Package: mapbaltimore (via r-universe)

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Type Package

Title Make maps for Baltimore City with open data

Version 0.1.1.9001

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Description This package provides data from the Baltimore City, the state of Maryland, and other sources, functions to access additional data, and function to create and modify simple maps of Baltimore neighborhoods using sf and ggplot2.

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URL https://github.com/elipousson/mapbaltimore,

https://elipousson.github.io/mapbaltimore/

BugReports https://github.com/elipousson/mapbaltimore/issues

Depends R (>= 2.10)

- **Imports** cli, dplyr, esri2sf (>= 0.2.0), getdata (>= 0.1.0.9004), glue, janitor, lifecycle (>= 1.0.3), lubridate, magrittr, pkgconfig, purrr, rappdirs, rlang (>= 1.1.0), sf, sfext (>= 0.1.1), snakecase, stringr, tibble, tidyr, tidyselect, utils
- Suggests bcpss, covr, forcats, ggplot2, ggrepel, knitr, maplayer, naniar, osmdata, progress, readr, rmarkdown, RSocrata, testthat (>= 3.0.0)

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Repository https://elipousson.r-universe.dev

 $RemoteUrl \ https://github.com/elipousson/mapbaltimore$

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adopted_plans Adopted city plans, accepted community-initiated plans, and LINCS corridors

Description

Combined area plans and LINCS corridor data from the Baltimore City Department of Planning.

Usage

adopted_plans

Format

A data frame with 59 rows and 5 variables:

plan_name Plan or area name

year_adopted Year adopted or initiated

program Planning program

url URL of plan website or document

geometry MULTIPOLYGON geometry for plan areas and MULTILINESTRING geometry for LINCS corridors

Source

<...>

baltimore_bbox Baltimore City WGS84 Bounding Box

Description

A generalized boundary for Baltimore City, Maryland (baltimore_city) converted to a bounding box object using a EPSG:4326 coordinate reference system.

Usage

baltimore_bbox

baltimore_blocks

Format

A bbox class object.

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

baltimore_blocks U.S. Census Blocks - 2020

Description

U.S. Census Blocks for Baltimore city, Maryland downloaded from the U.S. Census Bureau API with the tigris package.

Usage

baltimore_blocks

Format

A data frame with 13,598 rows and 9 variables: tractce10 Tract FIPS blockce10 Block FIPS geoid10 Block GeoID name10 Block name aland10 Land area awater10 Water area intptlat10 Interior center point latitude intptlon10 Interior center point longitude geometry MULTIPOLYGON geometry for block boundary

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

```
baltimore_block_groups
```

U.S. Census Block Groups - 2020

Description

U.S. Census Block Groups for Baltimore city, Maryland downloaded from the U.S. Census Bureau API with the tigris package.

Usage

baltimore_block_groups

Format

A data frame with 618 rows and 9 variables:

tractce Census tract code

blkgrpce Census block group number

geoid Census block group identifier; a concatenation of the state FIPS code, county FIPS code, census tract code, and block group number

namelsad translated legal/statistical area description and the block group number

aland land area (square meters)

awater water area (square meters)

intptlat latitude of the internal point

intptlon longitude of the internal point

geometry POLYGON geometry for block group boundary

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

baltimore_census_xwalk

Crosswalk for Baltimore areas and Census geography

Description

A pre-built crosswalk data frame that can be filtered by geography and then used with the getACS::use_area_xwalk() function. Crosswalk uses the 2010 City Council district boundaries, 2010 and 2020 neighborhood (neighborhood statistical area) boundaries, and current city planning districts.

baltimore_city

Usage

baltimore_census_xwalk

Format

A data frame with 1024 rows and 8 variables:

geography Geography/area type GEOID 2020 Census GeoID TRACTCE20 2020 Census Tract ID name Area name POP20 Population in area and tract perc_POP20 Percent of population in area and tract HOUSING20 Households/occupied housing units in area and tract perc_HOUSING20 Percent of households in area and tract

Details

Created using the getACS::make_area_xwalk() data.

baltimore_city Generalized political boundary for Baltimore City

Description

A generalized boundary for Baltimore City, Maryland using TIGER/Line Shapefiles data from the U.S. Census Bureau downloaded with tigris::county_subdivisions().

Usage

baltimore_city

Format

A data frame with 1 row and 3 variables:

name County name

countyfp 3-character county FIPS code

geoid county identifier; a concatenation of state FIPS code and county FIPS code

aland land area (square meters)

awater water area (square meters)

intptlat latitude of the internal point

intptlon longitude of the internal point

geometry MULITPOLYGON boundary geometry

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

baltimore_city_detailed

Detailed physical boundary for Baltimore City

Description

A detailed physical boundary of Baltimore City filtered from statewide detailed boundary data available through Maryland iMap.

Usage

baltimore_city_detailed

Format

A data frame with 1 row and 3 variables:

name County name

countyfp 3-character county FIPS code

geometry MULITPOLYGON boundary geometry

Source

Maryland Physical Boundaries - County Boundaries (Detailed)

baltimore_gis_index Baltimore ArcGIS Server index data

Description

A data.frame indexing the layers, services, and folders on four ArcGIS Servers maintained by the Baltimore City Mayor's Office of Information Technology (MOIT) Enterprise GIS (EGIS) program. A limited number of potential sensitive and unresponsive server layers have been excluded. Used by the get_baltimore_esri_data() function. Updated 2023 May 26.

Usage

baltimore_gis_index

baltimore_mihp

Format

A data frame with 1,324 rows and 17 variables:

name Name

nm Name with snake case

type Service/layer type

url Folder/service/layer URL

urlType URL type

folderPath Index type

serviceName Service name

serviceType Service type

id integer Layer ID number

parentLayerId integer Parent layer ID number

serviceItemId integer Service item ID number

defaultVisibility logical Layer default visibility

minScale double Minimum scale

maxScale integer Maximum scale

geometryType Geometry type

subLayerIds list Sublayer ID numbers

supportsDynamicLegends logical Supports dynamic legends

baltimore_mihp Maryland Inventory of Historic Properties in Baltimore City

Description

Baltimore City properties included in the Maryland Inventory of Historic Properties (MIHP). The MIHP is an administrative inventory maintained by the Maryland Historical Trust, Maryland's statewide historic preservation office and an agency within the Maryland Department of Planning. The boundaries represent property boundaries and district boundaries depending on the type of MIHP record. Updated 2023 March 29.

Usage

baltimore_mihp

Format

A data frame with 5,203 rows and 14 variables:

num_polys Number of polygons

mihp_id MIHP ID

property_id Property ID

mihp_num MIHP Number

name Property name

alternate_name Alternate property name

full_address Full street address

town Town name

county County

pdflink URL for PDF MIHP form

xcoord Longitude

ycoord Latitude

do_erecord Indicator for electronic records.

geometry MULTIPOLYGON geometry for property/district boundaries.

Source

Maryland Inventory Historic Properties (MD iMap)

baltimore_msa_counties

County boundaries for the Baltimore-Columbia-Towson MSA

Description

Counties boundaries in the Baltimore–Columbia–Towson Metropolitan Statistical Area (MSA) include Baltimore City, Baltimore County, Carroll County, Anne Arundel County, Howard County, Queen Anne's County, and Harford County.

Usage

baltimore_msa_counties

Format

A data frame with 7 rows and 13 variables:

countyfp County FIPS code

countyns County GNIS code

geoid Unique county FIPS code (concatenation of state and county FIPS codes)

name County name

namelsad Concatenated variable length geographic area name and legal/statistical area description (LSAD)

1sad Legal/statistical area description (LSAD)

 ${\tt classfp} \ {\tt FIPS} \ {\tt class} \ {\tt code}$

funcstat Functional status

aland Land area (square meters)

awater Water area (square meters)

intptlat Latitude of the internal point

intptlon Longitude of the internal point

geometry MULTIPOLYGON geometry for county boundary

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

baltimore_msa_water Baltimore Metropolitan Statistical Area (MSA) Water Polygons

Description

Downloaded using tigris package.

Usage

baltimore_msa_water

Format

A data frame with 3,491 rows and 9 variables:

ansicode American National Standards Institute codes (ANSI codes)

hydroid Unique key for hydrographic features

fullname Full name

mtfcc MAF/TIGER Feature Class Code

aland land area (square meters)

awater water area (square meters) intptlat latitude of the internal point intptlon longitude of the internal point geometry POLYGON geometry for water areas

baltimore_pumas Baltimore PUMAS (Public Use Microdata Areas) - 2010

Description

The U.S. Census Bureau explains that "Public Use Microdata Areas (PUMAs) are non-overlapping, statistical geographic areas that partition each state or equivalent entity into geographic areas containing no fewer than 100,000 people each... The Census Bureau defines PUMAs for the tabulation and dissemination of decennial census and American Community Survey (ACS) Public Use Microdata Sample (PUMS) data."

Usage

baltimore_pumas

Format

A data frame with 5 rows and 8 variables:

pumace10 PUMA code

geoid10 GeoID

name1sad10 name and the translated legal/statistical area description code for census tract

aland10 land area (square meters)

awater10 water area (square meters)

intptlat10 latitude of the internal point

intptlon10 longitude of the internal point

geometry Polygon with PUMA boundary

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

Description

U.S. Census Tracts for Baltimore city, Maryland downloaded from the U.S. Census Bureau API with the tigris package.

Usage

baltimore_tracts

Format

A data frame with 199 rows and 9 variables:

tractce census tract code

geoid nation-based census tract identifier; a concatenation of state FIPS code, county FIPS code, and census tract number

name Variable length geographic area name

name1sad name and the translated legal/statistical area description code for census tract

aland land area (square meters)

awater water area (square meters)

intptlat latitude of the internal point

intptlon longitude of the internal point

geometry Polygon with tract boundary

Source

https://www.census.gov/geo/maps-data/data/tiger-line.html

baltimore_water Baltimore City Water

Description

Detailed MULTIPOLYGON data for area of streams, lakes, and other water bodies in Baltimore City.

Usage

baltimore_water

Format

A data frame with 468 rows and 6 variables:

name Water feature name, if available type Water type subtype Water subtype symbol Symbol water Water indicator acres Feature area in acres geometry MULTIPOLYGON geometry

Source

https://dotgis.baltimorecity.gov/arcgis/rest/services/DOT_Map_Services/DOT_Basemap/ MapServer/7

balt_tbl_labs Baltimore Data Table Labels

Description

A data.frame with labels to use with tables created using mapbaltimore data. The Housing Market Typology 2017 data is the only set of labels included and the preset table functions are not yet implemented.

Usage

balt_tbl_labs

Format

A data frame with 9 rows and 7 variables:

fn_name Function name

table Table name

col Column name

label Column label

definition Column variable definition (logical)

source logical Column variable data source

fmt Column data format

Source

https://docs.google.com/spreadsheets/d/1FXEJlhccnhoQmS02WydBidXIw-f2lpomURDGy9KBgJw/ edit?usp=sharing

14

Description

Locations of school buildings/school programs from SY 2021-2022 joined by location to Open-StreetMap polygons tagged with "amenity:school".

