

## Utah County Small Area Estimates, 2010-2016

*Authored By: Natalie B. Young, Pamela S. Perlich*

### Background

The Kem C. Gardner Policy Institute prepares small area population estimates to support informed decision making in Utah. This brief presents annual small area housing and population estimates for Utah County from 2010 to 2016. We produced these results using the housing unit method, one of the most widely used estimation methods for detailed geographic levels.<sup>1</sup> This brief shares key information about this set of estimates, including county and small area (census tract) results. The data and methodology are also discussed. Note that all estimates refer to July 1 of each year.

To our knowledge, these are the first published tract level population estimates for Utah County. The Utah Legislature funds the production of these estimates.

### Results

#### County Totals

This analysis indicates that Utah County grew from a population of 516,564 in the 2010 Census to a population of 585,859 in 2016, an increase of 69,295 people (13.4 percent). In 2016, the household population was 571,662 (97.6 percent of the total population) and the group quarters population was 14,197 (2.4 percent of the total population). Group quarters include college dormitories, nursing homes, correctional facilities, and other group living facilities that vary from a typical household-type living arrangement.

The total number of housing units in Utah County grew from 148,350 units in the 2010 Census to 167,446 units in 2016, an increase of 19,096 units (12.9 percent). This includes both occupied and vacant units. There were an estimated 159,532 occupied units (95.3 percent of total units) and 7,914 vacant units (4.7 percent of total units) in 2016. We estimate Utah County's households (occupied units) were 69.2 percent owner-occupied and 30.8 percent renter-occupied in 2016.

#### Total Population

The highest population growth occurred in northern Utah County and at the east and west borders of Utah Lake. Tract 22.01, which covers all of Vineyard and part of Orem, gained the most new residents of any tract—over 5,700 people. The area contains the large “@Geneva” master planned community in Vineyard. The area had just under 5,000 residents in the 2010 Census but became the most populated tract in the county in 2016. The population more than doubled to reach 10,734 in 2016. The second most populated tract was Tract 101.09 in Saratoga Springs, trailing by only 27 people. The tract grew from about 7,000 residents in Census 2010 to 10,707 residents in 2016.

There were over 1,900 new housing units constructed in Tract 22.01 (Vineyard). Construction types were mixed: 58 percent of the new households were owner-occupied units and 42 percent were renter-occupied. This is in line with the mixed development occurring in the “@Geneva” development, which includes single family homes, townhomes, and apartments.

After Vineyard, the second-highest population growth occurred in Tract 102.12, at the Point of the Mountain area in Lehi. The area added just under 5,000 new residents, moving from 3,882 in the 2010 Census to 8,866 in 2016. As with Tract 22.01 (Vineyard), the population more than doubled over the estimate period. This area had the fifth-largest population in the county in 2016. The area had both owner and renter-occupied construction, slightly favoring rental construction with 60 percent of new households estimated to be renter-occupied. Tract 101.09 in Saratoga Springs, already mentioned as the second-most populated tract in the county in 2016, had the third-highest growth over the estimate period (3,771 people).

In terms of the rate of growth, Tracts 102.12 (Point of the Mountain) and 22.01 (Vineyard), previously mentioned, stand out the most. After these, the fastest growth occurred in Tract 101.10 in Lehi, south of Interstate 15. Though the population grew less than 1,000 people, the growth represented a 68 percent increase. Tract 101.13 in Saratoga Springs gained over 3,000 people, a 65 percent increase. Each of these areas had only owner-occupied construction.

Only two tracts cumulatively lost population over the estimate period, both located near Brigham Young University (BYU) in Provo. This is likely explained by movement of student populations across the various BYU dorms, as the overall BYU dorm population did not decline. Tract 16.01 decreased by 652 people (10.6 percent) due to a smaller number of students at BYU's Wyview campus housing. Neighboring Tract 16.02, which contains several existing and newly constructed BYU dorms, added 851 people to group quarters. The second tract with a population decline was Tract 16.03, which decreased by only 36 people. This decline is also explained by the group quarters population. Tract 16.03 contains the Provo Missionary Training Center (MTC) and BYU's foreign language student housing. The MTC population fluctuated year to year, but ultimately experienced only a small population decline. The student housing contributed minimally to the population change.

### Housing Units by Tenure

Owner-occupied households made up over two thirds (69 percent) of Utah County households. The tracts with the most owner-occupied housing were Tract 101.05 (Eagle Mountain/Saratoga Springs), 101.09 (Saratoga Springs), and 103.04 (Spanish Fork/Mapleton). Tract 22.01 (Vineyard) added the most owned housing units of any tract (1,100 new units). This also represented the fastest rate of growth in the county for owned housing units (164 percent). Tract 101.13 (Saratoga Springs) added the second most owned housing units. Tract 101.10 (Lehi) is also notable for fast owner-occupied construction, growing 79 percent.

Tract 18.02 in Provo, south of the BYU campus, had nearly 2,000 renter-occupied units in 2016, the most in the county. Tract 5.09 in Pleasant Grove followed with over 1,700 renter units. Tract 18.01, south of BYU, also had almost 1,700 renter units in 2016. Eleven tracts in the county had at least 1,000 renter units in 2016, most located in Provo. While four Provo tracts continued to add new rental units during the estimate period, other areas had the highest gains. Tract 22.01 in Vineyard added the most rented housing units of any tract (785 new units), followed by Tract 102.12 at Point of the Mountain in Lehi, which added 759 rental units. Third in line was Tract 5.09 (Pleasant Grove), which added 426 rental units. Since 2010, rental construction has also reached a few tracts that previously had relatively small numbers of renter units, diversifying the housing types.

### Comparison to Alternative Estimates

The Census Bureau provides housing and population estimates for census tracts through the American Community Survey. However, the data are available for five-year periods only and thus do not provide annual point-in-time information. There are no single-year census tract estimates from other sources to directly compare to our results. The Census Bureau's Population Division releases population estimates for incorporated places (cities and towns). While we can also produce city and town estimates, there are some downsides to doing

so. First, we must account for annual geographic changes in city boundaries. Second, areas outside of incorporated places are grouped as one area, lacking geographic detail of where growth in such areas is occurring.

While there are no single-year census tract estimates to use as small area comparison, aggregation of tract level results to county totals allows for comparison to county level estimates produced by other sources or with alternate methods. We have compared the county-level estimates to those done by the Census Bureau's Population Division and the Utah Population Committee (UPC).<sup>2</sup> See Figures 1 and 2 for graphs of the comparisons. Our housing unit estimates of population are lower than the Census Bureau estimates for every year. Our estimates are also lower than the UPC estimates for all years, and by greater amounts. By 2016, these housing unit method estimates were 1.1 percent lower than the Census Bureau's estimate and 2.9 percent lower than the UPC estimates.

## Data And Methodology

---

### Building Permit Data and Geocoding

Building permit data were obtained from Construction Monitor, a proprietary source of permit data. The data were geocoded (mapped to their correct locations) using several methods. Geocoding was first attempted with the Utah AGRC Geocoding Toolbox. Subdivision names were used to place a limited number of permits. Some permits were individually researched to determine their proper locations.

