Package 'USpopcenters'

October 12, 2022

Title United States Centers of Population (Centroids)

Version 0.1.1

Description Centers of population (centroid) data for census areas in the
United States.

License CC0

URL https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.html,

https://github.com/NikKrieger/USpopcenters

BugReports https://github.com/NikKrieger/USpopcenters/issues

Depends R (>= 2.10)

Suggests tibble

Encoding UTF-8

LazyData true

LazyDataCompression xz

RoxygenNote 7.1.2

NeedsCompilation no

Author Nik Krieger [aut, cre]

Maintainer Nik Krieger <nk@case.edu>

Repository CRAN

Date/Publication 2021-11-09 17:40:02 UTC

R topics documented:

block_group2000   *Centers of population of US census tracts according to the 2000 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of census block groups in the US states plus the District of Columbia and Puerto Rico. Populations according to the 2000 decennial census are also included.

Usage

```
block_group2000
```

Format

A `tibble` with 211,267 rows and 7 variables:

STATEFP The two-digit GEOID of the state where the block group is located

COUNTYFP The last three digits of the five-digit GEOID of the county where the block group is located

TRACTCE The last six digits of the eleven-digit GEOID of the tract where the block group is located

BLKGRPCE The last digit of the twelve-digit GEOID of the block group

POPULATION The population of the block group

LATITUDE The latitude coordinate of the center of population (centroid) of the block group (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the block group (positive is east; negative is west)

Details

There are 707 block groups with a `POPULATION` **of 0 and a missing value for both** `LATITUDE` **and** `LONGITUDE`.

Unlike `county2000`, `block_group2000` does not contain data from American Samoa, Guam, the Northern Mariana Islands, or the US Virgin Islands.

The source data file in the zip file on the US census website has different column names than what its data dictionary reports. The data dictionary's version of the column names were used, since they are consistent with the majority of the other data files and data dictionaries on the census website.

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is in the .zip file at https://www2.census.gov/geo/docs/reference/cenpop2000/blkgrp/bg_popcen.zip. The 2000 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2000.html

See Also

Other 2000 census centers of population: state2000; county2000; tract2000

2010 census centers of population: state2010; county2010; tract2010; block_group2010; US_mean_center2010; US_median_center2010

Examples

```
block_group2000
```

---

block_group2010	*Centers of population of US census block groups according to the 2010 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of census block groups in the US states plus the District of Columbia and Puerto Rico. Populations according to the 2010 decennial census are also included.

Usage

```
block_group2010
```

Format

A tibble with 220,334 rows and 7 variables:

STATEFP The two-digit GEOID of the state where the block group is located

COUNTYFP The last three digits of the five-digit GEOID of the county where the block group is located

TRACTCE The last six digits of the eleven-digit GEOID of the tract where the block group is located

BLKGRPCE The last digit of the twelve-digit GEOID of the block group

POPULATION The population of the block group

LATITUDE The latitude coordinate of the center of population (centroid) of the block group (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the block group (positive is east; negative is west)

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2010/blkgrp/
CenPop2010_Mean_BG.txt The 2010 center of population info page is at https://www.census.
gov/geographies/reference-files/time-series/geo/centers-population.2010.html

See Also

Other 2010 census centers of population: state2010; county2010; tract2010; US_mean_center2010;
US_median_center2010

2000 census centers of population: state2000; county2000; tract2000; block_group2000

Examples

```
block_group2010
```

---

county2000   *Centers of population of US counties according to the 2000 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of counties (and county equivalents) in the US states plus the District of Columbia, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the US Virgin Islands. Populations according to the 2000 decennial census are also included.

Usage

```
county2000
```

Format

A tibble with 3,232 rows and 6 variables:

STATEFP The two-digit GEOID of the state where the county is located

COUNTYFP The last three digits of the five-digit GEOID of the county

COUNAME The name of the county

POPULATION The population of the county

LATITUDE The latitude coordinate of the center of population (centroid) of the county (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the county (positive is east; negative is west)

Details

This had to be stitched together from separate state files.

