

Package ‘onmaRg’

July 20, 2023

Type Package

Title Import Public Health Ontario's Ontario Marginalization Index

Version 1.0.3

Description The Ontario Marginalization Index is a socioeconomic model that is built on Statistics Canada census data.

The model consists of four dimensions: In 2021, these dimensions were updated to “Material Resources” (previously called “Material Deprivation”), “Households and Dwellings” (previously called “Residential Instability”), “Age and Labour Force” (previously called “Dependency”), and “Racialized and Newcomer Populations” (previously called “Ethnic Concentration”).

This update reflects a movement away from deficit-based language. 2021 data will load with these new dimension names, whereas 2011 and 2016 data will load with the historical dimension names.

Each of these dimensions are imported for a variety of geographic levels (DA, CD, etc.) for the 2021, 2011 and 2016 administrations of the census.

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

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om_data	<i>Load OnMarg data</i>
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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`*Load OnMarg spatial data*

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, quiet_sf = FALSE)
```

Arguments

<code>year</code>	Integer year of data to load.
<code>level</code>	The level of precision to load, this can be "DAUID", "CTUID", "CSDUID", "CCSUID", "CDUID", "CMAUID", "PHUID", "LHINUID", or "LHIN_SRUID".
<code>format</code>	The format for the geographic object, this can be "sf" or "sp".
<code>quiet_sf</code>	Logical, whether or not to print a message after transforming geometry projection.

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>
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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)
```

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