Usage

bcps_programs

Format

A data frame with 164 rows and 7 variables:

program_name_short Program or school name (short)

program_number Program number

osm_name OpenStreetMap name

osm_id OpenStreetMap identifier

type Program type

category Program category or grade band, e.g. E, EM, H, etc.

swing_space Program located in a temporary swing space; logical

geometry MULTIPOLYGON geometry for school program location

Source

https://services3.arcgis.com/mbYrzb5fKcXcAMNi/ArcGIS/rest/services/SY2122_Ezones_ and_Programs/FeatureServer/11

bcps_zones	Baltimore City Public Schools School Zones or School Attendance
	Zones (SY 2021-2022)

Description

Baltimore City Public Schools School Zones also known as School Attendance Zones.

Usage

bcps_zones

Format

A data frame with 96 rows and 4 variables:

zone_name Program name with zone appended
program_number Program number
program_name_short Program or school name (short)
type Program type
category Program category or grade band, e.g. E, EM, H, etc.
geometry MULTIPOLYGON geometry for school zone boundary

Source

https://services3.arcgis.com/mbYrzb5fKcXcAMNi/ArcGIS/rest/services/SY2122_Ezones_ and_Programs/FeatureServer/15

buildings_21stc Baltimore 21st Century Schools

Description

Buildings constructed or renovated through the 21st Century Schools Program. See schools_21stc for school-level information.

Usage

buildings_21stc

Format

A data frame with 28 rows and 20 variables:

bldg_name Building name

name Name (identical to build name)

bldg_name_short Short building name

project_type Project type

project_url Project URL

building_occupied Building occupied year/season (or scheduled occupation date)

inspire_plan INSPIRE Plan

inspire_plan_url INSPIRE Plan URL

school_names School/program names

school_names_short Short school/program names

school_numbers School numbers

grade_bands Schools grade bands

grades_served Grades served address Street address city City state State zip Zip code lon Longitude (EPSG 4326) lat Latitude (EPSG 4326) geometry POINT geometry for building locations

cache_baltimore_data Cache data for mapbaltimore package

Description

Cache data to rappdirs::user_cache_dir("mapbaltimore")

Usage

```
cache_baltimore_data(data = NULL, filename = NULL, overwrite = FALSE)
cache_msa_streets(
  url =
  "https://geodata.md.gov/imap/rest/services/Transportation/MD_HighwayPerformanceMonitoringSystem/
  filename = "baltimore_msa_streets.gpkg",
 crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
 overwrite = FALSE
)
cache_edge_of_pavement(
  url =
  "https://gisdata.baltimorecity.gov/egis/rest/services/OpenBaltimore/Edge_of_Pavement/FeatureServe
  filename = "edge_of_pavement.gpkg",
  crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
 overwrite = FALSE
)
cache_baltimore_property(
  url =
  "https://geodata.baltimorecity.gov/egis/rest/services/Housing/dmxOwnership/MapServer/0",
  location = NULL,
  filename = "baltimore_property.gpkg",
 crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
 overwrite = FALSE
)
show_cached_files()
```

Arguments

data	Data to cache.
filename	File name to use for cached file. Defaults to name of data. If the data is an sf object make sure to include the file type, e.g. "data.gpkg", supported by sf::write_sf(). All other data is written to rda with readr::write_rds().
overwrite	Logical. Default FALSE. If TRUE, overwrite any existing cached files that use the same filename.
url	URL
crs	Coordinate reference system.
location	sf, sfc, or bbox object (or other object convertible with as_bbox(). Optional.

Details

- Use cache_msa_streets() to download and cache street centerline data for all counties in the Baltimore metropolitan area.
- Use cache_edge_of_pavement() to download and cache edge of pavement data for Baltimore city.

Value

show_cached_files() returns a tibble with the columns:

- file, the name of the file,
- size_MB, file size in MB,
- modified, date and time last modified

chap_districts CHAP Historic Districts

Description

Historic districts designated by the Baltimore City Commission on Historical and Architectural Preservation (CHAP) which is the local historic preservation office for Baltimore City, Maryland. Updated 2023 February 10.

Usage

chap_districts

check_area

Format

A data frame with 39 rows and 7 variables:

name Historic district name

contact_name CHAP Staff contact name

url URL for CHAP website

deed_covenant Design review required under deed covenants

overlaps_nr_district District is also designated as or overlaps some or entirely with a designated National Register Historic District

acres Acreage

geometry MULTIPOLYGON boundary geometry

check_area

Validate area provided to mapping or charting function.

Description

Validate an area for a mapping function or another mapbaltimore function.

Usage

```
check_area(area)
```

Arguments

area sf object with a column named "name."

circulator_routes Charm City Circulator Routes

Description

The Baltimore City Department of Transportation describes the Charm City Circulator (CCC) as "a fleet of 24 free shuttles that travel four routes in the central business district of Baltimore City, Maryland." The Harbor Connector (HC) is "an extension of the CCC and is the City's free maritime transit service connecting 6 piers through four vessels."

Usage

circulator_routes

Format

A data frame with 6 rows and 3 variables:

route_name Route name

alt_route_name Alternate route name

geometry MULTILINESTRING geometry for routes

Source

Baltimore CityView - Charm City Circulator Routes

circulator_stops Charm City Circulator and Harbor Connector Stops

Description

The Baltimore City Department of Transportation describes the Charm City Circulator (CCC) as "a fleet of 24 free shuttles that travel four routes in the central business district of Baltimore City, Maryland." The Harbor Connector (HC) is "an extension of the CCC and is the City's free maritime transit service connecting 6 piers through four vessels."

Usage

circulator_stops

Format

A data frame with 111 rows and 5 variables:

stop_num Stop number as integer

stop_location Intersection location (address, intersection, or landmark)

corner Intersection corner

route_name Route name

geometry POINT geometry for stop location

Source

Baltimore CityView - Charm City Circulator Stops

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congressional_districts

U.S. Congressional Districts for Baltimore City

Description

U.S. Congressional Districts overlapping with Baltimore City. Downloaded with the tigris package.

Usage

congressional_districts

Format

A data frame with 3 rows and 15 variables:

statefp 2-character state FIPS code

cd116fp 116th congressional district FIPS code

geoid GeoID

namelsad concatenated variable length geographic area name and legal/statistical area description (LSAD)

1sad Legal/statistical area description (LSAD)

cdsessn Congressional session code

mtfcc MAF/TIGER Feature Class Code (MTFCC)

funcstat functional status

aland land area (square meters)

awater water area (square meters)

intptlat latitude of the internal point

intptlon longitude of the internal point

label Congressional District label

name Congressional District name

geometry MULTIPOLYGON geometry for Congressional district boundary

Source

<...>

Description

Boundaries for the Baltimore City Council Districts used since 2012 (following boundary revisions completed in 2011 based on the 2010 Decennial Census).

Usage

council_districts

Format

A data frame with 14 rows and 2 variables:

id Number of the City Council district

name Name of the City Council district

geometry MULTIPOLYGON geometry fpr Council district boundary

Source

https://geodata.baltimorecity.gov/egis/rest/services/CityView/City_Council_Districts/ MapServer/0

csas

Community Statistical Areas (2010)

Description

Community Statistical Areas (CSAs) are clusters of neighborhoods and are organized around U.S. Census tract boundaries by the Baltimore Neighborhood Indicators Alliance. In some cases, CSA boundaries may cross neighborhood boundaries. There are 55 CSAs in Baltimore City. Neighborhood lines often do not fall along CSA boundaries. The CSAs were originally created in 2002 and were revised for the publication of Vital Signs 10 using new 2010 Census Tract boundaries. There are no anticipated boundary revisions in 2020.

Usage

csas

Format

A data frame with 55 rows and 3 variables:

id Community Statistical Area id number name Community Statistical Area name url URL to BNIA-JFI webpage on Community Statistical Area geometry MULITPOLYGON boundary geometry

Source

https://bniajfi.org/mapping-resources/

explore_baltimore Explore Baltimore Heritage Stories

Description

A table of public stories on the Explore Baltimore Heritage website published by Baltimore Heritage. The text of stories on Explore Baltimore Heritage is licensed under a CC BY 4.0 license. Updated on 2023 March 29.

Usage

explore_baltimore

Format

A data frame with 491 rows and 10 variables:

id Story identifier
featured Featured indicator
modified Modified date/time
title Story title
address Street address for story location
thumbnail URL for thumbnail-size featured image
fullsize URL for full-size featured image
url URL for story
geometry POINT for story location

Source

https://explore.baltimoreheritage.org/

filter_streets Filter streets

Description

Internal function for filtering streets by multiple parameters

Usage

```
filter_streets(
    x,
    sha_class = NULL,
    street_type = NULL,
    block_num = NULL,
    union = FALSE,
    bbox = NULL,
    call = caller_env()
)
```

Arguments

х	sf object with streets to filter
sha_class	selected SHA classifications to include. "all" selects all streets with an assigned SHA classification (around one-quarter of all street segments). Additional options include c("COLL", "LOC", "MART", "PART", "FWY", "INT")
street_type	selected street subtypes to include. By default, the returned data includes all subtypes except alleys ("STRALY"). Options include c("STRALY", "STR- PRD", "STRR", "STREX", "STRFIC", "STRNDR", "STRURD", "STCLN", "STRTN"). Not supported for
block_num	Integer vector with block number, e.g. 300, or range of block numbers (e.g. $c(100, 500)$) to filter streets.
union	Logical. Default TRUE. Union geometry based on fullname of streets.
bbox	Bounding box to filter passed to location parameter of getdata::get_location_data().

Value

streets filtered by parameters

get_area

Description

Get a sf object with one or more neighborhoods, Baltimore City Council districts, Maryland Legislative Districts, U.S. Congressional Districts, Baltimore Planning Districts, Baltimore Police Districts, or Community Statistical Areas, park districts, or Census blocks, block groups, or tracts. Area type is required and can be used in combination with area name, area id (not supported by all data sets), or location (as an address or sf object). Name and id are not supported for U.S. Census geogrpahies. Use the location parameter to return any areas of the selected type that intersect with the specified location. get_baltimore_area() has different parameter names (more consistent with getdata::get_location()) and is now recommended over get_area() to avoid a name conflict with the sfext::get_area() function.

Usage

```
get_area(
  type = c("neighborhood", "council district", "legislative district",
    "congressional district", "planning district", "police district", "csa",
    "park district", "block", "block group", "tract"),
  area_name = NULL,
  area_id = NULL,
  location = NULL,
  union = FALSE,
  area_label = NULL
)
get_baltimore_area(
  type = NULL,
  name = NULL,
  id = NULL,
  location = NULL,
  union = FALSE,
  label = NULL
)
```

get_neighborhood(name, location = NULL, union = FALSE, ...)

