



# **Risk of transport poverty – A regional indicator**

**Judith Nijenhuis**

9th ITF statistics meeting

3-4-2023

# What is transport poverty?

Transport poverty refers to a lack of adequate transport services necessary to access general services and work, or to the inability to pay for these transport services. It is intertwined with social vulnerabilities, such as low income, old age or disabilities and with regional disadvantages.



European parliament think tank -

[https://www.europarl.europa.eu/thinktank/en/document/EPRS\\_ATA\(2022\)738181](https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA(2022)738181)



# Relevance

A relevant theme due to social trends such as:

- Accessibility issues in cities due to urban growth
- Shrinking population in rural areas, inadequate public services
- Public transport cuts
- Poverty, rising costs
- Single-person households
- Population ageing
- Sustainable transport for all?



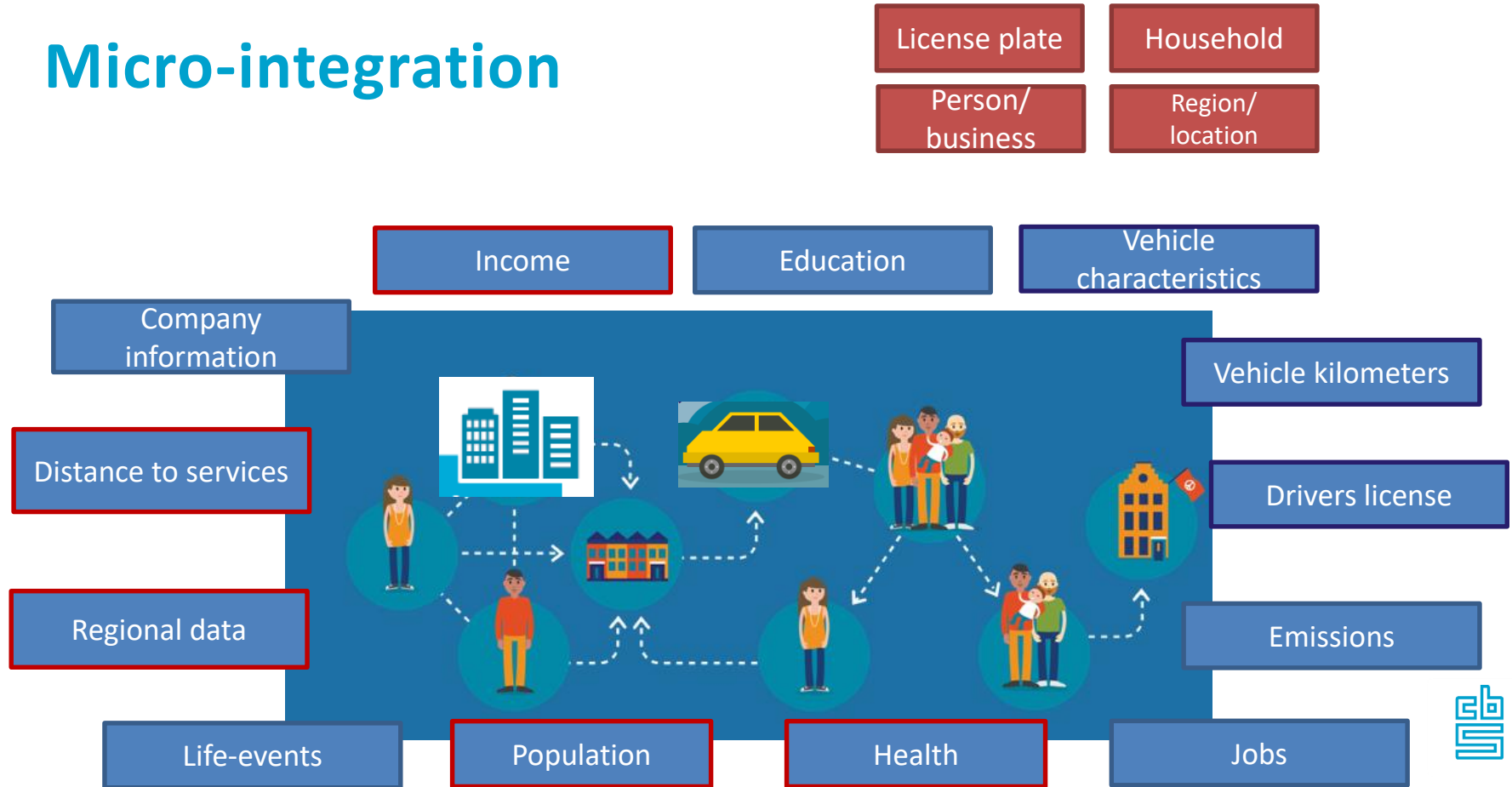
Previous studies/existing literature: often qualitative studies, many case studies