In the interest of high-quality data, Mountainland Association of Governments collaborated in review of our initial set of geocoded permit data and provided edits pertaining to building locations and permit duplication. As Construction Monitor does not have complete coverage of large multifamily structures, the Kem C. Gardner Policy Institute researched and added structures built after the 2010 Census which were not present in Construction Monitor data. The number of units and locations for large apartments were checked using an internal list of apartment construction.

### Methodology and Assumptions

The housing unit method for these 2010-2016 estimates is very similar to that used in our 2010-2014 Salt Lake County tract estimates. The publication of the 2010-2014 set of estimates describes the method in detail, though key points and differences from the 2010-2014 methodology are covered here.<sup>3</sup> The method begins with tract-level housing and population data from the 2010 Census. Geocoded building permit data are used to estimate the annual changes in housing units. Once housing unit changes are established, tract-level owner-occupied and renter-occupied average persons per household values from Census 2010 are used to estimate the population in new housing units. Group quarters population changes are implemented where available data demonstrated that these populations should be adjusted. Each year, the resulting additional house-

hold population is cumulated with the previous year's household population. For example, the incremental population from April 1, 2010 to July 1, 2010 is added to the Census 2010 population to compute the July 1, 2010 estimate. The current group quarters population is then added to the household population to determine the total population for that year.

Assumptions implemented in the method concern various elements. They are listed below and subsequently discussed in brief.

1. Times of Construction and Occupancy (Lag Times)
2. Household Size (Persons per Household)
3. Housing Unit Tenure
4. Occupancy and Vacancy
5. Group Quarters
6. Demolitions

### **Assumption 1: Time of Construction and Occupancy (Lag Times)**

New housing units are assumed to be built and occupied six months after the date of the building permit. The only exceptions are for large multifamily apartments, which have a much longer lag from permit date to occupancy. The goal of differing assumptions for large multifamily apartments is to improve the average timing of construction and occupancy for housing units of this kind.

In these estimates, apartment projects of 100-174 units were assumed to be completed and occupied in 2 phases. The phases come 12 and 15 months after the permit date, with half of the overall units completed each time. The change to a 15-month overall lag is more representative of actual construction timelines of projects of this size. Projects of 175 or more units (adjusted down from 200) were assumed to be completed and occupied in 4 phases (9, 12, 15, and 18 months after the permit date; one-quarter of the overall units are completed each time). Groups of permits with less than 100 units each, but which could be identified as belonging to the same large complex, also followed the 15 – 18-month lags described here. These permits were identified through an automated step.

### **Assumption 2: Household Size (Persons per Household)**

In these 2010-2016 estimates, Census 2010 persons per household (PPH) values were held constant for each tract. Note that we continue to use tenure specific (owner and renter) tract PPH values for new structures of each type. Annual Utah County American Community Survey (ACS) data do not indicate increases in average PPH by 2015, for owner or renter-occupied households. ACS data for 2016 suggest that average PPH in owner-occupied homes may have increased since the 2010 Census. However, because ACS data are so variable and most annual changes are not statistically significant or suggestive of a consistent trend, we have opted to hold Census 2010 data constant. This also avoids applying a uniform rate of change to all tracts based on a county level observation. PPH is an important methodological concern

and we will continue to consider ways to inform change in PPH values over time.

### **Assumption 3: Housing Unit Tenure**

Owner and renter classification is inferred from the permit data by using the number of units in the permit. A permit with 1 to 11 units is classified as owner-occupied. A permit with 12 or more units (or known to be part of a large multiple-permit apartment project) is classified as renter-occupied. Classification of tenure is done to choose an appropriate persons per household assumption; it is not intended to precisely represent owning and renting.

### **Assumption 4: Occupancy and Vacancy**

Vacant units are based on Census 2010 vacancy counts. Newly constructed units from building permit data are assumed to be 99 percent occupied for owner units and 97 percent occupied for renter units. The remaining 1 percent of owner units and 3 percent of renter units are considered vacant units. Newly constructed vacant units add to the previous stock of vacant units. Vacant units may be reduced by demolition (see Assumption 6).

### **Assumption 5: Group Quarters**

Annual group quarters populations were gathered by our office through the annual Group Quarters Report to the Census Bureau as well as primary data collection. Annual changes for BYU dormitories, the Provo Missionary Training Center, and the Utah County Jail were included in the method.

### **Assumption 6: Demolitions**

As with building permit data, demolition permit data were also sourced from Construction Monitor. During the estimate period, 121 units in Utah County were determined to be residential demolitions. Demolitions are assumed to be completed six months after the permit date. Demolitions subtract vacant housing units; they do not reduce occupied housing units unless demolitions exceed the amount of vacant housing units in a tract.

### **Conclusion**

The 2010-2016 Utah County tract level housing and population estimates are a valuable source of small area information for the county. The housing unit method relies heavily on input data. We have taken important steps to review our input data, though we note that one limitation of this method is that identifying omissions in the underlying permit data is very time-intensive. However, a benefit of the housing unit method is that its results are easy to understand in that they are clearly linked to the data and assumptions which build them. This research provides rich data for those seeking to understand housing and population changes at the subcounty level.

# County Results

**Table 1**  
**Utah County Estimates Results for Selected Variables**

Variables	April 1, 2010	July 1, 2010	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016
Total Population	516,564	518,688	525,706	532,462	542,703	554,665	567,787	585,859
Household Population	502,652	504,218	510,581	517,211	527,535	540,562	554,572	571,662
Group Quarters Pop.	13,912	14,470	15,125	15,251	15,168	14,103	13,215	14,197
Households	140,602	141,004	142,659	144,419	147,133	150,689	154,638	159,532
Total Housing Units	148,350	148,752	150,400	152,175	154,903	158,511	162,511	167,446
Occupied Units	140,602	141,004	142,659	144,419	147,133	150,689	154,638	159,532
Owner-Occupied	96,053	96,420	98,027	99,514	101,836	104,494	107,249	110,403
Renter-Occupied	44,549	44,584	44,631	44,905	45,298	46,195	47,389	49,129
Vacant Units	7,748	7,748	7,741	7,756	7,770	7,822	7,873	7,914
Avg. Persons Per Household	3.57	3.58	3.58	3.58	3.59	3.59	3.59	3.58
Owner	3.74	3.74	3.74	3.74	3.75	3.75	3.75	3.75
Renter	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.21

Note: Changes to the average persons per household values calculated from estimate results are possible from year to year as the housing stock changes with construction and demolition. However, the values used to imply population changes in the course of the production of estimates match Census 2010 values.

