

# Package ‘canadianmaps’

May 8, 2026

**Title** Effortlessly Create Stunning Canadian Maps

**Version** 2.0.0

**Description** Simple and seamless access to a variety of 'StatCan' shapefiles for mapping Canadian provinces, regions, forward sortation areas, census divisions, and subdivisions using the popular 'ggplot2' package.

**License** MIT + file LICENSE

**Encoding** UTF-8

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**LazyDataCompression** xz

**RoxygenNote** 7.2.0

**URL** <https://github.com/joellecayen/canadianmaps>

**BugReports** <https://github.com/joellecayen/canadianmaps/issues>

**Imports** ggplot2, sp, sf, ggrepel, RColorBrewer, dplyr

**Depends** R (>= 2.10)

**Suggests** knitr, rmarkdown, testthat (>= 3.0.0)

**Config/testthat/edition** 3

**NeedsCompilation** no

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**Repository** CRAN

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## Contents

|                           |   |
|---------------------------|---|
| CD . . . . .              | 2 |
| coord_transform . . . . . | 3 |
| crs_coord . . . . .       | 3 |
| CSD . . . . .             | 4 |
| FSA . . . . .             | 4 |

|                           |           |
|---------------------------|-----------|
| geom_cd . . . . .         | 5         |
| geom_csd . . . . .        | 5         |
| geom_fsa . . . . .        | 6         |
| geom_hr . . . . .         | 6         |
| geom_prov . . . . .       | 7         |
| geom_reg . . . . .        | 7         |
| HR . . . . .              | 8         |
| label_prov . . . . .      | 8         |
| label_reg . . . . .       | 9         |
| PROV . . . . .            | 10        |
| REG . . . . .             | 10        |
| scale_color_map . . . . . | 11        |
| scale_fill_map . . . . .  | 12        |
| text_prov . . . . .       | 12        |
| theme_map . . . . .       | 13        |
| theme_wallis . . . . .    | 13        |
| <b>Index</b>              | <b>14</b> |

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 CD

*Canadian Census Division Boundary Data*


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## Description

Provides geospatial information for all Canadian census divisions.

## Usage

CD

## Format

A data frame with 293 rows and 7 variables:

**CDNAME** Census Division names

**PRUID** ID column for each province

**rmapshaperid** id for geometry

**population\_2021** Population from 2021 Census

**PT** province or territory

**PRNAME** Province name

**geometry** map geometry ...

---

|                 |                                     |
|-----------------|-------------------------------------|
| coord_transform | <i>Transforming map coordinates</i> |
|-----------------|-------------------------------------|

---

**Description**

Converts your longitude and latitude coordinates to match the maps to properly overlay.

**Usage**

```
coord_transform(data, long, lat)
```

**Arguments**

|      |  |
|------|--|
| data | a data set with long and lat coordinates |
| long | the longitude variable name              |
| lat  | the latitude variable name               |

**Value**

Your coordinates transformed.

---

|           |                              |
|-----------|------------------------------|
| crs_coord | <i>Map coordinate system</i> |
|-----------|------------------------------|

---

**Description**

Used to visualize simple feature (sf) objects. Required to plot geometry objects.

**Usage**

```
crs_coord()
```

**Value**

a coordinate system for mapping

CSD

*Canadian Census Sub Division Boundary Data***Description**

Provides geospatial information for all Canadian census sub divisions.

**Usage**

CSD

**Format**

A data frame with 5161 rows and 9 variables:

**CDNAME** Census Division names

**PRUID** ID column for each province

**CDUID** Census Division ID

**CMAUID** CMA ID

**rmapshaperid** id for geometry

**population\_2021** Population from 2021 Census

**PT** province or territory

**PRNAME** Province name

**geometry** map geometry ...

FSA

*Canadian FSA Boundary Data***Description**

Provides geospatial information for all Canadian Forward sortation areas (FSA).

**Usage**

FSA

**Format**

A data frame with 1614 rows and 6 variables:

**CFSAUID** ID column for each FSA code

**PRNAME** Province name

**PRUID** ID column for each province

**PT** province or territory

**rmapshaperid** id for geometry

**geometry** map geometry ...

---

geom\_cd                      *Mapping Census Division data*

---

**Description**

Maps CD data using Statistics Canada CD shape file.

**Usage**

```
geom_cd(data = CD, fill = "PRNAME", colour = "white", size = 0.2)
```

**Arguments**

|        |                                   |
|--------|-----------------------------------|
| data   | a data set with geometry variable |
| fill   | the color fill variable           |
| colour | outline color, default is NA      |
| size   | size of outline                   |

**Value**

census division map.

