Package 'usa'

March 11, 2024

Title Updated US State Facts and Figures

Version 0.1.2

Description Updated versions of the 1970's ``US State Facts and Figures''
objects from the 'datasets' package included with R. The new data is
compiled from a number of sources, primarily from United States Census
Bureau or the relevant federal agency.

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URL https://k5cents.github.io/usa/, https://github.com/k5cents/usa

BugReports https://github.com/k5cents/usa/issues

Depends R (>= 3.2)

Imports tibble (>= 2.1.3)

Suggests covr (>= 3.3.2), testthat (>= 2.1.0)

Encoding UTF-8

LazyData true

RoxygenNote 7.2.3

NeedsCompilation no

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Repository CRAN

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R topics documented:

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city.name   *US ZIP Cities*

Description

The United States Postal Service's official names for the cities in which ZIP codes are contained. This vector contains unique values, sorted alphabetically; because of this, they do not line up the other vectors in the way zip.code and zip.center do.

Usage

```
city.name
```

Format

A character vector of length 19108.

Source

Daniel Coven's web site and the CivicSpace US ZIP Code Database written by Schuyler Erle schuyler@geocoder.us, 5 August 2004.

---

counties	*US Counties*

Description

The county subdivisions of the US states and territories.

Usage

```
counties
```

Format

A tibble with 3,232 rows and 3 variables:

fips Federal Information Processing Standard Publication 5-2 code

name Census county names

state USPS official state, territory abbreviation code

Source

https://web.archive.org/web/20240106151642/https://transition.fcc.gov/oet/info/maps/census/fips/fips.txt

---

county.name	*US County Names*

Description

The name of distinct US counties.

Usage

```
county.name
```

Format

A character vector of length 19108.

Source

https://web.archive.org/web/20240106151642/https://transition.fcc.gov/oet/info/maps/census/fips/fips.txt

---

facts *US State Facts*

Description

Updated version of the [datasets::state.x77](#) matrix, which provides eights statistics from the 1970's. This version is a modern data frame format with updated (and alternative) statistics.

Usage

    facts

Format

A tibble with 52 rows and 9 variables:

name Full state name

population Population estimate (September 26, 2019)

votes Votes in the Electoral College (following the 2010 Census)

admission The data which the state was admitted to the union

income Per capita income (2018)

life_exp Life expectancy in years (2017-18)

murder Murder rate per 100,000 population (2018)

college Percent adult population with at least a bachelor's degree or greater (2019)

heat Mean number of degree days (temperature requires heating) per year from 1981-2010

Source

- Population: `https://www2.census.gov/programs-surveys/popest/datasets/2010-2018/state/detail/SCPRC-EST2018-18+POP-RES.csv`
- Electoral College: `https://www.archives.gov/electoral-college/allocation`
- Income: `https://data.census.gov/cedsci/table?tid=ACSST1Y2018.S1903`
- GDP: `https://www.bea.gov/system/files/2019-11/qgdpstate1119.xlsx`
- Literacy: `https://nces.ed.gov/naal/estimates/StateEstimates.aspx`
- Life Expectancy: `https://web.archive.org/web/20231129160338/https://usa.mortality.org/`
- Murder: `https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/tables/table-4/table-4.xls/output.xls`
- Education: `https://data.census.gov/cedsci/table?q=S1501`
- Temperature: `ftp://ftp.ncdc.noaa.gov/pub/data/normals/1981-2010/products/temperature/ann-cldd-normal.txt`

| people | *Synthetic Sample of US population* |

Description

A statistically representative synthetic sample of 20,000 Americans. Each record is a simulated survey respondent.

Usage

```
people
```

Format

A tibble with 20,000 rows and 40 variables:

id Sequential unique ID

fname Random first name, see details

lname Random last name, see details

gender Biological sex

age Age capped at 85

race Race and Ethnicity

edu Educational attainment

div Census regional division

married Marital status

house_size Household size

children Has children

us_citizen Is a US citizen

us_born Was born in the Us

house_income Family income

emp_status Employment status

emp_sector Employment sector

hours_work Hours worked per week

hours_vary Hours vary week to week

mil Has served in the military

house_own Home ownership

metro Lives in metropolitan area

internet Household has internet access

foodstamp Receives food stamps

house_moved Moved in the last year

pub_contact Contacted or visited a public official

boycott

hood_group Participated in a community association

hood_talks Talked with neighbors

hood_trust Trusts neighbors

tablet Uses a tablet or e-reader

texting Uses text messaging

social Uses social media

volunteer Volunteered

register Is registered to vote

vote Voted in the 2014 midterm elections

party Political party

religion Religious (evangelical) affiliation

ideology Political ideology

govt Follows government and public affairs

guns Owns a gun

Details

This dataset was originally produced by the Pew Research center for their paper entitled *For Weighting Online Opt-In Samples, What Matters Most?* The synthetic population dataset was created to serve as a reference for making online opt-in surveys more representative of the overall population.

See Appendix B: Synthetic population dataset for a more detailed description of the method for and rationale behind creating this dataset.

In short, the dataset was created to overcome the limitations of using large, federal benchmark survey datasets such as the American Community Survey (ACS) or Current Population Survey (CPS). These surveys often do not contain the exact questions asked in online-opt in surveys, keeping them from being used for proper adjustment.

This *synthetic* dataset was created by combining nine separate benchmark datasets. Each had a set of common demographic variables but many added unique variables such as gun ownership or voter registration. The surveys were combined, stratified, sampled, combined, and imputed to fill missing values from each. From this large dataset, the original 20,000 surveys from the ACS were kept to ensure accurate demographic distribution.

The names were *RANDOMLY* assigned to respondents to better simulate a synthetic sample of the population. First names were taken from the babynames dataset which contains the Social Security Administration's record of baby names from 1880 to 2017 along with gender and proportion. First names were proportionally randomly assigned by birth year and sex. Last names were taken from the Census Bureau, who provides the 162,254 most common last names in the 2010 Census, covering over 90% of the population. For a given surname, the proportion of that name belonging to members of each race and ethnicity is provided. The last names were proportionally randomly assigned by race.

Source

"For Weighting Online Opt-In Samples, What Matters Most?" Pew Research Center, Washington, D.C. (January 26, 2018) https://www.pewresearch.org/methods/2018/01/26/for-weighting-online-opt-in-sampl

---

state.abb   *US State Abbreviations*

Description

The 2-letter abbreviations for the US state names.

Usage

```
state.abb
```

Format

A character vector of length 52.

Source

https://www2.census.gov/geo/docs/reference/state.txt

---

state.area   *US State Areas*

Description

The area in square miles of the US states.

Usage

```
state.area
```

Format

A numeric vector of length 52.

Source

https://tigerweb.geo.census.gov/tigerwebmain/Files/acs19/tigerweb_acs19_state_us.html

---

state.center	*US State Centers*

Description

A list with components named x and y giving the approximate geographic center of each state in negative longitude and latitude.

Usage

```
state.center
```

Format

A list of length two, each element a numeric vector of length 52.

x Center longitudinal coordinate

y Center latitudinal coordinate

Source

https://tigerweb.geo.census.gov/tigerwebmain/Files/acs19/tigerweb_acs19_state_us.html

---

state.division	*US State Divisions*

Description

The Census division to which each state belongs, one of nine:

1. New England
2. Middle Atlantic
3. East North Central
4. West North Central
5. South Atlantic
6. East South Central
7. West South Central
8. Mountain
9. Pacific

Usage

```
state.division
```

Format

A factor vector of length 52.

Source

<https://www2.census.gov/programs-surveys/popest/geographies/2018/state-geocodes-v2018.xlsx>

---

state.name *US State Names*

Description

The full names for the US states.

Usage

state.name

Format

A numeric vector of length 52.

Source

<https://tigerweb.geo.census.gov/tigerwebmain/Files/acs19/tigerweb_acs19_state_us.html>

---

state.region *US State Regions*

Description

The Census region to which each state belongs, one of four:

1. Northeast
2. Midwest
3. South
4. West

Usage

state.region

Format

A factor vector of length 52.

Source

---

state.x19   *US State and Territory Statistics*

Description

A matrix version of the facts tibble, used to more closely align with the datasets::state.x77 matrix included with R.

