

# Package ‘geobr’

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**Type** Package

**Title** Loads shapefiles of the Brazilian Institute of Geography and Statistics (IBGE)

**Version** 0.01

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**URL** <https://github.com/ipeaGIT/geobr>

**BugReports** <https://github.com/ipeaGIT/geobr/issues>

**Description** geobr provides easy access to shapefiles of the Brazilian Institute of Geography and Statistics (IBGE) and loads into R as 'sf' objects. It includes a wide set of geographic datasets available at various geographic scales and for various years.

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** TRUE

**Depends** R (>= 3.4.0)

**Suggests** dplyr,  
ggplot2,  
mapview

**Imports** httr,  
readr,  
sf

**RoxygenNote** 6.1.1

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read_census_tract	<i>Download shape files of census sectors of the Brazilian Population Census</i>
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## Description

Download shape files of census sectors of the Brazilian Population Census

## Usage

```
read_census_tract(CODE, year = NULL, zone = "urban")
```

## Arguments

CODE	One can either pass the 7-digit code of a Municipality or the 2-digit code of a State.If CODE="all", all census sectors of the country are loaded.
year	the year of the data download (defaults to 2010)
zone	"urban" or "rural" for separation in the year 2000

## See Also

Other general area functions: [read\\_meso\\_region](#), [read\\_micro\\_region](#), [read\\_municipality](#), [read\\_state](#), [read\\_statistical\\_grid](#), [read\\_weighting\\_area](#)

## Examples

```
## Not run:
# Exemplos
dados <- read_census_tract(year=2010)
dados <- read_census_tract(123,2010)
dados <- read_census_tract("df",2010)
dados <- read_census_tract(1302603,2010)
dados <- read_census_tract(35)
dados <- read_census_tract(14,2010)
dados <- read_census_tract()

# mapa
library(mapview)
mapview(dados)

## End(Not run)
```

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read_meso_region	<i>Download shape files of meso region.</i>
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**Description**

Download shape files of meso region.

**Usage**

```
read_meso_region(cod_meso, year = NULL)
```

**Arguments**

cod_meso	The 4-digit code of a meso region. If a two-digit code of a state is passed, the function will load all meso regions of that state. If cod_meso="all", all meso regions of the country are loaded.
year	Year of the data (defaults to 2010)

**See Also**

Other general area functions: [read\\_census\\_tract](#), [read\\_micro\\_region](#), [read\\_municipality](#), [read\\_state](#), [read\\_statistical\\_grid](#), [read\\_weighting\\_area](#)

**Examples**

```
## Not run:

library(geobr)

# Read all meso regions of a state at a given year
meso <- read_meso_region(cod_meso=12, year=2017)

# Read all meso regions of the country at a given year
meso <- read_meso_region(cod_meso="all", year=2010)

## End(Not run)
```

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read_micro_region	<i>Download shape files of micro region.</i>
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**Description**

Download shape files of micro region.

**Usage**

```
read_micro_region(cod_micro, year = NULL)
```

**Arguments**

cod_micro	5-digit code of a micro region. If the two-digit code of a state is passed, the function will load all micro regions of that state. If cod_micro="all", all micro regions of the country are loaded.
year	Year of the data (defaults to 2010)

**See Also**

Other general area functions: [read\\_census\\_tract](#), [read\\_meso\\_region](#), [read\\_municipality](#), [read\\_state](#), [read\\_statistical\\_grid](#), [read\\_weighting\\_area](#)

**Examples**

```
## Not run:

library(geobr)

# Read all micro regions of a state at a given year
micro <- read_micro_region(cod_micro=12, year=2017)

# Read all micro regions at a given year
micro <- read_micro_region(cod_micro="all", year=2010)

## End(Not run)
```

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read_municipality	<i>Download shape files of municipalities</i>
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**Description**

