

Package ‘onmaRg’

May 22, 2023

Type Package

Title Import Public Health Ontario's Ontario Marginalization Index

Version 0.2.1

Description The Ontario Marginalization Index is a socioeconomic model that is built on Statistics Canada census data.
The model consists of four dimensions: Residential Instability, Material Deprivation, Dependency and Ethnic Concentration.
Each of these dimensions are imported for a variety of geographic levels (DA, CD, etc.) for both the 2011 and 2016 administrations of the census (2021 pending). These data sets contribute to community analysis of equity with respect to Ontario's Anti-Racism Act.
The Ontario Marginalization Index data is retrieved from the Public Health Ontario website: <<https://www.publichealthontario.ca/en/data-and-analysis/health-equity/ontario-marginalization-index>>.
The shapefile data is retrieved from the Statistics Canada website: <<https://www12.statcan.gc.ca/census-recensement/2011/geo/bound-limit/bound-limit-eng.cfm>>.

License GPL-3

Encoding UTF-8

RoxygenNote 7.2.1

Depends dplyr, httr, readxl, sf, stringr, utils

Suggests knitr, rmarkdown

VignetteBuilder knitr

NeedsCompilation no

Author William Conley [aut, cre]

Maintainer William Conley <william@cconley.ca>

Repository CRAN

Date/Publication 2023-05-22 14:10:02 UTC

R topics documented:

om_data	2
om_geo	2
om_quint	3

Index**5**

om_data	<i>Load OnMarg data</i>
---------	-------------------------

Description

This function loads Public Health Ontario's Ontario Marginalization Index data into a dataframe which includes geographic variables (e.g. DA labels, CSD labels) and associated values for the four OnMarg domains of Instability, Material Deprivation, Dependency and Ethnic Concentration.

Usage

```
om_data(year, level)
```

Arguments

year	Integer year of data to load
level	The level of precision to load, this can be "DAUID", "CTUID", "CSDUID", "CCSUID", "CDUID", "CMAUID", "PHUID", "LHINUID", or "LHIN_SRUID"

Details

If the data file is unable to be downloaded, an error message will be produced.

Value

A dataframe containing the Marginalization Index for every geographic identifier

Examples

```
DA_2016_data <- om_data(2016, "DAUID")
```

om_geo	<i>Load OnMarg spatial data</i>
--------	---------------------------------

Description

This function combines Public Health Ontario's Ontario Marginalization Index data with Statistics Canada's shape files to create an sf_object. The sf_object can be used for mapping with packages such as ggplot, and for spatial analysis.

Usage

```
om_geo(year, level, format)
```

Arguments

year	Integer year of data to load
level	The level of precision to load, this can be "DAUID", "CTUID", "CSDUID", "CCSUID", "CDUID", "CMAUID", "PHUID", "LHINUID", or "LHIN_SRUID"
format	The format for the geographic object, this can be "sf" or "sp"

Details

If a year or level is used that does not exist or is not implemented, an error message will be produced.
If the geometry file is unable to be downloaded, an error message will be produced.

Value

A sf or sp object containing the Marginalization Index and geographic boundaries for every geographic identifier

Examples

```
## Not run:
DA_2016_geo <- om_geo(2016, "DAUID", "sf")

## End(Not run)
```

om_quint	<i>This function converts an arbitrary vector of values into corresponding quintile scores.</i>
----------	---

Description

NA values are ignored and left NA

Usage

```
om_quint(x)
```

Arguments

x	Vector of values to recalculate quintiles for
---	---

Details

It can be used to recalculate the quintile scores for subsets of the OnMarg dataset.

Value

Vector of quintile scores for each element in the input vector

Examples

```
## Not run:  
city_data$DEPRIVATION_Q_DA16 <- om Quint(city_data$DEPRIVATION_DA16)  
  
## End(Not run)
```

Index

om_data, 2
om_geo, 2
om_quint, 3