Unlike county2010, county2000 contains data from American Samoa, Guam, the Northern Mariana Islands, and the US Virgin Islands. Also unlike county2010, county2000 does not contain the STNAME (state name) column.

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The individual state source files are at https://www2.census.gov/geo/docs/reference/cenpop2000/county/. The 2000 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2000.html

See Also

Other 2000 census centers of population: state2000; tract2000; block_group2000

2010 census centers of population: state2010; county2010; tract2010; block_group2010; US_mean_center2010; US_median_center2010

Examples

```
county2000
```

---

county2010 *Centers of population of US counties according to the 2010 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of counties (and county equivalents) in the US states plus the District of Columbia and Puerto Rico. Populations according to the 2010 decennial census are also included.

Usage

```
county2010
```

Format

A tibble with 3,221 rows and 7 variables:

STATEFP The two-digit GEOID of the state where the county is located

COUNTYFP The last three digits of the five-digit GEOID of the county

COUNAME The name of the county

STNAME The name of the state where the county is located

POPULATION The population of the county

LATITUDE The latitude coordinate of the center of population (centroid) of the county (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the county (positive is east; negative is west)

Details

Unlike county2000, county2010 does not contain data from American Samoa, Guam, the Northern Mariana Islands, or the US Virgin Islands. Also unlike county2010, it contains the the state name column STNAME.

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2010/county/CenPop2010_Mean_CO.txt The 2010 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2010.html

See Also

Other 2010 census centers of population: state2010; tract2010; block_group2010; US_mean_center2010; US_median_center2010

2000 census centers of population: state2000; county2000; tract2000; block_group2000

Examples

    county2010

---

state2000	*Centers of population of US states according to the 2000 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of the US states plus the District of Columbia. Populations according to the 2000 decennial census are also included.

Usage

    state2000

Format

A `tibble` with 51 rows and 5 columns

STATEFP The two-digit GEOID of the state

STNAME The name of the state

POPULATION The population of the state

LATITUDE The latitude coordinate of the center of population (centroid) of the state (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the state (positive is east; negative is west)

Details

Note that this does not contain Puerto Rico's data, unlike `state2010`.

Also, unlike `county2000`, `state2000` does not contain data from Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, or the US Virgin Islands.

The source data file on the US census website has different column names than what its data dictionary reports. The data dictionary's version of the column names were used, since they are consistent with the majority of the other data files and data dictionaries on the census website.

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2000/statecenters.txt. The 2000 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2000.html

See Also

Other 2000 census centers of population: `county2000`; `tract2000`; `block_group2000`;

2010 census centers of population: `state2010`; `county2010`; `tract2010`; `block_group2010`; `US_mean_center2010`; `US_median_center2010`

Examples

```
state2000
```

---

state2010   *Centers of population of US states according to the 2010 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of the US states plus the District of Columbia and Puerto Rico. Populations according to the 2010 decennial census are also included.

Usage

```
state2010
```

Format

A [tibble](#) with 52 rows and 5 columns

STATEFP The two-digit GEOID of the state

STNAME The name of the state

POPULATION The population of the state

LATITUDE The latitude coordinate of the center of population (centroid) of the state (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the state (positive is east; negative is west)

Details

Note that this contains Puerto Rico data, unlike [state2000](#).

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2010/CenPop2010_Mean_ST.txt. The 2010 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2010.html

See Also

Other 2010 census centers of population: [county2010](#); [tract2010](#); [block_group2010](#); [US_mean_center2010](#); [US_median_center2010](#)

2000 census centers of population: [state2000](#); [county2000](#); [tract2000](#); [block_group2000](#)

Examples

```
state2010
```

| tract2000 | *Centers of population of US census tracts according to the 2000 census* |

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of census tracts in the US states plus the District of Columbia and Puerto Rico. Populations according to the 2000 decennial census are also included.

