

What's New in Utah's 2020 Census Geography?

Geography is a foundational aspect of the census, providing the framework for the once-a-decade count of population and housing. The U.S. Census Bureau released Utah's 2020 census geographic boundaries in February, with the corresponding demographic data planned for release in September 2021. Though census count data are not available yet, census geography provides insight into the decade's population change and defines the upcoming data's reference locations.

Geographic information system (GIS) shapefile format boundary files and other geographic support products are [available for public download](#) as part of the 2020 census P.L. 94-171 redistricting data.¹ All shapefiles reflect boundaries as of January 1, 2020.

What leads to a change in Census Bureau geography?

Geographies change from one census to the next for several reasons. Legal changes in designation, such as incorporation, annexation, or dissolution, occur in cities and towns. The Census Bureau may recognize a well-known place by forming a new census-designated place (CDP).² Throughout the decade before each decennial census, local entities provide information to the Census Bureau to update the nation's geographic framework.³

Though the Census Bureau strives to maintain statistical boundaries to preserve comparability over time, population changes often lead to geographic changes in blocks, block groups, and tracts. For example, tracts may be split due to population growth, or merged due to population decline. These updates help the area's population better fit the population size thresholds established by the Census Bureau.⁴ Splits and merges often preserve the overall shape of the original tract or tracts. However, tracts may also be redrawn and have markedly new shapes, especially in places with brand new street and landmark development.

Technical adjustments are another reason for geographic changes. For example, the Census Bureau performed systematic updates to census blocks in preparation for this census, eliminating several zero-population blocks.

Utah Adds New Places, Census Tracts, and Block Groups

Since the 2010 census, Utah added nearly half a million new residents. Several cities and counties topped national rankings for their fast growth, while some areas lost population. Eleven new communities incorporated as cities, towns, or metro townships. This growth and change resulted in multiple adjustments to key 2020 census geographies to guide appropriate data collection. Utah now has:

- **333 places** – Seven more than the total number of places in 2010.
- **716 census tracts** – 128 more than the total number of tracts in 2010 (235 new tracts, 107 tracts retired).
- **2,020 block groups** – 330 more than the count of block groups in 2010.
- **71,207 census blocks** – 44,199 fewer than the total number of blocks in 2010.

See page 5 for definitions of places, tracts, etc.

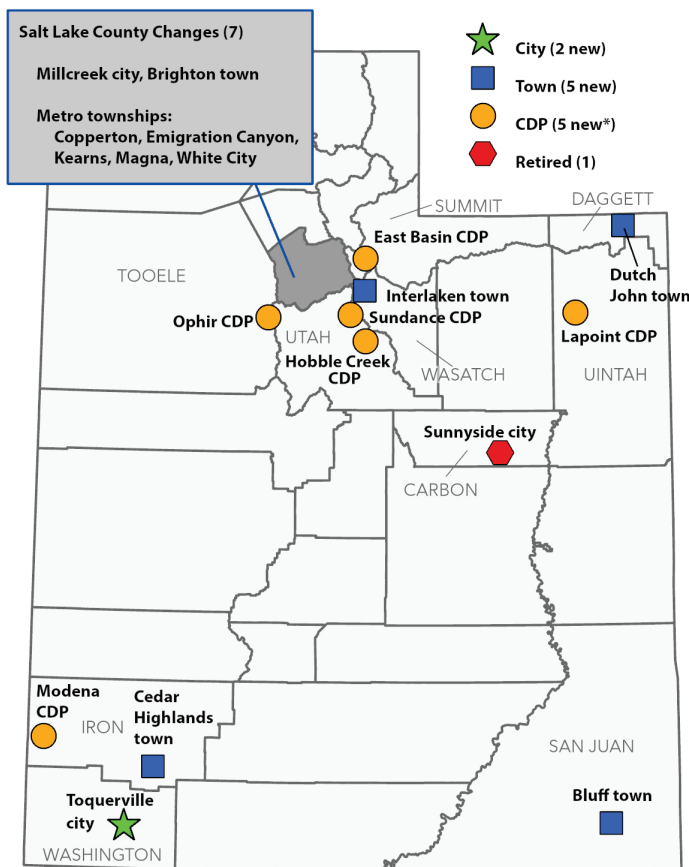
The State Has 11 Newly Incorporated Places and 5 New CDPs

In Utah, the Census Bureau's "place" geography includes incorporated places: cities, towns, and metro townships, and unincorporated census-designated places (CDPs—see definitions on pg. 5). Eleven new places in Utah incorporated over the past decade. Seven of these incorporations are within Salt Lake County: Brighton (town), Millcreek (city), and five metro townships: Copperton, Emigration Canyon, Kearns, Magna, and White City. Millcreek and the townships each incorporated in 2016, while Brighton incorporated in 2019. Metro townships are a new form of government created in Utah in 2015 with the passage of Senate Bill 199 (the Community Preservation Act), and exist only in Utah.