Arguments

type	Required. Area type matching one of the boundary datasets included with mapbaltimore. Supported values include "neighborhood", "council district",
	"legislative district", "congressional district", "planning district", "police dis-
	trict", "csa", "park district". U.S. Census geographies including "block", "block group", and "tract" are supported when using the location parameter only.
area_name	name or names matching id column in data of selected dataset. Character.

area_id	identifier or identifiers matching id column of selected dataset. Not all supported datasets have an id column and the id may be an integer or character depending on the dataset.
location	Location supports to types of values: an address that can be geocoded using tidygeocoder::geo() or an sf object that intersects with the selected area types. If using an sf object, the CRS for the object must be EPSG:2804.
union	If TRUE and multiple area names are provided, the area geometry is combined with sf::st_union(). Defaults to FALSE.
area_label	Label to use as name for area if union is TRUE or as additional label column if union is FALSE. If union is TRUE and area_label is not provided, the original area names are concatenated into a single string.
name	Passed to area_name by get_baltimore_area()
id	Passed to area_id by get_baltimore_area()
label	Passed to area_label by get_baltimore_area()
	Additional parameters passed by get_neighborhood() to get_area()

See Also

neighborhoods,council_districts,legislative_districts, congressional_districts,planning_districts,police_districts,csas, park_districts tidygeocoder::geo()

Examples

```
# Get the Harwood neighborhood by name
get_area(
 type = "neighborhood",
  area_name = "Harwood"
)
# Get City Council District 12 and 14 by id
get_area(
 type = "council district",
 area_id = c(12, 14)
)
# Get the east and southeast planning districts and combine them
get_area(
  type = "planning district",
 area_id = c("East", "Southeast"),
 union = TRUE,
  area_label = "East and Southeast Planning Districts"
)
# Get legislative district for Walters Art Museum (600 N Charles St)
get_area(
  type = "legislative district",
  location = "600 N Charles St, Baltimore, MD 21201"
)
```

```
# Get Census tracts for the Edmondson Village neighborhood
get_area(
   type = "tract",
   location = get_area("neighborhood", "Edmondson Village")
)
```

get_area_911_calls Get area 911 calls for service from Open Baltimore

Description

get_area_911_calls() can return public records on 911 calls for service from 2017 through the present year.

Usage

```
get_area_911_calls(
    area_type = NULL,
    area_name = NULL,
    description = NULL,
    year = 2023,
    start_date = NULL,
    end_date = NULL,
    where = NULL,
    ...
)
```

Arguments

area_type	Area type. Requires area_name is also provided. Options include "neighbor- hood", "council district", or "police district"
area_name	Area name. Requires area_type is also provided.
description	String matching call description, e.g. "DISORDERLY", "BURGLARY", "DIS-CHRG FIREARM", etc.
year	numeric. Year of calls for service. Currently only one year at a time is supported (except for years since 2021). If NULL, the oldest year from the start_date and end_date is used.
start_date	Character string in format YYYY-MM-DD. Filters calls by date.
end_date	Character string in format YYYY-MM-DD. Filters calls by date.
where	string for where condition. Ignored if area_type, area_name, start_date, or end_date are provided.
	Additional parameters passed to getdata::get_esri_data() excluding url, where, crs, and .name_repair.

get_area_bcps_programs

Get BCPS programs and attendance zones for a local area

Description

Get BCPS programs and attendance zones for a local area

Usage

```
get_area_bcps_programs(
    area,
    dist = NULL,
    diag_ratio = NULL,
    asp = NULL,
    crop = TRUE,
    trim = FALSE,
    type = c("all", "zones", "programs", "other")
)
```

Arguments

area	<pre>sf object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union()</pre>
dist	buffer distance in meters. Optional.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
crop	If TRUE, data cropped to area or bounding box sf::st_crop() adjusted by the dist, diag_ratio, and asp parameters provided. Default TRUE.
trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
type	Type of BCPS data to return. "all" returns a named list with all of the follow- ing spatial data. "zones" returns attendance zones, "programs" returns locations of programs (schools) with zones intersecting area (even if the program is lo- cated outside the area), "other" returns charter schools and other special schools located within the specified area.

Details

Returns a named list with overlapping BCPS attendance zones, program locations associated with those zones, and any additional programs located within the area.

get_area_census_geography

Get U.S. Census geography overlapping with an area.

Description

Return an sf object with the U.S. Census blocks, block groups, or tracts overlapping with an area. By default, at least 25% of the tract area or 30% of the block group area, or 50% of the block area must be within the provided area to be returned. Returned sf object includes new columns with the combined land and water area of the Census geography, the Census geography area within the provided area, the percent of Census geography area within the provided area, and the percent of the provided area within the Census geography area.

Usage

```
get_area_census_geography(
    area,
    geography = c("block", "block group", "tract"),
    area_overlap = NULL
)
```

Arguments

area	sf object.
geography	Character vector with type of U.S. Census
area_overlap	Optional. A numeric value less than 1 and greater than 0 representing the phys- ical area of the geography that should be within the provided area to return.

get_area_citations Get area citations from Open Baltimore

Description

Get Environmental Control Board (ECB) citations from 2007 to 2021.

Usage

```
get_area_citations(
    area_type = NULL,
    area_name = NULL,
    description = NULL,
    start_date = NULL,
    end_date = NULL,
    where = "1=1",
    geometry = TRUE,
```

```
crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
...
```

Arguments

)

area_type	Area type. Requires area_name is also provided. Options include "neighbor- hood", "council district", or "police district"
area_name	Area name. Requires area_type is also provided.
description	String matching description of citations, e.g. "SIGNS" filters citations to "PRO- HIBITED POSTING OF SIGNS ON PUBLIC PROPERTY"
start_date	Character string in format YYYY-MM-DD. Filters citations by violation date.
end_date	Character string in format YYYY-MM-DD. Filters citations by violation date.
where	string for where condition. Ignore where condition if area_type and area_name are provided.
geometry	Return sf object based on lat/lon. Default TRUE. Set to FALSE to return citations with missing coordinates.
crs	Coordinate reference system (CRS) to return. Default 2804
	Additional parameters passed to getdata::get_esri_data() excluding url, where, crs, and .name_repair.

Examples

Get bulk trash citations for Council District 5
get_area_citations(
 area_type = "council district",
 area_name = "5",
 description = "BULK TRASH")

get_area_crime Get area crimes from Open Baltimore

Description

Get reported crimes since 2014 for a specific area.

Usage

```
get_area_crime(
    area,
    description = NULL,
    date_range = NULL,
    where = NULL,
    dist = NULL,
    diag_ratio = NULL,
```

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```
asp = NULL,
unit = "m",
trim = FALSE,
crs = pkgconfig::get_config("mapbaltimore.crs", 2804)
)
```

Arguments

area	sf, sfc, or bbox object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union().
description	Crime type or description. Supported options include "AGG. ASSAULT", "AR- SON", "AUTO THEFT", "BURGLARY", "COMMON ASSAULT", "HOMI- CIDE", "LARCENY", "LARCENY FROM AUTO", "RAPE", "ROBBERY - CARJACKING", "ROBBERY - COMMERCIAL", "ROBBERY - RESIDENCE", "ROBBERY - STREET", or "SHOOTING"
date_range	Date range as character vector in format of c("YYYY-MM-DD", "YYYY-MM-DD"). Minimum and maximum values are used if length is greater than 1.
where	where query string passed to esri2sf, Default: NULL
dist	buffer distance in units. Optional.
diag_ratio	ratio of diagonal distance of area's bounding box used as buffer distance. e.g. if the diagonal distance is 3000 meters and the "diag_ratio = 0.1 " a 300 meter will be used. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3"). If numeric, get_asp() returns the same value without modification.
unit	Units for buffer. Supported options include "meter", "foot", "kilometer", and "mile", "nautical mile" Common abbreviations (e.g. "km" instead of "kilometer") are also supported. Distance in units is converted to units matching GDAL units for x; defaults to "meter"
trim	If TRUE, x is trimmed to y with st_trim().
crs	Cordinate reference system to return, Default: 4326 for $sf_to_df()$ and NULL for $df_to_sf()$.

Examples

```
## Not run:
# Get shootings for the Lauraville area
area <- get_area("neighborhood", "Barclay")
crimes <- get_area_crime(
    area = area,
    date_range = c("2022-01-01", "2022-12-31"),
    description = "SHOOTING"
)
```

End(Not run)

get_area_data

Description

[**Deprecated**] Returns data for a selected area or areas with an optional buffer. If both crop and trim are FALSE, the function uses sf::st_intersects() to filter data to include the full geometry of anything that overlaps with the area or bbox (if the area is not provided).

Usage

```
get_area_data(
 area = NULL,
 bbox = NULL,
  data = NULL,
  extdata = NULL,
  cachedata = NULL,
  path = NULL,
  url = NULL,
  fn = NULL,
  diag_ratio = NULL,
  dist = NULL,
  asp = NULL,
  crop = TRUE,
  trim = FALSE,
  crs = NULL
)
```

Arguments

area	<pre>sf object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union()</pre>
bbox	bbox object defining area used to filter data. If an area is provided, the bounding box is ignored.
data	sf object including data in area
extdata	Character. Name of an external geopackage (.gpkg) file included with the pack- age where selected data is available. Available data includes "trees", "unim- proved_property", and "vegetated_area"
cachedata	Character. Name of a cached geopackage (.gpkg) file where selected data is available. Running cache_mapbaltimore_data() caches data for "real_property", "baltimore_msa_streets", and "edge_of_pavement"
path	Character. Path to local or remote spatial data file supported by sf::st_read()
url	$Character. \ URL \ for \ Feature Server \ or \ MapServer \ layer \ to \ pass \ to \ get_area_esri_data.$
fn	Function to apply to area data before returning.

diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
dist	buffer distance in meters. Optional.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
crop	If TRUE, data cropped to area or bounding box sf::st_crop() adjusted by the dist, diag_ratio, and asp parameters provided. Default TRUE.
trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
crs	Coordinate Reference System (CRS) to use for the returned data. The CRS of the provided data and bounding box or area must match one another but are not required to match the CRS provided by this parameter.

get_area_permits Get area build

Get area building permits from Open Baltimore

Description

Get building permits from 2019 through the present.

Usage

```
get_area_permits(
    area,
    year = 2022,
    date_range = NULL,
    permit_type = NULL,
    where = NULL,
    dist = NULL,
    diag_ratio = NULL,
    unit = "m",
    asp = NULL,
    trim = FALSE,
    crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
    ...
)
```

Arguments

area	sf, sfc, or bbox object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union().
year	Year. Must be 2019 or later.
date_range	Date range as character vector in format of c("YYYY-MM-DD", "YYYY-MM-DD"). Minimum and maximum values are used if length is greater than 1.

permit_type	Optional. Supported values include "USE", "DEM", "COM", or "BMZ".
where	string for where condition. permit_type and year are ignored if a custom where is provided. Set where to "1=1" to return data for all years since 2019.
dist	buffer distance in units. Optional.
diag_ratio	ratio of diagonal distance of area's bounding box used as buffer distance. e.g. if the diagonal distance is 3000 meters and the "diag_ratio = 0.1 " a 300 meter will be used. Ignored when dist is provided.
unit	Units for buffer. Supported options include "meter", "foot", "kilometer", and "mile", "nautical mile" Common abbreviations (e.g. "km" instead of "kilometer") are also supported. Distance in units is converted to units matching GDAL units for x; defaults to "meter"
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3"). If numeric, get_asp() returns the same value without modification.
trim	If TRUE, x is trimmed to y with st_trim().
crs	Cordinate reference system to return, Default: 4326 for sf_to_df() and NULL for df_to_sf().
	Additional parameters passed to getdata::get_esri_data().

get_area_property Get real property data

Description

Get showing parcels described as owner occupied, non-owner occupied, vacant, and unimproved. Real property or parcel data is from the Maryland State Department of Assessment and Taxation and may include errors.

Usage