Sources: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau, 2010 Census

**Table 2**  
**Utah County Estimates Results for Selected Variables: Annual Changes**

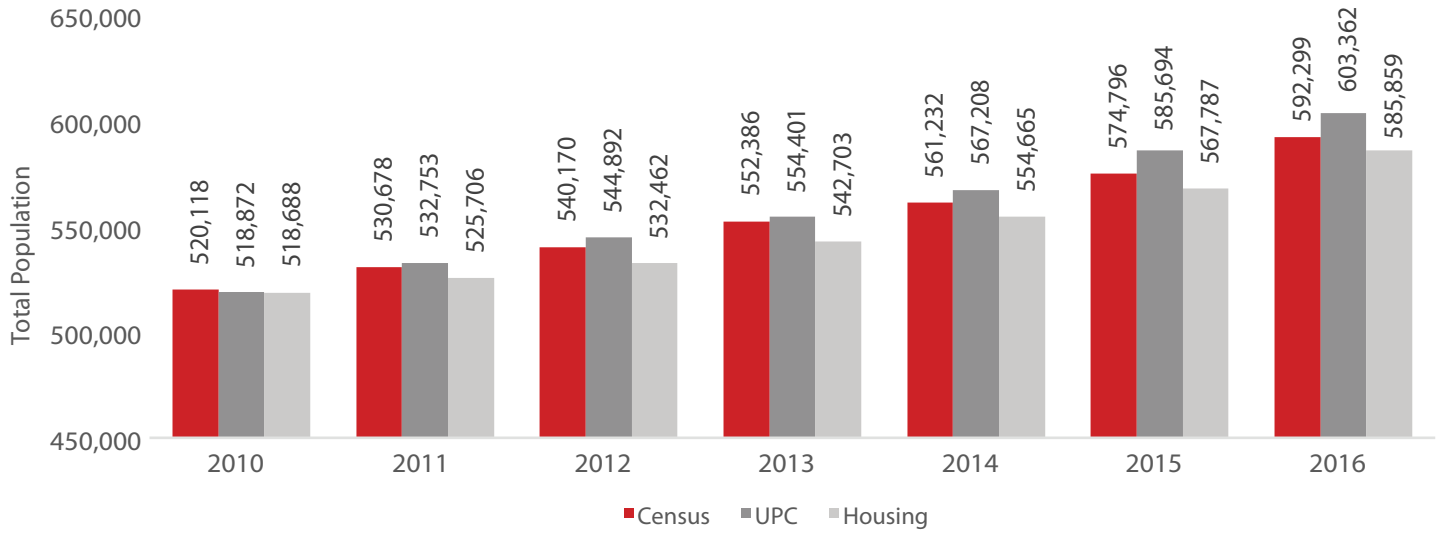
Annual Changes		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Change	Total Population	7,018	6,756	10,241	11,963	13,122	18,072
	Household Population	6,363	6,630	10,324	13,028	14,010	17,090
	Group Quarters Population	655	126	-83	-1,065	-888	982
	Households	1,654	1,761	2,714	3,555	3,949	4,894
	Housing Units	1,648	1,775	2,728	3,608	4,000	4,935
	Occupied Units	1,654	1,761	2,714	3,555	3,949	4,894
	Owner-occupied Units	1,607	1,487	2,322	2,658	2,755	3,154
	Renter-occupied Units	48	274	393	897	1,194	1,740
	Vacant Units	-6	14	14	53	51	41

Percent Change	Total Population	1.4%	1.3%	1.9%	2.2%	2.4%	3.2%
	Household Population	1.3%	1.3%	2.0%	2.5%	2.6%	3.1%
	Group Quarters Population	4.5%	0.8%	-0.5%	-7.0%	-6.3%	7.4%
	Households	1.2%	1.2%	1.9%	2.4%	2.6%	3.2%
	Housing Units	1.1%	1.2%	1.8%	2.3%	2.5%	3.0%
	Occupied Units	1.2%	1.2%	1.9%	2.4%	2.6%	3.2%
	Owner-occupied Units	1.7%	1.5%	2.3%	2.6%	2.6%	2.9%
	Renter-occupied Units	0.1%	0.6%	0.9%	2.0%	2.6%	3.7%
	Vacant Units	-0.1%	0.2%	0.2%	0.7%	0.6%	0.5%

Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

**Figure 1**

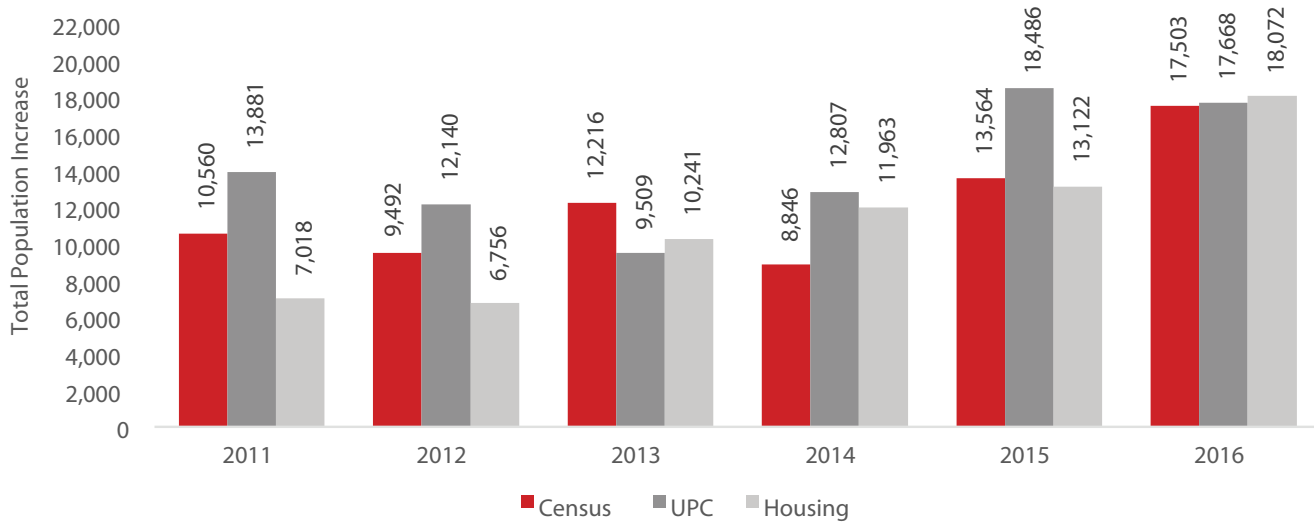
**Annual Utah County Total Population Estimates: Comparison of Census, UPC, and Housing Unit Method**



Sources: U.S. Census Bureau Population Division Estimates; Utah Population Committee (UPC) 2010-2016 Population Estimates; Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