The remaining new incorporations were Dutch John (Daggett County, 2015), Interlaken (Wasatch County, 2015), Cedar Highlands (Iron County, 2017), and Bluff (San Juan County, 2018), which all became towns. Toquerville (Washington County) was already incorporated but changed status from town to city in 2013.

The Census Bureau works with county governments and local entities to identify unincorporated towns to include in the census as CDPs. CDPs are only created every ten years in preparation for the decennial census.⁵ In Utah, five new CDPs were recognized for this census: East Basin (Summit County), Hobbie Creek and Sundance (Utah County), Lapoint (Uintah County), and Modena (Iron County). Ophir (Tooele County) was previously a town but became a CDP. Sunnyside city (Carbon County) was the only place from the 2010 census that was retired. The area is now largely covered by the previously adjacent East Carbon city.⁶ The 333 places statewide include 145 cities, five metro townships, 104 towns, and 79 CDPs.

Figure 1: Utah Places with Changed Status, Census 2020 Geographic Products



Notes: In Utah, incorporated places are cities, metro townships, or towns. There are 11 new incorporations this decade. Toquerville changed status from town to city this decade, so it is considered a new city but not counted among the 11 new incorporations. There are also five newly listed CDPs (census-designated places), which are not incorporated places. Sunnyside city was retired, but the area is now largely covered by the previously adjacent East Carbon city.

*Ophir is not a newly listed CDP; it was downgraded from town to CDP.
Source: Kem C. Gardner Policy Institute analysis of 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles prepared by the U.S. Census Bureau, 2020.

New Census Tracts Formed Across the State

Utah gained 235 new census tracts for the 2020 census, with the most significant changes in some of the most populated or high-growth areas across the state. St. George and Provo led the way with 12 and 11 new tracts. Several other places with high numbers of new tracts were in Salt Lake or Utah Counties, including West Jordan, West Valley City, South Jordan, Lehi, and Herriman. Each gained seven to nine new tracts. Outside the Wasatch Front, the city of Tooele also gained seven new tracts.