```
get_area_property(
    area = NULL,
    bbox = NULL,
    dist = NULL,
    diag_ratio = NULL,
    unit = "m",
    asp = NULL,
    crop = TRUE,
    trim = FALSE,
    cache = FALSE,
    filename = NULL,
    overwrite = FALSE,
    ...
)
```

format_property_data(data)

Arguments

area	<pre>sf object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union()</pre>
bbox	bbox object defining area used to filter data. If an area is provided, the bounding box is ignored.
dist	buffer distance in units. Optional.
diag_ratio	ratio of diagonal distance of area's bounding box used as buffer distance. e.g. if the diagonal distance is 3000 meters and the "diag_ratio = 0.1 " a 300 meter will be used. Ignored when dist is provided.
unit	Units for buffer. Supported options include "meter", "foot", "kilometer", and "mile", "nautical mile" Common abbreviations (e.g. "km" instead of "kilometer") are also supported. Distance in units is converted to units matching GDAL units for x; defaults to "meter"
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3"). If numeric, get_asp() returns the same value without modification.
crop	If TRUE, data cropped to area or bounding box sf::st_crop() adjusted by the dist, diag_ratio, and asp parameters provided. Default TRUE.
trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
cache	If TRUE, cache data to mapbaltimore cache folder. Defaults to FALSE.
filename	File name to use for cached file. Defaults to name of data. If the data is an sf object make sure to include the file type, e.g. "data.gpkg", supported by sf::write_sf(). All other data is written to rda with readr::write_rds().
overwrite	Logical. Default FALSE. If TRUE, overwrite any existing cached files that use the same filename.
	Additional parameters passed to getdata::get_esri_data().
data	sf object including data in area

Examples

```
get_area_property(
   area = neighborhoods[1, ],
   dist = -150,
   unit = "m"
)
```

get_area_requests Get area 311 service requests from Open Baltimore

Description

Get 311 service requests for a specific area. Service requests from 2017 to 2020 area available but only a single year can be requested at a time. Duplicate requests are removed from the returned data. Requests can be filtered by request type, responsible city agency, or both. You can return multiple types or agencies, by using a custom where query parameter or by calling each type/agency separately.

Usage

```
get_area_requests(
 area = NULL,
 year = 2022,
  date_range = NULL,
  request_type = NULL,
  agency = NULL,
 where = NULL,
  dist = NULL,
  diag_ratio = NULL,
  unit = "m",
  asp = NULL,
  trim = FALSE,
  geometry = TRUE,
  crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
  duplicates = FALSE,
  . . .
)
```

Arguments

area	sf, sfc, or bbox object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union().
year	Year for service requests. Default 2021. 2017 to 2022 supported.
date_range	Date range as character vector in format of c("YYYY-MM-DD", "YYYY-MM-DD"). Minimum and maximum values are used if length is greater than 1.
<pre>request_type</pre>	Service request type.
agency	City agency responsible for request. Options include "Transportation", "BGE", "Solid Waste", "Housing", "Water Wastewater", "Health", "Call Center", "Fi- nance", "Liquor Board", "Recreation & Parks", "Fire Department", "Parking Authority", and "General Services"
where	string for where condition. This parameter is ignored if a request_type or agency are provided.
dist	buffer distance in units. Optional.
diag_ratio	ratio of diagonal distance of area's bounding box used as buffer distance. e.g. if the diagonal distance is 3000 meters and the "diag_ratio = 0.1 " a 300 meter will be used. Ignored when dist is provided.

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unit	Units for buffer. Supported options include "meter", "foot", "kilometer", and "mile", "nautical mile" Common abbreviations (e.g. "km" instead of "kilometer") are also supported. Distance in units is converted to units matching GDAL units for x; defaults to "meter"
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3"). If numeric, get_asp() returns the same value without modification.
trim	If TRUE, x is trimmed to y with st_trim().
geometry	Default TRUE. If FALSE, return requests with missing latitude/longitude (for years prior to 2021 only).
crs	Cordinate reference system to return, Default: 4326 for $sf_to_df()$ and NULL for $df_to_sf()$.
duplicates	If TRUE, return 311 service requests marked as "Duplicate". If FALSE, filter duplicate requests out of results.
•••	Arguments passed on to esri2sf::esri2sf
	outFields vector of fields you want to include. default is NULL for all fields. replaceDomainInfo If TRUE, add domain information to the return data frame. Default FALSE.

Examples

```
# Get boundary for Edmondson Village
area <- get_area("neighborhood", "Edmondson Village")</pre>
# Get fallen limb requests for 2022
get_area_requests(
 area = area,
 date_range = c("2022-11-01", "2022-12-31"),
  request_type = "FOR-Fallen Limb"
)
# Get dirty alley service requests for multiple years using purrr::map_dfr()
purrr::list_rbind(
  purrr::map(
   c(2021, 2020),
   ~ get_area_requests(
     area = area,
     year = .x,
     request_type = "SW-Dirty Alley"
   )
 )
)
```

Description

Get streets within an area or areas.

Usage

```
get_area_streets(
    area = NULL,
    street_type = NULL,
    sha_class = NULL,
    bbox = NULL,
    dist = NULL,
    diag_ratio = NULL,
    asp = NULL,
    trim = FALSE,
    msa = FALSE,
    union = TRUE
)
```

Arguments

area	sf object with area of streets to return.
street_type	selected street subtypes to include. By default, the returned data includes all subtypes except alleys ("STRALY"). Options include c("STRALY", "STR-PRD", "STRR", "STREX", "STRFIC", "STRNDR", "STRURD", "STCLN", "STRTN")
sha_class	selected SHA classifications to include. "all" selects all streets with an assigned SHA classification (around one-quarter of all street segments). Additional options include c("COLL", "LOC", "MART", "PART", "FWY", "INT")
bbox	bbox object defining area used to filter data. If an area is provided, the bounding box is ignored.
dist	buffer distance in meters. Optional.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
trim	Logical. Default FALSE. Trim streets to area using sf::st_intersection().
msa	Logical. Default FALSE. Get streets from cached baltimore_msa_streets.gpkg file using cachedata parameter of get_area_data function.
union	Logical. Default TRUE. Union geometry based on fullname of streets.

get_area_vacants

Description

Parcel boundaries for all properties with an active vacant building notice. If a building is unoccupied and unsafe or unfit for people to live or work inside the building, or has two code violations that have not been fixed, or has six code violations in the past year, then the building may receive a vacant building notice in Baltimore City.

Usage

```
get_area_vacants(
    area = NULL,
    bbox = NULL,
    dist = NULL,
    diag_ratio = NULL,
    asp = NULL,
    crop = TRUE,
    trim = FALSE,
    rehabbed = FALSE
)
```

Arguments

area	<pre>sf object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union()</pre>
bbox	bbox object defining area used to filter data. If an area is provided, the bounding box is ignored.
dist	buffer distance in meters. Optional.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
crop	If TRUE, data cropped to area or bounding box sf::st_crop() adjusted by the dist, diag_ratio, and asp parameters provided. Default TRUE.
trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
rehabbed	If TRUE, return building permits pulled on properties with vacant building no- tices. Default FALSE.

Details

If the rehabbed parameter is TRUE, the returned data is use and occupancy permits that were pulled on properties with vacant building notices. DHCD uses this data as proxy for vacant building rehabs.

Description

Get zoning codes for an area within a provided sf or bbox object.

Usage

```
get_area_zoning(
    area = NULL,
    bbox = NULL,
    category = c("all", "residential", "commercial", "industrial"),
    diag_ratio = NULL,
    dist = NULL,
    asp = NULL,
    crop = TRUE,
    trim = FALSE,
    crs = NULL,
    union = FALSE
)
```

Arguments

area	sf, sfc, or bbox object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union().
bbox	bbox object defining area used to filter data. If an area is provided, the bounding box is ignored.
category	Zoning category to return. "all", "residential", "commercial", "industrial"
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
dist	buffer distance in meters. Optional.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
crop	If TRUE, data cropped to area or bounding box sf::st_crop() adjusted by the dist, diag_ratio, and asp parameters provided. Default TRUE.
trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
crs	Coordinate Reference System (CRS) to use for the returned data. The CRS of the provided data and bounding box or area must match one another but are not required to match the CRS provided by this parameter.
union	Logical. Default FALSE. If true, group zoning by label and combine geometry with sf::st_union().

Details

This 2017 zoning data does not include any exemptions granted by the Baltimore City BMZA (Board of Municipal Zoning Appeals).

Value

sf object with zoning and overlay data for area.

Description

A wrapper for getdata::get_esri_data()

Usage

get_baltimore_esri_data(area = NULL, nm = NULL, type = NULL, crs = NULL, ...)

Arguments

area	Area (passed to location), Default: NULL
nm	nm (should match a single value from baltimore_gis_index\$nm), Default: NULL
type	Type used as an alias for a nm value, Default: NULL
crs	Coordinate reference system, Default: NULL
	Arguments passed on to getdata::get_esri_data
	<pre>url FeatureServer or MapServer url to retrieve data from. Passed to url pa- rameter of esri2sf::esri2sf() or esri2sf::esri2df() functions. For get_esri_layers(), the optional url must be a service url which is the base url for one or more layer urls.</pre>
	<pre>location sf, sfc, or bbox object (or other object convertible with as_bbox().</pre>
	dist buffer distance in units. Optional.
	<pre>diag_ratio ratio of diagonal distance of area's bounding box used as buffer distance. e.g. if the diagonal distance is 3000 meters and the "diag_ratio = 0.1" a 300 meter will be used. Ignored when dist is provided.</pre>
	unit Units for buffer. Supported options include "meter", "foot", "kilometer", and "mile", "nautical mile" Common abbreviations (e.g. "km" instead of "kilometer") are also supported. Distance in units is converted to units matching GDAL units for x; defaults to "meter"
	asp Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3"). If numeric, get_asp() returns the same value without modification.

where where query string passed to esri2sf, Default: NULL

- name, name_col Name value and name column found in the ArcGIS Feature-Server or MapServer data.
- coords Coordinate columns for input data.frame or output sf object (if geometry is 'centroid' or 'point') Default: c("lon", "lat").
- from_crs For df_to_sf(), coordinate reference system used by coordinates or well known text in data frame.
- clean_names If TRUE, set .name_repair to janitor::make_clean_names() Ignored when get_esri_metadata() is not returning a data.frame, e.g. meta = "id".

token string for authentication token. defaults to NULL.

- progress Show progress bar from cli::cli_progress_along() if TRUE. Default FALSE.
- quiet If TRUE, use suppressMessages() to prevent the printing of messages about the requested layer. Defaults to FALSE.
- .name_repair Defaults to "check_unique"

Value

A dataframe or simple feature object

See Also

getdata::get_esri_data()

get_baltimore_worker_flows

Get Baltimore metro area worker flows from the Census Transportation Planning data (2012-2016 ACS)

Description

Use FeatureLayers provided by the Baltimore Metropolitan Council.

Usage