Download shape files of municipalities

**Usage**

```
read_municipality(cod_mun, year = NULL)
```

**Arguments**

cod_mun	The 7-digit code of a municipality. If the two-digit code of a state is used, the function will load all municipalities of that state. If cod_mun="all", all municipalities will be loaded.
year	Year of the data (defaults to 2010)

**See Also**

Other general area functions: [read\\_census\\_tract](#), [read\\_meso\\_region](#), [read\\_micro\\_region](#), [read\\_state](#), [read\\_statistical\\_grid](#), [read\\_weighting\\_area](#)

**Examples**

```
## Not run:

library(geobr)

# Read specific municipality at a given year
mun <- read_municipality(cod_mun=1200179, year=2017)

# Read all municipalities of a state at a given year
mun <- read_municipality(cod_mun=12, year=2010)

## End(Not run)
```

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read\_state

*Download shape files of Brazilian states*

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**Description**

Download shape files of Brazilian states

**Usage**

```
read_state(cod_uf, year = NULL)
```

**Arguments**

cod_uf	The two-digit code of a state. If cod_uf="all", all states will be loaded.
year	Year of the data (defaults to 2010)

**See Also**

Other general area functions: [read\\_census\\_tract](#), [read\\_meso\\_region](#), [read\\_micro\\_region](#), [read\\_municipality](#), [read\\_statistical\\_grid](#), [read\\_weighting\\_area](#)

**Examples**

```
## Not run:

library(geobr)

# Read specific municipality at a given year
uf <- read_state(cod_uf=12, year=2017)

# Read all states at a given year
ufs <- read_state(cod_uf="all", year=2010)

## End(Not run)
```

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`read_statistical_grid` *Download shape files of IBGE's statistical grid (200 x 200 meters)*

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### Description

Download shape files of IBGE's statistical grid (200 x 200 meters)

### Usage

```
read_statistical_grid(cod_grid, year = NULL)
```

### Arguments

<code>cod_grid</code>	The 7-digit code of a grid quadrant. If the two-letter abbreviation of a state is used, the function will load all grid quadrants that intersect with that state. If <code>cod_grid="all"</code> , the grid of the whole country will be loaded.
<code>year</code>	Year of the data (defaults to 2010). The only year available thus far is 2010.

### See Also

Other general area functions: [read\\_census\\_tract](#), [read\\_meso\\_region](#), [read\\_micro\\_region](#), [read\\_municipality](#), [read\\_state](#), [read\\_weighting\\_area](#)

### Examples

```
## Not run:

library(geobr)

# Read specific municipality at a given year
grid <- read_statistical_grid(cod_grid = 45, year=2010)

# Read all municipalities of a state at a given year
state_grid <- read_statistical_grid(cod_grid = "RJ")

## End(Not run)
```

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`read_weighting_area` *Download shape files of Census Weighting Areas (área de ponderação) of the Brazilian Population Census*

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### Description

Download shape files of Census Weighting Areas (área de ponderação) of the Brazilian Population Census

### Usage

```
read_weighting_area(CODE, year = NULL)
```

**Arguments**

CODE	One can either pass the 7-digit code of a Municipality or the 2-digit code of a State. The function will load the shape files of all weighting areas in the specified geography
year	the year of the data download (defaults to 2010)

**See Also**

Other general area functions: [read\\_census\\_tract](#), [read\\_meso\\_region](#), [read\\_micro\\_region](#), [read\\_municipality](#), [read\\_state](#), [read\\_statistical\\_grid](#)

**Examples**

```
## Not run:

library(geobr)

dados <- read_weighting_area(year=2010)
dados <- read_weighting_area(3500000,2010)
dados <- read_weighting_area(123,2010)
dados <- read_weighting_area("df",2010)
dados <- read_weighting_area(1302603,2010)
dados <- read_weighting_area(35)
dados <- read_weighting_area(14,2010)
dados <- read_weighting_area()

# map it
library(mapview)
mapview(dados)

## End(Not run)
```

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