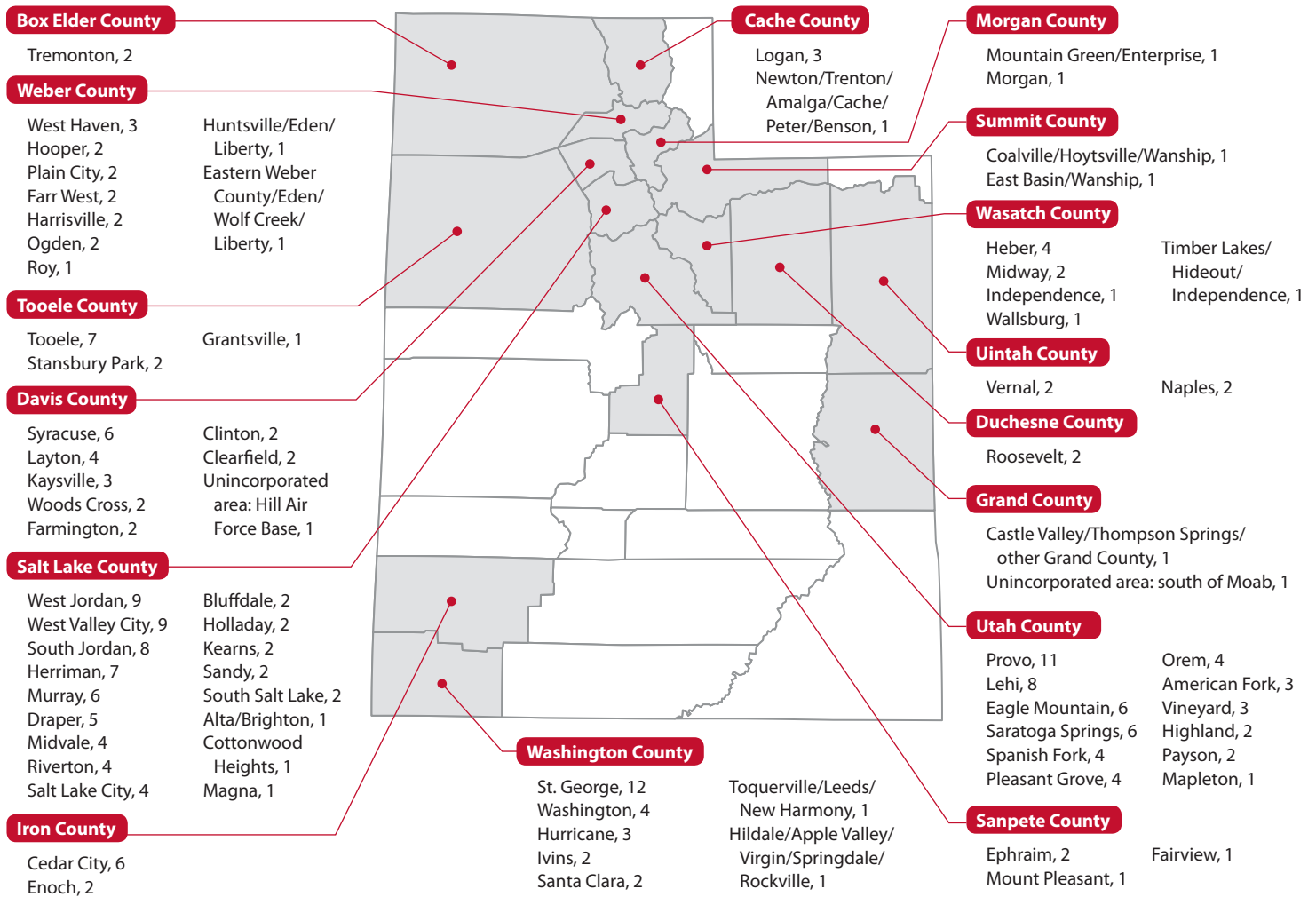
Other cities with notable geography changes were Syracuse, Cedar City, Murray, Eagle Mountain, Saratoga Springs, and Draper. Each has five or six new tracts. See Figure 2 for the complete list of new tracts by place. Though tract changes occurred in many areas, 13 of Utah's 29 counties had no changes. In Beaver, Carbon, Daggett, Emery, Garfield, Juab, Kane, Millard, Piute, Rich, San Juan, Sevier, and Wayne Counties, tract boundaries remain the same as the 2010 census. See Table 3 for tract counts by county.

Importantly, tract boundaries do not coincide perfectly with place boundaries. Tracts often contain parts of multiple places or cities. The analysis discussed here assigns tracts to the place where most of the population likely lives, or, if the population majority was difficult to determine, the place with most of the tract's area.

Several of the places noted here for high numbers of new tracts were also those with the highest population growth in Utah this decade. These include Herriman, South Jordan, Lehi, St. George, Eagle Mountain, Saratoga Springs, and West Jordan. However, a few places added a relatively high number of new tracts, but don't rank particularly high in population growth over the past ten years. For example, although Provo, Tooele, and Murray appear high in the list of new tracts, they are respectively ranked 32nd, 31st, and 47th in the state for highest population growth among incorporated places.⁷

Provo's large number of new tracts is due in part to new special land use designations. Five of Provo's eleven new tracts were designated as special land use tracts for this census, resulting in new names for the five tracts. These changes are not associated with high population growth. Three of the new special use tracts did not have any change to their 2010 boundary areas.⁸ Tooele's new tracts may also seem to exaggerate the population change that actually occurred within the city because two of the tracts assigned to Tooele also hold significant populations outside the city boundary. Similarly, two tracts assigned to Murray also include significant populations outside of Murray. For place populations, refer to [2019 population estimates](#) since census 2020 data is not yet available.⁹

Figure 2: New Census Tracts by Place, Census 2020 Geographic Products



Notes: See Table 3 for tract numbers by county. Tract boundaries do not coincide perfectly with place boundaries and may contain parts of multiple cities or places. This analysis counted tracts to the place where most of the population likely lives, or, if the population majority was difficult to determine, the place with the majority of the tract's area. Since some tracts cover all or most of multiple places, a few listings show multiple names. For example, Alta and Brighton are separate places, but a new tract covers both of them, so "Alta/Brighton" are listed together with a count of one new tract. Tracts which changed designation to special land use tracts are considered new tracts.
 Source: Kem C. Gardner Policy Institute analysis of 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles prepared by the U.S. Census Bureau, 2020.