Usage

```
state.x19
```

Format

A tibble with 52 rows and 9 variables:

abb 2-letter abbreviation

population Population estimate as of September 26, 2019

votes Votes in the Electoral College (following the 2010 Census)

income Per capita income (2017)

life_exp Life expectancy in years (2017-18)

murder Murder rate per 100,000 population (2018)

high Percent of population with at least a high school degree (2019)

bach Percent of population with at least a bachelor's degree (2019)

heat Mean number of "degree days" per year from 1981-2010

---

states *US State and Territories*

Description

The 50 states, District of Columbia, and Puerto Rico.

Usage

```
states
```

Format

A tibble with 52 rows and 8 variables:

abb 2-letter abbreviation
name Full legal name
fips Federal Information Processing Standard Publication 5-2 code
region Census Bureau region
division Census Bureau division
area Area in square miles
lat Center latitudinal coordinate
long Center longitudinal coordinate

---

state_convert *Convert state identifiers*

Description

Take a vector of state identifiers and convert to a common format.

Usage

```
state_convert(x, to = NULL)
```

Arguments

x	A character vector of: state names, abbreviations, or FIPS codes.
to	The format returned: "abb", "name" or "fips".

Value

A character vector of single format state identifiers.

Examples

```
state_convert(c("AL", "Vermont", "06"))
```

`territory`   *US Territories*

Description

The 6 non-state territories and federal district.

Usage

```
territory
```

Format

A tibble with 7 rows and 6 variables:

abb 2-letter abbreviation

name Full legal name

fips Federal Information Processing Standard Publication 5-2 code

area Area in square miles

lat Center latitudinal coordinate

long Center longitudinal coordinate

`territory.abb`   *US Territory Abbreviations*

Description

The 2-letter abbreviations for the US territory names.

Usage

```
territory.abb
```

Format

A character vector of length 52.

Source

https://www2.census.gov/geo/docs/reference/state.txt

`territory.area`   *US State Areas*

Description

The area in square miles of the US territories.

Usage

```
territory.area
```

Format

A numeric vector of length 52.

Source

https://tigerweb.geo.census.gov/tigerwebmain/Files/acs19/tigerweb_acs19_state_us.html

---

`territory.center`   *US Territory Centers*

Description

A list with components named x and y giving the approximate geographic center of each territory in negative longitude and latitude.

Usage

```
territory.center
```

Format

A list of length two, each element a numeric vector of length 5.

x Center longitudinal coordinate

y Center latitudinal coordinate

Source

https://tigerweb.geo.census.gov/tigerwebmain/Files/acs19/tigerweb_acs19_state_us.html

---

territory.name   *US Territory Names*

Description

The full names for the US territories.

Usage

    territory.name

Format

A numeric vector of length 52.

Source

https://tigerweb.geo.census.gov/tigerwebmain/Files/acs19/tigerweb_acs19_state_us.html

---

zip.center   *US ZIP Centers*

Description

A list with components named x and y giving the approximate geographic center of each ZIP code in negative longitude and latitude.

Usage

    zip.center

Format

A list of length two, each element a numeric vector of length 44336.

x Center longitudinal coordinate

y Center latitudinal coordinate

Source

Daniel Coven's [web site](#) and the CivicSpace US ZIP Code Database written by Schuyler Erle schuyler@geocoder.us, 5 August 2004.

---

zip.code	*US ZIP Codes*

Description

The United States Postal Service's 5-digit codes used to identify a particular postal delivery area.

Usage

```
zip.code
```

Format

A character vector of length 44336.

Source

Daniel Coven's web site and the CivicSpace US ZIP Code Database written by Schuyler Erle schuyler@geocoder.us, 5 August 2004.

---

zipcodes	*US ZIP Code Locations*

Description

This tibble contains city, state, latitude, and longitude for U.S. ZIP codes from the CivicSpace Database (August 2004) augmented by Daniel Coven's web site (updated on January 22, 2012). The data was originally contained in the zipcode CRAN package, which was archived on January 1, 2020.

Usage

```
zipcodes
```

Format

A tibble with 52 rows and 9 variables:

zip 5 digit ZIP code or military postal code (FPO/APO)
city USPS official city name
state USPS official state, territory abbreviation code
latitude Decimal Latitude
longitude Decimal Longitude

Source

Daniel Coven's web site and the CivicSpace US ZIP Code Database written by Schuyler Erle schuyler@geocoder.us, 5 August 2004.

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