---

geom\_csd                      *Mapping Census Sub Division data*

---

**Description**

Maps CSD data using Statistics Canada CSD shape file.

**Usage**

```
geom_csd(data = CSD, fill = "PRNAME", colour = "white", size = 0.2)
```

**Arguments**

|        |                                   |
|--------|-----------------------------------|
| data   | a data set with geometry variable |
| fill   | the color fill variable           |
| colour | outline color, default is NA      |
| size   | size of outline                   |

**Value**

census subdivision map.

---

`geom_fsa`*Mapping FSA data*

---

**Description**

Maps FSA data using Statistics Canada FSA shape file.

**Usage**

```
geom_fsa(data = FSA, fill = "PRNAME", colour = "white", size = 0.2)
```

**Arguments**

|                     |                                   |
|---------------------|-----------------------------------|
| <code>data</code>   | a data set with geometry variable |
| <code>fill</code>   | the color fill variable           |
| <code>colour</code> | outline color, default is NA      |
| <code>size</code>   | size of outline                   |

**Value**

FSA map.

---

`geom_hr`*Mapping HR data*

---

**Description**

Maps HR data using Statistics Canada HR shape file.

**Usage**

```
geom_hr(data = HR, fill = "PRNAME", colour = "white", size = 0.2)
```

**Arguments**

|                     |                                   |
|---------------------|-----------------------------------|
| <code>data</code>   | a data set with geometry variable |
| <code>fill</code>   | the color fill variable           |
| <code>colour</code> | outline color, default is NA      |
| <code>size</code>   | size of outline                   |

**Value**

HR map.

---

|           |                                |
|-----------|--------------------------------|
| geom_prov | <i>Mapping provincial data</i> |
|-----------|--------------------------------|

---

**Description**

Maps provincial data using Statistics Canada province shape file.

**Usage**

```
geom_prov(data = PROV, fill = "PT", colour = NA, size = 0.1)
```

**Arguments**

|        |                                   |
|--------|-----------------------------------|
| data   | a data set with geometry variable |
| fill   | the color fill variable           |
| colour | outline color, default is NA      |
| size   | size of outline                   |

**Value**

Provincial map.

---

|          |                              |
|----------|------------------------------|
| geom_reg | <i>Mapping regional data</i> |
|----------|------------------------------|

---

**Description**

Maps regional data using Statistics Canada province shape file.

**Usage**

```
geom_reg(data = REG, fill = "region", colour = NA, size = 0.1)
```

**Arguments**

|        |                                   |
|--------|-----------------------------------|
| data   | a data set with geometry variable |
| fill   | the color fill variable           |
| colour | outline color, default is NA      |
| size   | size of outline                   |

**Value**

Regional map.

---

|    |                                  |
|----|----------------------------------|
| HR | <i>Canadian HR Boundary Data</i> |
|----|----------------------------------|

---

**Description**

Provides geospatial information for all Health Regions areas (HR).

**Usage**

HR

**Format**

A data frame with 104 rows and 8 variables:

**HRID** ID column for each HR code

**HRENGNAME** Health Region english name

**HRFRNAME** Health Region french name

**rmapshapeid** id for geometry

**geometry** map geometry

**PT** province or territory

**PRNAME** Province name

**PRUID** ID column for each province ...

---

|            |                        |
|------------|------------------------|
| label_prov | <i>Province labels</i> |
|------------|------------------------|

---

**Description**

Adds text labels in the center of each province with light gray bubble.

**Usage**

```
label_prov(
  data = PROV,
  label = "PT",
  colour = "grey20",
  size = 3,
  outline = NA,
  alpha = 0.7
)
```

**Arguments**

|         |                                   |
|---------|-----------------------------------|
| data    | a data set with geometry variable |
| label   | the label variable                |
| colour  | label color                       |
| size    | label size                        |
| outline | outline color                     |
| alpha   | transparency                      |

**Value**

Provincial map labels

---

|           |                        |
|-----------|------------------------|
| label_reg | <i>Regional labels</i> |
|-----------|------------------------|

---

**Description**

Adds text labels in the center of each region with light gray bubble.

**Usage**

```
label_reg(data = REG, label = "region", colour = "grey20", size = 4)
```

**Arguments**

|        |                                   |
|--------|-----------------------------------|
| data   | a data set with geometry variable |
| label  | the label variable                |
| colour | label color                       |
| size   | label size                        |

**Value**

Regional map labels.