Utah Has Fewer Census Blocks Due to National Cleanup

The Census Bureau performed a national "cleanup" of census blocks this decade. They merged several 2010 census blocks that were very small or unpopulated with neighboring blocks in the 2020 geography. The Census Bureau created many new census blocks in the 2020 geography in response to growth in developing areas. However, the overall number of blocks in Utah decreased since 2010 due to this extensive technical cleanup.

American Indian and Political Geographies Mostly Unchanged

Several of Utah's geographic boundaries did not change for this census, such as American Indian areas, American Indian tribal subdivisions, and state legislative districts. There are seven American Indian reservations: Goshute, Navajo Nation, Northwestern Shoshone, Paiute, Skull Valley, Uintah and Ouray,

and Ute Mountain.¹⁰ All nine of the state's American Indian tribal subdivisions are chapters or areas within the Navajo Nation Reservation.

The 2020 county boundaries reflect minor changes to Utah's 29 counties. Changes along the boundary of Juab and Millard Counties affected the largest area, but no population. Adjustments to the boundary of Salt Lake and Utah Counties impacted at least 35 residences. Changes to the Davis-Weber and Box Elder-Cache county borders also impacted a few homes. There were other small county boundary adjustments that do not appear to impact any housing units or population.

Census 2020 geography reveals a few changes to the state's 41 unified school districts. The Cache, Logan, Granite, Jordan, Murray, Alpine, and Provo School Districts had some boundary adjustments impacting relatively small populations. The most visible change is that the Granite School District now includes

Table 1: List of Utah TIGER/Line 2020 Census Redistricting Shapefiles

Shapefile Name	File Name	Boundary Type	2010 Version Available (Yes/No)*	County Version of File Available
American Indian/Alaska Native/Native Hawaiian Areas	AIANNH	Legal and Statistical	Yes	No
American Indian Tribal Subdivision	AIT5	Legal	Yes	No
Block Group	BG	Statistical	Yes	Yes
Congressional District	CD	Legal	Yes	No
County	COUNTY	Legal	Yes	No
County Subdivision/Census County Divisions**	COUSUB	Statistical	Yes	Yes
Place	PLACE	Legal and Statistical	Yes	No
Primary and Secondary Roads	PRISECROADS	Features	No	No
State Legislative District - Lower Chamber	SLDL	Legal	Yes	No
State Legislative District - Upper Chamber	SLDU	Legal	Yes	No
State	STATE	Legal	Yes	No
Census Block (Tabulation Block)	TABBLOCK	Statistical	Yes	Yes
Census Tract	TRACT	Statistical	Yes	Yes
Unified School District	UNSD	Legal	Yes	No
Voting District	VTD	Legal	No	Yes

*This column indicates whether a census 2010 version of the shapefile is available alongside census 2020 materials. The package download of all statewide shapefiles automatically includes both years. For congressional districts, shapefiles for both the 113th and 116th Congressional Districts are included.

**County subdivisions are legal entities in some states and statistical entities in others. In Utah, they are statistical and are referred to as census county subdivisions (CCDs).

Sources: Kem C. Gardner Policy Institute analysis of 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles prepared by the U.S. Census Bureau, 2020. 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles Technical Documentation prepared by the U.S. Census Bureau, 2020.

the Millcreek Canyon area previously belonging to the Canyons School District. This change has little impact on the populations of each district. There were slight cosmetic boundary changes in other school districts.

The 29 State Senate Districts and 75 State House Districts in Utah are referred to as upper and lower chamber districts, respectively, in geographic materials. These districts have not changed.¹¹ While redistricting efforts will use the 2020 census demographic data to redraw political districts, the census will initially share demographic data for the districts as they stood on January 1, 2020.

Voting districts are a generic name for geographic entities, such as precincts, wards, and election districts, established by state governments for the purpose of conducting elections. The number of voting districts in Utah increased from 2,299 in 2010 to 2,745 in 2020, a net increase of 446.

Accessing Geographic Data

Several geographic data layers are available as part of the 2020 census redistricting data, including some not mentioned in this analysis. These layers are available for download at the U.S. Census Bureau’s [TIGER/Line Shapefiles](#) site.¹²

Table 1 lists the available statewide GIS shapefiles. As indicated in the table, some statewide layers also have county-level versions available.