```
get_baltimore_worker_flows(
    area,
    tracts = baltimore_tracts,
    min_estimate = 10,
    geometry = TRUE,
    crs = 2804
)
```

get_batch

Arguments

area	A sf or sfc object that intersects with tracts.
tracts	Data from tigris::tracts() for one or more county in the Balitmore metro area. Defaults to baltimore_tracts.
min_estimate	Minimum number of workers or residents a tract must have to include in re- sults. Tracts with fewer than the min_estimate values are filtered out of results. Defaults to 10.
geometry	If TRUE, return a list of sf objects. If FALSE, return a list of data.frame objects. Defaults to TRUE.
crs	Coordinate reference system to use for returned data when geometry = TRUE. Defaults to 2804.

Value

A list of two data.frames or sf objects named "to" and "from".

get_batch

Batch load or save data for an area, street, or intersection

Description

This batch loading/saving function is less flexible than get_area_data() can reduce the need for repetitive calls to get_area_data() when gathering area-level data for mapping.

- get_data_batch() calls get_area_data().
- get_area_batch() calls get_area() using the provided area as the location parameter.

Usage

```
get_data_batch(
  get = NULL,
  area = NULL,
  label = get,
  adj = list(dist = 15, diag_ratio = NULL, asp = "6:4"),
  fn = NULL,
  batch = NULL,
  crop = TRUE,
  trim = FALSE,
  load = TRUE,
  cache = FALSE,
  save = FALSE,
  filetype = "geojson",
  crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
  . . .
)
```

```
get_area_batch(
  get = NULL,
  area = NULL,
  label = get,
  adj = list(dist = 15, diag_ratio = NULL, asp = "6:4"),
  fn = NULL,
  batch = c("neighborhood", "council district", "csa", "tract"),
  trim = FALSE,
  load = TRUE,
  save = FALSE,
  cache = FALSE,
  filetype = "geojson",
  crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
  ...
)
```

Arguments

get	Type of geography to use in setting the area of data to load or save. Supported values area "area", "street", or "intersection". Default: NULL
area	An sf object to use instead of getting an area, street, or intersection. Only used if get is NULL.
label	Label to use for the loaded objects or saved files, Defaults to the same as the get parameter.
adj	Named list with parameters used by adjust_bbox() to create a bounding box for the area, street, or intersection. Set to NULL if to use the area as is (or to use another sf object with the other_area parameter) Default: list(dist = 15, diag_ratio = NULL, asp = "6:4").
fn	Function to apply to area after returning it. Useful for applying a buffer to a street or creating a walking distance isochrone to use as the bounding box for an intersection.
batch	A character string or named list.
	• If using get_area_batch(), batch must be a character vector or list with the type(s) of area supported by get_area(). Any area intersecting with the area or adjusted area is returned. Default: "neighborhood", "council district", "csa", "tract"
	• If using get_data_batch(), batch must be a character vector matching one of the spatial datasets included with the mapbaltimore package or cached in advance. "osm_buildings" is a special supported parameter that calls get_area_osm_buildings() to return all building footprints in the bound- ing box. Default: c("streets", "parks", "zoning", "hmt_2017", "mta_bus_lines", "mta_bus_stops", "trees", "vegetated_area", "unimproved_property"). A named list where list items are sf objects, supported character strings, or valid URLs for ArcGIS FeatureServer or MapServer layers is also sup- ported. Default: NULL

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crop	If FALSE, return data that intersects with the bounding box of the area, street, or intersection but do not crop to the bounding box. This parameter is not supported for get_area_batch(). Default: TRUE.
trim	If TRUE (and if adj is NULL), trim the data to the area, street, or intersection. Default: FALSE.
load	If TRUE, load the datasets to the global environment, Default: TRUE
cache	If TRUE, cache the datasets to the package cache folder with cache_baltimore_data(). Default FALSE.
save	If TRUE, save the selected areas and datasets locally as a file (using the filetype parameter as a file extension)., Default: FALSE
filetype	File extension supported by sf::write_sf(), Default: 'geojson'
crs	Coordinate reference system
	Parameters passed to get_area(), get_streets(), or get_intersection() depending on the value of the get parameter.

Examples

```
## Not run:
if (interactive()) {
  # Load streets and cached edge of pavement data for the Harwood neighborhood
  get_data_batch(
   get = "area",
   label = "harwood",
   type = "neighborhood",
   area_name = "Harwood",
   batch = c("streets", "edge_of_pavement"),
   load = TRUE,
   save = FALSE
  )
  # Save parks, trees, and vegetated area w/in 800 meters
  # of the intersection of E. Pratt and Light Sts. to GeoJSON files
  get_data_batch(
   get = "intersection",
   street_names = "E PRATT ST & LIGHT ST",
   adj = list(dist = 0, diag_ratio = NULL, asp = "1:1"),
   dist = 800,
   batch = c("parks", "trees", "vegetated_area")
 )
}
```

End(Not run)

Description

Get intersections by name and id with option to apply buffer and return streets or edgement of pavement instead of the intersection.

Usage

```
get_intersection(
  street_names = NULL,
  id = NULL,
  dist = 25,
  type = c("area", "edge_of_pavement", "streets"),
  trim = TRUE
)
```

Arguments

street_names	street names matching one or more of the names from the named_intersections data.
id	id values corresponding to one or more id values from the named_intersections data.
dist	buffer distance in meters. Optional.
type	Type of data to return. "area" returns the intersection center if dist is 0 or a cir- cle centered on the intersection center with any positive dist value. "edge_of_pavement" or "streets" return what either the cached edge of pavement data or street center line data.
trim	If type is "edge_of_pavement" or "streets" and trim is TRUE return data trimmed to the buffered intersection, otherwise return data within bounding box, Default: TRUE

Value

Intersection center point, buffered area around intersection center, streets, or edge of pavement data.

Examples

```
get_intersection(street_names = "Overton St & S Chapelgate Lane", dist = 30)
get_intersection(id = "41758", dist = 425, type = "streets", trim = FALSE)
```

Description

Return areas of a selected type within a set distance of another area.

Usage

```
get_nearby_areas(
    area,
    type = c("neighborhood", "council district", "legislative district",
        "congressional district", "planning district", "police district", "csa",
        "park district"),
    dist = 1,
    exclude_area = TRUE,
    residential = FALSE
)
```

Arguments

area	sf object. Must have a name column for exclude_area to work.
type	Required. Supported values include "neighborhood", "council district", "leg- islative district", "congressional district", "planning district", "police district", "csa", and "park district". The type may be different than the type of the area provided.
dist	Distance in meters for matching nearby areas. Default is 1 meter.
exclude_area	Logical. Default TRUE. If FALSE, include the same areas provided to area (assuming the areas provide are the same type as the parameter provided to get_nearby_areas).
residential	Logical. Default FALSE. If the type is neighborhood, set TRUE to only re- turn residential neighborhoods (excluding industrial areas, business parks, and parks/reservoirs).

get_streets

Get streets

Description

Get streets in Baltimore City by name with option to exclude streets by name, crop to a bounding box, or to filter to selected street types or functional classifications.

Usage

```
get_streets(
   street_name,
   exclude_name = NULL,
   street_type = NULL,
   sha_class = NULL,
   block_num = NULL,
   bbox = NULL,
   union = TRUE
)
```

Arguments

<pre>street_name</pre>	Street names to return. Required.
exclude_name	Street names to exclude
street_type	selected street subtypes to include. By default, the returned data includes all subtypes except alleys ("STRALY"). Options include c("STRALY", "STRPRD", "STRR", "STREX", "STRFIC", "STRNDR", "STRURD", "STCLN", "STRTN"). Not supported for
sha_class	selected SHA classifications to include. "all" selects all streets with an assigned SHA classification (around one-quarter of all street segments). Additional options include c("COLL", "LOC", "MART", "PART", "FWY", "INT")
block_num	Integer vector with block number, e.g. 300, or range of block numbers (e.g. $c(100, 500)$) to filter streets.
bbox	bbox to crop returned streets. Optional.
union	$\label{eq:logical} Logical. \ If \ {\tt TRUE}, use \ {\tt st_union} \ to \ combine \ geometry \ by \ {\tt fullname} \ of \ the \ streets.$

Details

DETAILS

Value

OUTPUT_DESCRIPTION

See Also

get_area_streets
streets get_area_streets()

Examples

```
get_streets(street_name = "UNIVERSITY PKWY")
```

get_streets(street_name = c("E FAYETTE", "ORLEANS"), block_num = c(1700, 3600))

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Description

The 2017 update of the City's Housing Market Typology was jointly developed by the Baltimore City Planning Department, Department of Housing & Community Development, and The Reinvestment Fund.

Usage

hmt_2017

Format

A data frame with 663 rows and 15 variables:

geoid U.S. Census Block Group GeoID

geoid_part Identifier for U.S. Census Block Group GeoID including part identifier

part Part identifier

cluster Housing market cluster

cluster_group Housing market cluster

median_sales_price Median sales price, Q3 2015 - Q2 2017

sales_price_variation Sales price variation, Q3 2015 - Q2 2017

num_sales Number of residential sales, Q3 2015 - Q2 2017

num_foreclosure_filings Number of foreclosure filings, Q3 2015 - Q2 2017

perc_foreclosure_sales Percent of sales through foreclosure, Q3 2015 - Q2 2017

perc_homeowners Percent owner occupied, July 2017

perc_permits_over10k Percent of residential building permits over \$10,000, Q3 2015 - Q2 2017

vacant_lots_bldgs_per_acre_res Vacant lots and buildings per residential acre, July 2017

units_per_acre_res Housing units per residential acre, July 2017

geometry MULTIPOLYGON geometry matching Census blocks groups or parts of block groups

Source

https://opendata.baltimorecity.gov/egis/rest/services/Hosted/Housing_Market_Typology_
2017/FeatureServer/0

inspire_plans INS

Description

Data frame and boundary geometry for INSPIRE Plans adopted and in progress.

Usage

inspire_plans

Format

A data frame with 24 rows and 23 variables: plan_name Plan name plan_name_short Plan name (short) overall_status Overall status inspire_lead_planner Lead INSPIRE Planner plan_url Baltimore City Department of Planning plan webpage url year_launched Year launched year_adopted Year adopted by Planning Commission adoption_status Planning Commission adoption status adoption_date Planning Commission adoption data document_url Adopted plan PDF url recommendation_report_status Recommendation report status recommendation_report_url Draft recommendation report PDF url kick_off_presentation_date Kick-off presentation date launch_date_target Target launch date walking_route_id_target_date Primary walking route identification date recommendations_date_target Target draft recommendation report publication date commission_review_date_target Target Planning Commission review date implementation_status Plan implementation status program_numbers School program numbers planning_districts Planning Districts neighborhoods Neighborhoods council_districts Baltimore City Council Districts geometry MULTIPOLYGON boundary geometry

Details

Last updated: 2024-03-29

layer_area_property Add a layer to a gpplot2 map with area property categorized by type

Description

Real property or parcel data is from the Maryland State Department of Assessment and Taxation and may include outdated or inaccurate information.

Usage