**Figure 2**

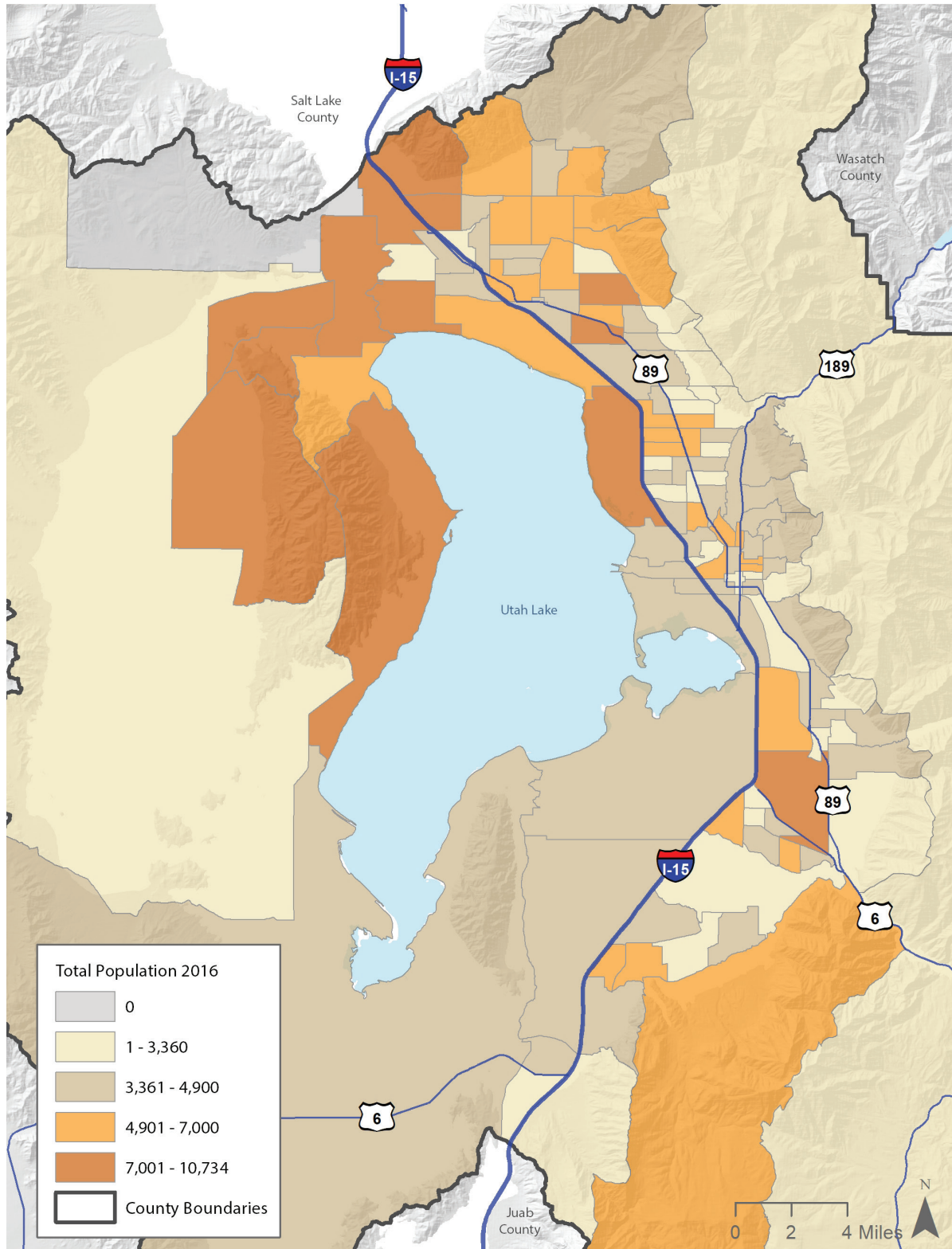
**Utah County Annual Total Population Changes: Comparison of Census, UPC, and Housing Unit Method**



Sources: U.S. Census Bureau Population Division Estimates; Utah Population Committee (UPC) 2010-2016 Population Estimates; Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

# Tract Results

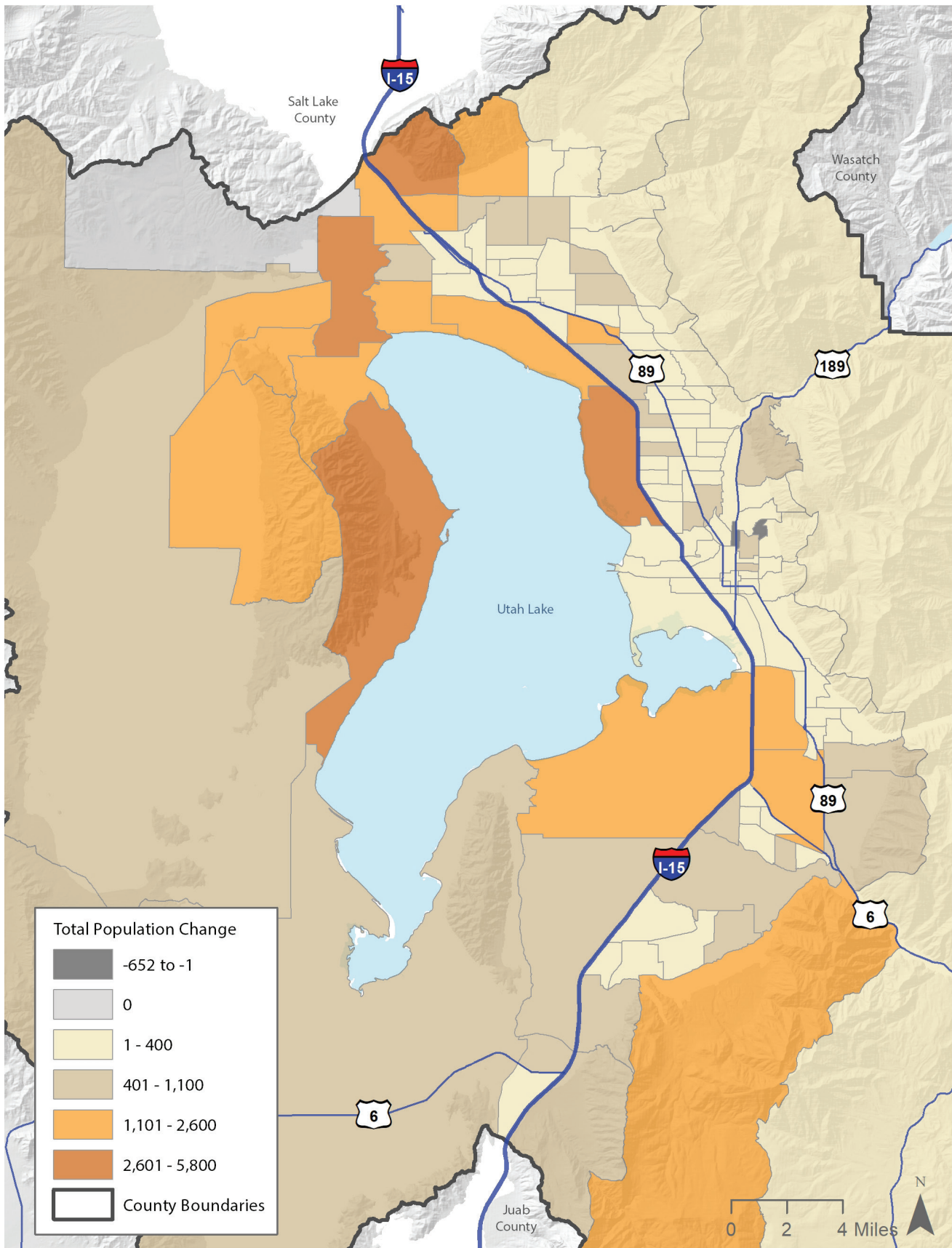
Figure 3, Utah County Tract Estimates: Total Population 2016



Notes: The map extent includes all places in Utah County recognized by the Census Bureau. The full extent of some tracts is not shown on this map. The small populations living outside the area shown are included in the data. The full area of tract 101.13 covers Utah Lake; the tract has been trimmed for display. For reference maps containing tract numbers, see Figures 6 and 7.

Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

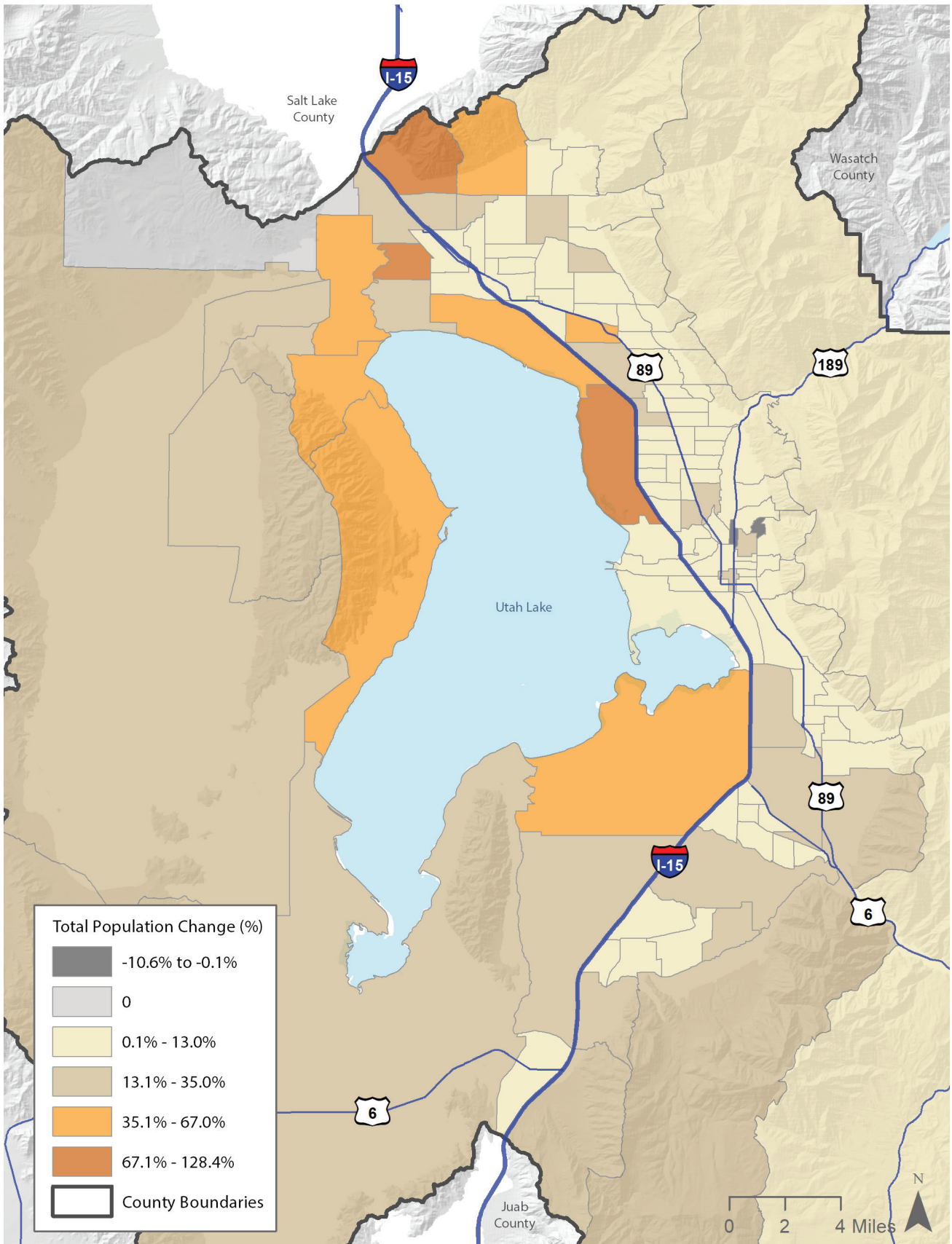
**Figure 4, Utah County Tract Estimates: Total Population Change, Census 2010 to 2016**



Notes: The map extent includes all places in Utah County recognized by the Census Bureau. The full extent of some tracts is not shown on this map. The small populations living outside the area shown are included in the data. The full area of tract 101.13 covers Utah Lake; the tract has been trimmed for display. For reference maps containing tract numbers, see Figures 6 and 7.

Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

**Figure 5, Utah County Tract Estimates: Rate of Population Change, Census 2010 to 2016**

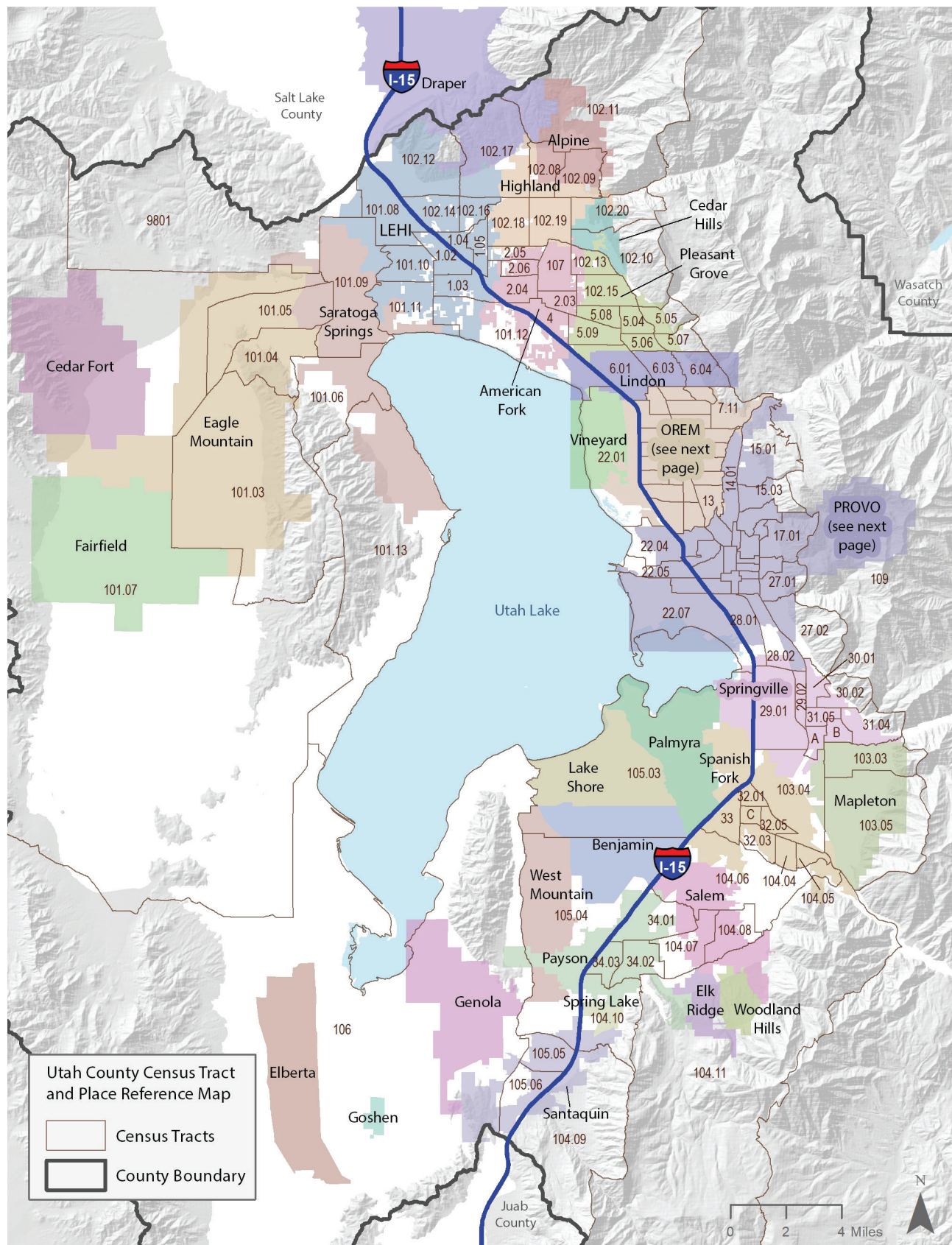


Notes: The map extent includes all places in Utah County recognized by the Census Bureau. The full extent of some tracts is not shown on this map. The small populations living outside the area shown are included in the data. The full area of tract 101.13 covers Utah Lake; the tract has been trimmed for display. For reference maps containing tract numbers, see Figures 6 and 7.

Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah



**Figure 6, Utah County Census Tract and Place Reference Map**

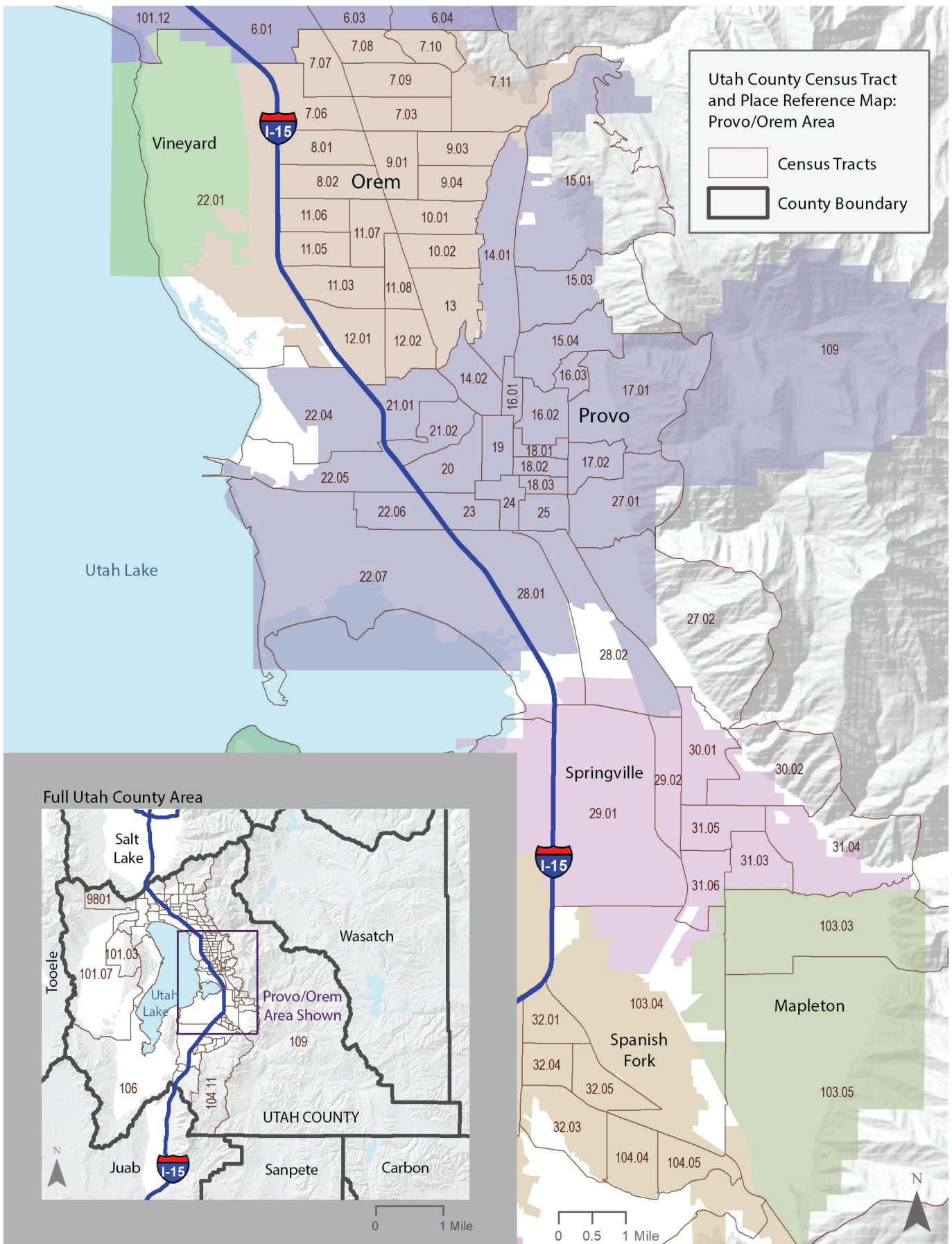


Numbers for tracts marked with a letter: Springville: A=31.06, B=31.03. Spanish Fork: C=32.04

Notes: The map extent includes all places in Utah County recognized by the Census Bureau. The full extent of some tracts is not shown on this map. To view the full areas of tracts, see Figure 7. The full area of tract 101.13 covers Utah Lake; the tract has been trimmed for display. Places which do not extend into Utah County are not shown.

Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

**Figure 7, Utah County Census Tract and Place Reference Map: Provo/Orem Detail and County Overview**



Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

**Table 3**

**Total Population and Change in Utah County Census Tracts: Census 2010 to 2016**

Census Tract Name	Census 2010	Population Estimates							Change: Census 2010 to July 1, 2016	
		2010	2011	2012	2013	2014	2015	2016	Numeric	Percent
1.02	4,488	4,488	4,495	4,513	4,542	4,585	4,610	4,688	200	4.5%
1.03	3,805	3,805	3,812	3,822	3,829	3,860	4,096	4,204	399	10.5%
1.04	3,058	3,062	3,073	3,139	3,143	3,151	3,158	3,243	185	6.1%
1.05	4,117	4,117	4,117	4,121	4,133	4,212	4,236	4,244	127	3.1%
2.03	4,345	4,365	4,456	4,473	4,532	4,564	4,646	4,711	366	8.4%
2.04	5,628	5,635	5,677	5,685	5,783	5,872	5,903	6,006	378	6.7%
2.05	3,739	3,743	3,757	3,805	3,857	3,892	3,905	3,971	232	6.2%
2.06	3,473	3,481	3,489	3,493	3,524	3,559	3,599	3,618	145	4.2%
4	3,484	3,484	3,493	3,506	3,534	3,622	3,638	3,663	179	5.1%
5.04	4,076	4,079	4,093	4,104	4,118	4,174	4,219	4,247	171	4.2%
5.05	3,049	3,049	3,049	3,049	3,053	3,057	3,069	3,121	72	2.4%
5.06	3,652	3,652	3,659	3,667	3,699	3,819	3,899	3,964	312	8.6%
5.07	2,207	2,207	2,207	2,207	2,219	2,219	2,238	2,327	120	5.4%
5.08	5,004	5,004	5,015	5,030	5,075	5,101	5,109	5,210	206	4.1%
5.09	6,193	6,193	6,213	6,223	6,297	7,845	8,234	8,502	2,309	37.3%
6.01	3,105	3,113	3,170	3,215	3,252	3,362	3,817	3,862	757	24.4%
6.03	3,976	3,980	4,003	4,057	4,092	4,107	4,134	4,197	221	5.6%
6.04	3,068	3,068	3,068	3,081	3,102	3,123	3,203	3,271	203	6.6%
7.03	5,307	5,307	5,307	5,317	5,363	5,380	5,380	5,380	73	1.4%
7.06	5,830	5,830	5,872	5,876	5,936	5,985	6,110	6,759	929	15.9%
7.07	3,645	3,652	3,660	3,667	3,682	3,730	3,730	3,733	88	2.4%
7.08	2,838	2,838	2,846	2,873	2,917	2,921	2,976	3,023	185	6.5%
7.09	2,917	2,925	2,943	2,955	2,959	2,974	3,038	3,170	253	8.7%
7.10	3,070	3,070	3,070	3,070	3,070	3,078	3,078	3,086	16	0.5%
7.11	2,317	2,386	2,390	2,398	2,430	2,438	2,443	2,447	130	5.6%
8.01	5,505	5,505	5,598	5,658	5,658	5,658	5,664	5,671	166	3.0%
8.02	5,167	5,167	5,167	5,167	5,167	5,179	5,564	5,669	502	9.7%
9.01	5,600	5,600	5,603	5,603	5,616	5,619	5,657	5,673	73	1.3%
9.03	3,535	3,535	3,535	3,539	3,539	3,539	3,546	3,586	51	1.4%
9.04	3,075	3,075	3,075	3,075	3,078	3,082	3,254	3,285	210	6.8%
10.01	3,631	3,631	3,631	3,631	3,638	3,652	3,655	3,655	24	0.7%
10.02	2,621	2,621	2,624	2,634	2,638	2,641	2,644	2,654	33	1.3%
11.03	2,674	2,674	2,678	2,678	2,678	2,689	2,692	2,696	22	0.8%
11.05	3,564	3,564	3,568	3,572	3,572	3,579	3,579	3,587	23	0.6%
11.06	2,946	2,946	2,946	2,949	2,949	2,949	2,953	2,963	17	0.6%
11.07	3,585	3,585	3,585	3,585	3,585	3,593	3,593	3,593	8	0.2%
11.08	3,219	3,219	3,227	3,239	3,239	3,239	3,306	3,308	89	2.8%
12.01	4,252	4,252	4,270	4,292	4,311	4,340	4,344	4,380	128	3.0%
12.02	4,708	4,721	4,728	4,731	4,734	4,738	5,128	5,462	754	16.0%
13	3,529	3,529	3,539	3,765	3,772	3,778	3,798	4,437	908	25.7%
14.01	3,797	3,800	3,813	3,813	3,816	3,823	3,839	3,845	48	1.3%
14.02	6,590	6,590	6,590	6,593	6,593	6,593	6,593	6,693	103	1.6%
15.01	3,827	3,827	3,830	3,837	3,847	3,864	3,867	4,316	489	12.8%
15.03	3,660	3,667	3,673	3,706	3,710	3,716	3,720	3,739	79	2.2%

Sources: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau, 2010 Census

Census Tract Name	Census 2010	Population Estimates							Change: Census 2010 to July 1, 2016	
		2010	2011	2012	2013	2014	2015	2016	Numeric	Percent
15.04	4,567	4,567	4,583	4,628	4,640	4,644	4,650	4,669	102	2.2%
16.01	6,122	6,188	6,221	6,227	6,180	5,454	5,442	5,470	-652	-10.6%
16.02	3,729	3,815	3,941	4,199	4,175	4,043	3,809	4,580	851	22.8%
16.03	4,328	4,734	5,196	5,022	4,974	4,731	4,053	4,292	-36	-0.8%
17.01	3,625	3,625	3,628	3,628	3,642	3,646	3,652	3,663	38	1.0%
17.02	4,586	4,586	4,596	4,596	4,599	4,623	4,640	4,657	71	1.5%
18.01	6,008	6,008	6,008	6,010	6,010	6,106	6,106	6,106	98	1.6%
18.02	6,008	6,008	6,008	6,581	6,771	6,771	6,787	6,787	779	13.0%
18.03	2,177	2,177	2,177	2,177	2,177	2,177	2,180	2,180	3	0.2%
19	4,186	4,186	4,189	4,189	4,318	4,318	4,318	4,323	137	3.3%
20	6,128	6,128	6,128	6,131	6,167	6,222	6,288	6,288	160	2.6%
21.01	3,850	3,853	3,907	3,948	4,006	4,141	4,168	4,171	321	8.3%
21.02	2,975	2,978	2,978	2,981	2,991	2,991	2,997	3,003	28	1.0%
22.01	4,972	4,992	5,160	5,414	5,827	6,193	8,307	10,734	5,762	115.9%
22.04	3,688	3,688	3,704	3,735	3,770	3,813	3,926	3,937	249	6.8%
22.05	4,129	4,129	4,129	4,136	4,142	4,158	4,162	4,198	69	1.7%
22.06	3,296	3,303	3,332	3,358	3,427	3,482	3,504	3,511	215	6.5%
22.07	3,604	3,604	3,620	3,620	3,620	3,656	3,676	3,720	116	3.2%
23	3,637	3,637	3,637	3,637	3,640	3,650	3,650	3,653	16	0.4%
24	1,138	1,138	1,141	1,141	1,141	1,164	1,267	1,513	375	32.9%
25	4,297	4,297	4,297	4,297	4,297	4,300	4,300	4,303	6	0.1%
27.01	3,160	3,160	3,170	3,177	3,181	3,191	3,198	3,208	48	1.5%
27.02	4,428	4,435	4,470	4,501	4,511	4,518	4,563	4,716	288	6.5%
28.01	3,584	3,584	3,618	3,624	3,627	3,631	3,631	3,634	50	1.4%
28.02	1,446	1,446	1,449	1,449	1,449	1,449	1,449	1,452	6	0.4%
29.01	5,071	5,217	5,470	5,627	5,961	6,244	6,391	6,677	1,606	31.7%
29.02	3,616	3,616	3,619	3,619	3,626	3,626	3,630	3,630	14	0.4%
30.01	4,165	4,169	4,183	4,186	4,193	4,207	4,232	4,295	130	3.1%
30.02	2,256	2,256	2,256	2,256	2,256	2,259	2,259	2,263	7	0.3%
31.03	2,734	2,738	2,738	2,738	2,738	2,759	2,791	2,802	68	2.5%
31.04	3,868	3,872	3,913	3,946	4,045	4,069	4,086	4,115	247	6.4%
31.05	3,629	3,629	3,635	3,641	3,650	3,669	3,773	3,776	147	4.1%
31.06	2,723	2,730	2,763	2,770	2,777	2,780	2,780	2,783	60	2.2%
32.01	2,598	2,598	2,601	2,601	2,601	2,607	2,613	2,619	21	0.8%
32.03	4,097	4,097	4,124	4,128	4,160	4,171	4,175	4,250	153	3.7%
32.04	2,734	2,734	2,734	2,734	2,737	2,737	2,743	2,743	9	0.3%
32.05	4,279	4,279	4,283	4,287	4,287	4,298	4,306	4,317	38	0.9%
33	6,042	6,046	6,124	6,153	6,203	6,335	6,413	6,463	421	7.0%
34.01	3,738	3,738	3,738	3,738	3,738	3,741	3,741	3,745	7	0.2%
34.02	6,035	6,039	6,072	6,076	6,091	6,143	6,184	6,229	194	3.2%
34.03	5,206	5,206	5,228	5,228	5,231	5,235	5,235	5,246	40	0.8%
101.03	6,738	6,789	6,964	6,969	7,020	7,388	7,661	8,131	1,393	20.7%
101.04	6,999	7,110	7,412	7,556	7,800	8,105	8,473	9,145	2,146	30.7%
101.05	7,564	7,702	7,901	8,046	8,569	9,057	9,338	9,943	2,379	31.5%
101.06	4,105	4,117	4,300	4,459	4,690	5,198	5,466	5,730	1,625	39.6%
101.07	2,481	2,485	2,523	2,544	2,582	2,696	2,839	3,337	856	34.5%