There are several other geographic products available for download at the county level, listed in Table 2.

Table 2: List of TIGER/Line Census 2020 Redistricting Shapefiles and Relationship Files, Available County Level Only

Shapefile or Relationship File Name	File Name	File Type*
Address Range Relationship File	ADDR	Relationship File
Address Range-Feature Name Relationship	ADDRFN	Relationship File
Area Landmark	AREALM	Features
Area Hydrography	AREAWATER	Features
All Lines (All boundary edges)	EDGES	Features
Topological Faces (Polygons with All Geocodes)	FACES	Features
Topological Faces-Area Hydrography Relationship File	FACESAH	Relationship File
Topological Faces-Area Landmark Relationship File	FACESAL	Relationship File
Feature Names Relationship File	FEATNAMES	Relationship File
Linear Hydrography	LINEARWATER	Features
Point Landmark	POINTLM	Features
All Roads	ROADS	Features

* Relationship file downloads are in .dbf format.

Sources: Kem C. Gardner Policy Institute analysis of 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles prepared by the U.S. Census Bureau, 2020. 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles Technical Documentation prepared by the U.S. Census Bureau, 2020.

Utah’s Automated Geographic Reference Center (AGRC) also offers [Utah downloads](#) and web services for the most common census geographies. The downloads are available in several formats.¹³ Additionally, geographic support products such as block assignment files for technical users and pdf format maps are available on the census 2020 redistricting data site¹⁴.

Quick Definitions for Commonly-Used Census Bureau Geography

The Census Bureau provides data within two types of boundaries: statistical and legal. Statistical boundaries depend on population thresholds and typically follow features like roads, power lines, and rivers. Legal boundaries are more familiar, like city, county, and state boundaries. Figure 3 shows how key geographies interact with one another.

See the [Census Bureau Geography Glossary](#)¹⁵ for additional information about all geographies.

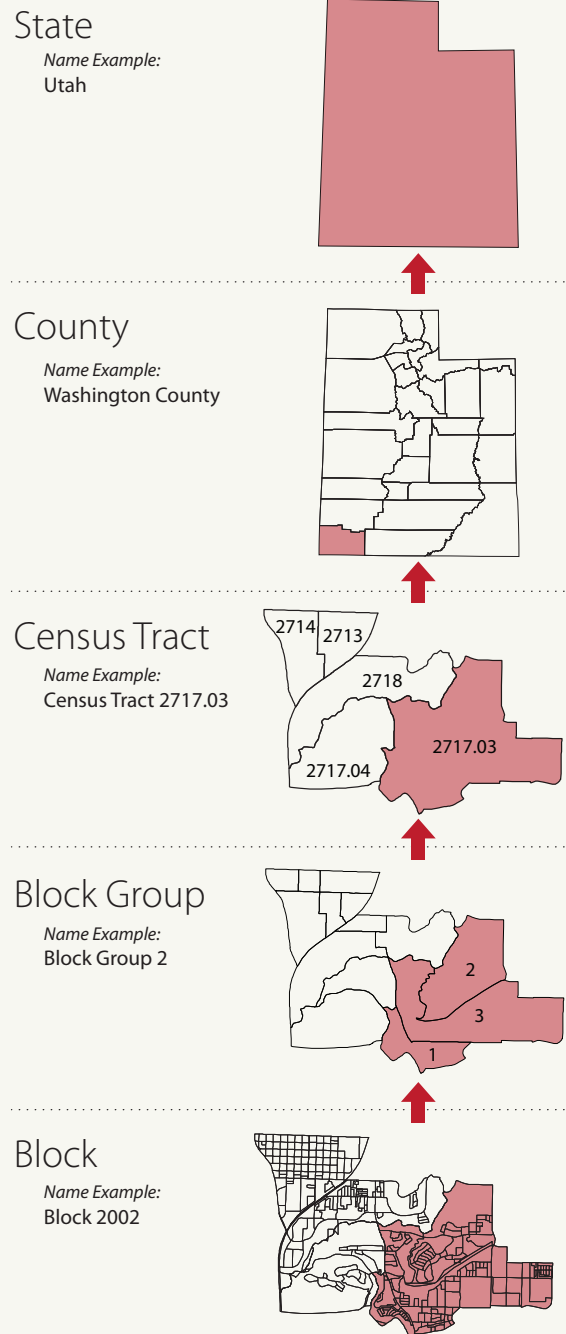
Census tracts (statistical): small, relatively permanent subdivisions of a county designed to present and compare statistical data for areas of roughly equal population. Census tracts generally contain between 1,200 and 8,000 people, with an optimum population of 4,000. Spatially, a census tract will be smaller in higher-density areas, and larger in more sparsely populated areas. In higher-density areas, tracts can be considered approximately “neighborhood” sized. Census tracts subdivide the full area of counties and states, and never cross county boundaries.