Statistics Netherlands has access to data for a quantitative study based on registry data at the person/household level for all of the Netherlands

Research and theoretical framework in cooperation with the Netherlands Environmental Agency (PBL)



# Micro-integration



# Method

4 key themes, measured using 9 variables at the household level:

- Motorvehicle ownership
- Distance to public transport
- Distance to services
- Distance to family
- Household income
- Socio-economic category
- Migration background
- Health and disability
- Age and household composition

Variables based on academic literature

Indicator based on data, doesn't measure experiences  
-> households at risk of transport poverty



# Weighing method

Scores for each of the 9 variables:

Motorvehicle ownership	Score
Household owns a passenger car	0
Household without a passenger car but does own other motorvehicles	1
Household does not own any motorvehicles	2

Sum of the scores of all 9 variables are divided by 9 → equal weight for all variables

Score	Risk of transport poverty
0.0-0.5	Low
>0.5-1.0	Below average
>1.0-1.5	Above average
>1.5-2.0	High



# Results

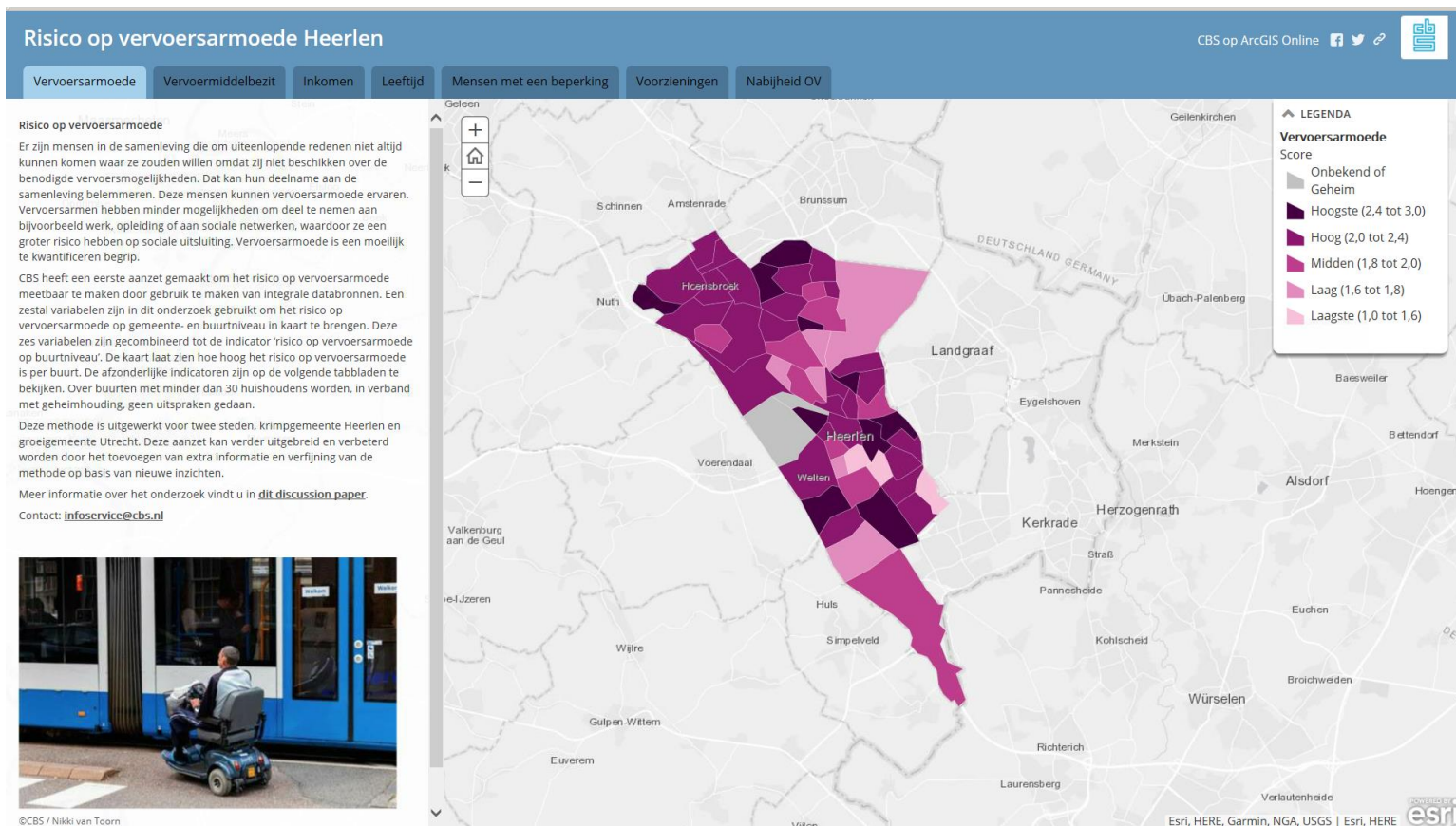
- Dashboard
- Methodological report
- Table with results at the neighbourhood level:
  - % of households with above average/high risk
  - Number of households with high risk