```
layer_area_property(
 area = NULL,
 bbox = NULL,
 data = NULL,
 type = c("improved", "vacant", "principal residence", "use", "building type", "value"),
 asis = FALSE,
 diag_ratio = NULL,
 dist = NULL,
 asp = NULL,
 crop = TRUE,
  trim = FALSE,
  show_area = FALSE,
 show_mask = FALSE,
 crs = pkgconfig::get_config("mapbaltimore.crs", 2804),
  . . .
)
```

Arguments

area	<pre>sf object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union()</pre>
bbox	bbox object defining area used to filter data. If an area is provided, the bounding box is ignored.
data	sf object including data in area
type	Real property variable to map. Options include c("improved", "vacant", "principal residence", "value"). Currently supports only one variable at a time.
asis	Logical. Default FALSE. If TRUE, use inherited data as is without cropping to area.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
dist	buffer distance in meters. Optional.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
crop	If TRUE, data cropped to area or bounding box sf::st_crop() adjusted by the dist, diag_ratio, and asp parameters provided. Default TRUE.

trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
show_area	Logical. Default FALSE. If TRUE, add an outline of the area to the layer.
show_mask	Logical. Default FALSE. If TRUE, add a mask using layer_area_mask
crs	Coordinate Reference System (CRS) to use for the returned data. The CRS of the provided data and bounding box or area must match one another but are not required to match the CRS provided by this parameter.
	passed to ggplot2::geom_sf() for data layer.

See Also

layer_area_data

Examples

```
## Not run:
area <- get_area("neighborhood", "West Forest Park")
property <- get_area_property(area = area)
ggplot2::ggplot() +
layer_area_property(area = area, data = property, type = "principal residence")
## End(Not run)
```

layer_area_streets Add a layer to a gpplot2 map with area streets, street names, or both

Description

Add a layer to a gpplot2 map with area streets, street names, or both.

Usage

```
layer_area_streets(
    area = NULL,
    street_type = NULL,
    sha_class = NULL,
    dist = NULL,
    diag_ratio = NULL,
    asp = NULL,
    trim = FALSE,
    msa = FALSE,
    show_streets = TRUE,
    show_names = FALSE,
    name_location = NULL,
```

```
edge_dist = 10,
color = "gray40",
size = 1,
...
```

Arguments

)

area	sf object. Returns streets within this area (after adjustment by dist, diag_ratio, and asp parameters)
street_type	selected street subtypes to include. By default, the returned data includes all subtypes except alleys ("STRALY"). Options include c("STRALY", "STR-PRD", "STRR", "STREX", "STRFIC", "STRNDR", "STRURD", "STCLN", "STRTN")
sha_class	selected SHA classifications to include. "all" selects all streets with an assigned SHA classification (around one-quarter of all street segments). Additional options include c("COLL", "LOC", "MART", "PART", "FWY", "INT")
dist	buffer distance in meters. Optional.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
trim	Logical. Default FALSE. Trim streets to area using sf::st_intersection().
msa	Logical. Default FALSE. Get streets from cached baltimore_msa_streets.gpkg file using cachedata parameter of get_area_data function.
show_streets	Logical. Default TRUE. If FALSE, hides street center lines.
show_names	Logical. Default FALSE. If TRUE, shows street names.
name_location	Options include c("area", "edge", "top", "left", "bottom", "right", "topleft", "topright", "bottomleft", "bottomright"). Defaults to NULL.
edge_dist	Distance buffer to use for placing street names.
color	Color of streets and/or text of street name labels.
size	Size of the streets and/or street name labels.
	Other parameters to pass along to ggplot2::geom_sf() that maps the streets.

legislative_districts Maryland Legislative Districts for Baltimore City (2022)

Description

A subset of Maryland legislative districts from Maryland iMap.

Usage

legislative_districts

Format

A data frame with 6 rows and 4 variables:

name District name

id District number

label District label

geometry MULTIPOLYGON geometry for district boundary

Source

https://geodata.md.gov/imap/rest/services/Boundaries/MD_ElectionBoundaries_2022/
FeatureServer/1

legislative_districts_2012 Maryland Legislative Districts for Baltimore City (2012)

Description

A subset of Maryland legislative districts from Maryland iMap.

Usage

legislative_districts_2012

Format

A data frame with 6 rows and 4 variables:

name District name

id District number

label District label

geometry MULTIPOLYGON geometry for district boundary

Source

https://geodata.md.gov/imap/rest/services/Boundaries/MD_ElectionBoundaries/FeatureServer/
1

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main_streets

Description

Boundaries for Baltimore City Main Street programs, including two programs that are not currently funded but formerly participated in the program.

Usage

main_streets

Format

A data frame with 10 rows and 7 variables:

id Main Street ID from source FeatureLayer

name Main Street name

name_abb Name abbreviation

url Main Street partner organization URL

funding_status Funding status (active or inactive)

name_short Short name

geometry sfc list column with MULTIPOLYGON boundary geometry

Source

https://services1.arcgis.com/43Lm3JYE3nM91DAF/arcgis/rest/services/MainStreets/FeatureServer/ 0

map_area_bcps_programs

Map BCPS programs and attendance zones for a local area

Description

Map showing BCPS school zones that overlap with a provided area or areas. If the area sf tibble includes multiple areas, a separate map is created for each area provided.

Usage

map_area_bcps_programs(area)

Arguments

area sf object

Examples

```
## Not run:
## Map school attendance boundary zones for the Madison Park neighborhood
madisonpark <- get_area(</pre>
  area_type = "neighborhood",
  area_name = "Madison Park"
)
map_area_bcps_programs(area = madisonpark)
## End(Not run)
## Not run:
## Map school attendance boundary zones for City Council District 2
district9 <- get_area(</pre>
  type = "council district",
  area_name = "9"
)
map_area_bcps_programs(area = district9)
## End(Not run)
```

map_area_highlighted Maps a highlighted area within the context of multiple areas

Description

Map highlighting the location of an area the context of multiple areas.

Usage

```
map_area_highlighted(area, highlight_name = "all")
```

Arguments

area	Required sf object with a 'name' column.
highlight_name	Character vector. Required. Use "all" to create a grid of maps highlighting each area in the provided sf object or provide the name of one or more areas to highlight.

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map_area_in_areas Map area within selected overlapping areas

Description

Map an area or areas within selected overlapping areas.

Usage

```
map_area_in_areas(
    area,
    type = c("neighborhood", "council district", "legislative district",
        "congressional district", "planning district", "police district", "csa"),
    show_area = TRUE,
    show_label = FALSE,
    background = NULL
)
```

Arguments

area	sf object. Required
type	Type of area to map. Supports the same types as the get_area function.
show_area	Logical. Default TRUE.
show_label	Logical. Default FALSE. If TRUE, label areas with ggplot2::geom_sf_label()
background	ggplot layer. Default NULL. Passing a ggplot2 layer may be necessary to have an appropriate background for the congressional district maps.

map_area_in_city Map area in the context of city boundaries

Description

Map showing the location of an area within the city.

Usage

map_area_in_city(area, area_label = NULL)

Arguments

area	sf object with a 'name' column. Required.
area_label	area label to replace area name. Optional.

Examples

```
## Not run:
## Area with a defined label
district2 <- get_area(</pre>
  type = "council district",
  area_id = "2"
)
map_area_in_city(
  area = district2,
  area_label = "Baltimore's Second Council District"
)
## End(Not run)
## Not run:
## Multiple areas in a single map
selected_se_neighborhoods <- get_area(</pre>
  type = "neighborhood",
  area_name = c("Upper Fells Point", "Fells Point", "Canton")
)
map_area_in_city(
  area = selected_se_neighborhoods,
  area_label = "Southeast Baltimore neighborhoods"
)
## End(Not run)
## Not run:
## Area with a defined map title
canton_industrial <- get_area(</pre>
  type = "neighborhood",
  area_name = "Canton Industrial Area"
)
map_area_in_city(area = canton_industrial)
## End(Not run)
```

map_area_mta_services Map MTA services

Description

Map MTA services. MTA bus lines are currently the only supported service.

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map_area_parks

Usage

```
map_area_mta_services(
    area,
    mta_services = "bus_lines",
    diag_ratio = 0.166,
    asp = NULL
)
```

Arguments

area	sf object. Required.
<pre>mta_services</pre>	Character vector. Default is "bus_lines" to use mta_bus_lines data.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").

map_area_parks

Map area parks and open spaces

Description

Return a ggplot map showing parks in and around a selected area.

Usage

```
map_area_parks(
    area,
    type = c("parks", "vacant lots"),
    label = c("parks"),
    dist = NULL,
    diag_ratio = 0.125,
    asp = NULL
)
```

Arguments

area	sf object. Required.
type	layers to show on map ("parks" or "vacant lots"). Defaults to both.
label	layers to label. Only "parks" is supported. Use any other value to exclude labels.
dist	buffer distance in meters. Optional.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").

map_area_property

Real property or parcel data is from the Maryland State Department of Assessment and Taxation and may include outdated or inaccurate information.

Description

Real property or parcel data is from the Maryland State Department of Assessment and Taxation and may include outdated or inaccurate information.

Usage

```
map_area_property(
    area,
    property = c("improved", "vacant", "principal residence", "use", "building type",
        "value"),
    dist = NULL,
    diag_ratio = 0.1,
    asp = NULL,
    trim = FALSE,
    show_mask = FALSE
)
```

Arguments

area	Simple features object. Function currently supports only a single area at a time.
property	Real property variable to map. Options include c("improved", "vacant", "principal residence", "value"). Currently supports only one variable at a time.
dist	buffer distance in meters. Optional.
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
trim	If TRUE, data trimmed to area with sf::st_intersection(). This option is not supported for any adjusted areas that use the dist, diag_ratio, or asp parameters. Default FALSE.
show_mask	If TRUE, apply a white, 0.6 alpha mask over property located outside the provided area. Default FALSE.

map_area_zoning

Description

Map zoning/zoning overlay codes for an area within the city. The 2017 zoning data does not include any exemptions granted by the BMZA (Board of Municipal Zoning Appeals).

Usage

```
map_area_zoning(
    area,
    category = c("all", "residential", "commercial", "industrial"),
    diag_ratio = 0.125,
    asp = NULL,
    crs = pkgconfig::get_config("mapbaltimore.crs", 2804)
)
```

Arguments

area	sf, sfc, or bbox object. If multiple areas are provided, they are unioned into a single sf object using sf::st_union().
category	Zoning category to return. "all", "residential", "commercial", "industrial"
diag_ratio	ratio to set map extent based diagonal distance of area's bounding box. Ignored when dist is provided.
asp	Aspect ratio of width to height as a numeric value (e.g. 0.33) or character (e.g. "1:3").
crs	Coordinate Reference System (CRS) to use for the returned data. The CRS of the provided data and bounding box or area must match one another but are not required to match the CRS provided by this parameter.

maryland_open_data_api_key

Install a Maryland Open Data Portal API Key in Your .Renviron File for Repeated Use

Description

This function will add your Maryland Open Data Portal API key to your .Renviron file so it can be called securely without being stored in your code. After you have installed your key, it can be called any time by typing Sys.getenv("MARYLAND_OPEN_DATA_API_KEY") and can be used in package functions by simply typing MARYLAND_OPEN_DATA_API_KEY If you do not have an .Renviron file, the function will create on for you. If you already have an .Renviron file, the function will append the key to your existing file, while making a backup of your original file for disaster recovery purposes.

Usage

```
maryland_open_data_api_key(key, overwrite = FALSE, install = FALSE)
```

Arguments

key	The API key provided to you from Maryland Open Data Portal formatted in quotes. A key be be created after signing up https://imap.maryland.gov/Pages/open-data-portal-signup.aspx
overwrite	If this is set to TRUE, it will overwrite an existing MARYLAND_OPEN_DATA_API_KEY that you already have in your .Renviron file.
install	if TRUE, will install the key in your .Renviron file for use in future sessions. Defaults to FALSE.

Examples