Block groups (statistical): divisions of census tracts that generally contain between 600 and 3,000 people. A block group consists of a cluster of census blocks within the same census tract.

Census blocks (statistical): the smallest geographic areas and the basis for all tabulated census data. Blocks are statistical areas bounded by visible features, such as streets, roads, streams, and railroad tracks, and by nonvisible boundaries, such as selected property lines and city, township, school district, and county limits. A block often represents a typical city block area. However, as with other statistical geographies, blocks in rural areas may be very large in area.

Places (legal or statistical): In Utah, census “places” include cities, towns, metro townships, and census-designated places (CDPs). The first three are legal boundaries in Utah, representing incorporated places that provide governmental functions for residents. Under Utah law, towns must have populations of at least 100, and cities at least 1,000. Metro townships are a new form of government created in Utah in 2015 with the passage of Senate Bill 199 (the Community Preservation Act), and exist only in Utah. CDPs are statistical boundaries delineated to provide data for recognizable places that are not legally incorporated. The “place” geography is not required to fully cover a county or state’s area, so areas that do not belong to any place are common. Places may cross county boundaries.

Figure 3: Census Geographies Hierarchy



Note: Washington County has 35 total census tracts; the blocks, block groups, and census tracts shown in this diagram present a five-tract area as an example. Source: Kem C. Gardner Policy Institute. Boundary data from 2020 Census P.L. 94-171 TIGER/Line™ Shapefiles prepared by the U.S. Census Bureau, 2020.

Table 3: Census Tract Changes and Place Counts by County, Census 2020

County Name	Census Tract Counts					Places Count
	Census 2010	Census 2020	2010-2020 Change (Net Change)	Retired 2010 Tracts	New 2020 Tracts	
Beaver	2	2	0	0	0	3
Box Elder	11	12	1	1	2	19
Cache	26	28	2	2	4	24
Carbon	5	5	0	0	0	10
Daggett	1	1	0	0	0	3
Davis	54	66	12	10	22	15
Duchesne	3	4	1	1	2	7
Emery	3	3	0	0	0	9
Garfield	2	2	0	0	0	9
Grand	2	3	1	1	2	3
Iron	8	12	4	4	8	11
Juab	2	2	0	0	0	6
Kane	2	2	0	0	0	5
Millard	3	3	0	0	0	13
Morgan	2	3	1	1	2	3

County Name	Census Tract Counts					Places Count
	Census 2010	Census 2020	2010-2020 Change (Net Change)	Retired 2010 Tracts	New 2020 Tracts	
Piute	1	1	0	0	0	4
Rich	1	1	0	0	0	5
Salt Lake	212	251	39	30	69	24
San Juan	4	4	0	0	0	14
Sanpete	5	7	2	2	4	13
Sevier	5	5	0	0	0	12
Summit	13	14	1	1	2	17
Tooele	11	17	6	4	10	10
Uintah	6	8	2	2	4	10
Utah	128	156	28	26	54	34
Wasatch	4	10	6	3	9	10
Washington	21	35	14	11	25	19
Wayne	1	1	0	0	0	7
Weber	50	58	8	8	16	18

Notes: Retired census tracts were present in census 2010 but no longer exist in census 2020. New tracts represent those newly created for Census 2020 or newly designated as special land use tracts. Unlike tracts, places may cross county boundaries. These places are counted in each county they belong to. Places that cross county lines are Draper and Bluffdale (Salt Lake and Utah Counties), Park City (Summit and Wasatch Counties), and Santaquin (Utah and Juab Counties).

Source: Kem C. Gardner Policy Institute analysis of 2020 Census PL. 94-171 TIGER/Line™ Shapefiles prepared by the U.S. Census Bureau, 2020.

