Salt Lake and Utah County Subcounty Estimates, 2010-2018

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ANALYSIS IN BRIEF

As Census 2020 approaches and data from Census 2010 become more outdated, the need for current housing and population estimates becomes more urgent. This is especially crucial in Utah, the highest growth state this decade and third fastest-growing from 2017 to 2018. This report presents annual subcounty population, household, and housing unit estimates for cities and census tract areas in Salt Lake and Utah County from 2010 to 2018. Salt Lake County grew 1.2 percent from 2017 to 2018, Utah County grew 2.6 percent, and both counties experienced their largest and most rapid growth in housing units of any year this decade. Though Utah County is about half the population of Salt Lake County, it gained more new residents from 2017 to 2018, as the growth dynamic continues to shift south.

Population growth is most concentrated in southwestern Salt Lake County, northwestern Utah County, and Vineyard (Utah County), but Salt Lake City and other areas are growing as well. This report discusses and maps the changes occurring in the cities and the 340 census tracts of these counties, which comprise 56 percent of Utah's population. We also share the methodology used to produce these estimates and provide comparisons to other county and city-level estimates.

In summary

Housing unit construction accelerated in both Salt Lake and Utah counties from 2017 to 2018 and, in fact, outpaced population growth. This report provides housing and population estimates for all cities and census tracts of these two counties, highlighting key areas of growth.

At-A-Glance

Population and Housing Estimates

Population Growth, 2017-2018	
Counties	· Utah County grew more than Salt Lake County. · Utah County added 15,847 people (2.6 percent). · Salt Lake County added 13,806 people (1.2 percent).
Cities	· Herriman, Vineyard, Lehi, Eagle Mountain, and South Jordan have the highest population growth (2017-2018). · These five cities contributed 57 percent of combined growth in Salt Lake and Utah counties for the year. · The cities with the most growth vary widely in overall size. Herriman has surpassed 40,000 in population, Vineyard is approaching 10,000, and Lehi is nearly 69,000.

Housing Unit Growth, 2017-2018	
Counties	· 2017-2018 is the largest and fastest year of total housing unit growth in both Salt Lake and Utah counties (this decade). · Renter-occupied construction in Salt Lake County is the highest of any year this decade. It makes up almost half of new construction in the county, compared to 19 percent in Utah County.
Cities	· Herriman and Vineyard had the most new owner-occupied households; Salt Lake City had the most new renter-occupied households by far. · High density infill development in Salt Lake City continues to bring several large new apartment complexes.

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Thanks to Kelsey Carlston and Savannah Mailloux, GIS Interns, for their data development contributions to this report.

Introduction

The Utah Population Committee (UPC), chaired by the Kem C. Gardner Policy Institute, prepares subcounty population estimates to support informed decision making in Utah. This report presents annual subcounty population, household, and housing unit estimates for cities and census tracts in Salt Lake County and Utah County from 2010 to 2018. Estimates refer to July 1 of each year. We produce these results using the housing unit method, one of the most widely used estimation methods for detailed geographic levels.[1] This report shares key findings, data, and a methodology. Visualizations and downloadable datasets for these estimates are also available at gardner.utah.edu.

Our previous subcounty estimates for Salt Lake County and Utah County were for the years 2010 to 2017.[2] This current 2010 to 2018 release revises previous 2010 to 2017 estimates and includes estimates for 2018. The estimates are consistent with the UPC county-level 2018 estimates released last December.[3] This report emphasizes 2018 results and changes from 2017 to 2018 at the county, city, and tract levels.

Results

Total Population: Counties

Utah County grew more than Salt Lake County from 2017 to 2018. Utah County grew by 15,847 people, over 2,000 more than Salt Lake County's increase of 13,806 people. This represents a 2.6 percent increase in Utah County and a 1.2 percent increase in Salt Lake County. For Salt Lake County, 2017 to 2018 represents lower growth than the previous three years (2016 to 2017 had the highest growth this decade). For Utah County, 2017 to 2018 growth is higher than last year, but not as high as in 2014 to 2015 or 2015 to 2016 (see Tables 4 and 6). Though Utah County experienced more and faster growth, the total population of Salt Lake County remains almost twice that of Utah County: Salt Lake County's 2018 population is estimated at 1,142,077 and Utah County at 633,582.

Although 2017 to 2018 isn't the highest year for population growth, it is the largest and most rapid growth year for housing units this decade for both counties. Salt Lake County added more housing units than Utah County from 2017 to 2018 (about 7,800 vs. about 6,400). Two key factors help explain why Salt Lake County has lower estimated population growth for the year than Utah County, despite having more new housing units built. First, Utah County has larger household sizes for both owner and renter households than Salt Lake County, so a new home in Utah County is generally expected to house more residents. Second, renter-occupied construction comprises a much greater share of Salt Lake County's new construction than in Utah County: 48 percent vs. 19 percent of new households (2017 to 2018). The average renter household is smaller than the average owner household in both counties, meaning renter units host fewer people (see Tables 3 and 5). Together, smaller household sizes and greater shares of rental construction in Salt Lake County mean the county ultimately gained fewer people than Utah County.

These estimates also consider populations in group quarters. Group quarters include college dormitories, nursing homes, correctional facilities, and other group living facilities that vary from a typical household living arrangement. Though the overall number of residents in group quarters in each county is similar, Utah County has a higher share of its population residing in group quarters than Salt Lake County (2.3 percent vs. 1.4 percent). Most of the group quarters population in Utah County, home to Brigham Young University and Utah Valley University, resides in college or university housing. In Salt Lake County, many students of the University of Utah and Westminster College live in off-campus housing that is not considered group quarters.[4] Another notable group quarters population in Utah County is the Provo Missionary Training Center (MTC), which has almost 2,000 residents (2018). The largest portion of the group quarters population in Salt Lake County resides in correctional facilities, mainly the Utah State Prison in Draper.

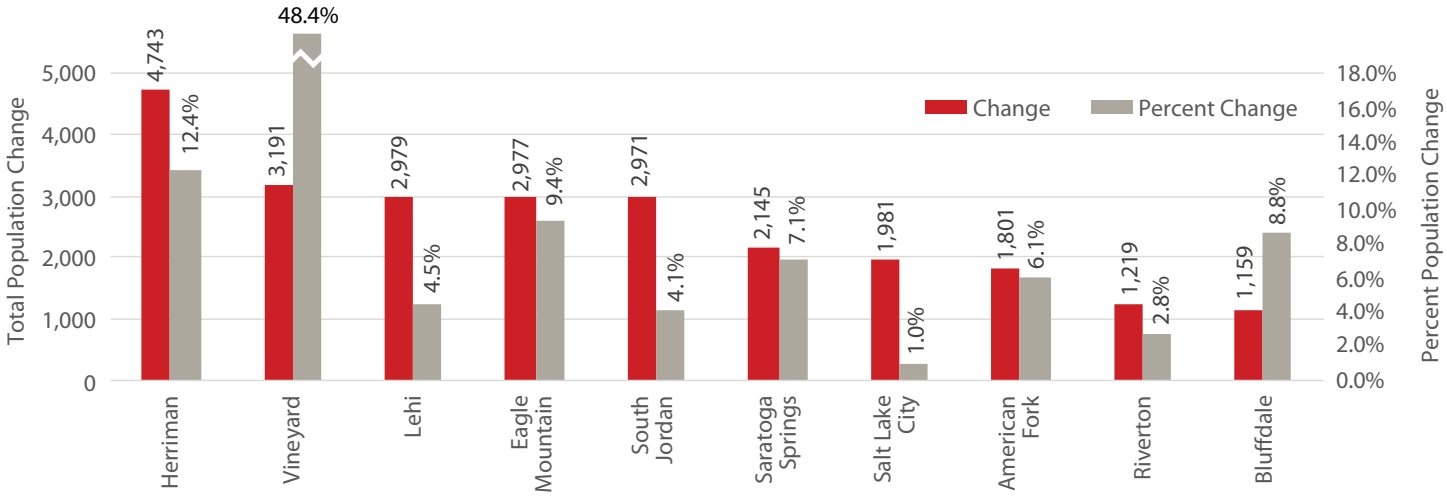
As with new construction, the tenure of the overall housing stock also varies by county. Utah County has a greater owner-occupied share of housing than Salt Lake County. We estimate that 70 percent of Utah County households are owner-occupied and 30 percent are renter-occupied in 2018. Salt Lake County has 66 percent owner households and 34 percent renter households.

Total Population: Cities

The highest population growth from 2017 to 2018 is in Herriman, Vineyard, Lehi, Eagle Mountain, and South Jordan. These cities are in southwestern Salt Lake County and northwestern Utah County, with the exception of Vineyard, which is between Orem and Utah Lake in Utah County. The top ten growth cities account for 85 percent of the combined population growth in Salt Lake County and Utah County from 2017-2018 (the cities are listed in Table 1 and Figure 1). City populations and changes are mapped in Figures 3 through 5.

In Salt Lake County, growth is concentrated in the southwest where land is still available for single-family home developments. Herriman, South Jordan, Riverton, and Bluffdale each added substantial populations, mainly through large single-family developments. Herriman added by far the most residents of any city in either county (4,743 people), arriving at 42,981 residents in 2018, an increase of 12.4 percent. Within Salt Lake County, South Jordan has the next highest growth, adding nearly 3,000 residents and surpassing 75,000 in population. All of these cities have heavily owner-occupied housing, and new construction from 2017 to 2018 favored the construction of owner-occupied homes.

Figure 1: Top 10 Population Growth with Percent Change, Salt Lake County and Utah County Cities, 2017-2018



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

Table 1: Top 10 Population Growth, Salt Lake County and Utah County Cities, 2017-2018

Rank	City	July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1	Herriman	38,238	42,981	4,743	12.4%
2	Vineyard	6,598	9,789	3,191	48.4%
3	Lehi	65,783	68,762	2,979	4.5%
4	Eagle Mountain	31,655	34,632	2,977	9.4%
5	South Jordan	72,604	75,575	2,971	4.1%
6	Saratoga Springs	30,196	32,341	2,145	7.1%
7	Salt Lake City	196,280	198,261	1,981	1.0%
8	American Fork	29,729	31,530	1,801	6.1%
9	Riverton	43,012	44,231	1,219	2.8%
10	Bluffdale	13,178	14,337	1,159	8.8%

Note: Ranked by largest 2017-2018 population growth.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

Salt Lake City has the seventh highest population growth from 2017 to 2018. Unlike the other top-growing cities in Salt Lake County, the majority of housing in the city is renter-occupied. New construction has continued to boost the rental supply. The city added very few single-family homes, but an abundance of new, high-density apartments (95 percent of new households from 2017 to 2018 are renter-occupied).[5] Apartment construction is booming downtown and in other nodes like Sugarhouse and Central Ninth. Salt Lake City added about 2,000 new residents from 2017 to 2018 for an estimated 2018 population of 198,261, representing 1.0 percent growth for the year. This is a slightly lower rate than the two previous years (1.1 percent growth from 2015 to 2016 and 2016 to 2017).

As discussed, growth in Utah County surpasses Salt Lake County in both rate and number from 2017 to 2018. Vineyard grew the most in the county, adding over 3,000 residents and growing at a faster rate than any other place in Salt Lake or Utah counties. Vineyard has seen very high levels of growth since 2010, when its population was a mere 139 people. The large "@Geneva" master planned community, at the former site of the Geneva Steel Mill, drives this growth.

Lehi, Eagle Mountain, and Saratoga Springs in northwestern Utah County offer space for single-family home construction relatively close to established or growing employment centers in both counties. After Vineyard, these cities had the highest growth in the county. Each had mainly owner-occupied housing construction in the past year, and remains heavily owner-occupied in the overall housing composition of each city. American Fork, however, is notable as the only top ten growth city other than Salt Lake City to favor renter-occupied housing construction this year. American Fork remains mostly owner-occupied overall, but new construction showed a distinct mixture of owner and renter-occupied housing.

The location of recent construction in both counties is visualized in Figure 6, a heat map of housing unit construction. Tables 7 and 8 share 2018 populations and changes for all cities.

Total Population: Tracts

Census tracts are subdivisions of a county of relatively similar population size. They are a common statistical geography for Census Bureau data, including survey data between decennial censuses. The boundaries may be updated before each decennial census and remain the same for the following decade. Estimates at the tract level provide coverage of all areas of a county and offer greater geographic detail than city-level estimates, particularly for large cities that include many tracts.

The highest population growth from 2017 to 2018 occurred in Tract 22.01, which covers all of Vineyard and a portion of Orem. Though housing construction in the tract has been high for several years, 2017 to 2018 growth is the highest growth

so far. Almost 1,300 new units were built, bringing 3,855 new residents and making this the highest growth tract of the two counties. Most (79 percent) of the population growth came through new owner-occupied construction. The remaining 21 percent of growth came through renter-occupied households.

The top 10 growth tracts are shown in Table 2. The tracts confirm the growth areas seen at the city level, and again reflect the concentrations of population growth: the top 10 tracts account for 58 percent of the combined population growth in Salt Lake County and Utah County from 2017 to 2018. Following Vineyard, the next highest growth tracts are in southwestern Salt Lake County in parts of Herriman, the South Jordan/West Jordan border area, and Bluffdale. The highest growth in this area is Tract 1131.07 of Herriman, which gained nearly 3,000 residents. After this set, the next highest growth tracts are in Utah County, in areas American Fork, Eagle Mountain, Saratoga Springs, and Lehi.

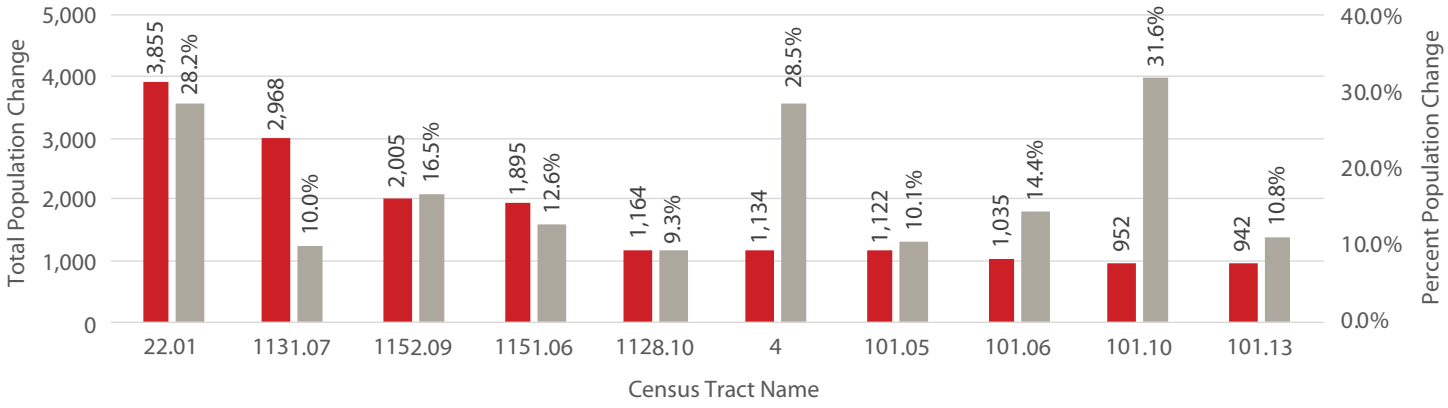
Tract-level estimates reveal which areas are drastically changing. For example, while American Fork grew 6.1 percent at the city level, Tract 4 in American Fork provided most of that growth. That area alone grew 29 percent this year. We note that several tracts have grown so high in population—some becoming as large as cities—that they are expected to be split into multiple tracts for the upcoming Census 2020.

Tract populations and changes are mapped in Figures 7 through 12. Tables 9 and 10 share 2017 and 2018 populations and changes for all tracts.

