

# 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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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)
```

---

|          |                                                                                     |
|----------|-------------------------------------------------------------------------------------|
| 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)
```

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|         |                                                                                      |
|---------|--------------------------------------------------------------------------------------|
| 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)
```

---

|               |                        |
|---------------|------------------------|
| 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)
```

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