```
## Not run:
MARYLAND_OPEN_DATA_API_KEY("111111abc", install = TRUE)
# First time, reload your environment so you can use the key without restarting R.
readRenviron("~/.Renviron")
# You can check it with:
Sys.getenv("MARYLAND_OPEN_DATA_API_KEY")
## End(Not run)
## Not run:
# If you need to overwrite an existing key:
MARYLAND_OPEN_DATA_API_KEY("111111abc", overwrite = TRUE, install = TRUE)
# First time, relead your environment so you can use the key without restarting R.
readRenviron("~/.Renviron")
# You can check it with:
```

```
Sys.getenv("MARYLAND_OPEN_DATA_API_KEY")
```

End(Not run)

mta_bus_lines Maryland Transit Administration (MTA) Bus Routes (2022)

Description

Maryland Department of Transportation's Maryland Transit Administration Summer 2022 Bus Routes including CityLink, LocalLink, Express BusLink and Commuter Bus services and reflects bus route changes as of June 19, 2022. For full details of service change visit: https://www.mta. maryland.gov/servicechanges/summer2022

Usage

mta_bus_lines

Format

A data frame with 103 rows and 4 variables:

route_name Bus route name route_type Route type (CityLink, LocalLink, or Commuter Bus) route_number Unique route number or color identifier route_abb Route abbreviation (only different from route_number for color CityLink routes) frequent Logical indicator of route inclusion in MTA BaltimoreLink's Frequent Transit Network. school Indicator for school routes geometry MULTILINESTRING bus route geometry

Source

Maryland Transit - MTA Bus Lines (MD iMap)

mta_bus_stops

Maryland Transit Administration (MTA) Bus Stops (2023)

Description

Maryland Department of Transportation's Maryland Transit Administration Bus Stops including CityLink, LocalLink, Express BusLink, and Commuter Bus. This data is based on the Winter 2023 schedule and reflects bus stop changes as of February 5, 2023 Ridership data is based on Automatic Passenger Counting (APC) system average daily weekday bus stop ridership (boarding, alighting, and total) from the Fall 2022 period and does not exclude outliers. For full details of service change visit: https://www.mta.maryland.gov/servicechanges/winter2023

Usage

mta_bus_stops

Format

A data frame with 4536 rows and 14 variables:

stop_id Stop identification number

stop_name Stop name

rider_on Average daily weekday count of riders boarding transit at stop

rider_off Average daily weekday count of riders alighting transit at stop

rider_total Average daily weekday count of total riders served at stop

stop_ridership_rank Stop rank for ridership

routes_served Routes served at stop

mode Mode served at stop

shelter Logical indicator of bus shelter availability
county County where stop is located
direction Route direction
stop_location Stop location
frequent Indicator for stop serving frequent transit network
geometry POINT stop location geometry

Details

Last updated from the Maryland iMap Source on August 23, 2023.

Source

Maryland Transit - MTA Bus Stops (MD iMap)

mta_light_rail_lines Maryland Transit Administration (MTA) Light RailLink Stations

Description

Location of MTA Light Rail Stations.

Usage

mta_light_rail_lines

Format

A data frame with 84 rows and 8 variables:

id Feature ID

rail_name Line name (Light Rail Line)

mode Facility mode (Light Rail)

tunnel Tunnel indicator

direction Travel direction

miles Section mileage

status Section status

geometry LINESTRING line geometry

Source

Maryland Transit - Light Rail Lines (MD iMap)

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mta_light_rail_stations

Maryland Transit Administration (MTA) Light RailLink Stations

Description

Locations for stations on the Baltimore Light RailLink (Baltimore Light Rail) line operated by the Maryland Transit Administration.

Usage

mta_light_rail_stations

Format

A data frame with 33 rows and 11 variables:

id Feature ID

name Station name

address Station address

city City

state State

zipcode Zipcode

mode Facility mode (Light Rail)

avg_wkdy Average weekday passengers

avg_wknd Average weekend passengers

facility_type Facility type

geometry POINT geometry for station locations

Source

Maryland Transit - Light RailLink Stations (MD iMap)

mta_marc_lines

Description

MARC (Maryland Area Regional Commuter) Rail system lines operated by the Maryland Transit Administration.

Usage

mta_marc_lines

Format

A data frame with 162 rows and 8 variables:

id Feature ID
rail_name Rail line name
mode Facility mode and line name (MARC)
tunnel Tunnel indicator
direction Travel direction
miles Section mileage
status Section status
geometry LINESTRING geometry for rail lines

Source

Maryland Transit - MARC Train Lines (MD iMap)

mta_marc_stations Maryland Transit Administration (MTA) MARC Train Stations

Description

Locations of MARC (Maryland Area Regional Commuter) Rail stations operated by the Maryland Transit Administration.

Usage

mta_marc_stations

mta_subway_lines

Format

A data frame with 44 rows and 12 variables:

id Feature ID
name Station name
address Station address
city City
state State
zipcode Zipcode
line_name Line name
mode Facility mode and line name (MARC)
avg_wkdy Average weekday passengers
avg_wknd Average weekend passengers
facility_type Facility type (Station)
geometry POINT geometry for station location

Source

Maryland Transit - MARC Trains Stations (MD iMap)

mta_subway_lines Maryland Transit Administration (MTA) SubwayLink Metro Lines

Description

Route of MTA SubwayLink Metro Line.

Usage

mta_subway_lines

Format

A data frame with 34 rows and 8 variables:

id Feature id number as integer
rail_name Subway line name (Metro Line)
mode Travel mode (Metro)
tunnel Section tunnel indicator
direction Travel direction
miles Section mileage
status Section status
geometry MULTILINESTRING geometry for lines

Source

Baltimore Metro Subway Line

mta_subway_stations Maryland Transit Administration (MTA) SubwayLink Metro Stations

Description

Location of MTA SubwayLink Metro Stations.

Usage

mta_subway_stations

Format

A data frame with 14 rows and 10 variables:

id Station identification number as integer
name Station name
address Station street address
city City
state State
mode Travel mode (Metro)
avg_wkdy Average weekday passengers
avg_wknd Average weekend passengers
facility_type Facility type (Station)
geometry POINT station location geometry

Source

Baltimore Metro SubwayLink Stations

named_intersections Baltimore City Street Intersection Names

Description

Index of Baltimore City intersections using names from street centerlines within 20 meters of the intersection boundaries. Data supports the for get_intersection() function. Updated 2022 October 13.

Usage

named_intersections

Format

A data frame with 11506 rows and 3 variables:

id Intersection identifier matching id in edge_of_pavement data

name Intersection name

geometry POINT geometry for intersection center

neighborhoods

Neighborhood Boundaries for Baltimore City (2010)

Description

Baltimore City neighborhoods (officially known as Neighborhood Statistical Areas) established by the Baltimore City Department of Planning based on the 2010 U.S. Decennial Census. Note that these boundaries may or may not be used by local community or neighborhood associations as an area of responsibility or membership recruitment.

Usage

neighborhoods

Format

A data frame with 278 rows and 6 variables:

name Neighborhood name

type Type of area, with options including residential, industrial area, park/open space, institutionl area and business park)

acres Area of the neighborhood (acres)

osm_id Open Street Map (OSM) relation identifier

wikidata Wikidata entity identifier

geometry MULITPOLYGON boundary geometry

Maryland Baltimore City Neighborhoods (MD iMap)

neighborhoods_2020 Neighborhood Boundaries for Baltimore City (2020)

Description

Baltimore City neighborhoods (officially known as Neighborhood Statistical Areas) established by the Baltimore City Department of Planning based on the 2020 U.S. Decennial Census. This is an updated version of the 2010 Neighborhood Statistical Areas.

Usage

neighborhoods_2020

Format

A data frame with 279 rows and 8 variables:

name Neighborhood name

name_alt 2010 neighborhood name

type Type of area, with options including residential, industrial area, park/open space, institutionl area and business park)

acres Area of the neighborhood (acres)

osm_id Open Street Map (OSM) relation identifier

wikidata Wikidata entity identifier

color_id Color identifier

geometry MULITPOLYGON boundary geometry

Source

NSA_Feb2023_service

parks

Description

Spatial data for parks and public recreation centers in Baltimore City from the Baltimore City Department of Recreation and Parks. A few names have been updated to use common names or recent new official names so the package version may not match the city data in all cases. The parks have been matched to corresponding entities on OpenStreetMap indicated by the osm_id column.

Usage

parks

Format

A data frame with 321 rows and 9 variables:

name Park name

id Identification number from city data

address Primary street address

name_alt Alternate name

operator Park operator, Baltimore City Department of Recreation and Parks (BCRP) or other

management Park management/owner name (column name may change)

class Park classification

park_district Park maintenance district for BCRP

acres Area of the park property (acres)

osm_id OpenStreetMap ID (node, way, or relation)

geometry MULTIPOLYGON geometry for park edges

Details

Updated 2023-10-16 with change to more recently updated city FeatureLayer as source for geometry.

Source

https://services1.arcgis.com/UWYHeuuJISiGmgXx/arcgis/rest/services/Map_WFL1/FeatureServer/ 16 park_districts

Description

Park districts for the Baltimore City Department of Recreation and Parks. District boundaries are used for park maintenance administration.

Usage

park_districts

Format

A data frame with 5 rows and 2 variables:

name Park district name

geometry MULTIPOLYGON geometry for park district boundary

planning_districts Baltimore City Planning Districts

Description

Administrative boundaries set by the Baltimore City Department of Planning. District planning staff are assigned to each of the planning districts.

Usage

planning_districts

Format

A data frame with 11 rows and 4 variables:

id Planning district area identifier

name Full name of the planning district

abb Planning district area abbreviation

geometry MULTIPOLYGON geometry for the planning district

Source

https://geodata.baltimorecity.gov/egis/rest/services/CityView/PlanningDistricts/ MapServer/0 police_districts Baltimore City Police Districts (1959-2022)

Description

Baltimore City Police Districts established in 1959 and used through 2022. Note this data will be moved to a separate object for historic district boundaries in 2023.

Usage

police_districts

Format

A data frame with 9 rows and 3 variables:

number Police district number

name Police district name

geometry MULITPOLYGON geometry for district boundary

Source

https://geodata.baltimorecity.gov/egis/rest/services/Planning/Boundaries/MapServer/
7

police_districts_2023 Baltimore City Police Districts (2023-Current)

Description

Baltimore City Police Districts boundaries updated in 2023.

Usage

police_districts_2023

Format

A data frame with 9 rows and 4 variables:

id Police district number

name Police district name

name_abb District name abbreviation

geometry MULTIPOLYGON geometry for district boundary

Source

https://services1.arcgis.com/UWYHeuuJISiGmgXx/arcgis/rest/services/Police_District/ FeatureServer/0

public_art

Baltimore public art works and monuments

Description

Data created by Eli Pousson and C. Ryan Patterson with contributions from staff and volunteers at Baltimore City Commission on Historical and Architectural Preservation, Baltimore Heritage, and the Baltimore Office of Promotion and the Arts. Updated January 18, 2023. See https://publicartbaltimore.github.io/inventory/ for more information.

Usage

public_art

Format

A data frame with 1140 rows and 35 variables:

id incomplete unique id column

osm_id OpenStreetMap identifier

title Artwork title

location Location name

type Artwork type

medium Artwork medium

status Artwork status

year Artwork status

year_accuracy Artwork status

creation_dedication_date Creation/dedication date

primary_artist Primary artist

street_address Street address

city City

state State

zipcode Zipcode

dimensions Artwork dimensions

program Commissioning program

rec_centers

funding Primary funding source artist_assistants Artist assistants architect Architect fabricator Fabricator neighborhood Neighborhood csa Community Statistical Area council_district Baltimore City Council District legislative_district character Maryland State Legislative District location_desc character Location description indoor_outdoor_access Indoor/outdoor accessible subject_person Subject of artworks (if work depicts a person) related_property Related property name property_ownership Related property ownership agency_or_insitution Agency/institution responsible wikipedia_url Wikipedia URL geometry POINT location

rec_centers

Baltimore City Recreation Centers

Description

Currently includes only publicly operated (BCRP) rec centers. Expect to add private operator facilities. Added 2023-10-19.

Usage

rec_centers

Format

A data frame with 48 rows and 18 variables:

id ID

name Center name

name_short Short name

street_address Street address

address Full address

center_amenities Center amenities

center_assets Center facility assets

center_category Center category

center_type Center type school_name School name (school-based centers only) operator Operator (BCRP only) recreation_district BCRP Recreation district park_district BCRP Park Maintenance District council_district City Council district legislative_district Maryland legislative district police_district BPD Police district (maybe outdated) notes Notes geometry POINT geometry with center location

Source

https://services1.arcgis.com/UWYHeuuJISiGmgXx/arcgis/rest/services/recreationCenter2023/
FeatureServer

request_types 311 Service Request Types for Baltimore City

Description

A list of request types based on unique request types used between January 2019 and October 2020.

Usage

request_types

Format

A data frame with 320 rows and 1 variable:

request_type Service request type

Source

https://data.baltimorecity.gov/

respagency_codes Baltimore City Real Property Responsible Agency Codes

Description

A reference table of responsible agency codes appearing in the Baltimore City real property data used by get_area_property(). Updated 2023 March 29.

Usage

respagency_codes

Format

A data frame with 37 rows and 7 variables:

name Responsible agency name

code Responsible agency code

agency_name Baltimore City agency/commission name

agency_abb Baltimore City agency/commission abbreviation

division_name Agency division name

active_code Active code indicator (FALSE for codes that do not appear in data)

notes Notes on code/agency

Source

https://docs.google.com/spreadsheets/d/1Dnyp4-AZxvFPpt5Vci4NRWR9tGP99R8RaHuPCbzcGCA/ edit?usp=sharing

scale_mapbaltimore Scales for Baltimore data

Description

Custom palettes for two package datasets: mta_bus_lines and hmt_2017 (both for cluster and cluster group).

Usage