Housing Units by Tenure

As discussed in the methodology section, we estimate the tenure (owner or renter-occupied status) of new construction (anything after Census 2010) because the true tenure is unknown. However, resulting estimates of owner and renter households still offer useful information about subcounty areas. We consider structures of 1-11 units to be owner-occupied, and structures of 12 or more units to be renter-occupied. Our results show that from 2017 to 2018, the highest growth in owner-occupied households occurred in Herriman, Vineyard, South Jordan, Eagle Mountain, and Lehi. These cities gained from 1,073 new owner households (Herriman) down to 810 new owner households (Lehi). Vineyard experienced, by far, the fastest growth in owner households, at 60.9 percent (868 new owner households), while Herriman followed at 12.4 percent.

Figure 2: Top 10 Population Growth with Percent Change, Salt Lake County and Utah County Census Tracts, 2017-2018



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

Table 2: Top 10 Population Growth, Salt Lake County and Utah County Census Tracts, 2017-2018

Rank	Census Tract Name	Tract Area Description	July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1	22.01	Vineyard/Orem	13,672	17,527	3,855	28.2%
2	1131.07	Herriman	29,812	32,780	2,968	10.0%
3	1152.09	South Jordan/West Jordan	12,159	14,164	2,005	16.5%
4	1151.06	Herriman	15,046	16,941	1,895	12.6%
5	1128.10	Bluffdale	12,469	13,633	1,164	9.3%
6	4	American Fork	3,984	5,118	1,134	28.5%
7	101.05	Eagle Mountain	11,117	12,239	1,122	10.1%
8	101.06	Saratoga Springs	7,167	8,202	1,035	14.4%
9	101.10	Lehi	3,011	3,963	952	31.6%
10	101.13	Saratoga Springs/Utah Lake	8,737	9,679	942	10.8%

Notes: Ranked by largest 2017-2018 absolute population change. Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

The number of renter-occupied households increased the most in Salt Lake City, Sandy, Orem, and American Fork, with Salt Lake City far exceeding the other cities. Several large developments added these renter units in Salt Lake City, including 600 Lofts, Legacy Village (senior living), 4th West Apartments, Moda Bonneville, Liberty Boulevard, and others.[6] There are 1,726 new renter households in Salt Lake City, 584 in Sandy, 471 in Orem, and 398 in American Fork (2017 to 2018).[7]

The housing composition of some cities changed from 2017 to 2018, as indicated by owner and renter shares of housing. Several cities increased their shares of owner-occupied households, particularly in Utah County. The most notable change is in Vineyard, where households were 69 percent owner-occupied in 2017, but increased to 74 percent in 2018. Owner-occupied housing in Vineyard includes many townhomes and small condo buildings in addition to single family homes. Bluffdale also increased its owner-occupied share.[8] Following the opposite trend, American Fork shows an increase in the renter-occupied share of households, from 22 percent to 24 percent. While Salt Lake City did increase its share of renter-occupied housing, the overall composition changed rather subtly, from 54 to 55 percent renter-occupied. Changes in other cities were also slight.

Data, Methodology, and Comparative Estimates

Building Permit Data and Geocoding

We analyzed building permit data from Construction Monitor, a proprietary source of permit data. We geocoded the data (mapped permits to their correct locations) using several methods. We performed most geocoding using the Utah AGRC Geocoding Toolbox, though other methods were used for permits that were not correctly located with the toolbox.[9] Subdivision names were used to place a limited number of permits. Many permits were individually researched to determine their proper locations.

This year and in previous subcounty estimates, regional planners have often participated in improvement of the building permit data to help ensure its high quality. Our collaborators are the Wasatch Front Regional Council for Salt Lake County and Mountainland Association of Governments for Utah County. They provided edits pertaining to construction completion times, numbers of units, permit duplication, and building locations. As Construction Monitor does not have complete coverage of large multifamily structures, the Kem C. Gardner Policy Institute and the Wasatch Front Regional Council added information for large apartment projects built after the 2010 Census that were not present in Construction Monitor data. Many resources, including parcel data, real estate reports, news articles, and aerial imagery were used to find information about additional structures. The addition of omitted apartment data is one of the most significant data refinements we perform in terms of its impact on the resulting population estimates.

We compared the improved Construction Monitor permit data to the Census Bureau's Building Permit Survey data and the Ivory-Boyer Construction Database, both of which report building permits for cities and towns, to look for cities where the Construction Monitor data may be less accurate than these sources.[10] As occurred in the 2017 population estimates, our analysis showed many missing permits in Construction Monitor coverage for Vineyard. We requested all building permits issued in 2017 from the city offices and used the data in place of Construction Monitor data for the city.[11] We also supplanted the data in both counties with parcel (assessor's) data from the Utah Land Information Record Parcels in areas where we observed that our permit data were low compared to the other sources, and where the parcel data were sufficient to supply lot-level information on newly constructed units by year built. In Salt Lake County, we used parcel data to add to our dataset for Cottonwood Heights and for single family construction in Draper. In Utah County, we used parcel data to add more construction data in Spanish Fork, Elk Ridge, Woodland Hills, and Genola.[12] While we are not able to resolve all differences seen in permit data across sources, these refinements improve our building permit dataset.

Salt Lake City data were also analyzed in detail due to the historically high number of new units permitted in late 2016, which were nearly all for large apartment complexes. The Census Bureau's Building Permit Survey and Ivory-Boyer Construction Database each reported over 3,000 new housing units permitted, over twice the amount reported in any other year this decade.[13] Using a list provided by the Ivory-Boyer Construction Database, all multifamily units were researched to best estimate their actual completion times, and were adjusted accordingly. We found that several complexes from this large set of permits began to be complete in time for the 2018 population estimates, but many complexes will not be completed until the 2019 estimate or even later. The timing of apartment construction greatly influences our population estimates for Salt Lake City.

Methodology and Assumptions

The subcounty estimates are produced using the housing unit method. The basic technique of the housing unit method is very straightforward; key points of the method used for these estimates are shared here. Geography is crucial throughout the process, as the estimates are calculated at a census block geographic level, and tract and city estimates are aggregated from the block results. The method begins with block-level housing and population data from the 2010 Census. Geocoded building permit data, which include a housing unit count with each permit, are used to estimate the annual changes in housing units for each block. Once housing unit changes are

established, owner-occupied and renter-occupied average persons per household values from Census 2010 are used to estimate the population in new housing units.[14] The persons per household values vary by area; the calculation for each block uses values for the tract in which the block is contained. This provides the household population for each block.

Each year, the household population is combined with the previous year's household population. For example, the new household population from July 1, 2017 to July 1, 2018 is added to the July 1, 2017 estimate. The group quarters population is then added to the household population to determine the total population for 2018. The household population and the group quarters population are the only two components of the total population, as all residents fall into one group or the other.

A set of core assumptions are implemented in the housing unit method. Census 2010 data provide the foundational data for assumptions 2 through 5. The assumptions are listed below and subsequently discussed in brief. The final assumption (7) controls the housing unit method results to independently calculated county-level estimates also produced by the Utah Population Committee (UPC).

Core Assumptions:

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
7. Control Estimates to UPC County-Level Estimates

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

We assume new housing units are built and then become either occupied or vacant six months after the issue 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, we assume apartment projects of 100-174 units are completed and occupied in two phases. The phases come 12 and 15 months after the permit date, with half of the overall units completed in each phase. We assume projects of 175 or more units are completed and occupied in four phases. The phases are 9, 12, 15, and 18 months after the permit date, with one-quarter of the overall units completed each time. Some groups of permits have less than 100 units each but were identified as belonging to the same large complex; these permits follow the 15 or 18-month lags described here. These permits are identified through an automated step, though some are also manually adjusted. In some cases, permit dates for specific complexes are adjusted so that the estimated construction computations better match research findings concerning their actual construction timelines.

Assumption 2: Household Size (Persons per Household)

Though actual persons per household (PPH) values for an area may change over time, in these estimates we hold Census 2010 PPH values constant for each area. As stated previously, PPH values are based on census tract location. Blocks are sub-geographies of tracts, so each block belongs to only one census tract. Note that we continue to use tenure-specific (owner and renter) tract PPH values for new structures based on their estimated type. For example, a new single-family home may be estimated to have 3.12 residents, while a 20-unit apartment complex in the same tract may gain 2.85 residents per unit. The first value is the average owner household size in the tract; the second is the average renter household size in the tract.

Construction and demolition affect county-level PPH values calculated from method results. For example, if most housing is constructed in tracts with higher-than-average PPH values, county PPH values will increase over time. The controlling process (Assumption 7) also heavily impacts PPH. Our results show PPH values in Salt Lake County that have lowered over time for both owner and renter households. In Utah County, PPH values for owner households have increased over time, while renter PPH increased in some years but currently matches Census 2010 levels in 2018 (See Tables 3 and 5).

Assumption 3: Housing Unit Tenure

For new construction (after Census 2010), we infer owner and renter classification 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 is classified as renter-occupied. In a handful of cases, a smaller permit known to be part of a large multiple-permit apartment project is also classified as a renter unit. Classification of tenure for new construction is done to choose an appropriate persons per household assumption and to fit with Census 2010 housing data. It is not intended to precisely represent owning and renting. Thus, housing that existed in Census 2010 reflects actual owning and renting, while postcensal housing units are more general estimations of owned or rented homes.

Assumption 4: Occupancy and Vacancy

Vacant units are based in 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

Census 2010 provides the starting count of group quarters populations in each census block. Subsequent annual changes are included in the estimates for the most major group quarters facilities. For all other facilities, the Census 2010 group quarters population is held constant for each year of the estimates.

We gathered annual population changes for major facilities through the annual Group Quarters Report to the Census Bureau and through primary data collection.

In Salt Lake County, annual changes for the Utah State Prison, Salt Lake County Jail, and the University of Utah and Westminster College dormitories were included in the method. A few small facilities which opened after the 2010 Census were also included in Salt Lake County. In Utah County, annual changes were included for the Brigham Young University dormitories, the Provo Missionary Training Center, and the Utah County Jail. There is no campus-owned housing for Utah Valley University (UVU). Despite this, some apartment complexes near UVU were classified as group quarters college housing in the 2010 Census. These populations are held constant for each estimate year, and residents of other new housing complexes built near UVU are covered in the household (non-group quarters) population in these estimates.[15]

Assumption 6: Demolitions

As with building permit data, demolition permit data were sourced from Construction Monitor. Demolitions are assumed to be completed six months after the permit date. Demolitions subtract vacant housing units; they do not reduce occupied housing units and population unless demolitions exceed the amount of vacant housing units in a block.

Assumption 7: Control Estimates to UPC County-Level Estimates

We refer to the initial results—achieved with the data and assumptions described so far—as the uncontrolled estimates or results, because they are calculated before the final "controlling" step takes place. The controlling step uses county-level population estimates from the Utah Population Committee (UPC) to adjust the subcounty results so they properly fit (control to) the UPC county totals. For the July 1, 2018 estimate, the subcounty total population estimates for Utah County had to be increased (controlled up) in order to match the UPC estimate for Utah County. In contrast, the subcounty estimates for Salt Lake County were decreased (controlled down). Both city and tract-level results are controlled so that either geography sums to the UPC county total.

The July 1, 2018 uncontrolled Salt Lake County population estimate from the subcounty method is 1,161,491. Since that estimate exceeds the UPC county-level population estimate of 1,142,077, subcounty results are controlled down by 19,414 people (-1.7%). In Utah County, the opposite is true. The county's uncontrolled population estimate is 631,093, which is lower than the UPC county-level estimate of 633,582. Subcounty results are controlled up by 2,489 people (0.4%) to match the UPC estimate. Further description of the process is in the following section.

Additional Information: Controlling to UPC County-Level Estimates

As this release of 2010 to 2018 subcounty estimates is our first in which results are controlled to the Utah Population Committee (UPC) county-level estimates, we include additional detail about the controlling process.

UPC produces annual state and county population estimates for Utah, as well as these subcounty estimates. The state and county-level methodology is entirely separate from the subcounty methodology (housing unit method) used here.[16]

The state and county estimates are produced using a components of change methodology. The natural increase component is provided by birth and death records. The migration component is estimated from a variety of local data sources including school enrollment, building permits, tax filings, and membership of the Church of Jesus Christ of Latter-day Saints.[17] Some data sources are excluded for certain counties where the committee deems the data unreasonable for that year. In order to integrate the findings from each method, this year we have introduced a controlling process as part of the overall subcounty estimates process.

As mentioned previously, the controlling process adjusts tract and city-level estimates so that when all tracts or all cities of a given county are summed, they equal the UPC total population estimate of that county. Every year of results is controlled, so subcounty estimates match UPC county level estimates for each year, be it 2013 or 2018. Controlling begins by subtracting the subcounty total group quarters population for each county from the UPC total population of each county. This serves as the UPC county-level household estimate.[18] Next, control factors are calculated for each county, each year. The control factor is the UPC county household population divided by the subcounty method's county household population, and determines whether population levels must be controlled up or down. If the control factor is greater than 1, the subcounty population must be controlled up to match the UPC county level. If the control factor is less than 1, the population must be controlled down. The 2018 control factors were 0.9831 for Salt Lake County and 1.0040 for Utah County.[19] The necessary adjustments are then distributed proportionally based on the total populations of cities and tracts, with larger cities and tracts receiving greater adjustments than smaller cities and tracts.

The controlling process does not establish the reason that population adjustments are needed. The UPC county-level estimation process establishes the county total populations, and differences between these totals and subcounty results are then adjusted to balance the differences. Any aspect of the subcounty methodology may be introducing the differences, such as assumptions on vacancy/occupancy rates, average household sizes, or, as is likely, a combination of factors. The controlling process is a way of incorporating observations from county-level data into the subcounty work. It also allows us to produce state, county, and subcounty estimates which all nest together numerically and can be treated as a cohesive set of estimates.

The controlling process affects household populations and total populations at all geographic levels. However, housing unit counts as estimated using building permit data are not affected. This maintains the integrity of the housing unit estimates produced by the subcounty method using individual, mapped permit data. Only the building permit dataset and improvements made to it affect estimates of the numbers of housing units (including occupied, owner, renter, and vacant units). No other adjustment is made to impact these results or control them to results from another method. Group quarters population estimates are also not affected by controlling.

Comparison to Alternative Estimates

We can compare these subcounty estimates to annual estimates published by the Census Bureau at the county and city level. However, annual census tract estimates are not publicly available from the Census Bureau or other sources for comparison. This section compares results at the county level, discusses comparisons at the city level, and further explains why annual tract-level estimates are not available. Comparisons are made to the final, controlled subcounty results.

County-level estimates for 2018 have not yet been released by the Census Bureau Population Division, so we have compared our 2017 county totals with the available 2017 estimates. We estimate a lower population for Salt Lake County (about 7,400 or 0.6% below the Census Bureau estimate) and a higher population for Utah County (about 11,300 or 1.9% above the Census Bureau estimate). See Figures 16 through 19 for graphs comparing our population estimates to the Census Bureau's.

In addition to county-level estimates, the Census Bureau's Population Division releases annual population estimates for incorporated places (cities and towns). These provide useful comparisons of city-level results. The Kem C. Gardner Policy Institute partners with the Census Bureau through the Federal-State Cooperative for Population Estimates (FSCPE) to review housing and population estimates for cities. This subcounty estimates work provides a core resource for this review in Salt Lake and Utah counties. We analyze differences between the Census Bureau's estimates and our own, informing both sets of estimates. As building permit data are the foundation of city population estimates for our method and the Census Bureau's, many differences in population results are due to differences in building permit datasets. In some cases, Census Bureau building permit information helps us improve our own data for a given place; in other cases, we have evidence that our building permit data is more complete for a city than the Census Bureau's. Neither source is guaranteed to have more accurate building permit data for all cities, especially because cities may report inconsistent permit data to different sources.