Other Census Geography Resources

- Tigerweb’s web maps and map services allow users to visualize TIGER data: <https://tigerweb.geo.census.gov>. For an interactive view of Utah’s census 2020 boundaries and roads, visit <https://tigerweb.geo.census.gov/tigerweb2020/>.
- The census geocoder (<https://geocoding.geo.census.gov/>) allows users to enter an address and return the location of the block, tract, etc., for that address.
- [Understanding Geographic Identifiers](#) offers explanations of the naming and numbering systems for census tracts and other geographies.¹⁶
- Census Bureau geographic [hierarchy diagrams](#) show additional levels of geography than those shown in Figure 3.¹⁷

Endnotes

1. Decennial Census P.L. 94-171 Redistricting Data – Geographic Support Products: <https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.html#P2>
Census 2020 GIS shapefiles are also available in the 2020 set of TIGER/Line shapefiles. See endnote 12 for details.
2. As with cities and towns, CDP boundaries may also change from one census to the next. A CDP's area may change shape in many ways (enlargement, contraction), or be removed entirely.
3. The Census Bureau updates legal boundaries throughout the decade through the Boundary and Annexation Survey, and continues this process in decennial census years to ensure that boundaries are up to date. Several other boundaries are statistical only, and are updated only before the decennial census.
4. See the definitions section of this document. The Census Bureau establishes population thresholds for census tracts and block groups.
5. CDP boundaries can be change between census years if bordering incorporated areas annex CDP land.
6. The five new CDPs, along with the towns of Brighton, Cedar Highlands, and Interlaken, comprise the eight newly listed Utah places in the 2020 census. All other new city, metro township, or town incorporations had been included in the 2010 census as CDPs. Since eight places are newly listed and one was retired, the total number of places in Utah is seven higher than in 2010.
7. The following list presents the top ten incorporated places in Utah by absolute population growth from census 2010 to 2019. They are ordered highest to lowest, with the number of new census tracts in parentheses: Herriman (7), South Jordan (8), Lehi (8), St. George (12), Eagle Mountain (6), Saratoga Springs (6), Salt Lake City (4), West Jordan (9), Vineyard (3), and Layton (4). Source: U.S. Census Bureau city and town population totals: 2010-2019 (<https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html>).
8. According to Census 2010 documentation, special land use census tracts are those that encompass a large area with little or no residential population and that have special characteristics, such as large parks or employment areas (<https://www.census.gov/prod/cen2010/doc/sf1.pdf>). Provo's new special land use tracts are Tracts 9802 (Provo Missionary Training Center, Provo Temple, and Brigham Young University's Wymount housing), 9803, 9804 (Utah State Hospital), 9805, and 9806 (Provo Airport). There were only three other special land use tracts designated in the state for this census, covering Hill Air Force Base in Davis County, South Valley Regional Airport in Salt Lake County, and Heber Valley Airport in Wasatch County.
9. Utah 2019 City Population Fact Sheet: <https://gardner.utah.edu/wp-content/uploads/Census-Bureau-Subcounty-Estimates-Fact-Sheet-2019.pdf>
10. The Uintah and Ouray Reservation and Ute Mountain Reservation include off-reservation trust lands in addition to the main reservation areas. This explains why there are nine total features in the American Indian area GIS shapefile.
11. In Utah's U.S. congressional districts and state legislative districts, there are slight cosmetic boundary differences between 2010 and 2020, but no substantial differences.
12. TIGER: Topologically Integrated Geographic Encoding and Referencing database. Shapefile site: <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html>
The 2020 TIGER/Line files includes both general year 2020 shapefiles and redistricting-specific shapefiles. Files with the same name listed in both sections have identical content. Redistricting files include the geographies most relevant to state and local governments involved in redistricting efforts. While redistricting shapefiles do not include all census geographies, they include the sub-state-level geographies most frequently used by the public. The redistricting shapefile set also offers several 2010 boundaries alongside 2020 boundaries to simplify comparisons.
13. Utah AGRC Demographic Data: <https://gis.utah.gov/data/demographic/census/>
14. Decennial Census P.L. 94-171 Redistricting Data – Geographic Support Products: <https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.html>
15. Definitions on this page were informed by the Census Bureau Geography Glossary page: <https://www.census.gov/programs-surveys/geography/about/glossary.html#P2>
16. Understanding Geographic Identifiers (GEOIDs): <https://www.census.gov/programs-surveys/geography/guidance/geo-identifiers.html>
17. Census Bureau hierarchy diagrams: <https://www.census.gov/programs-surveys/geography/guidance/hierarchy.html>