

# Package ‘befproj’

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**Type** Package

**Title** Makes a Local Population Projection

**Version** 0.1.1

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**Description** This is a sub national population projection model for calculating population development. The model uses a cohort component method. Further reading: Stanley K. Smith: A Practitioner's Guide to State and Local Population Projections. 2013. <[doi:10.1007/978-94-007-7551-0](https://doi.org/10.1007/978-94-007-7551-0)>.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.0

**Imports** dplyr (>= 0.8.5)

**Depends** R (>= 2.10)

**NeedsCompilation** no

**Repository** CRAN

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## Contents

|                          |   |
|--------------------------|---|
| assump_data . . . . .    | 2 |
| bef_components . . . . . | 3 |
| bef_proj . . . . .       | 3 |
| bef_raw . . . . .        | 4 |
| startpop_data . . . . .  | 5 |

|              |          |
|--------------|----------|
| <b>Index</b> | <b>6</b> |
|--------------|----------|

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`assump_data`*assumptions*

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**Description**

This is a Data Frame with assumptions about migrations rates, deaths and births.

**Usage**

```
data("assump_data")
```

**Format**

A data frame with 1111 observations on the following 14 variables.

`age` a numeric vector

`category` a factor with levels `asdr_men` `asdr_women` `asfr` `inmig.rates.men` `inmig.rates.women` `intermig.net.men` `intermig.net.women` `natpop.men` `natpop.women` `outmig.rates.men` `outmig.rates.women`

`ar_1` a numeric vector

`ar_2` a numeric vector

`ar_3` a numeric vector

`ar_4` a numeric vector

`ar_5` a numeric vector

`ar_6` a numeric vector

`ar_7` a numeric vector

`ar_8` a numeric vector

`ar_9` a numeric vector

`ar_10` a numeric vector

`ar_11` a numeric vector

`ar_12` a numeric vector

**Details**

This is a Data Frame that consists of assumptions and input to the population model. The Data Frame has 14 different variables under `category`: age specific death rates (`asdr`) for men and women, age specific fertility rates for women (`asfr`), domestic in migration and out migration rates for men and women, international in and out net migration for men and women, and the age specific national population.

**Source**

Umea kommun

**Examples**

```
data(assump_data)
str(assump_data)
```

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|                |  |
|----------------|--|
| bef_components | <i>Makes a local population projection and produce results for population components</i> |
|----------------|--|

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**Description**

Makes a local population projection and produce results for population components

**Usage**

```
bef_components(startpop, assumptions, YEAR)
```

**Arguments**

|             |   |
|-------------|---|
| startpop    | This is the start population                    |
| assumptions | This is a Data Frame with assumptions           |
| YEAR        | This is the year from which the forecast starts |

**Value**

The output from [return](#)

**Examples**

```
bef_components(startpop_data,assump_data,2019)
```

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|          |   |
|----------|---|
| bef_proj | <i>Makes a local population projection and produce results for growth per year.</i> |
|----------|---|

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**Description**

Makes a local population projection and produce results for growth per year.

**Usage**

```
bef_proj(startpop, assumptions, YEAR)
```

**Arguments**

|             |   |
|-------------|---|
| startpop    | This is the start population                    |
| assumptions | This is a Data Frame with assumptions           |
| YEAR        | This is the year from which the forecast starts |

**Value**

The output from [return](#)

**Examples**

```
bef_proj(startpop_data,assump_data,2019)
```

---

|         |  |
|---------|--|
| bef_raw | <i>Makes a local population projection and produce results for age, sex and year</i> |
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**Description**

Makes a local population projection and produce results for age, sex and year

**Usage**

```
bef_raw(startpop, assumptions, YEAR)
```

**Arguments**

|             |   |
|-------------|---|
| startpop    | This is the start population                    |
| assumptions | This is a Data Frame with assumptions           |
| YEAR        | This is the year from which the forecast starts |

**Value**

The output from [return](#)

**Examples**

```
bef_raw(startpop_data,assump_data,2019)
```

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|               |                        |
|---------------|------------------------|
| startpop_data | <i>Startpopulation</i> |
|---------------|------------------------|

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**Description**

This is a Data Frame with a startpopulation. The ages reaches from 0 to 100. The start year is from 2019.

**Usage**

```
data("startpop_data")
```

**Format**

A data frame with 101 observations on the following 3 variables.

age a numeric vector

women a numeric vector

men a numeric vector

**Source**

Statistiska centralbyran, SCB, Swedish statistics

**Examples**

```
data(startpop_data)  
str(startpop_data)
```

# Index

## \* datasets

assump\_data, 2

startpop\_data, 5

assump\_data, 2

bef\_components, 3

bef\_proj, 3

bef\_raw, 4

return, 3, 4

startpop\_data, 5