As with the 2018 county-level estimates, the Census Bureau has not yet released 2018 city-level estimates (the release is planned for May 2019). However, we have compared the 2017 data from our current subcounty estimates to the Census Bureau's 2017 population estimates.[20]

The largest difference in the 2017 population estimate is in Salt Lake City, where our estimate of 196,280 is over 4,000 people lower than the Census Bureau's estimate of 200,544. The difference is overwhelmingly due to the large boom in apartment complex units permitted in the city in fall 2016. The Census Bureau's methodology assumes that any housing permitted in 2016 will be complete before July 1, 2017. Our local research, however, determined that very few of these units were actually built and occupied by July 1, 2017, and many of them were still not complete for the July 1, 2018 estimates. Our construction lag assumptions and specific adjustments for these complexes are reflected in our results. The Census Bureau made no such adjustments, thus estimating that the apartment complexes are built and occupied much sooner than they are in reality. The difference in Salt Lake City is a compelling example of the influence of a particular local circumstance on the building permit data and estimates. We often adjust our subcounty estimates data based on these local circumstances, while the national production of the Census Bureau does not allow for all such circumstances to be considered.

A description of all city or town differences is beyond the scope of this report, however, we list some of the largest differences. There are seventeen cities where our 2017 estimate differs from the Census Bureau estimate by at least 500 people. Of these, six of our estimates are below the Bureau's estimates and the other eleven are above. This demonstrates that our subcounty estimates at the city level are not systematically higher or lower than the Census Bureau's estimates.[21]

The cities where our 2017 estimates are the lowest in comparison to Census Bureau estimates are Salt Lake City, West Jordan, Sandy, Herriman, and unincorporated Salt Lake County. Note that these are all in Salt Lake County, which we estimate to be lower in overall population than the Census Bureau estimates. The cities where our estimates are highest in comparison to Census Bureau estimates are Provo, Lehi, South Jordan, Orem, Draper, and Spanish Fork. Several of these cities are in Utah County, and are influenced by the fact that we estimate a higher Utah County population overall than does the Census Bureau.

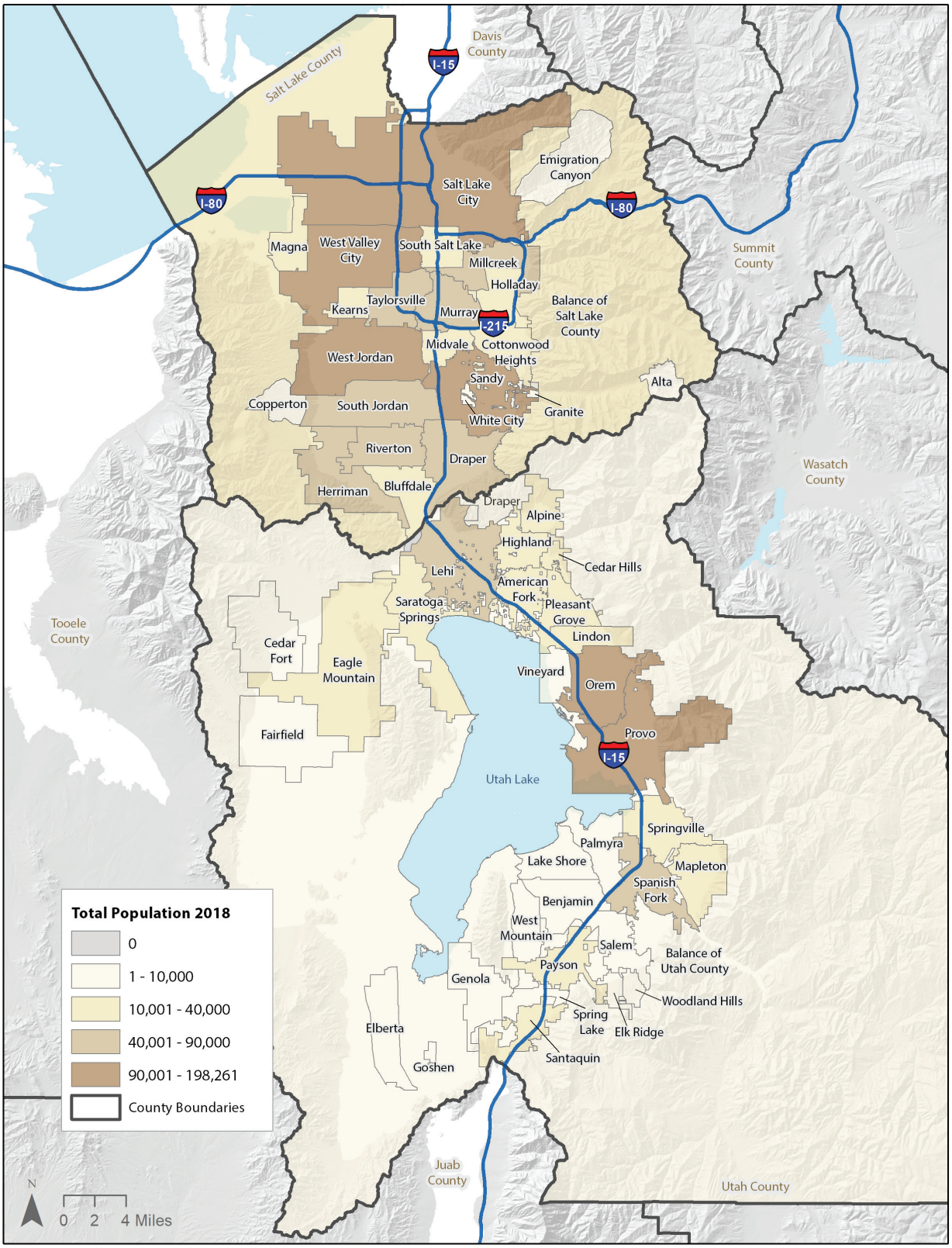
At the tract level, the Census Bureau provides housing and population estimates for all tracts through the American Community Survey. However, the data are available for five-year periods only and do not provide annual point-in-time information. Currently, the 2013-2017 5-year estimates are the most recent tract-level data available. As stated above, there are no single-year census tract estimates from the Census Bureau or other publicly available sources that can be used as comparisons to our results.

Conclusion

The 2010-2018 subcounty housing and population estimates provide unique information on cities and census tracts in Salt Lake and Utah counties. The quality of these housing unit method estimates relies heavily on the quality of input data. We made significant efforts to review our input data, though we note that one limitation of this method is that there is no simple way to identify omissions in the underlying permit data. However, a benefit of the housing unit method is that its results are easy to understand because they are clearly linked to data and assumptions. This research provides a rich data source for those seeking to understand housing and population changes at the subcounty level for Utah's two largest counties. Information about the drivers of population growth—natural increase and net migration—are provided in the county estimates work of the Utah Population Committee (UPC).[22]

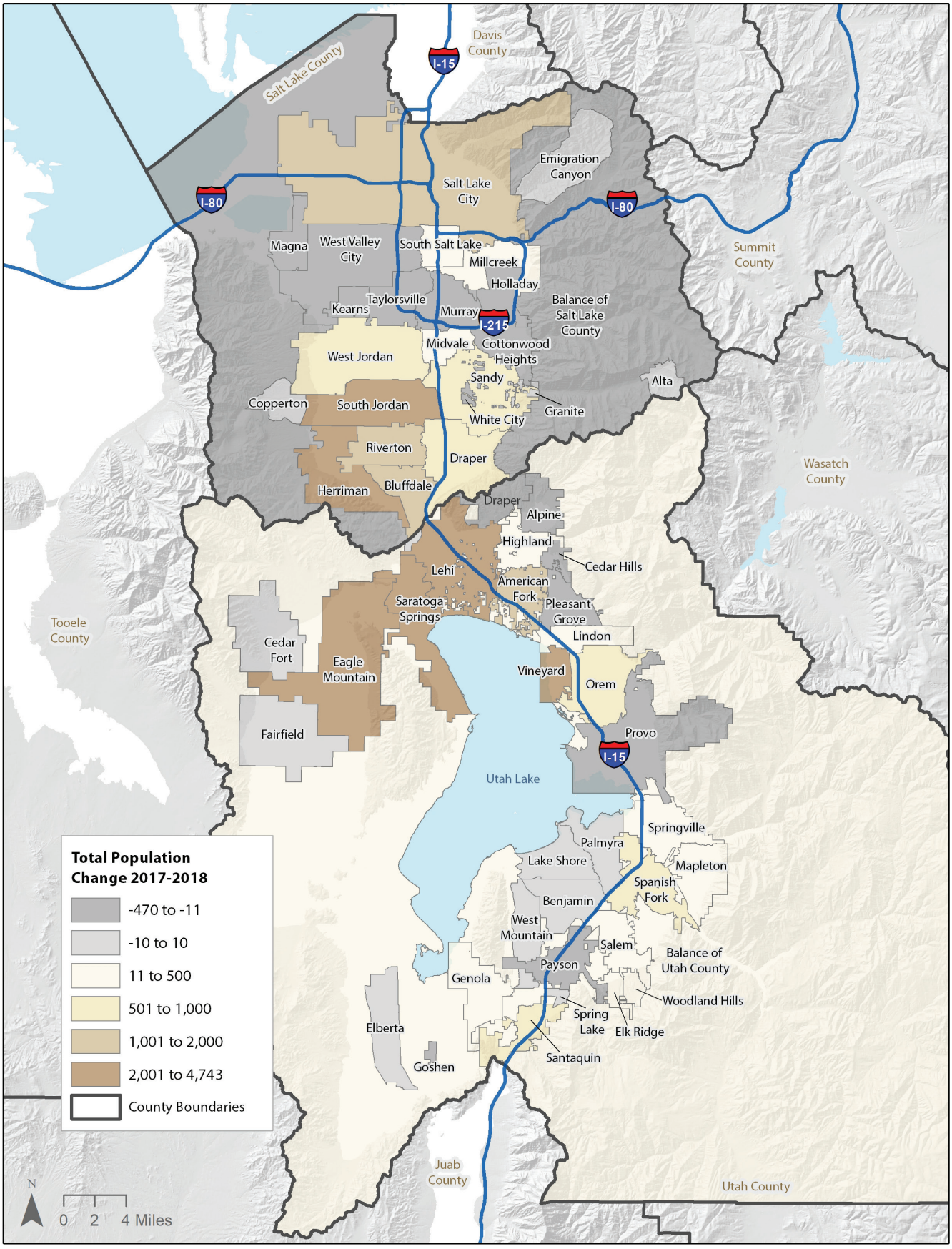
CITY MAPS

Figure 3: Salt Lake and Utah County City Estimates, Total Population 2018



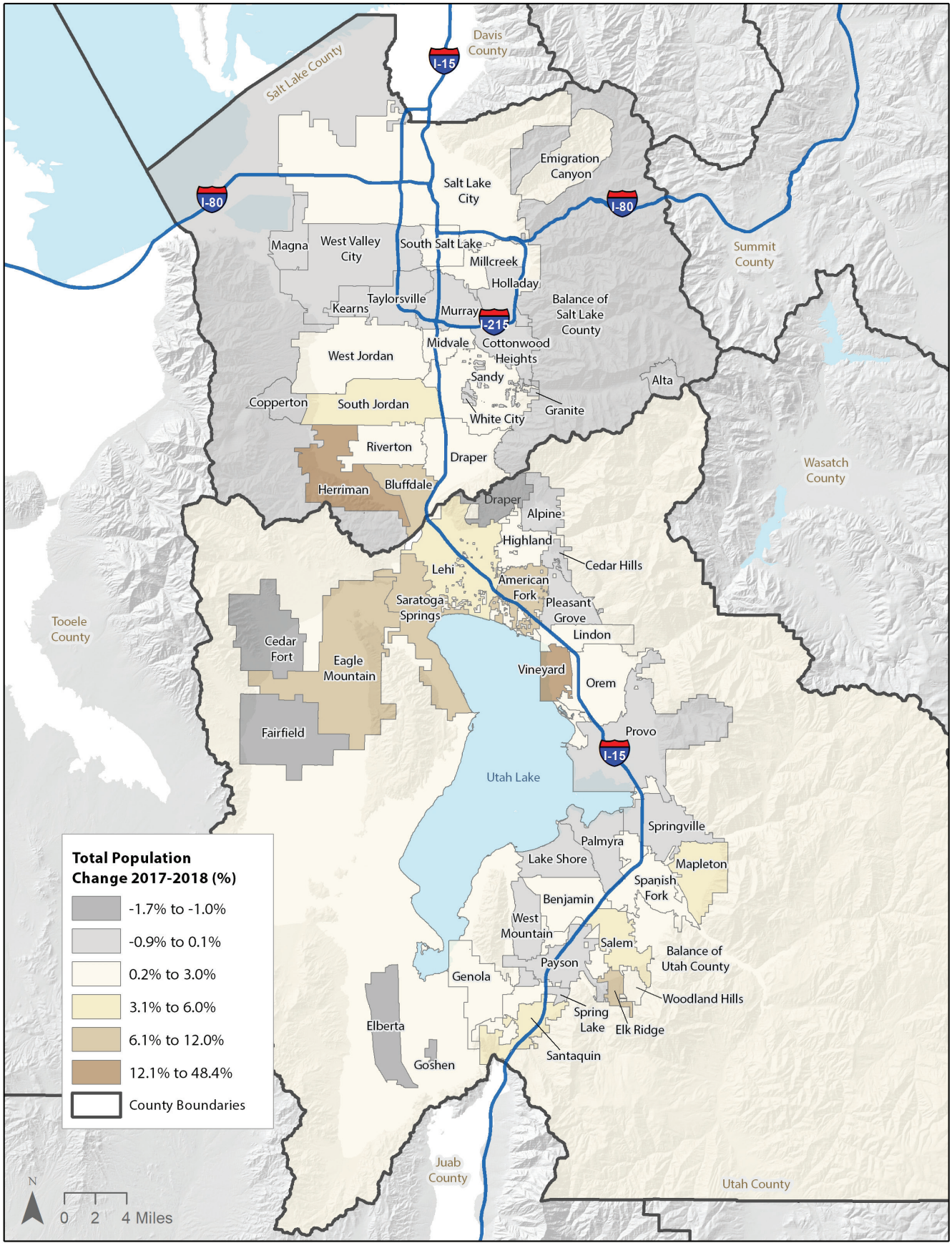
Note: Balance of county areas cover the entire county area outside of the cities, towns, and metro townships shown.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

Figure 4: Salt Lake and Utah County City Estimates, Total Population Change 2017-2018



Note: Balance of county areas cover the entire county area outside of the cities, towns, and metro townships shown.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