## Interpreting the results

- No policy advice
- Data only, interpretation is up to policy makers
- Local knowledge is a must

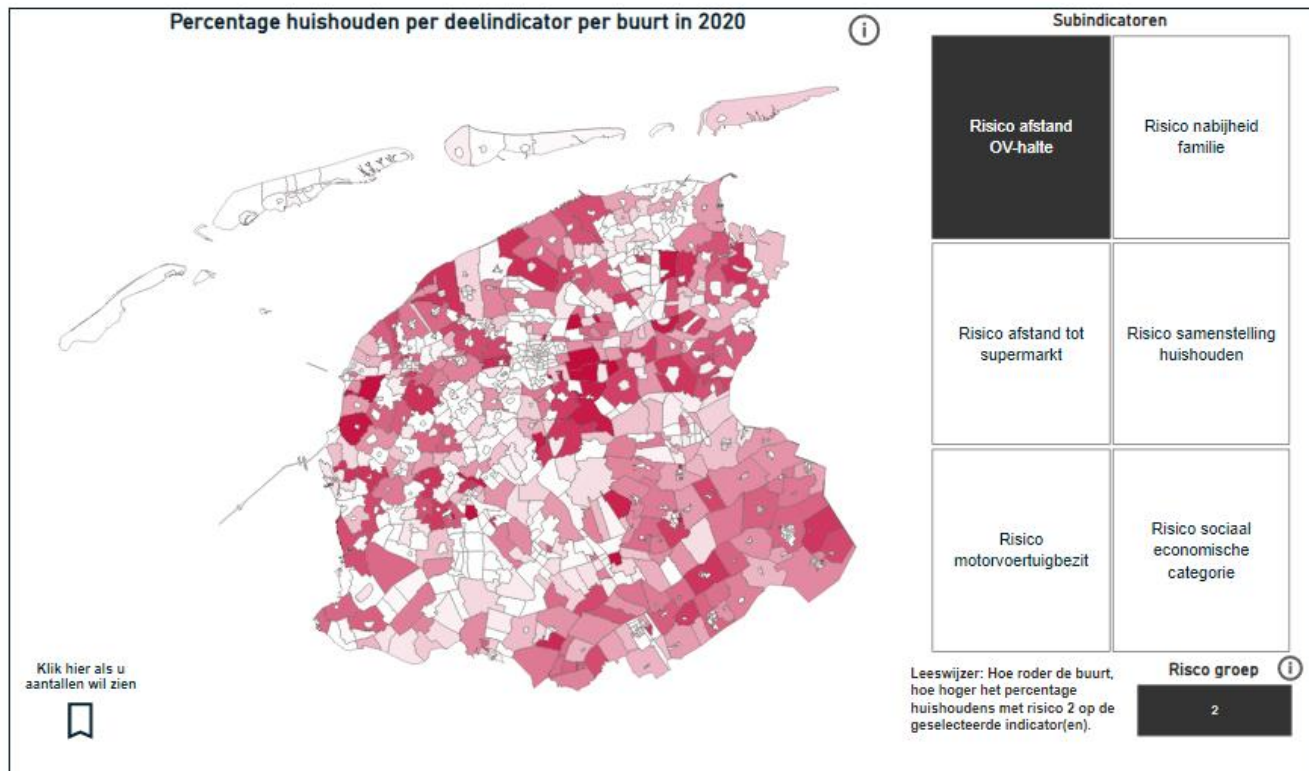


# Results – Municipality Heerlen



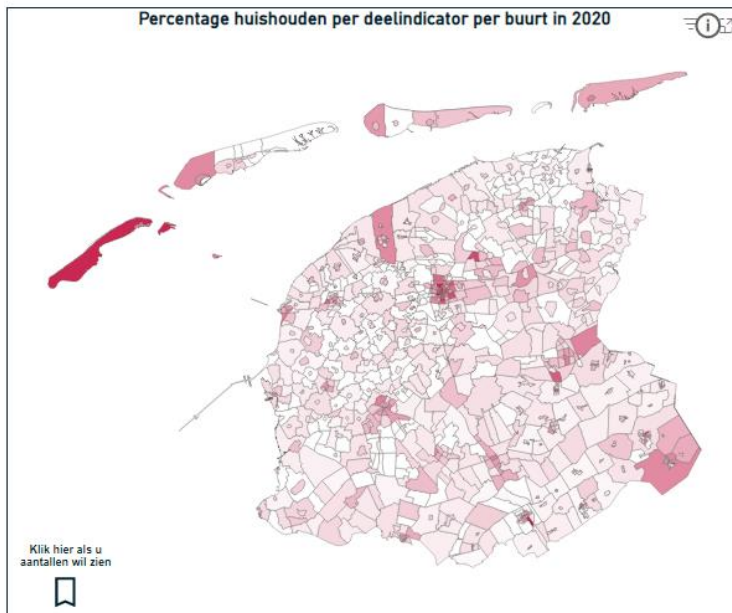


# Results – Province Fryslân

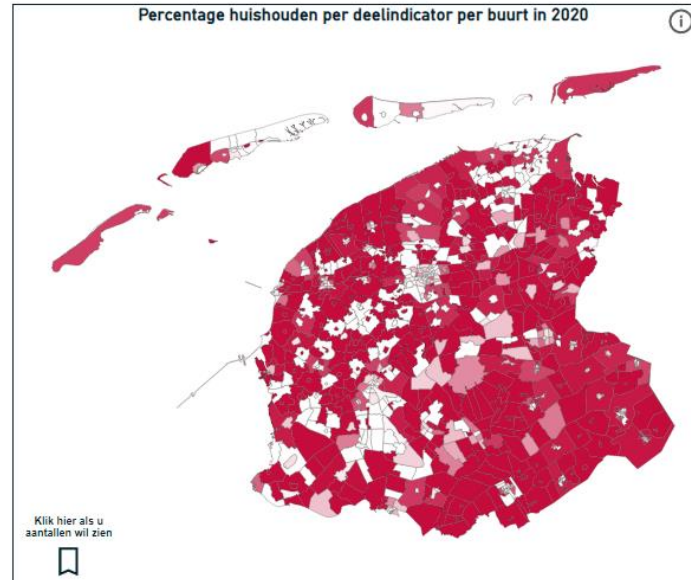


# Results – Province Fryslân

## Motorvehicle ownership



## Distance to the supermarket



# Follow-up

## Further improvement of the indicator

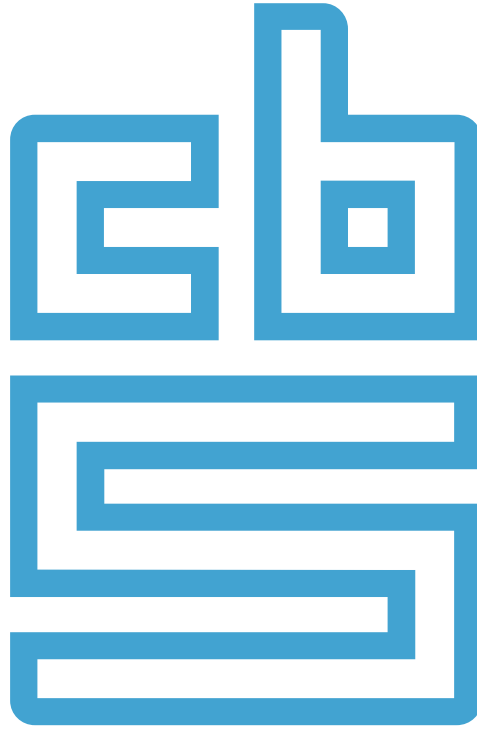
- Adding new variables, e.g.
  - Duration of residence
  - Bicycle ownership
- Weighing variables at the household level
- Adding scenarios to the weighing process

**Repeating the study** – only when commissioned/financed by a client

## Other studies:

- Questionnaire – Mobility of population aged 55 and older
- Questions added to the Dutch national travel survey (ODiN)
- Netherlands Environmental Agency (PBL): 'Access for everybody'
- The Netherlands Institute for Transport Policy Analysis (KiM): 'Towards accessibility goals in mobility policy' and coming soon: qualitative study 'mechanisms behind accessibility poverty'





**facts** that matter