Analysis, Regional Economic Information System.

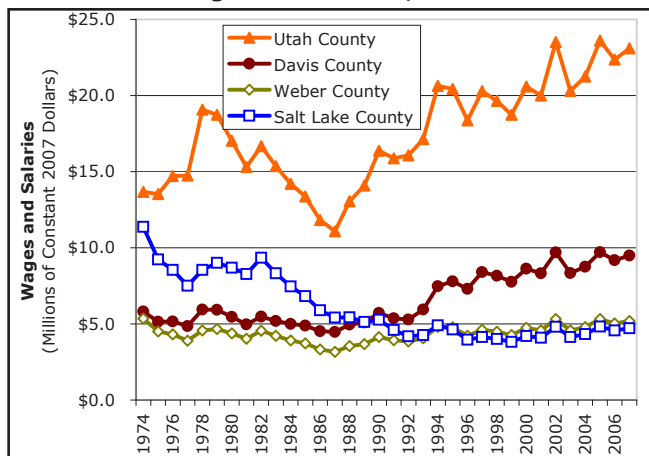
Figure 16
Farm Proprietors' Employment, 1974–2007



Source: Bureau of Economic Analysis, Regional Economic Information System.

8. Realized net income equals cash receipts from marketings plus other income minus production expenses. Net farm proprietors' income consists of the net income that is received by the sole proprietorships and partnerships that operate farms. It excludes the income received by non-family farm corporations. Total farm labor and proprietors' income comprises the net income of sole proprietors, partners, and hired laborers arising directly from the current production of agricultural commodities. It includes net farm proprietors' income and the wages and salaries, pay-in-kind, and other labor income of hired farm laborers; but excludes the income of non-family farm corporations.

Figure 17
Farm Wages and Salaries, 1974–2007



Source: Bureau of Economic Analysis, Regional Economic Information System.

by 69 percent and 63 percent, respectively, between 1974 and 2007. Total farm wages and salaries in these counties in 2007 amounted to \$23.1 million and \$9.5 million, respectively. In Weber County wages were essentially unchanged at \$5.2 million in 2007, just 3 percent below their level in 1974. Nevertheless, they have grown 64 percent since reaching a bottom in 1987. In fact, wages in Utah and Davis counties also hit troughs in 1987 and have more than doubled since then. In Salt Lake County farm wages and salaries declined until 1999 before turning around. At \$4.7 million in 2007 they were 60 percent lower than in 1974, but 23 percent higher than in 1999 (Figure 17).

Total farm labor and proprietors' income is the income of farm sole proprietorships and partnerships plus the salaries of owner-operators and the wages and salaries, pay-in-kind, and other labor income of hired farm laborers. It excludes the income of non-family corporate farms. While it has followed the ups and downs of farm proprietors' income, it has fared somewhat better since farm wages and salaries have been consistently positive. However, total farm income has been a small and shrinking share of total personal income in the Wasatch Front counties. In Utah County in 1974, total farm income represented just 1.8 percent of total personal income. Its share in the other counties was even smaller: 0.6 percent in Davis County, 0.5 percent in Weber, and only 0.2 percent in Salt Lake. After declining through the early 1980s, farm income's share of personal income rebounded from the mid-1980s through the early 1990s before shrinking again. As of 2007, farm income accounted for just 0.4 percent of personal income in Utah County, -0.03 percent in Salt Lake, -0.04 percent in Davis, and -0.1 percent in Weber (Figure 18).

Direct Sales and Organic Agriculture

Farmers' markets have gained in popularity in recent years as many communities turn to local growers for fresh and organically raised fruits, vegetables, and other farm products. The USDA has followed the progress of farmers' markets since 1994, when it counted 1,755 nationwide. The number has since tripled to 5,274 in 2009, with particularly rapid growth since 2002. The USDA's Agricultural Marketing Service currently lists 31 farmers' markets in Utah.

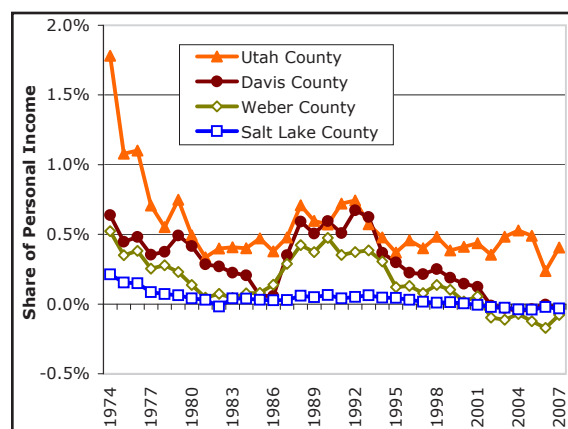
Since 1978, but excluding the 1987 census, the Census of Agriculture has tracked agricultural products sold directly to individuals for human consumption by the number of farms and the value of sales. This includes farmers' markets, roadside stands, and pick-your-own sites.