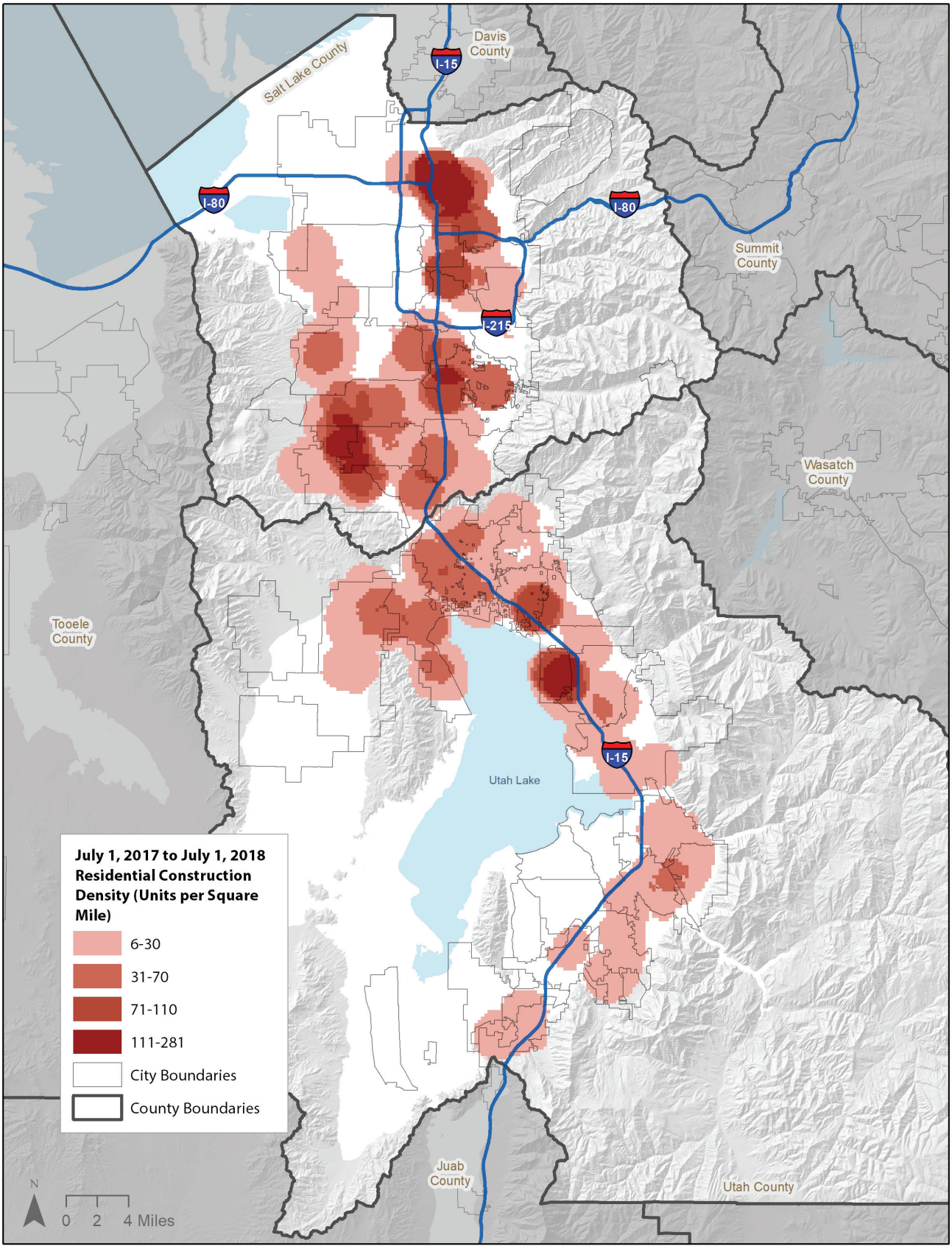
Figure 5: Salt Lake and Utah County City Estimates, Rate of Population Change 2017-2018



Note: Balance of county areas cover the entire county area outside of the cities, towns, and metro townships shown.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

BUILDING PERMIT HEAT MAP

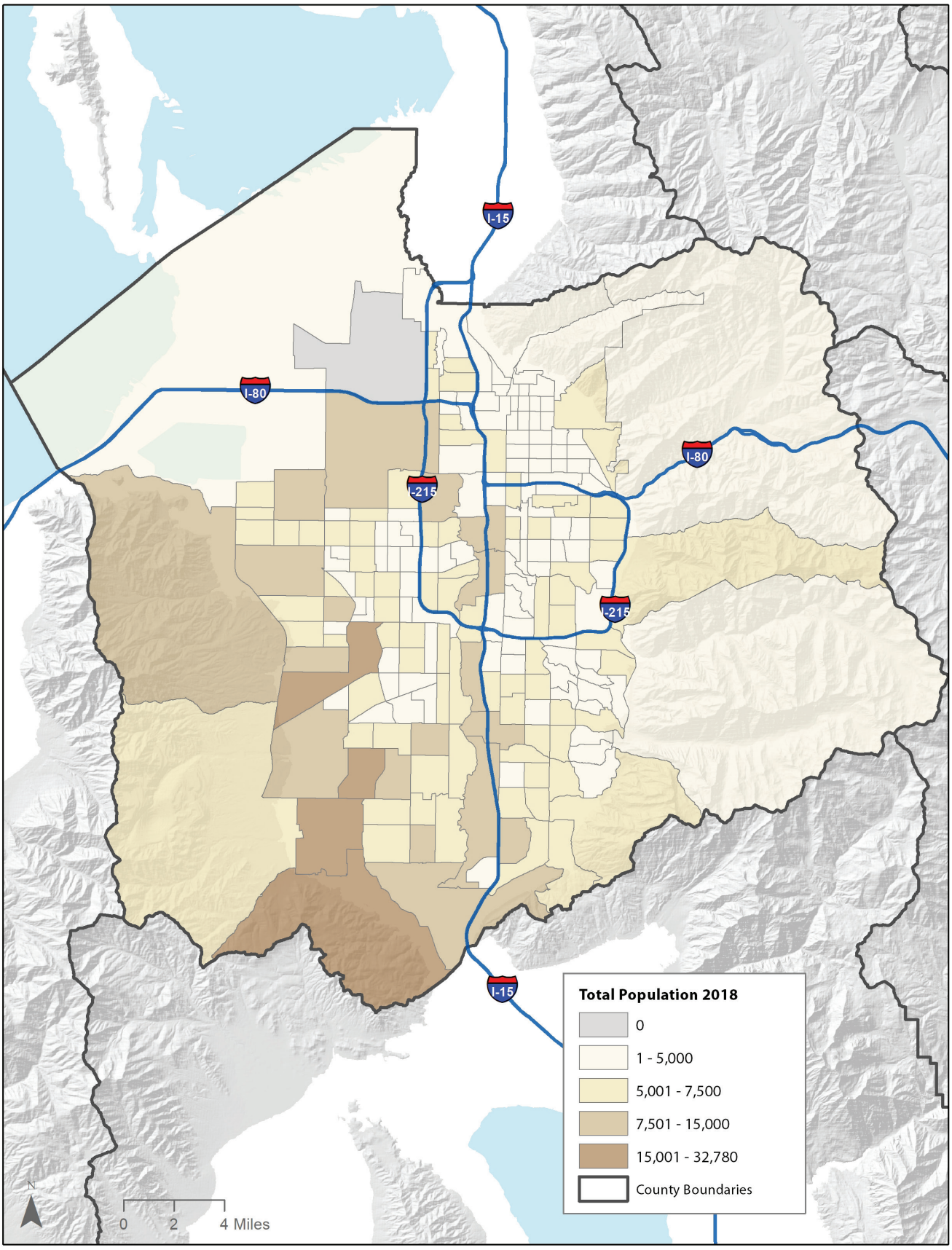
Figure 6: Salt Lake and Utah Counties, Heat Map of New Housing Units 2017-2018



Note: For apartment complexes with units built for the 2018 estimate and an additional estimate year (2017 and 2018 or 2018 and 2019), all units are included.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

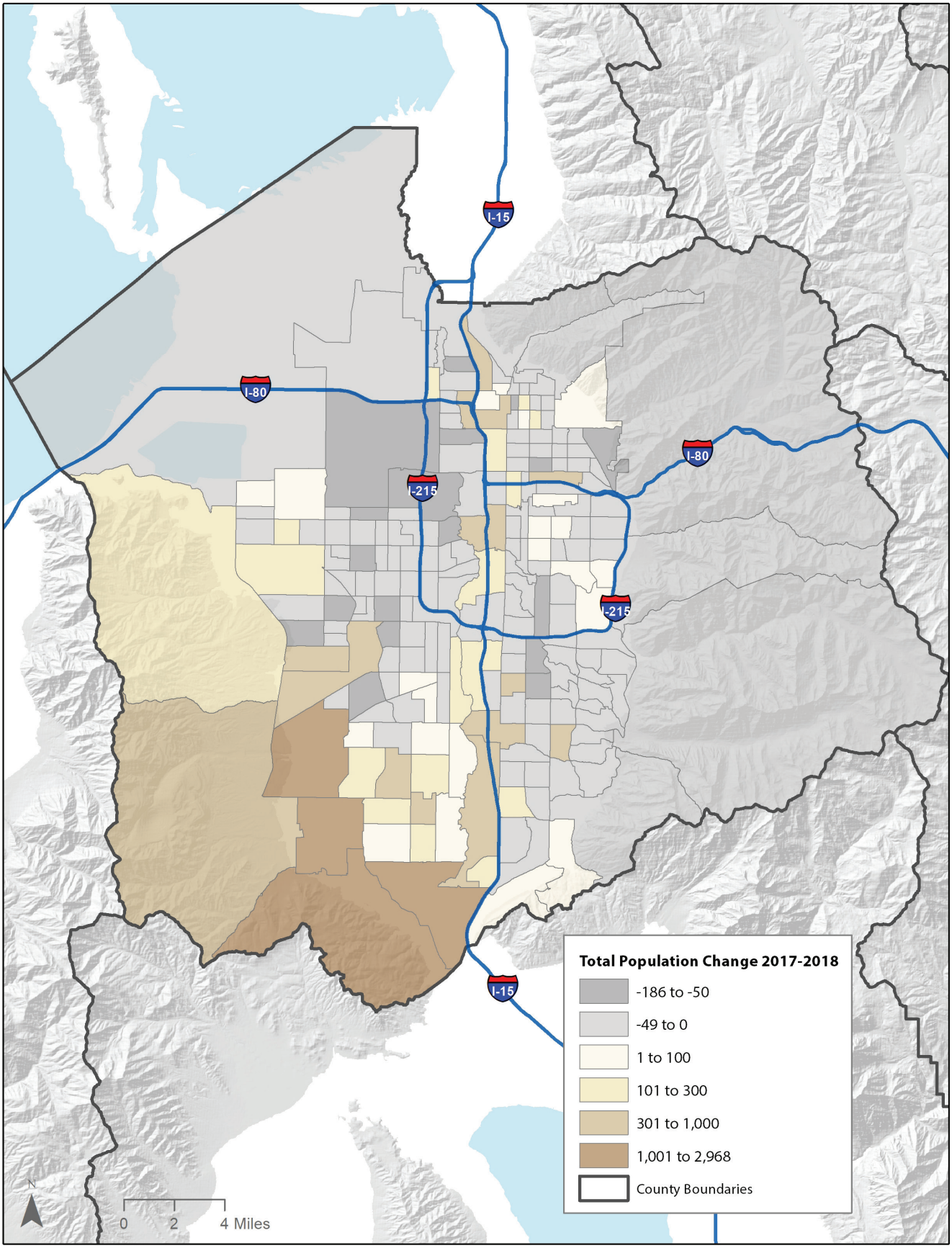
TRACT MAPS

Figure 7: Salt Lake County Tract Estimates, Total Population 2018



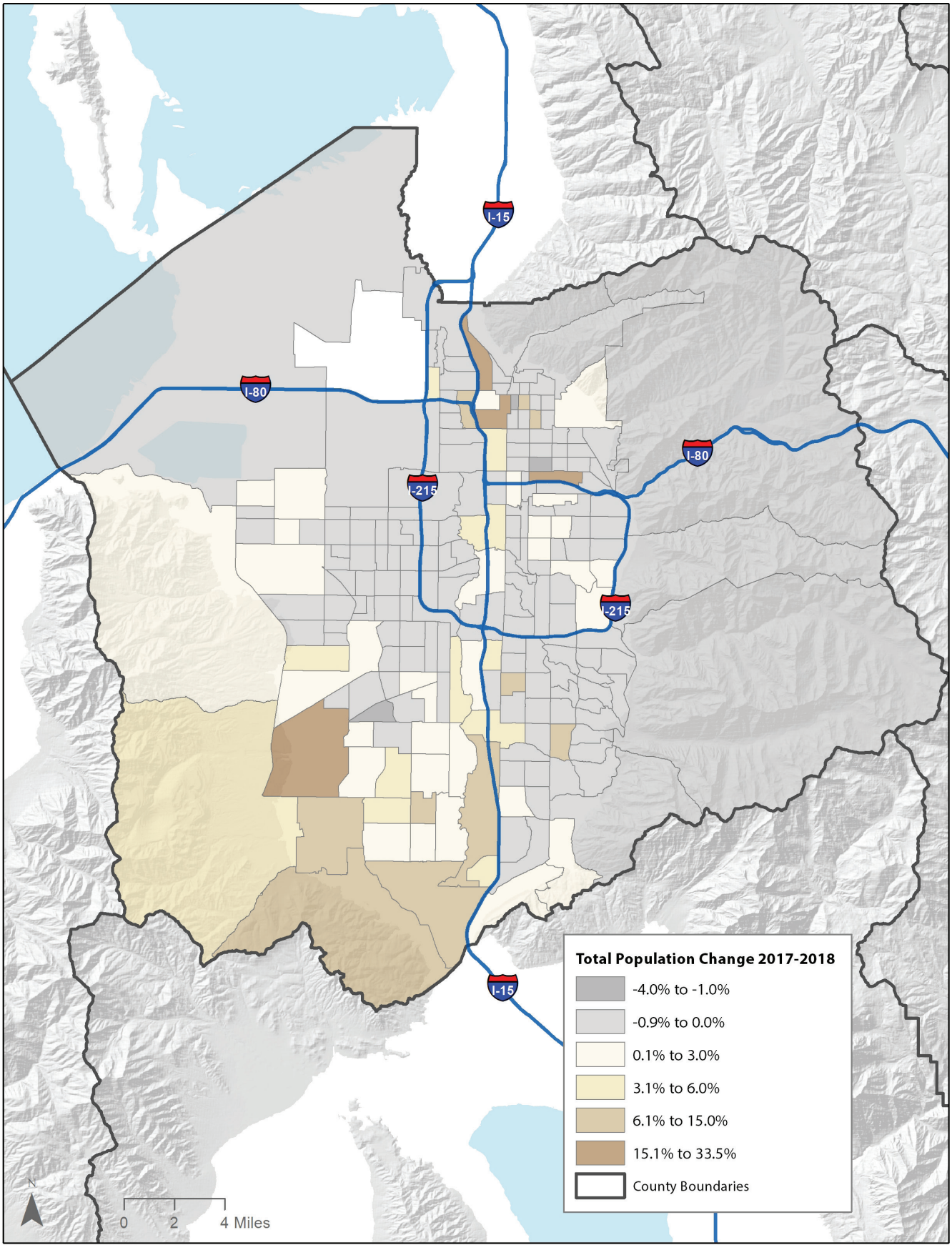
Note: For a reference map including tract numbers, see Figure 13.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