Sources: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau, 2010 Census

Census Tract Name	Census 2010	Population Estimates							Change: Census 2010 to July 1, 2016	
		2010	2011	2012	2013	2014	2015	2016	Numeric	Percent
101.08	6,504	6,538	6,698	6,884	7,495	7,825	7,989	8,144	1,640	25.2%
101.09	6,936	7,009	7,391	7,899	9,251	9,784	10,258	10,707	3,771	54.4%
101.10	1,397	1,397	1,426	1,573	1,856	2,102	2,180	2,340	943	67.5%
101.11	6,815	6,853	7,100	7,411	7,850	8,334	8,445	8,553	1,738	25.5%
101.12	4,884	4,941	5,304	5,686	6,262	6,432	6,693	6,924	2,040	41.8%
101.13	4,725	4,806	5,162	5,550	6,262	6,796	7,241	7,775	3,050	64.6%
102.08	3,934	3,939	3,961	4,002	4,056	4,110	4,178	4,205	271	6.9%
102.09	5,475	5,479	5,553	5,599	5,652	5,710	5,813	5,858	383	7.0%
102.10	6,070	6,083	6,104	6,109	6,130	6,160	6,182	6,285	215	3.5%
102.11	3,246	3,246	3,269	3,308	3,331	3,421	3,490	3,545	299	9.2%
102.12	3,882	3,905	4,094	4,257	4,503	6,019	7,278	8,866	4,984	128.4%
102.13	2,610	2,633	2,748	2,845	2,923	2,987	3,006	3,024	414	15.9%
102.14	6,084	6,119	6,250	6,447	6,778	7,245	7,593	7,859	1,775	29.2%
102.15	7,171	7,188	7,244	7,359	7,448	7,662	7,777	7,807	636	8.9%
102.16	2,699	2,707	2,861	2,990	3,095	3,252	3,341	3,438	739	27.4%
102.17	3,875	3,944	4,108	4,208	4,384	4,602	5,038	5,329	1,454	37.5%
102.18	5,615	5,620	5,656	5,729	5,807	5,852	5,939	6,017	402	7.2%
102.19	4,591	4,591	4,763	4,865	5,085	5,322	5,408	5,632	1,041	22.7%
102.20	5,972	5,980	6,005	6,055	6,084	6,109	6,171	6,200	228	3.8%
103.03	4,256	4,279	4,341	4,388	4,477	4,558	4,620	4,674	418	9.8%
103.04	6,590	6,727	6,980	7,194	7,497	7,852	8,332	8,770	2,180	33.1%
103.05	2,800	2,816	2,896	2,948	3,040	3,140	3,220	3,360	560	20.0%
104.04	4,531	4,566	4,682	4,744	4,859	4,917	4,975	4,992	461	10.2%
104.05	4,113	4,113	4,131	4,167	4,199	4,239	4,257	4,262	149	3.6%
104.06	1,999	2,003	2,082	2,108	2,213	2,307	2,459	2,673	674	33.7%
104.07	2,560	2,560	2,564	2,564	2,578	2,588	2,592	2,606	46	1.8%
104.08	3,530	3,545	3,614	3,687	3,764	3,933	4,090	4,209	679	19.2%
104.09	2,677	2,693	2,742	2,754	2,783	2,884	2,945	3,079	402	15.0%
104.10	3,239	3,276	3,401	3,538	3,617	3,713	3,821	3,879	640	19.8%
104.11	4,454	4,490	4,578	4,757	4,937	5,205	5,452	5,748	1,294	29.0%
105.03	2,913	2,913	3,020	3,096	3,138	3,208	3,804	4,230	1,317	45.2%
105.04	2,972	2,972	3,020	3,034	3,103	3,169	3,266	3,414	442	14.9%
105.05	3,972	3,995	4,054	4,089	4,155	4,241	4,319	4,385	413	10.4%
105.06	1,829	1,829	1,847	1,850	1,854	1,854	1,883	1,926	97	5.3%
106	3,510	3,543	3,637	3,673	3,702	3,775	3,909	4,094	584	16.6%
107	4,853	4,853	4,864	4,892	4,927	4,959	4,995	5,065	212	4.4%
109	1,059	1,062	1,068	1,084	1,090	1,103	1,112	1,115	56	5.3%
9801	0	0	0	0	0	0	0	0	0	-

Sources: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau, 2010 Census

## Endnotes

- Swanson, D.A., & Tayman, J. (2012). Subnational Population Estimates. New York: Springer.
- The Utah Population Committee (UPC) is convened by the Kem C. Gardner Policy Institute. While these tract estimates are part of UPC research, here we compare to the UPC county level results, which are produced annually using a methodology that is distinct from the methodology used to produce these tract level results.
- Perlich, P. S., Young, N. B., Van Noy, E., Mohammed, M., & Hollingshaus, M. (2016). Salt Lake County Small Area Estimates:2010-2014. Salt Lake City, UT: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah.