Package ‘censusxy’

August 10, 2019

**Title**  Access the U.S. Census Bureau Geocoder

**Version**  0.1.2

**Description**  Provides access to the U.S. Census Bureau's API for batch geocoding American street addresses (<https://geocoding.geo.census.gov/geocoder>). The package offers a batch solution for address geocoding, as opposed to geocoding a single address at a time. It has also been developed specifically with large data sets in mind - only unique addresses are passed to the API for geocoding. If a data set exceeds 1,000 unique addresses, it will be automatically subset into appropriately sized API calls, geocoded, and then put back together so that a single object is returned.

**Depends**  R (>= 3.3)

**License**  GPL-3

**URL**  https://github.com/slu-openGIS/censusxy

**BugReports**  https://github.com/slu-openGIS/censusxy/issues

**Encoding**  UTF-8

**LazyData**  true

**RoxygenNote**  6.1.1

**Imports**  dplyr, httr, readr, rlang, sf, tibble, tidyr

**Suggests**  covr, knitr, markdown, testthat

**VignetteBuilder**  knitr

**NeedsCompilation**  no

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**Repository**  CRAN

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Description

This is the single function of the censusxy package, allowing for the easy geocoding of US Addresses using the US Census Bureau Geocoder. This function allows for flexible input and virtually unlimited batch sizes. See the vignette vignette(censusxy) for more details.

Usage

cxy_geocode(.data, address, city, state, zip, 
      style = "minimal", output = "tibble", timeout = 30)

Arguments

.data           Data frame or tibble containing address data
address         Column name containing address
city            Optional; column name containing city
state           Optional; column name containing state
zip             Optional; column name containing 5-digit zip code
style           One of either "minimal" or "full"
output          One of either "tibble" or "sf"
timeout         Maximum number of minutes for each API call to the geocoder.

Value

Either a tibble or sf object containing the census geocoder response.

Examples

# load sample data
data <- stl_homicides_small

# geocode data
data <- cxy_geocode(data, address = "street_address", city = "city", 
                    state = "state", zip = "postal_code")
stl_homicides

# preview data
data

---

stl_homicides  

Homicides in the City of St. Louis, 2008 - 2018

Description

An example data set containing the addresses for homicides reported by the Saint Louis Metropolitan Police Department

Usage

data(stl_homicides)

Format

A tibble with 1822 rows and 6 variables:

- **street_address** number, street and street suffix where homicide occurred
- **year** year homicide occurred
- **date** data homicide occurred
- **state** state abbreviation of location, in these data, all "MO"
- **postal_code** zipcode/postal code of location, in these data all NA
- **city** city of location, in these data all "St. Louis"

Source

St. Louis Metropolitan Police Department

Examples

str(stl_homicides)
head(stl_homicides)
Description

An example data set containing the addresses for homicides reported by the Saint Louis Metropolitan Police Department

Usage

data(stl_homicides_small)

Format

A tibble with 24 rows and 6 variables:

- **street_address** number, street and street suffix where homicide occurred
- **year** year homicide occurred
- **date** date homicide occurred
- **state** state abbreviation of location, in these data, all "MO"
- **postal_code** zipcode/postal code of location, in these data all NA
- **city** city of location, in these data all "St. Louis"

Source

St. Louis Metropolitan Police Department

Examples

str(stl_homicides_small)
head(stl_homicides_small)
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