Figure 8: Salt Lake County Tract Estimates, Total Population Change 2017-2018



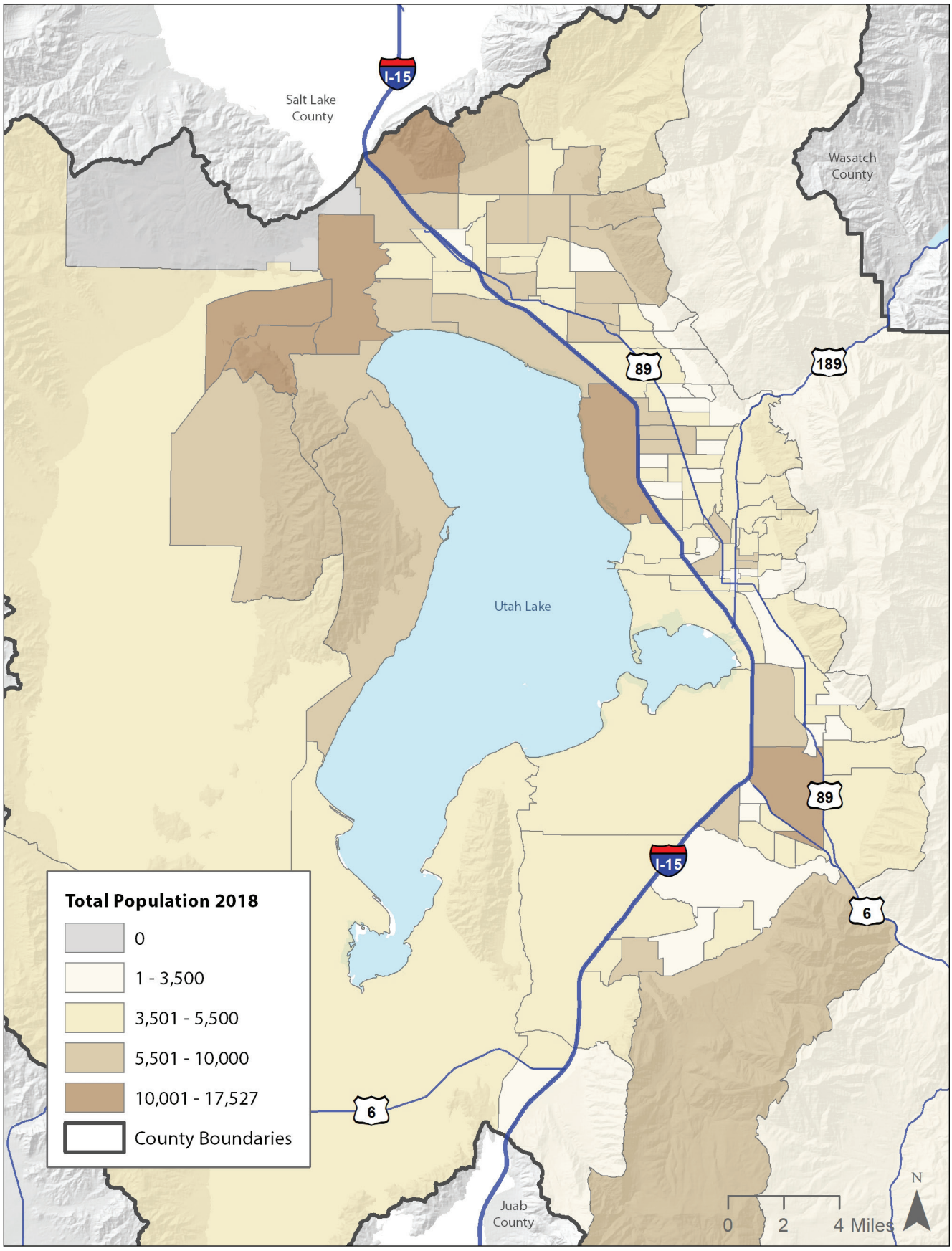
Note: For a reference map including tract numbers, see Figure 13.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

Figure 9: Salt Lake County Tract Estimates, Rate of Population Change 2017-2018



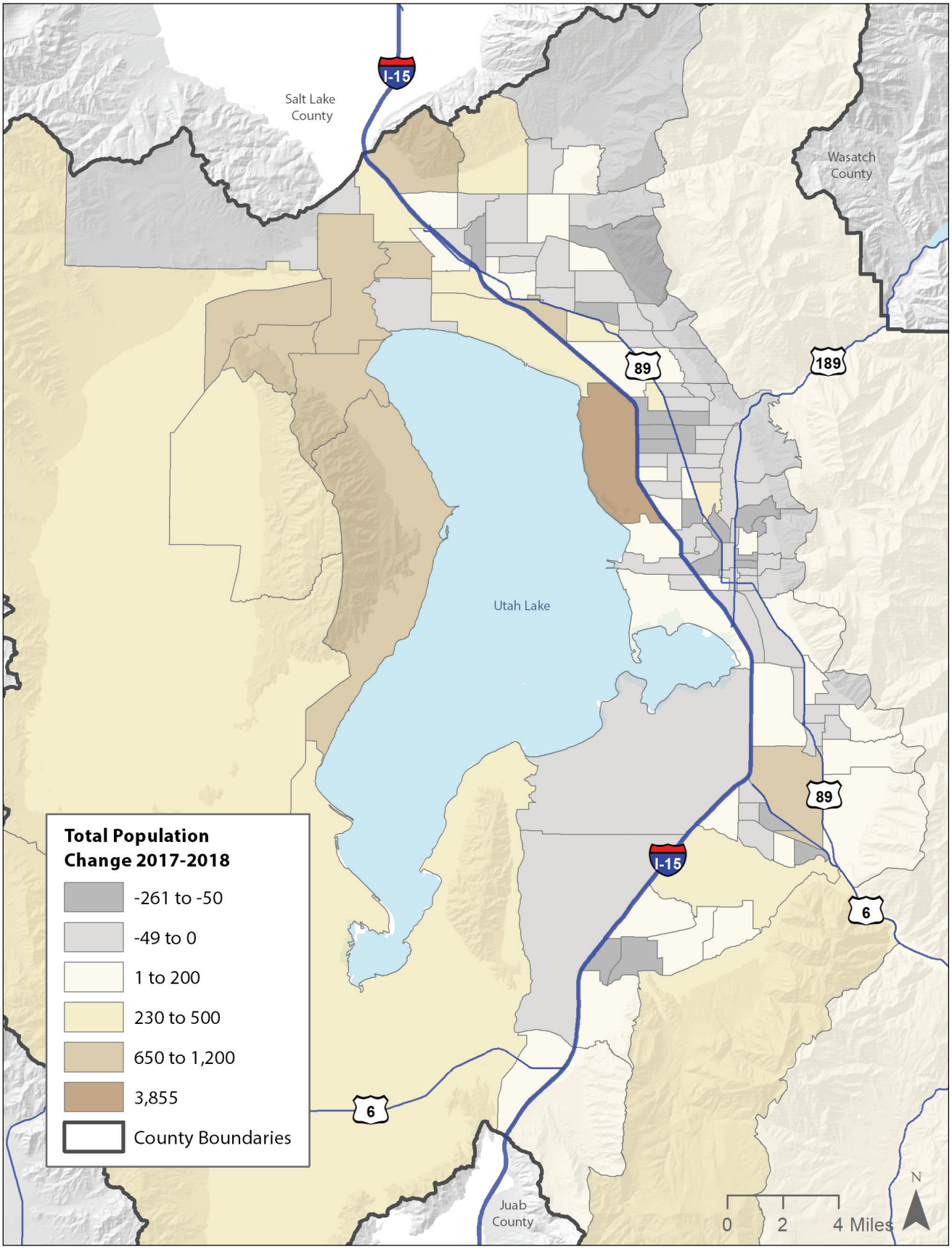
Note: For a reference map including tract numbers, see Figure 13.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

Figure 10: Utah County Tract Estimates, Total Population 2018



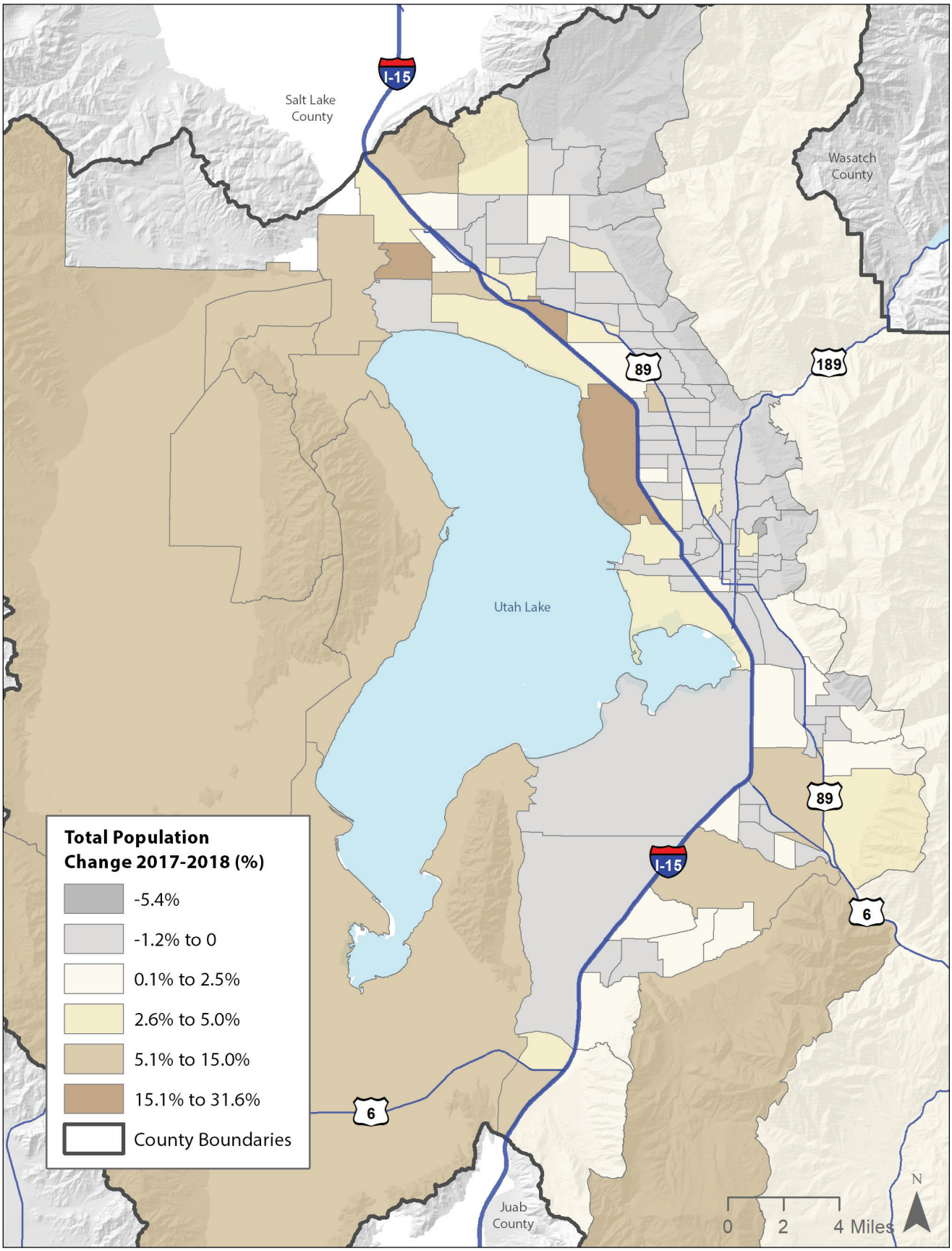
Notes: The full extent of some tracts is not shown on this map. The small populations living outside the area shown are included in the data. The full area of tract 101.13 covers Utah Lake; the tract has been trimmed for display. For reference maps including tract numbers, see Figures 14 and 15.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

Figure 11: Utah County Tract Estimates, Total Population Change 2017-2018



Notes: 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 including tract numbers, see Figures 14 and 15.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

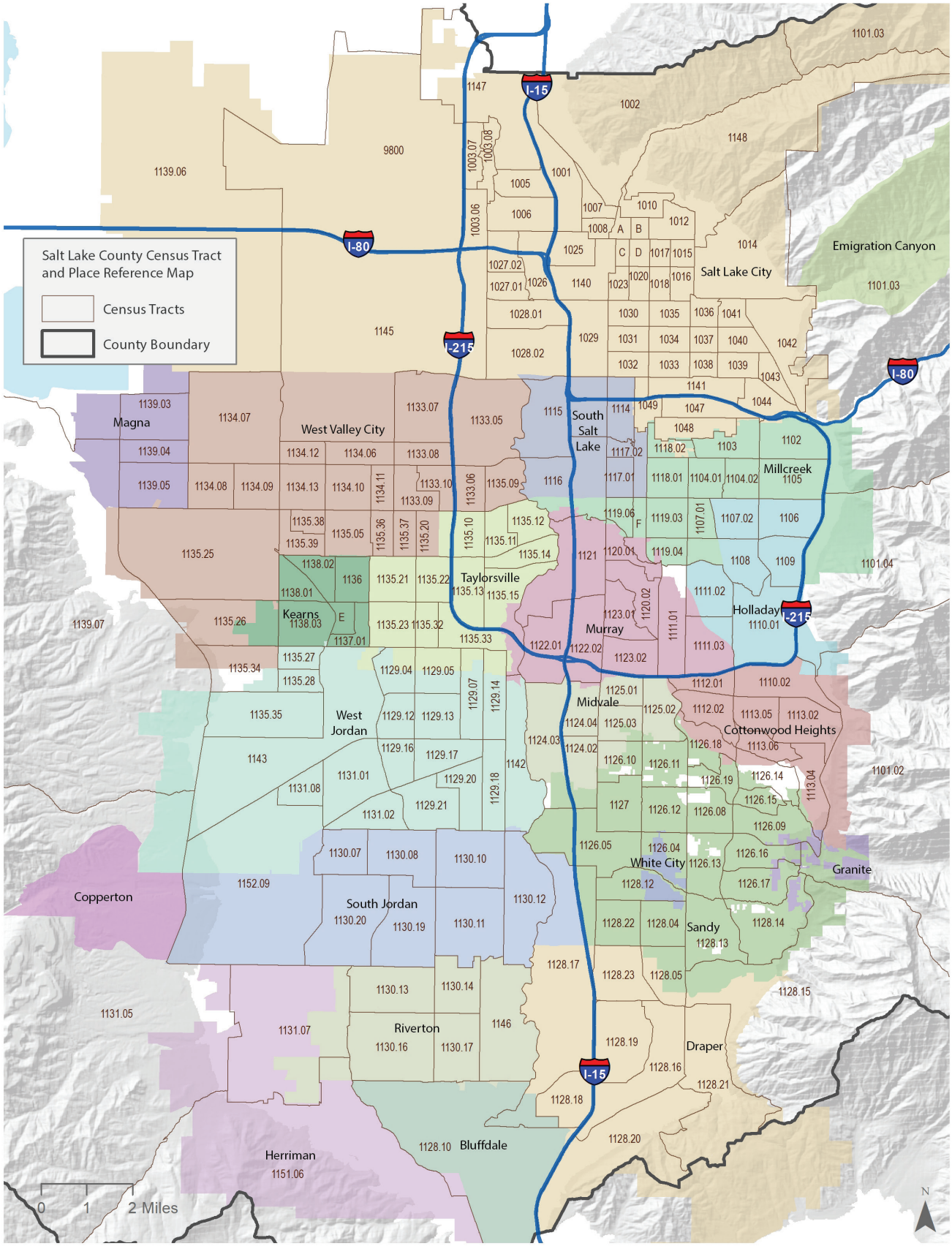
Figure 12: Utah County Tract Estimates, Rate of Population Change 2017-2018



Notes: 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 including tract numbers, see Figures 14 and 15.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