In 2007, a total of 610 Wasatch Front farms had direct sales of \$4.3 million, representing 1.6 percent of the total value of agricultural products sold. More than half of this, both farms and sales, was in Utah County, where 387 farms sold \$2.8 million of produce directly to consumers. The next largest source was Davis County, where 81 farms had \$785,000 in direct sales. In Weber County 65 farms sold \$508,000 worth of produce directly, and in Salt Lake County 77 farms sold \$200,000 of produce (Exhibit 1).

Between 1978 and 2007, the number of farms with direct sales to consumers shrank in Weber (-24 percent), Davis (-11 percent), and Salt Lake (-15 percent) counties but grew in Utah County (62 percent). The total value of direct sales, in real terms, declined only in Davis and Salt Lake counties, by \$44,300 (5 percent) and \$822,000 (80 percent) respectively. Sales increased by \$47,600 (10 percent) in Weber County and by almost \$1.2 million (71 percent) in Utah County. More recently, between 2002 and 2007 in Davis, Salt Lake, and Utah counties the number of farms with direct sales grew by 27 percent, 26 percent, and 77.5 percent, respectively, but shrank by 20 percent in Weber County. Surprisingly, the value of direct sales decreased in Davis and Salt Lake counties by \$233,100 (23 percent) and \$78,100 (28 percent), respectively, and grew in Weber County by \$120,800 (31 percent). Utah County saw a \$1.7 million, 150.5 percent increase in direct sales from 2002 to 2007.

A subset of direct sales is Community Supported Agriculture. CSAs allow consumers to purchase shares of a farm's production for a lump sum paid in advance. Then, during the growing season

Figure 18
Farm Income Share of Personal Income, 1974–2007



Source: Bureau of Economic Analysis, Regional Economic Information System.

(usually 16 to 20 weeks, mid-June through mid-October in Utah), subscribers receive a weekly allotment of a variety of fresh, usually organic produce. CSAs provide a degree of income security for small farmers and fresh, seasonal, locally grown vegetables and fruits to consumers.

In 2007 the Census of Agriculture counted 110 farms in Utah that sold products through Community Supported Agriculture. Utah County had the most in the state with 17 farms. In Salt Lake County six farms offered CSA programs, in Weber County there were five, and in Davis County there were four.

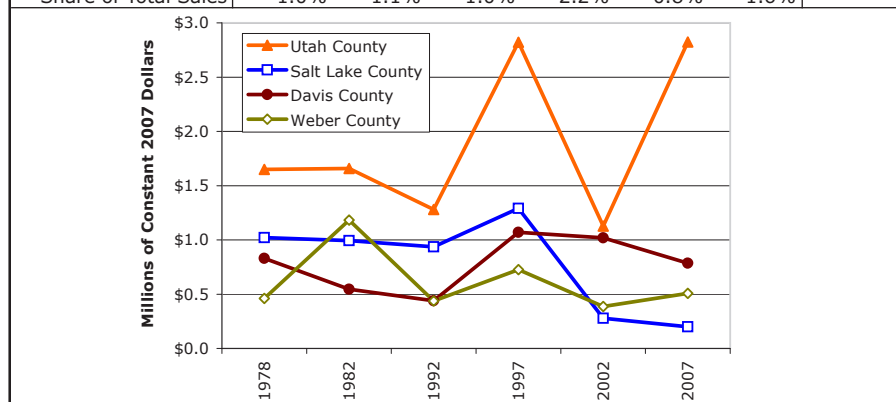
Products raised according to organic standards have also gained in popularity in recent years. What was once available only at health food stores can now be found on supermarket shelves. The USDA began collecting information on organic practices in the 2002 census but changed the questions it asked in the 2007 census.

Therefore, the data are not comparable.

In 2007, 154 farms in Utah had more than 86,000 acres under organic production, with a total of \$7.3 million of organic products sold. In Utah County 18 farms had a total of 7,722 acres used for organic production. Seventeen of those farms had total organic product sales of \$478,000. Both Salt Lake and Weber counties had 10 farms with land in organic production, 21 acres in Salt Lake and 30 acres in Weber. Nine of the farms in Salt Lake had total organic sales of \$81,000; just six of the farms in Weber had organic sales, but the amount was not disclosed. In Davis County there were six farms with a total of 14 acres that produced \$27,000 worth of organic products (Table 9).

The main sources of organic agriculture in Utah are San Juan and Box Elder counties. San Juan had over 43,000 acres in organic production with a total of \$2.2 million in sales in 2007. Box Elder had more than 27,000 acres with almost \$3.2 million in sales. Cache

| Exhibit 1 Agricultural Products Sold Directly to Consumers (Thousands of Constant 2007 Dollars) | | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| | 1978 | 1982 | 1992 | 1997 | 2002 | 2007 | Change |
| Weber County | | | | | | | |
| Farms | 86 | 129 | 81 | 72 | 81 | 65 | -24.4% |
| Share | 11.1% | 14.3% | 8.6% | 6.7% | 8.0% | 6.5% | |
| Value | \$460.4 | \$1,183.2 | \$436.4 | \$725.8 | \$387.2 | \$508.0 | 10.3% |
| Share of Total Sales | 0.5% | 1.9% | 1.0% | 1.8% | 1.3% | 1.6% | |
| Davis County | | | | | | | |
| Farms | 91 | 122 | 80 | 88 | 64 | 81 | -11.0% |
| Share | 16.1% | 18.5% | 13.7% | 13.5% | 11.0% | 16.3% | |
| Value | \$829.3 | \$544.7 | \$439.4 | \$1,070.4 | \$1,018.1 | \$785.0 | -5.3% |
| Share of Total Sales | 1.4% | 1.1% | 0.9% | 2.3% | 2.9% | 2.1% | |
| Salt Lake County | | | | | | | |
| Farms | 91 | 149 | 109 | 86 | 61 | 77 | -15.4% |
| Share | 13.8% | 18.5% | 15.9% | 12.2% | 8.6% | 13.1% | |
| Value | \$1,022.0 | \$993.6 | \$935.6 | \$1,289.9 | \$278.1 | \$200.0 | -80.4% |
| Share of Total Sales | 1.4% | 1.7% | 3.1% | 4.1% | 1.2% | 0.9% | |
| Utah County | | | | | | | |
| Farms | 239 | 303 | 202 | 246 | 218 | 387 | 61.9% |
| Share | 14.8% | 16.4% | 11.9% | 12.1% | 10.7% | 17.8% | |
| Value | \$1,648.9 | \$1,658.2 | \$1,279.4 | \$2,821.8 | \$1,127.2 | \$2,824.0 | 71.3% |
| Share of Total Sales | 1.0% | 1.1% | 1.0% | 2.2% | 0.8% | 1.6% | |



Note: Data were not collected in the 1987 census.
Source: U.S. Department of Agriculture, Censuses of Agriculture: 1982, 1992, 2002, 2007.

County had less land dedicated to organic production than Utah County, at 4,300 acres, but sold \$847,000 worth of organic products. Cache's produce may be higher-value goods like meat and other animal products (full details were not disclosed), while Utah County's organic production is primarily crops.

Conclusion

The Wasatch Front has seen substantial population growth over the last three decades. Not surprisingly, much of this growth has come at the expense of agriculture. The total amount of farmland has decreased, farms have become smaller, farming is the primary occupation of a smaller share of farm operators, and there has been a shift from

land-intensive livestock and poultry farming to crops. However, despite the long-run declines there have been some recent gains. Cash receipts from agricultural sales grew in three of the four counties between 2002 and 2007, farmland increased in Weber County from 1997 to 2007 and in Salt Lake and Utah counties from 2002 to 2007, and the number of farms in Utah County has grown steadily since 1992.

Agriculture on the periphery of the Salt Lake City metropolitan area, i.e., in Weber and Utah counties, is faring better than in the urban core. Despite experiencing the largest relative population growth during the study period, with the number of residents

increasing by almost 200 percent, Utah County has seen the smallest relative decline in farmland, losing 28 percent between 1974 and 2007. In addition, the number of farms is up 35.5 percent, second to Weber County's 41 percent growth.

| Table 9 2007 Organic Production | | | | |
|------------------------------------|----------------------------------|-------|-----------------------------|-----------|
| County | Land Used for Organic Production | | Total Organic Product Sales | |
| | Farms | Acres | Farms | Amount |
| Weber County | 10 | 30 | 6 | (D) |
| Davis County | 6 | 14 | 6 | \$27,000 |
| Salt Lake County | 10 | 21 | 9 | \$81,000 |
| Utah County | 18 | 7,722 | 17 | \$478,000 |

(D) Not disclosed.
Source: U.S. Department of Agriculture, 2007 Census of Agriculture.

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