```
scale_mapbaltimore(
  palette = NULL,
  values = NULL,
  na.value = "grey50",
  aesthetics = c("color", "fill"),
  error_call = caller_env(),
  ...
)
scale_color_mapbaltimore(palette = NULL, na.value = "grey50", ...)
scale_fill_mapbaltimore(palette = NULL, na.value = "grey50", ...)
```

Arguments

palette	Options include "mta_bus", "hmt_2017", "hmt_cluster", "cluster", "hmt_cluster_group", or "cluster_group", Default: NULL
values	a set of aesthetic values to map data values to. The values will be matched in order (usually alphabetical) with the limits of the scale, or with breaks if provided. If this is a named vector, then the values will be matched based on the names instead. Data values that don't match will be given na.value.
na.value	Defaults to "grey50"
aesthetics	Character string or vector of character strings listing the name(s) of the aesthetic(s) that this scale works with. This can be useful, for example, to apply colour settings to the colour and fill aesthetics at the same time, via $aesthetics = c("colour", "fill")$.
error_call	The execution environment of a currently running function, e.g. caller_env(). The function will be mentioned in error messages as the source of the error. See the call argument of abort() for more information.
	Arguments passed on to discrete_scale
	<pre>palette A palette function that when called with a single integer argument (the number of levels in the scale) returns the values that they should take (e.g., scales::hue_pal()).</pre>
	limits One of:
	• NULL to use the default scale values
	• A character vector that defines possible values of the scale and their order
	• A function that accepts the existing (automatic) values and returns new ones. Also accepts rlang lambda function notation.
	drop Should unused factor levels be omitted from the scale? The default, TRUE, uses the levels that appear in the data; FALSE uses all the levels in the factor.
	<pre>na.translate Unlike continuous scales, discrete scales can easily show miss- ing values, and do so by default. If you want to remove missing values from a discrete scale, specify na.translate = FALSE.</pre>

- scale_name The name of the scale that should be used for error messages associated with this scale.
- name The name of the scale. Used as the axis or legend title. If waiver(), the default, the name of the scale is taken from the first mapping used for that aesthetic. If NULL, the legend title will be omitted.

labels One of:

- · NULL for no labels
- waiver() for the default labels computed by the transformation object
- A character vector giving labels (must be same length as breaks)
- An expression vector (must be the same length as breaks). See ?plotmath for details.
- A function that takes the breaks as input and returns labels as output. Also accepts rlang lambda function notation.
- guide A function used to create a guide or its name. See guides() for more information.

super The super class to use for the constructed scale

Examples

```
## Not run:
if (interactive()) {
    library(ggplot2)
ggplot(data = dplyr::filter(mta_bus_lines, frequent)) +
    geom_sf(aes(color = route_abb), alpha = 0.5, size = 2) +
    scale_mapbaltimore(palette = "bus") +
    theme_minimal()
ggplot(data = hmt_2017) +
    geom_sf(aes(fill = cluster_group, color = cluster_group)) +
    scale_mapbaltimore(palette = "cluster_group") +
    theme_minimal()
}
```

End(Not run)

schools_21stc Baltimore 21st Century Schools

Description

Schools with buildings in the 21st Century Schools Program. Updated 2022 October 13. This data may contain some out-dated or inaccurate information. See buildings_21stc for building-level information (including more accurate locations).

Usage

schools_21stc

Format

A data frame with 29 rows and 24 variables: school_name School name school_number School number nces_number NCES number grade_band Grade bane url School website URL year 21st Century School renovation/replacement complete type 21st Century School project type bldg_budget_approx Approximate building budget status_21c 21st Century School project status status_inspire INSPRE Plan status inspire_plan Related INSPIRE Plan occupancy_month Building occupancy month occupancy_year Building occupancy year address Street address city City state State zip Zipcode phone School phone number alt_school_name Alternate school name bldg_name Building name (if applicable) alt_name Alternate/former names (if applicable) lon Longitude lat Latitude geometry POINT geometry for school locations

Details

https://baltimore21stcenturyschools.org/school-projects

set_map_theme

Set default map theme

Description

Set a map theme using ggplot2::theme_set() and default for geom_label using ggplot2::update_geom_defaults(). Optionally hides axis text and labels.

Usage

set_map_theme(map_theme = NULL, show_axis = FALSE)

Arguments

<pre>map_theme</pre>	ggplot2 theme. Optional. Defaults to ggplot2::theme_minimal()	
show_axis	Logical. If TRUE, keep theme axis formatting. If FALSE, hide the panel grid,	
	axis title, and axis text.	

streets	Baltimore City Street Center Lines	
---------	------------------------------------	--

Description

Street center line data for public streets in Baltimore City, Maryland. Data is used by the get_streets() function.

Usage

streets

Format

Simple feature collection with 48,473 features and 23 fields.

type ... subtype ... subtype_label ... dirpre ... feanme ... featype ... dirsuf ... fraddl ... toaddl ...

```
fraddr ...
toaddr ...
fraddla ...
fraddla ...
fraddra ...
fraddra ...
toaddra ...
leftzip ...
rightzip ...
fullname ...
sha_class ...
sha_class_label ...
blocktext ...
block_num ...
geometry ...
```

Source

https://dotgis.baltimorecity.gov/arcgis/rest/services/DOT_Map_Services/DOT_Basemap/ MapServer/7

wards_1797_1918 Historic Ward Boundaries, 1797-1918 for Baltimore City

Description

Historic ward boundary data from 1797 to 1918. Derived from KML data provided by the Baltimore City Archives.

Usage

wards_1797_1918

Format

A data frame with 245 rows and 4 variables:

year Earliest effective year of ward boundary

name Ward name

number Ward number

geometry MULTIPOLYGON geometry for ward boundary

Source

https://msa.maryland.gov/bca/wards/index.html

xwalk_block2tract

Description

A crosswalk file used to generate xwalk_neighborhood2tract.

Usage

xwalk_block2tract

Format

A data frame with 13598 rows and 3 variables:

block Block GeoID tract Tract GeoID households Block household population

xwalk_csa2nsa

Community Statistical Area (CSA)-to-Neighborhood Statistical Area (NSA) Crosswalk

Description

A crosswalk to match Community Statistical Areas to Neighborhood Statistical Areas. Both a Neighborhood Statistical Area name and neighborhood name are provided, with the NSA name matching the crosswalk file provided by BNIA-JFI and the neighborhood name matching the neighborhoods data included with the mapbaltimore package. NSA boundaries may overlap over several CSAs. When more than 50% of a NSA falls within a particular community it is assigned to that community. No NSAs in these files are assigned to more than one community.

Usage

xwalk_csa2nsa

Format

A data frame with 278 rows and 4 variables:

id Community Statistical Area id number

- csa Community Statistical Area name
- nsa Neighborhood Statistical Area name
- neighborhood Neighborhood name

Source

https://bniajfi.org/mapping-resources/

xwalk_neighborhood2tract

Neighborhood-to-U.S. Census Tract Crosswalk

Description

Share of total households is based on the proportion of U.S. Census tract population within the named neighborhood based on overlapping U.S. Census Block groups.

Usage

xwalk_neighborhood2tract

Format

A data frame with 551 rows and 4 variables:

name Neighborhood name

geoid GeoID for U.S. Census tract

tract Tract number

weight_households Share of total households in neighborhood and U.S. Census tract (based on 2010 decennial Census). Variable code is "H013001".

weight_units Share of occupied housing units in neighborhood and U.S. Census tract (based on 2020 decennial Census PL-94171 redistricting data). Variable code is "H1_002N".

xwalk_zip2csa Zipcode-to-Community Statistical Area (NSA) Crosswalk

Description

A crosswalk to match zipcodes to Community Statistical Areas.

Usage

xwalk_zip2csa

Format

A data frame with 119 rows and 3 variables:

zip Zipcode

csa Community Statistical Area name

id Community Statistical Area id number

zoning

Source

https://bniajfi.org/mapping-resources/

zoning

Baltimore City Zoning Code

Description

The Baltimore City Zoning Code is administered by the Baltimore City Department of Housing and Community Development (HCD) Office of the Zoning Administrator. This office supports the Board of Municipal Zoning Appeals (BMZA).

Usage

zoning

Format

A data frame with 2,406 rows and 4 variables:

zoning Zoning designation code

overlay Overlay zone designation

label Label combining zoning and overlay zoning codes

category_zoning Coning code category

name_zoning Zoning code name

category_overlay Overlay code category

name_overlay Overlay zoning name

geometry MULTIPOLYGON geometry for zoning areas

Source

https://geodata.baltimorecity.gov/egis/rest/services/Planning/Boundaries_and_Plans/ MapServer/20

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