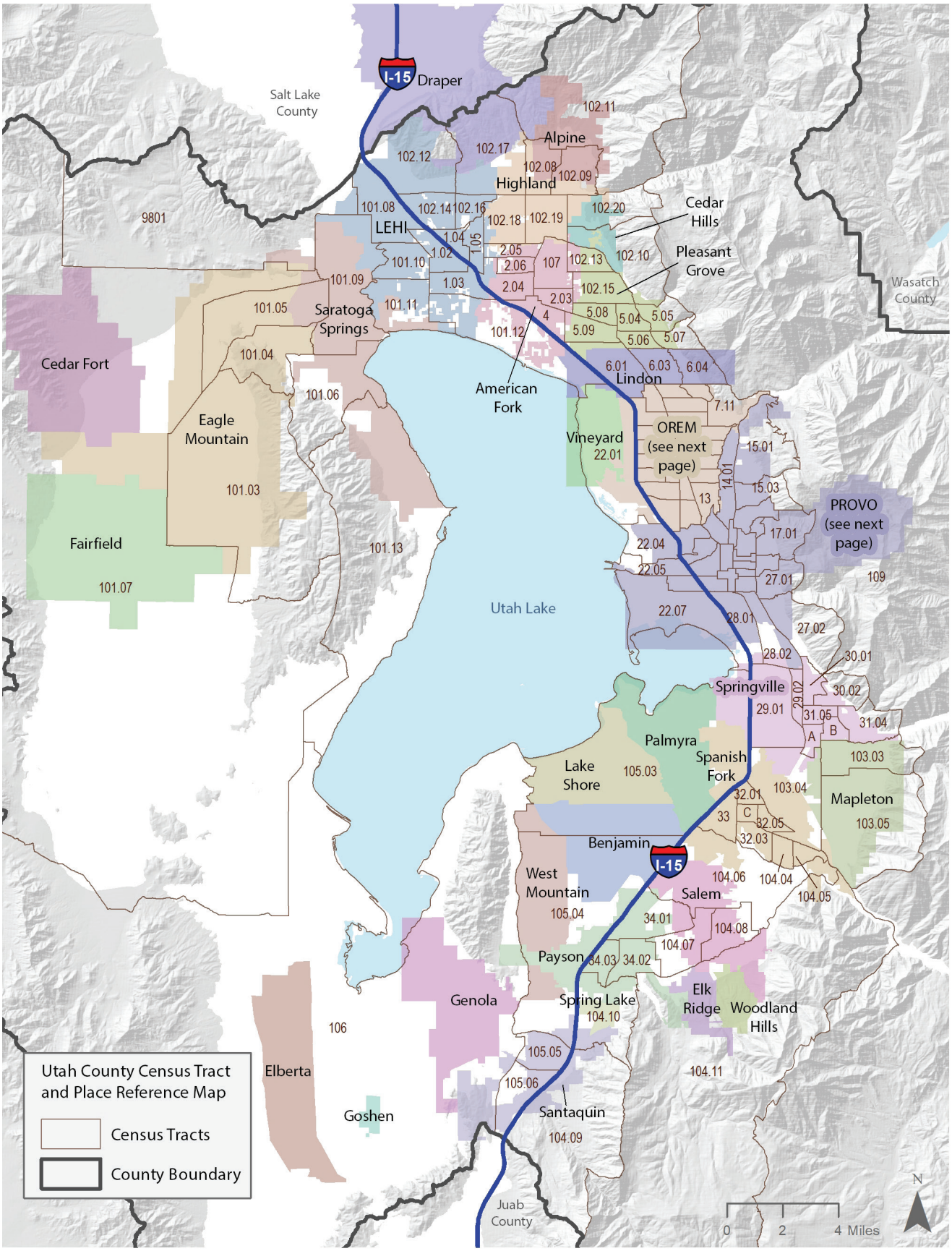
REFERENCE MAPS

Figure 13: Salt Lake County Census Tract and Place Reference Map



Notes: Numbers for tracts marked with a letter: Salt Lake City: A=1011.02, B=1011.01, C=1021, D=1019. Kearns: E=1137.02. Millcreek: F=1119.05. The map is scaled so tract names are legible. Tracts at edges of the county extend to the county boundary as shown in other maps.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

Figure 14: Utah County Census Tract and Place Reference Map



Notes: Numbers for tracts marked with a letter: Springville: A=31.06, B=31.03. Spanish Fork: C=32.04. The full extent of some tracts is not shown on this map. To view the full areas of outlying tracts, see Figure 15. The full area of tract 101.13 covers Utah Lake; the tract has been trimmed for display.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau (boundaries)

SALT LAKE COUNTY RESULTS

Table 3: Salt Lake County Estimates for Selected Variables

Variables	April 1, 2010	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016	July 1, 2017	July 1, 2018
Total Population	1,029,655	1,046,461	1,060,336	1,070,815	1,080,905	1,094,681	1,108,910	1,128,271	1,142,077
Household Pop.	1,015,649	1,032,016	1,045,876	1,055,879	1,065,941	1,080,075	1,094,831	1,112,917	1,126,539
Group Quarters Pop.	14,006	14,445	14,460	14,936	14,964	14,606	14,079	15,354	15,538
Total Housing Units	364,031	368,132	372,027	376,057	380,291	386,165	392,261	398,923	406,719
Occupied Units	342,622	346,667	350,525	354,504	358,677	364,481	370,511	377,118	384,836
Owner-Occupied	230,419	232,325	234,229	236,938	240,104	242,999	246,155	249,685	253,704
Renter-Occupied	112,203	114,341	116,297	117,566	118,573	121,482	124,357	127,434	131,133
Vacant Units	21,409	21,465	21,501	21,553	21,613	21,684	21,750	21,804	21,883
Avg. Household Size (PPH)	2.96	2.98	2.98	2.98	2.97	2.96	2.95	2.95	2.93
Owner	3.13	3.14	3.15	3.15	3.14	3.14	3.13	3.13	3.11
Renter	2.63	2.65	2.65	2.64	2.63	2.62	2.61	2.60	2.57

Notes: Occupied units represent households; these values can be used as estimates of household counts. Due to rounding, occupied and vacant units may not add to total housing units, and owner-occupied and renter-occupied units may not add to occupied units. In the housing unit method, the PPH values used to imply population match Census 2010 values by tract. Changes to PPH can occur over time due to locations of new construction and the controlling of population estimates (refer to the methodology section).
Sources: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau, 2010 Census

Table 4: Salt Lake County Estimates for Selected Variables, Annual Changes

Annual Changes	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016- 2017	2017-2018	Census 2010-2018
Total Population	14,764	13,875	10,479	10,090	13,776	14,229	19,361	13,806	112,422
Household Pop.	14,325	13,860	10,003	10,062	14,134	14,756	18,086	13,622	110,890
Group Quarters Pop.	439	15	476	28	-358	-527	1,275	184	1,532
Housing Units	2,834	3,895	4,030	4,234	5,874	6,096	6,662	7,796	42,688
Occupied Units	2,805	3,858	3,979	4,173	5,804	6,030	6,607	7,718	42,214
Owner-Occupied	1,539	1,904	2,709	3,166	2,895	3,156	3,530	4,019	23,285
Renter-Occupied	1,265	1,956	1,269	1,007	2,909	2,875	3,077	3,699	18,930
Vacant Units	29	36	52	60	71	66	54	79	474
Percent Change									
Total Population	1.4%	1.3%	1.0%	0.9%	1.3%	1.3%	1.7%	1.2%	10.9%
Household Pop.	1.4%	1.3%	1.0%	1.0%	1.3%	1.4%	1.7%	1.2%	10.9%
Group Quarters Pop.	3.1%	0.1%	3.3%	0.2%	-2.4%	-3.6%	9.1%	1.2%	10.9%
Housing Units	0.8%	1.1%	1.1%	1.1%	1.5%	1.6%	1.7%	2.0%	11.7%
Occupied Units	0.8%	1.1%	1.1%	1.2%	1.6%	1.7%	1.8%	2.0%	12.3%
Owner-Occupied	0.7%	0.8%	1.2%	1.3%	1.2%	1.3%	1.4%	1.6%	10.1%
Renter-Occupied	1.1%	1.7%	1.1%	0.9%	2.5%	2.4%	2.5%	2.9%	16.9%
Vacant Units	0.1%	0.2%	0.2%	0.3%	0.3%	0.3%	0.2%	0.4%	2.2%

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

UTAH COUNTY RESULTS

Table 5: Utah County Estimates for Selected Variables

Variables	April 1, 2010	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016	July 1, 2017	July 1, 2018
Total Population	516,564	532,753	544,892	554,405	567,218	585,719	603,385	617,735	633,582
Household Pop.	502,652	517,628	529,641	539,237	553,115	572,504	589,188	603,091	619,013
Group Quarters Pop.	13,912	15,125	15,251	15,168	14,103	13,215	14,197	14,644	14,569
Total Housing Units	148,350	150,432	152,243	155,028	158,689	162,886	168,053	173,672	180,030
Occupied Units	140,602	142,679	144,470	147,229	150,833	154,968	160,067	165,620	171,915
Owner-Occupied	96,053	98,034	99,529	101,856	104,448	107,257	110,406	114,599	119,721
Renter-Occupied	44,549	44,645	44,941	45,372	46,385	47,712	49,661	51,022	52,194
Vacant Units	7,748	7,753	7,773	7,799	7,856	7,917	7,986	8,052	8,115
Avg. Household Size (PPH)	3.57	3.63	3.67	3.66	3.67	3.69	3.68	3.64	3.60
Owner	3.74	3.79	3.83	3.83	3.83	3.86	3.85	3.81	3.77
Renter	3.22	3.26	3.30	3.29	3.30	3.32	3.30	3.26	3.22

Notes: Occupied units represent households; these values can be used as estimates of household counts. Due to rounding, occupied and vacant units may not add to total housing units, and owner-occupied and renter-occupied units may not add to occupied units. In the housing unit method, the PPH values used to imply population match Census 2010 values by tract. Changes to PPH can occur over time due to locations of new construction and the controlling of population estimates (refer to the methodology section).
Sources: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah; U.S. Census Bureau, 2010 Census

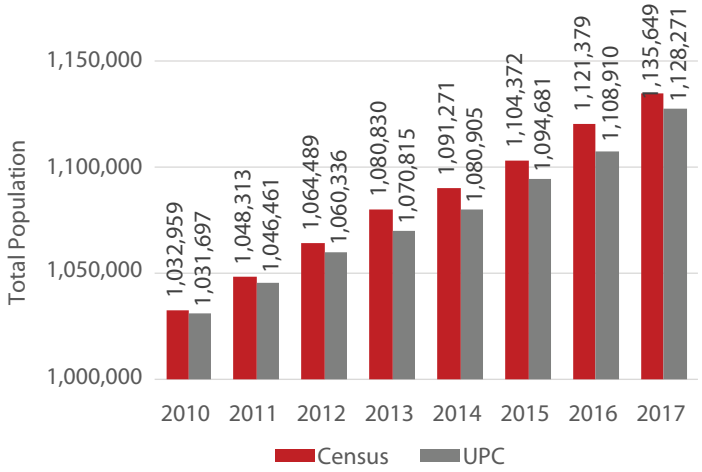
Table 6: Utah County Estimates for Selected Variables, Annual Changes

Annual Changes	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016- 2017	2017-2018	Census 2010-2018
Household Pop.	12,668	12,013	9,596	13,878	19,389	16,684	13,903	15,922	116,361
Group Quarters Pop.	1,213	126	-83	-1,065	-888	982	447	-75	657
Housing Units	1,680	1,811	2,785	3,661	4,197	5,167	5,619	6,358	31,680
Occupied Units	1,677	1,791	2,759	3,604	4,135	5,099	5,553	6,295	31,313
Owner-Occupied	1,615	1,495	2,327	2,592	2,809	3,149	4,193	5,122	23,668
Renter-Occupied	62	296	431	1,013	1,327	1,949	1,361	1,172	7,645
Vacant Units	3	20	26	57	61	69	66	63	367
Percent Change									
Total Population	2.7%	2.3%	1.7%	2.3%	3.3%	3.0%	2.4%	2.6%	22.7%
Household Pop.	2.5%	2.3%	1.8%	2.6%	3.5%	2.9%	2.4%	2.6%	23.1%
Group Quarters Pop.	8.7%	0.8%	-0.5%	-7.0%	-6.3%	7.4%	3.1%	-0.5%	4.7%
Housing Units	1.1%	1.2%	1.8%	2.4%	2.6%	3.2%	3.3%	3.7%	21.4%
Occupied Units	1.2%	1.3%	1.9%	2.4%	2.7%	3.3%	3.5%	3.8%	22.3%
Owner-Occupied	1.7%	1.5%	2.3%	2.5%	2.7%	2.9%	3.8%	4.5%	24.6%
Renter-Occupied	0.1%	0.7%	1.0%	2.2%	2.9%	4.1%	2.7%	2.3%	17.2%
Vacant Units	0.0%	0.3%	0.3%	0.7%	0.8%	0.9%	0.8%	0.8%	4.7%

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

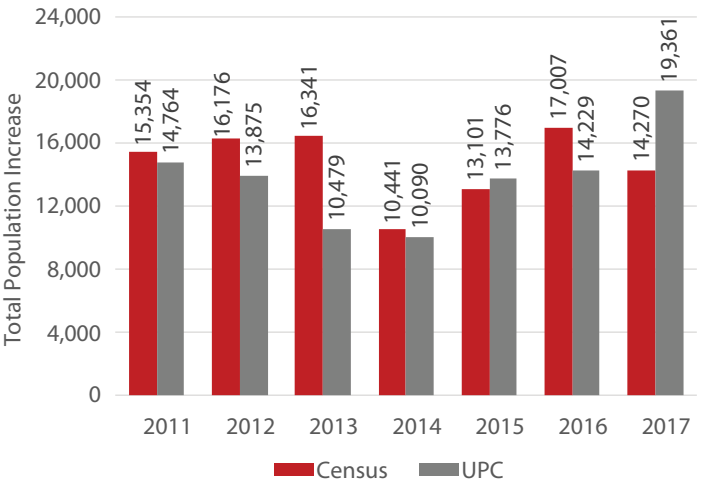
COUNTY ESTIMATE COMPARISON

Figure 16: Annual Salt Lake County Total Population: Comparison of Census and UPC Estimates



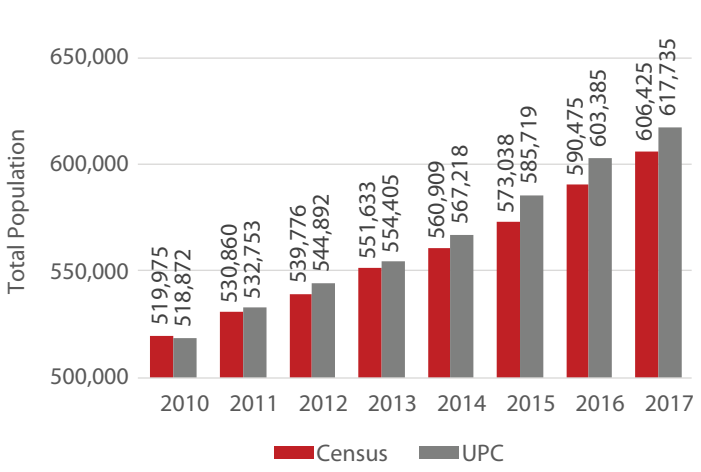
Note: The UPC county estimates and the county totals of UPC subcounty estimates are equal. Refer to the methodology section.
Source: U.S. Census Bureau Population Division Estimates; Utah Population Committee (UPC) 2018 State and County Population Estimates, Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

Figure 17: Salt Lake County Total Population Changes: Comparison of Census and UPC Estimates



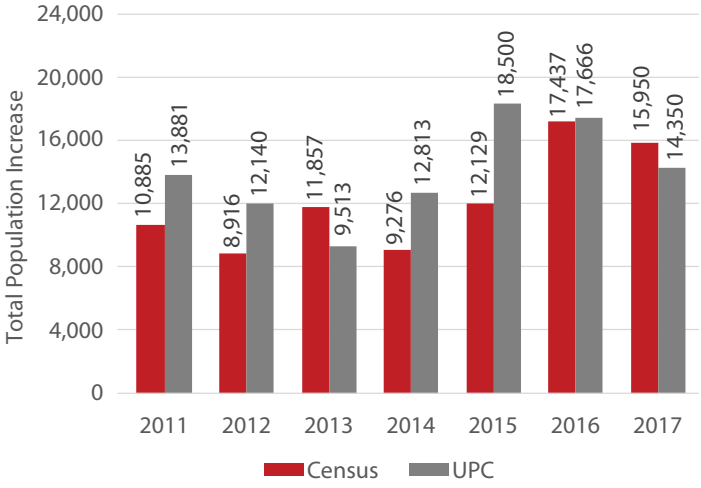
Note: The UPC county estimates and the county totals of UPC subcounty estimates are equal. Refer to the methodology section.
Source: U.S. Census Bureau Population Division Estimates; Utah Population Committee (UPC) 2018 State and County Population Estimates, Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

Figure 18: Annual Utah County Total Population: Comparison of Census and UPC Estimates



Note: The UPC county estimates and the county totals of UPC subcounty estimates are equal. Refer to the methodology section.
Source: U.S. Census Bureau Population Division Estimates; Utah Population Committee (UPC) 2018 State and County Population Estimates, Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

Figure 19: Utah County Total Population Changes: Comparison of Census and UPC Estimates



Note: The UPC county estimates and the county totals of UPC subcounty estimates are equal. Refer to the methodology section.
Source: U.S. Census Bureau Population Division Estimates; Utah Population Committee (UPC) 2018 State and County Population Estimates, Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

CITY AND TRACT RESULTS

Table 7: Total Population and Change in Salt Lake County Cities, 2017-2018

Rank	Place Name	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1	Herriman	38,238	42,981	4,743	12.4%
2	South Jordan	72,604	75,575	2,971	4.1%
3	Salt Lake City	196,280	198,261	1,981	1.0%
4	Riverton	43,012	44,231	1,219	2.8%
5	Bluffdale	13,178	14,337	1,159	8.8%
6	Draper	46,452	47,416	964	2.1%
7	West Jordan	110,840	111,719	879	0.8%
8	Sandy	94,208	94,878	670	0.7%
9	Millcreek	59,912	60,308	396	0.7%
10	Midvale	33,982	34,263	281	0.8%
11	South Salt Lake	25,075	25,213	138	0.6%
12	Emigration Canyon	1,613	1,623	10	0.6%
13	Alta	381	378	-3	-0.8%
14	Granite	1,334	1,328	-6	-0.4%
15	Copperton	819	812	-7	-0.9%
16	Murray	49,586	49,544	-42	-0.1%
17	White City	5,647	5,599	-48	-0.9%
18	Holladay	31,162	31,110	-52	-0.2%
19	Unincorporated County	10,253	10,193	-60	-0.6%
20	Magna	27,538	27,450	-88	-0.3%
21	Cottonwood Heights	33,837	33,626	-211	-0.6%
22	Kearns	35,530	35,242	-288	-0.8%
23	West Valley City	136,738	136,388	-350	-0.3%
24	Taylorsville	60,055	59,601	-454	-0.8%
Salt Lake County Total		**1,128,271**	**1,142,077**	**13,806**	**1.2%**

Notes: Ranked by largest 2017-2018 population change. County total may differ from sum of places due to rounding. City results are built from Census 2010 blocks fitted to 2018 Census Bureau city boundaries. Draper refers to only the Salt Lake County portion of Draper.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

Table 8: Total Population and Change in Utah County Cities, 2017-2018

Rank	Place Name	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1	Vineyard	6,598	9,789	3,191	48.4%
2	Lehi	65,783	68,762	2,979	4.5%
3	Eagle Mountain	31,655	34,632	2,977	9.4%
4	Saratoga Springs	30,196	32,341	2,145	7.1%
5	American Fork	29,729	31,530	1,801	6.1%
6	Orem	98,858	99,622	764	0.8%
7	Spanish Fork	40,332	41,072	740	1.8%
8	Santaquin	11,245	11,852	607	5.4%
9	Salem	8,338	8,706	368	4.4%
10	Elk Ridge	3,950	4,308	358	9.1%
11	Mapleton	9,896	10,213	317	3.2%
12	Highland	19,230	19,492	262	1.4%
13	Balance of County	4,251	4,364	113	2.7%
14	Lindon	11,729	11,767	38	0.3%
15	Genola	1,565	1,594	29	1.9%
16	Woodland Hills	1,518	1,544	26	1.7%
17	Springville	33,815	33,838	23	0.1%
18	Benjamin	1,243	1,245	2	0.2%
19	Palmyra	518	518	0	0.0%
20	Spring Lake	476	475	-1	-0.2%
21	Fairfield	121	119	-2	-1.7%
22	Elberta	264	261	-3	-1.1%
23	Lake Shore	873	869	-4	-0.5%
24	Cedar Fort	374	369	-5	-1.3%
25	West Mountain	1,196	1,188	-8	-0.7%
26	Goshen	936	925	-11	-1.2%
27	Alpine	10,510	10,489	-21	-0.2%
28	Draper (Utah County portion)	2,470	2,441	-29	-1.2%
29	Cedar Hills	10,399	10,337	-62	-0.6%
30	Payson	20,264	20,193	-71	-0.4%
31	Pleasant Grove	38,863	38,655	-208	-0.5%
32	Provo	120,541	120,071	-470	-0.4%
Utah County Total		**617,735**	**633,582**	**15,847**	**2.6%**

Notes: Ranked by largest 2017-2018 population change. County total may differ from sum of places due to rounding. City results are built from Census 2010 blocks fitted to 2018 Census Bureau city boundaries. The Utah County portion of Bluffdale is not listed. The area is estimated to have no population.
Source: Kem C. Gardner Policy Institute, David Eccles School of Business, University of Utah

Table 9: Total Population and Change in Salt Lake County Census Tracts, 2017-2018

Census Tract Name	Tract Area Description	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1001	Salt Lake City	2,671	3,565	894	33.5%
1002	Salt Lake City	1,315	1,308	-7	-0.5%
1003.06	Salt Lake City	5,448	5,618	170	3.1%
1003.07	Salt Lake City	5,183	5,138	-45	-0.9%
1003.08	Salt Lake City	4,186	4,150	-36	-0.9%
1005	Salt Lake City	6,325	6,271	-54	-0.9%
1006	Salt Lake City	6,521	6,477	-44	-0.7%
1007	Salt Lake City	2,687	2,686	-1	0.0%
1008	Salt Lake City	2,672	2,673	1	0.0%
1010	Salt Lake City	2,939	2,916	-23	-0.8%
1011.01	Salt Lake City	1,955	1,938	-17	-0.9%
1011.02	Salt Lake City	3,393	3,365	-28	-0.8%
1012	Salt Lake City	3,851	3,822	-29	-0.8%
1014	Salt Lake City	5,998	6,086	88	1.5%
1015	Salt Lake City	3,188	3,162	-26	-0.8%
1016	Salt Lake City	3,598	3,570	-28	-0.8%
1017	Salt Lake City	3,509	3,480	-29	-0.8%
1018	Salt Lake City	3,189	3,411	222	7.0%
1019	Salt Lake City	3,132	3,329	197	6.3%
1020	Salt Lake City	2,998	2,999	1	0.0%
1021	Salt Lake City	2,393	2,312	-81	-3.4%
1023	Salt Lake City	2,954	2,929	-25	-0.8%
1025	Salt Lake City	4,744	4,819	75	1.6%
1026	Salt Lake City	4,443	4,749	306	6.9%
1027.01	Salt Lake City	5,066	5,022	-44	-0.9%
1027.02	Salt Lake City	3,842	3,809	-33	-0.9%
1028.01	Salt Lake City	6,061	6,009	-52	-0.9%
1028.02	Salt Lake City	5,021	4,979	-42	-0.8%
1029	Salt Lake City	5,444	5,641	197	3.6%
1030	Salt Lake City	3,065	3,044	-21	-0.7%
1031	Salt Lake City	4,139	4,114	-25	-0.6%
1032	Salt Lake City	4,504	4,488	-16	-0.4%
1033	Salt Lake City	4,654	4,468	-186	-4.0%
1034	Salt Lake City	4,051	4,014	-37	-0.9%
1035	Salt Lake City	4,028	3,993	-35	-0.9%
1036	Salt Lake City	2,663	2,643	-20	-0.8%
1037	Salt Lake City	2,578	2,561	-17	-0.7%
1038	Salt Lake City	2,440	2,421	-19	-0.8%
1039	Salt Lake City	3,764	3,737	-27	-0.7%
1040	Salt Lake City	3,255	3,233	-22	-0.7%
1041	Salt Lake City	2,971	2,950	-21	-0.7%
1042	Salt Lake City	6,654	6,604	-50	-0.8%
1043	Salt Lake City	2,799	2,775	-24	-0.9%
1044	Salt Lake City	2,020	2,003	-17	-0.8%
1047	Salt Lake City	4,742	4,702	-40	-0.8%
1048	Salt Lake City	5,054	5,116	62	1.2%
1049	Salt Lake City	3,143	3,117	-26	-0.8%
1101.02	east bench/Big and Little Cottonwood	4,526	4,510	-16	-0.4%
1101.03	Emigration Canyon/Millcreek/Parley's Canyon	3,671	3,662	-9	-0.2%
1101.04	Holladay/mountainous	5,325	5,296	-29	-0.5%
1102	Millcreek	5,097	5,059	-38	-0.7%
1103	Millcreek	5,466	5,434	-32	-0.6%
1104.01	Millcreek	3,489	3,509	20	0.6%
1104.02	Millcreek	3,706	3,684	-22	-0.6%
1105	Millcreek	6,279	6,238	-41	-0.7%
1106	Holladay	5,592	5,546	-46	-0.8%
1107.01	Millcreek	3,655	3,632	-23	-0.6%
1107.02	Holladay	4,977	4,949	-28	-0.6%
1108	Holladay	5,454	5,554	100	1.8%
1109	Holladay	4,650	4,706	56	1.2%
1110.01	Holladay	4,616	4,658	42	0.9%
1110.02	Cottonwood Heights	5,647	5,604	-43	-0.8%
1111.01	Murray	6,352	6,299	-53	-0.8%
1111.02	Holladay	6,447	6,399	-48	-0.7%
1111.03	Murray	6,024	5,981	-43	-0.7%
1112.01	Cottonwood Heights	2,741	2,724	-17	-0.6%
1112.02	Cottonwood Heights	4,714	4,673	-41	-0.9%
1113.02	Cottonwood Heights	5,983	5,950	-33	-0.6%
1113.04	Cottonwood Heights	3,697	3,680	-17	-0.5%
1113.05	Cottonwood Heights	3,872	3,839	-33	-0.9%
1113.06	Cottonwood Heights	2,556	2,537	-19	-0.7%
1114	South Salt Lake	6,510	6,636	126	1.9%
1115	South Salt Lake	2,050	2,034	-16	-0.8%
1116	South Salt Lake	9,029	9,519	490	5.4%
1117.01	South Salt Lake	5,500	5,453	-47	-0.9%
1117.02	South Salt Lake	4,329	4,292	-37	-0.9%
1118.01	Millcreek	5,427	5,473	46	0.8%
1118.02	Salt Lake City/Millcreek	2,959	2,933	-26	-0.9%
1119.03	Millcreek	3,964	4,063	99	2.5%
1119.04	Millcreek	3,511	3,501	-10	-0.3%
1119.05	Millcreek	3,579	3,559	-20	-0.6%
1119.06	Millcreek	4,232	4,193	-39	-0.9%
1120.01	Murray	3,373	3,347	-26	-0.8%
1120.02	Murray	4,703	4,688	-15	-0.3%
1121	Murray	9,749	9,946	197	2.0%
1122.01	Murray	5,213	5,181	-32	-0.6%
1122.02	Murray	3,891	3,855	-36	-0.9%
1123.01	Murray	3,828	3,803	-25	-0.7%
1123.02	Murray	3,546	3,515	-31	-0.9%

Census Tract Name	Tract Area Description	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1124.02	Midvale	6,477	6,440	-37	-0.6%
1124.03	Midvale	9,454	9,690	236	2.5%
1124.04	Midvale	4,063	4,255	192	4.7%
1125.01	Midvale	3,717	3,686	-31	-0.8%
1125.02	Midvale	6,139	6,089	-50	-0.8%
1125.03	Midvale	4,694	4,654	-40	-0.9%
1126.04	Sandy/White City	5,058	5,015	-43	-0.9%
1126.05	Sandy	9,144	9,600	456	5.0%
1126.08	Sandy	5,256	5,212	-44	-0.8%
1126.09	Sandy	5,519	5,475	-44	-0.8%
1126.10	Sandy	5,499	6,016	517	9.4%
1126.11	Sandy	6,694	6,637	-57	-0.9%
1126.12	Sandy	4,963	4,920	-43	-0.9%
1126.13	Sandy	4,876	5,206	330	6.8%
1126.14	Cottonwood Heights/Sandy	3,438	3,415	-23	-0.7%
1126.15	Sandy	2,398	2,378	-20	-0.8%
1126.16	Sandy	4,520	4,485	-35	-0.8%
1126.17	Sandy	3,531	3,501	-30	-0.8%
1126.18	Cottonwood Heights	3,362	3,347	-15	-0.4%
1126.19	Sandy	3,093	3,066	-27	-0.9%
1127	Sandy	5,847	5,798	-49	-0.8%
1128.04	Sandy	5,571	5,524	-47	-0.8%
1128.05	Sandy	5,351	5,306	-45	-0.8%
1128.10	Bluffdale	12,469	13,633	1,164	9.3%
1128.12	Sandy/White City	5,628	5,580	-48	-0.9%
1128.13	Sandy	5,496	5,449	-47	-0.9%
1128.14	Sandy	4,945	4,913	-32	-0.6%
1128.15	Sandy/Draper	5,138	5,104	-34	-0.7%
1128.16	Draper	6,378	6,355	-23	-0.4%
1128.17	Draper	9,206	9,830	624	6.8%
1128.18	Draper	3,126	3,299	173	5.5%
1128.19	Draper	7,992	7,975	-17	-0.2%
1128.20	Draper	8,141	8,225	84	1.0%
1128.21	Draper	6,488	6,584	96	1.5%
1128.22	Sandy	4,964	4,922	-42	-0.8%
1128.23	Draper	6,315	6,451	136	2.2%
1129.04	Taylorsville/West Jordan	6,677	6,620	-57	-0.9%
1129.05	Taylorsville/West Jordan	5,496	5,456	-40	-0.7%
1129.07	West Jordan	4,610	4,574	-36	-0.8%
1129.12	West Jordan	2,750	2,727	-23	-0.8%
1129.13	West Jordan	5,156	5,119	-37	-0.7%
1129.14	West Jordan	6,446	6,426	-20	-0.3%
1129.16	West Jordan	4,748	4,708	-40	-0.8%
1129.17	West Jordan	3,925	3,989	64	1.6%
1129.18	West Jordan	5,296	5,256	-40	-0.8%
1129.20	West Jordan	4,880	4,916	36	0.7%

Census Tract Name	Tract Area Description	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1129.21	West Jordan	4,242	4,206	-36	-0.8%
1130.07	South Jordan	5,057	5,077	20	0.4%
1130.08	South Jordan	6,376	6,355	-21	-0.3%
1130.10	South Jordan	7,676	7,691	15	0.2%
1130.11	South Jordan	6,512	6,678	166	2.5%
1130.12	South Jordan	5,680	5,709	29	0.5%
1130.13	Riverton	5,633	5,842	209	3.7%
1130.14	Riverton	4,819	5,129	310	6.4%
1130.16	Riverton	6,899	6,967	68	1.0%
1130.17	Riverton	7,631	7,756	125	1.6%
1130.19	South Jordan	10,109	10,614	505	5.0%
1130.20	South Jordan	20,286	20,533	247	1.2%
1131.01	West Jordan	7,112	7,056	-56	-0.8%
1131.02	West Jordan	3,991	3,942	-49	-1.2%
1131.05	Copperton/Herriman/ west bench	5,842	6,193	351	6.0%
1131.07	Herriman	29,812	32,780	2,968	10.0%
1131.08	West Jordan	4,406	4,369	-37	-0.8%
1133.05	West Valley City	8,378	8,325	-53	-0.6%
1133.06	West Valley City	6,054	6,020	-34	-0.6%
1133.07	West Valley City	6,990	6,934	-56	-0.8%
1133.08	West Valley City	5,042	4,999	-43	-0.9%
1133.09	West Valley City	4,907	4,875	-32	-0.7%
1133.10	West Valley City	3,654	3,626	-28	-0.8%
1134.06	West Valley City	6,693	6,637	-56	-0.8%
1134.07	West Valley City	12,385	12,419	34	0.3%
1134.08	West Valley City	6,735	6,889	154	2.3%
1134.09	West Valley City	5,389	5,368	-21	-0.4%
1134.10	West Valley City	6,515	6,476	-39	-0.6%
1134.11	West Valley City	2,673	2,650	-23	-0.9%
1134.12	West Valley City	2,861	2,840	-21	-0.7%
1134.13	West Valley City	5,641	5,603	-38	-0.7%
1135.05	West Valley City	6,741	6,684	-57	-0.8%
1135.09	West Valley City	6,622	6,566	-56	-0.8%
1135.10	Taylorsville	3,732	3,697	-35	-0.9%
1135.11	Taylorsville	3,644	3,613	-31	-0.9%
1135.12	Taylorsville	3,480	3,451	-29	-0.8%
1135.13	Taylorsville	6,232	6,185	-47	-0.8%
1135.14	Taylorsville	5,788	5,740	-48	-0.8%
1135.15	Taylorsville	5,815	5,772	-43	-0.7%
1135.20	West Valley City	3,952	3,918	-34	-0.9%
1135.21	Taylorsville	6,454	6,405	-49	-0.8%
1135.22	Taylorsville	3,271	3,243	-28	-0.9%
1135.23	Taylorsville	6,499	6,444	-55	-0.8%
1135.25	West Valley City	8,330	8,522	192	2.3%
1135.26	West Valley City	5,691	5,643	-48	-0.8%
1135.27	West Jordan	4,527	4,489	-38	-0.8%

