

# Package ‘censusr’

August 29, 2016

**Type** Package

**Title** Collect Data from the Census API

**Version** 0.0.2

**Date** 2015-12-11

**Description** Use the US Census API to collect summary data tables for SF1 and ACS datasets at arbitrary geographies.

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**LazyData** TRUE

**Depends** dplyr (>= 0.4.3), httr (>= 1.0.0)

**Suggests** knitr

**VignetteBuilder** knitr

**RoxygenNote** 5.0.1

**NeedsCompilation** no

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**Repository** CRAN

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call_api_once	<i>Call Census API for a set of variables</i>
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### Description

This is an internal function and is not intended for users. See instead [call\\_census\\_api](#).

### Usage

```
call_api_once(variables_to_get, geoid, allgeos, data_source, year, period,
              api_key)
```

### Arguments

variables\_to\_get

A character vector of the desired variable names for the Census API call, defined at <http://api.census.gov/>

geoid

A character string with a FIPS code, between 2 and 15 digits long.

allgeos

(optional) A string identifying the type of geography for which to collect data within the the requested geoids. Must be one of c('co', 'tr', 'bg', 'bl'). For instance, if allgeos = "bg", will return all block groups within the given geoids.

data\_source

A string identifying whether the SF1 (decennial census) or ACS data is desired.

year

If data\_source = "acs", the final year of the summary period. Default is 2013.

period

If data\_source = "acs", the length of aggregation period. Default is 5, or a 5-year aggregation table.

api\_key

The user's Census API key (as a character string). You can get a free key from [Census]([http://api.census.gov/data/key\\_signup.html](http://api.census.gov/data/key_signup.html)). See `vignette('censusr', package = 'census')` to setup a default key as an environment variable.

### Value

A `codedata.frame` with the requested variables at the requested geography.

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call_census_api	<i>Retrieve data from the Census API</i>
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### Description

Returns Census data for the 2010 SF1 or ACS 2013-2015 1-, 3-, and 5-Yr aggregations for requested variables and geographies.

**Usage**

```
call_census_api(variables_to_get, names = NULL, geoids, allgeos = NULL,
  data_source = c("sf1", "acs"), year = 2013, period = 5,
  api_key = NULL)
```

**Arguments**

variables\_to\_get

A character vector of the desired variable names for the Census API call, defined at <http://api.census.gov/>

names

A character vector of the same length as variables\_to\_get giving the user-defined names for the variables (optional). Defaults to raw API names.

geoids

A character vector of FIPS codes; must be at least to the county (5-digit) level, and can accept down to blocks (15-digit).

allgeos

(optional) A string identifying the type of geography for which to collect data within the the requested geoids. Must be one of c('co', 'tr', 'bg', 'bl'). For instance, if allgeos = "bg", will return all block groups within the given geoids.

data\_source

A string identifying whether the SF1 (decennial census) or ACS data is desired.

year

If data\_source = "acs", the final year of the summary period. Default is 2013.

period

If data\_source = "acs", the length of aggregation period. Default is 5, or a 5-year aggregation table.

api\_key

The user's Census API key (as a character string). You can get a free key from [Census]([http://api.census.gov/data/key\\_signup.html](http://api.census.gov/data/key_signup.html)). See vignette('censusr', package = 'census') to setup a default key as an environment variable.

**Details**

See vignette('censusr', package = 'censusr') for examples.

**Value**

a data\_frame with each requested variable at each requested geography.

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get\_geo\_url

*Construct a geography request string from a FIPS Code*

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**Description**

Construct a geography request string from a FIPS Code

**Usage**

```
get_geo_url(geoid, allgeos)
```

**Arguments**

<code>geoid</code>	A character string with a FIPS code, between 2 and 15 digits long.
<code>allgeos</code>	(optional) A string identifying the type of geography for which to collect data within the the requested geoids. Must be one of <code>c('co', 'tr', 'bg', 'bl')</code> . For instance, if <code>allgeos = "bg"</code> , will return all block groups within the given geoids.

**Value**

A string with the FIPS formatted for an API request.

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