---

PROV

*Canadian Province Boundary Data*

---

**Description**

Provides geospatial information for all 13 Canadian provinces and territories.

**Usage**

PROV

**Format**

A data frame with 13 rows and 12 variables:

**PREABBR** Province abbreviated English

**PRENAME** Province name English

**PRFABBR** Province abbreviated French

**PRFNAME** Province name French

**PRNAME** Province name

**PRUID** ID column for each province

**PT** province or territory

**region** national region

**X** center of shape x axis

**Y** center of shape y axis

**rmapshaperid** id for geometry

**geometry** map geometry ...

---

REG

*Canadian Regions Boundary Data*

---

**Description**

Provides geospatial information for all 4 regions of Canada (Central, Eastern, Western, and Northern).

**Usage**

REG

**Format**

A data frame with 13 rows and 12 variables:

**PREABBR** Province abbreviated English

**PRENAME** Province name English

**PRFABBR** Province abbreviated French

**PRFNAME** Province name French

**PRNAME** Province name

**PRUID** ID column for each province

**PT** province or territory

**region** national region

**X** center of shape x axis

**Y** center of shape y axis

**rmapshaperid** id for geometry

**geometry** map geometry ...

---

|                 |                                  |
|-----------------|----------------------------------|
| scale_color_map | <i>Color Palettes Line Color</i> |
|-----------------|----------------------------------|

---

**Description**

Create a custom number of colors to use for graphing or mapping based on preset color palettes.

**Usage**

```
scale_color_map(palette, num, na.value = "grey90", rev = FALSE)
```

**Arguments**

|          |  |
|----------|--|
| palette  | color palette name                           |
| num      | number of colors to create                   |
| na.value | a color value for NA, defaults to light gray |
| rev      | condition to reverse the order of the colors |

**Value**

a ggplot color palette

---

|                |                            |
|----------------|----------------------------|
| scale_fill_map | <i>Color Palettes Fill</i> |
|----------------|----------------------------|

---

**Description**

Create a custom number of colors to use for graphing or mapping based on preset color palettes.

**Usage**

```
scale_fill_map(palette, num, na.value = "grey90", rev = FALSE)
```

**Arguments**

|          |  |
|----------|--|
| palette  | color palette name                           |
| num      | number of colors to create                   |
| na.value | a color value for NA, defaults to light gray |
| rev      | condition to reverse the order of the colors |

**Value**

a ggplot color palette

---

|           |                      |
|-----------|----------------------|
| text_prov | <i>Province text</i> |
|-----------|----------------------|

---

**Description**

Adds text labels in the center of each province.

**Usage**

```
text_prov(data = PROV, label = "PT", colour = "grey20", size = 3)
```

**Arguments**

|        |                                   |
|--------|-----------------------------------|
| data   | a data set with geometry variable |
| label  | the label variable                |
| colour | text color                        |
| size   | text size                         |

**Value**

Provincial map labels

---

|           |                         |
|-----------|-------------------------|
| theme_map | <i>Plot theme - map</i> |
|-----------|-------------------------|

---

**Description**

Blank theme to apply for mapping using ggplot2.

**Usage**

```
theme_map(base_size = 9, base_family = "")
```

**Arguments**

|             |               |
|-------------|---------------|
| base_size   | size for text |
| base_family | font for text |

**Value**

A blank theme for ggplot

---

|              |                            |
|--------------|----------------------------|
| theme_wallis | <i>Plot theme - Wallis</i> |
|--------------|----------------------------|

---

**Description**

Custom theme to apply for plotting using ggplot2.

**Usage**

```
theme_wallis()
```

**Value**

A theme for ggplot

# Index

## \* datasets

- CD, [2](#)
- CSD, [4](#)
- FSA, [4](#)
- HR, [8](#)
- PROV, [10](#)
- REG, [10](#)

- CD, [2](#)
- coord\_transform, [3](#)
- crs\_coord, [3](#)
- CSD, [4](#)

- FSA, [4](#)

- geom\_cd, [5](#)
- geom\_csd, [5](#)
- geom\_fsa, [6](#)
- geom\_hr, [6](#)
- geom\_prov, [7](#)
- geom\_reg, [7](#)

- HR, [8](#)

- label\_prov, [8](#)
- label\_reg, [9](#)

- PROV, [10](#)

- REG, [10](#)

- scale\_color\_map, [11](#)
- scale\_fill\_map, [12](#)

- text\_prov, [12](#)
- theme\_map, [13](#)
- theme\_wallis, [13](#)