Census Tract Name	Tract Area Description	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1135.28	West Jordan	5,275	5,230	-45	-0.9%
1135.32	Taylorsville	3,223	3,196	-27	-0.8%
1135.33	Taylorsville	4,862	4,824	-38	-0.8%
1135.34	West Valley City/ West Jordan	7,486	7,422	-64	-0.9%
1135.35	West Jordan	7,759	8,198	439	5.7%
1135.36	West Valley City	4,197	4,162	-35	-0.8%
1135.37	West Valley City	3,559	3,528	-31	-0.9%
1135.38	West Valley City	3,261	3,233	-28	-0.9%
1135.39	West Valley City	4,818	4,781	-37	-0.8%
1136	Kearns	5,252	5,207	-45	-0.9%
1137.01	Kearns	4,039	4,005	-34	-0.8%
1137.02	Kearns	2,747	2,723	-24	-0.9%
1138.01	Kearns	5,764	5,715	-49	-0.9%
1138.02	Kearns	3,974	3,940	-34	-0.9%
1138.03	Kearns/West Valley City	8,602	8,543	-59	-0.7%
1139.03	Magna	5,078	5,103	25	0.5%
1139.04	Magna	5,622	5,616	-6	-0.1%
1139.05	Magna	7,385	7,351	-34	-0.5%
1139.06	Salt Lake City	4,773	4,735	-38	-0.8%
1139.07	Magna/west bench	7,825	7,944	119	1.5%
1140	Salt Lake City	2,314	2,865	551	23.8%
1141	Salt Lake City	3,397	3,932	535	15.7%
1142	West Jordan	4,811	5,017	206	4.3%
1143	West Jordan	18,850	19,410	560	3.0%
1145	West Valley City/ Salt Lake City	7,831	7,768	-63	-0.8%
1146	Riverton	7,225	7,256	31	0.4%
1147	Salt Lake City	4,680	4,640	-40	-0.9%
1148	Salt Lake City	3,565	3,537	-28	-0.8%
1151.06	Herriman	15,046	16,941	1,895	12.6%
1152.09	South Jordan/ West Jordan	12,159	14,164	2,005	16.5%
9800	Salt Lake City	0	0	0	0.0%

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

Table 10: Total Population and Change in Utah County Census Tracts, 2017-2018

Census Tract Name	Tract Area Description	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
1.02	Lehi	4,810	4,872	62	1.3%
1.03	Lehi	4,284	4,520	236	5.5%
1.04	Lehi	3,315	3,299	-16	-0.5%
1.05	Lehi	4,328	4,277	-51	-1.2%
2.03	American Fork	4,871	4,835	-36	-0.7%
2.04	American Fork	6,288	6,468	180	2.9%
2.05	American Fork	4,043	4,031	-12	-0.3%
2.06	American Fork	3,704	3,685	-19	-0.5%
4	American Fork	3,984	5,118	1,134	28.5%
5.04	Pleasant Grove	4,325	4,303	-22	-0.5%
5.05	Pleasant Grove	3,195	3,186	-9	-0.3%
5.06	Pleasant Grove	4,123	4,123	0	0.0%
5.07	Pleasant Grove	2,364	2,336	-28	-1.2%
5.08	Pleasant Grove	5,823	5,763	-60	-1.0%
5.09	Pleasant Grove	8,779	9,162	383	4.4%
6.01	Lindon	4,156	4,214	58	1.4%
6.03	Lindon	4,314	4,315	1	0.0%
6.04	Lindon	3,365	3,343	-22	-0.7%
7.03	Orem	5,469	5,406	-63	-1.2%
7.06	Orem	6,862	6,782	-80	-1.2%
7.07	Orem	3,807	4,187	380	10.0%
7.08	Orem	3,091	3,059	-32	-1.0%
7.09	Orem	3,224	3,187	-37	-1.1%
7.10	Orem	3,131	3,110	-21	-0.7%
7.11	Orem	2,486	2,465	-21	-0.8%
8.01	Orem	5,770	5,707	-63	-1.1%
8.02	Orem	6,151	6,079	-72	-1.2%
9.01	Orem	5,775	5,715	-60	-1.0%
9.03	Orem	3,678	3,643	-35	-1.0%
9.04	Orem	3,158	3,129	-29	-0.9%
10.01	Orem	4,172	4,128	-44	-1.1%
10.02	Orem	2,700	2,669	-31	-1.1%
11.03	Orem	2,739	2,707	-32	-1.2%
11.05	Orem	3,648	3,659	11	0.3%
11.06	Orem	3,016	2,991	-25	-0.8%
11.07	Orem	4,432	4,393	-39	-0.9%
11.08	Orem	3,525	3,567	42	1.2%
12.01	Orem	4,486	4,671	185	4.1%
12.02	Orem	5,554	5,490	-64	-1.2%
13	Orem	4,889	5,119	230	4.7%
14.01	Provo	3,915	3,902	-13	-0.3%
14.02	Provo	6,793	6,719	-74	-1.1%
15.01	Provo	4,416	4,408	-8	-0.2%
15.03	Provo	3,816	3,784	-32	-0.8%

Census Tract Name	Tract Area Description	Population Levels and Change			
		July 1, 2017 Pop.	July 1, 2018 Pop.	Change	Change (%)
15.04	Provo	4,746	4,694	-52	-1.1%
16.01	Provo	5,510	5,475	-35	-0.6%
16.02	Provo	4,818	4,993	175	3.6%
16.03	Provo	4,821	4,560	-261	-5.4%
17.01	Provo	3,728	3,688	-40	-1.1%
17.02	Provo	4,754	4,719	-35	-0.7%
18.01	Provo	6,607	6,533	-74	-1.1%
18.02	Provo	6,895	6,817	-78	-1.1%
18.03	Provo	2,215	2,189	-26	-1.2%
19	Provo	4,376	4,333	-43	-1.0%
20	Provo	6,408	6,337	-71	-1.1%
21.01	Provo	4,241	4,202	-39	-0.9%
21.02	Provo	3,044	3,031	-13	-0.4%
22.01	Vineyard/Orem	13,672	17,527	3,855	28.2%
22.04	Provo	4,137	4,287	150	3.6%
22.05	Provo	4,281	4,277	-4	-0.1%
22.06	Provo	3,563	3,521	-42	-1.2%
22.07	Provo	3,943	4,124	181	4.6%
23	Provo	3,906	3,934	28	0.7%
24	Provo	1,993	1,972	-21	-1.1%
25	Provo	4,374	4,327	-47	-1.1%
27.01	Provo	3,265	3,231	-34	-1.0%
27.02	Provo	4,912	5,007	95	1.9%
28.01	Provo	3,694	3,652	-42	-1.1%
28.02	Provo/Springville	1,472	1,458	-14	-1.0%
29.01	Springville	7,122	7,266	144	2.0%
29.02	Springville	3,693	3,655	-38	-1.0%
30.01	Springville	4,381	4,416	35	0.8%
30.02	Springville	2,299	2,272	-27	-1.2%
31.03	Springville	2,858	2,838	-20	-0.7%
31.04	Springville	4,214	4,222	8	0.2%
31.05	Springville	3,796	3,773	-23	-0.6%
31.06	Springville	2,827	2,798	-29	-1.0%
32.01	Spanish Fork	2,657	2,627	-30	-1.1%
32.03	Spanish Fork	4,368	4,341	-27	-0.6%
32.04	Spanish Fork	2,786	2,754	-32	-1.1%
32.05	Spanish Fork	4,736	4,685	-51	-1.1%
33	Spanish Fork	6,671	6,826	155	2.3%
34.01	Payson	3,829	3,841	12	0.3%
34.02	Payson	6,335	6,269	-66	-1.0%
34.03	Payson	5,325	5,274	-51	-1.0%
101.03	Eagle Mountain	8,903	9,383	480	5.4%
101.04	Eagle Mountain	9,995	10,853	858	8.6%
101.05	Eagle Mountain	11,117	12,239	1,122	10.1%
101.06	Saratoga Springs	7,167	8,202	1,035	14.4%
101.07	Cedar Fort/Fairfield/ unincorporated	3,976	4,255	279	7.0%
101.08	Lehi	8,331	8,677	346	4.2%
101.09	Saratoga Springs	11,723	12,540	817	7.0%
101.10	Lehi	3,011	3,963	952	31.6%
101.11	Lehi	8,813	8,784	-29	-0.3%
101.12	Lehi/American Fork	7,557	7,876	319	4.2%
101.13	Saratoga Springs/ Utah Lake	8,737	9,679	942	10.8%
102.08	Alpine	4,313	4,295	-18	-0.4%
102.09	Alpine	5,980	5,981	1	0.0%
102.10	Cedar Hills/ Pleasant Grove	6,406	6,344	-62	-1.0%
102.11	Alpine	3,629	3,629	0	0.0%
102.12	Lehi	9,645	10,295	650	6.7%
102.13	Pleasant Grove	3,091	3,217	126	4.1%
102.14	Lehi	8,351	8,538	187	2.2%
102.15	Pleasant Grove	7,982	7,933	-49	-0.6%
102.16	Lehi	3,534	3,525	-9	-0.3%
102.17	Highland/Draper	5,756	6,023	267	4.6%
102.18	Highland	6,168	6,138	-30	-0.5%
102.19	Highland	5,806	5,823	17	0.3%
102.20	Cedar Hills/Highland	6,621	6,608	-13	-0.2%
103.03	Mapleton	4,851	4,946	95	2.0%
103.04	Spanish Fork	9,883	10,634	751	7.6%
103.05	Mapleton	3,550	3,666	116	3.3%
104.04	Spanish Fork	5,139	5,195	56	1.1%
104.05	Spanish Fork	4,334	4,283	-51	-1.2%
104.06	Spanish Fork/Salem	2,962	3,219	257	8.7%
104.07	Salem	2,682	2,701	19	0.7%
104.08	Salem	4,501	4,587	86	1.9%
104.09	Santaquin	3,198	3,246	48	1.5%
104.10	Spring Lake	4,063	4,107	44	1.1%
104.11	Salem/Elk Ridge/ Woodland Hills	6,654	7,150	496	7.5%
105.03	Spanish Fork/ Springville/Lake Shore	4,113	4,069	-44	-1.1%
105.04	Payson/Benjamin/ West Mountain	3,565	3,537	-28	-0.8%
105.05	Santaquin	4,609	4,748	139	3.0%
105.06	Santaquin	1,959	2,065	106	5.4%
106	Genola/Santaquin/un-incorporated	4,623	4,964	341	7.4%
107	American Fork	5,232	5,227	-5	-0.1%
109	Unincorporated Utah County	1,161	1,170	9	0.8%
9801	Unincorporated Utah County	0	0	0	0.0%

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

Endnotes

1 David A. Swanson and Jeff Tayman, *Subnational Population Estimates* (New York: Springer, 2012), 137-163.
2 Young, Carlston, and Perlich, "Salt Lake and Utah County Subcounty Estimates, 2010-2017", Kem C. Gardner Policy Institute, available at gardner.utah.edu.
3 Emily Harris, "State and County Population Estimates for Utah: 2018", Kem C. Gardner Policy Institute, available at gardner.utah.edu. Refer also to the section "Additional Information: Controlling to UPC County-Level Estimates" within this subcounty report.
4 College housing facilities house students in a group living arrangement and must be owned, leased, or managed by a college or university according to Census 2010 rules. In the 2010 Census, there were 8,564 people in college housing in Utah County, compared to 2,112 in Salt Lake County. Within Utah County, 85 percent of those in college housing in Utah County live in Provo, home to Brigham Young University. The remaining college housing population lives in Orem, where Utah Valley University is located (U.S. Census Bureau, 2010 Census Summary File 1).
5 For an analysis of building permits in Salt Lake City since 2000, refer to DJ Benway, "Salt Lake City's Current Apartment Boom: An Analysis of Salt Lake City's Record Apartment Growth", Kem C. Gardner Policy Institute, available at gardner.utah.edu.
6 Some large complexes have construction spanning two estimate years. Of this list, 4th West Apartments spanned 2017 and 2018 and Liberty Boulevard spanned 2018 and will continue toward the 2019 estimates.
7 Other cities with over 200 new renter-occupied housing units for the year are Millcreek (288), Herriman (285), and Draper (232).
8 Bluffdale was 84 percent owner-occupied in 2017, but is now 86 percent owner-occupied.
9 The Utah AGRC is the Utah Automated Geographic Reference Center. https://gis.utah.gov/data/address-geocoders-locators/
10 Building Permit Survey: https://www.census.gov/construction/bps/
Ivory-Boyer Construction Database: http://gardner.utah.edu/economics/ivory-boyer-construction-database/
11 Permits issued in calendar year 2017 are those which apply to the July 1, 2018 estimates.
12 Land Information Record Parcels information: https://gis.utah.gov/data/cadastre/parcels/
13 For an analysis of building permits in Salt Lake City since 2000, refer to DJ Benway, "Salt Lake City's Current Apartment Boom: An Analysis of Salt Lake City's Record Apartment Growth", Kem C. Gardner Policy Institute, available at gardner.utah.edu.
14 We compute persons per household values by dividing household populations by occupied housing units. Similarly, renter persons per household is the total population in renter-occupied households divided by the total number of renter-occupied households.
15 The population in college housing in Orem, home of Utah Valley University, was 1,266 in the 2010 Census. Several UVU students live in neighboring Provo, which has a much larger population in college housing: 7,298 people in the 2010 Census (U.S. Census Bureau, 2010 Census Summary File 1).
16 While the production of estimates is separate, we note that findings from subcounty-level research contribute to the state and county-level estimation process as contextual information. They serve as supporting data analysis to the state and county-level estimates.
17 Emily Harris, "State and County Population Estimates for Utah: 2018", Kem C. Gardner Policy Institute, available at gardner.utah.edu. Utility connections are also used as contributing contextual information to the UPC state and county-level estimates.
18 The UPC county level estimates are for total population; the methodology does not produce a household population estimate.
19 Control factors shown here are rounded to four decimal places; control factors are not rounded in calculations.
20 Population and Housing Unit Estimates release schedule: https://www.census.gov/programs-surveys/popest/about/schedule.html. Census Bureau 2017 city and town estimates are available here: https://www.census.gov/data/datasets/2017/demo/popest/total-cities-and-towns.html
21 Treated together, our estimates show that the 17 cities with large differences (500 or more people, whether higher or lower) compared to Census Bureau estimates collectively have higher populations than the Census Bureau estimates. The same is also true when all cities and towns are considered.
22 Emily Harris, "State and County Population Estimates for Utah: 2018", Kem C. Gardner Policy Institute, available at gardner.utah.edu.

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