Usage

```
tract2000
```

Format

A [tibble](#) with 66,304 rows and 6 variables:

STATEFP The two-digit GEOID of the state where the tract is located

COUNTYFP The last three digits of the five-digit GEOID of the tract

TRACTCE The last six digits of the eleven-digit GEOID of the tract

POPULATION The population of the tract

LATITUDE The latitude coordinate of the center of population (centroid) of the tract (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the tract (positive is east; negative is west)

Details

There are 307 tracts with a POPULATION **of 0 and a missing value for both** LATITUDE **and** LONGITUDE.

Unlike [county2000](#), tract2000 does not contain data from American Samoa, Guam, the Northern Mariana Islands, or the US Virgin Islands.

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2000/tract/tract_pop.txt. The 2000 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2000.html

See Also

Other 2000 census centers of population: state2000; county2000; block_group2000

2010 census centers of population: state2010; county2010; tract2010; block_group2010; US_mean_center2010; US_median_center2010

Examples

```
tract2000
```

---

tract2010   *Centers of population of US census tracts according to the 2010 census*

Description

A data set of the latitude and longitude coordinates of the centers of population (centroids) of census tracts in the US states plus the District of Columbia and Puerto Rico. Populations according to the 2010 decennial census are also included.

Usage

```
tract2010
```

Format

A [tibble](#) with 74,002 rows and 6 variables:

STATEFP The two-digit GEOID of the state where the tract is located

COUNTYFP The last three digits of the five-digit GEOID of the county where the tract is located

TRACTCE The last six digits of the eleven-digit GEOID of the tract

POPULATION The population of the tract

LATITUDE The latitude coordinate of the center of population (centroid) of the tract (positive is north; negative is south)

LONGITUDE The longitude coordinate of the center of population (centroid) of the tract (positive is east; negative is west)

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2010/tract/CenPop2010_Mean_TR.txt The 2010 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2010.html

See Also

Other 2010 census centers of population: `state2010`; `county2010`; `block_group2010`; `US_mean_center2010`; `US_median_center2010`

2000 census centers of population: `state2000`; `county2000`; `tract2000`; `block_group2000`

Examples

```
tract2010
```

US_mean_center2010	**Mean** *center of population of the US according to the 2010 census*

Description

A data set of the latitude and longitude coordinates of the **mean** center of population (centroid) of the United States. The total US populations according to the 2010 decennial census is also included.

Usage

```
US_mean_center2010
```

Format

A `tibble` with 1 row and 3 columns

POPULATION The population of the US

LATITUDE The latitude coordinate of the **mean** center of population (centroid) of the US (positive is north; negative is south)

LONGITUDE The longitude coordinate of the **mean** center of population (centroid) of the US (positive is east; negative is west)

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2010/CenPop2010_Mean_US.txt. The 2010 center of population info page is at https://www.census.gov/geographies/reference-files/time-series/geo/centers-population.2010.html

See Also

Median center of population of the US: `US_median_center2010`

Other 2010 census centers of population: `state2010`; `county2010`; `tract2010`; `block_group2010`

2000 census centers of population: `state2000`; `county2000`; `tract2000`; `block_group2000`

Examples

```
US_mean_center2010
```

US_median_center2010   **Median** *center of population of the US according to the 2010 census*

Description

A data set of the latitude and longitude coordinates of the **median** center of population (centroid) of
the United States. The total US populations according to the 2010 decennial census is also included.

Usage

```
US_median_center2010
```

Format

A [tibble](#) with 1 row and 3 columns

POPULATION The population of the US

LATITUDE The latitude coordinate of the **median** center of population (centroid) of the US (pos-
itive is north; negative is south)

LONGITUDE The longitude coordinate of the **median** center of population (centroid) of the US
(positive is east; negative is west)

US census data terms of service

https://www.census.gov/data/developers/about/terms-of-service.html

Source

The source file is at https://www2.census.gov/geo/docs/reference/cenpop2010/CenPop2010_
Median_US.txt. The 2010 center of population info page is at https://www.census.gov/geographies/
reference-files/time-series/geo/centers-population.2010.html

See Also

Mean center of population of the US: US_mean_center2010

Other 2010 census centers of population: state2010; county2010; tract2010; block_group2010

2000 census centers of population: state2000; county2000; tract2000; block_group2000

Examples

```
US_median_center2010
```

Index