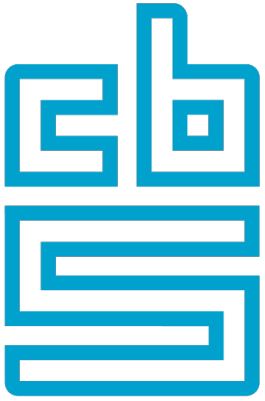




Roundtable on EV Charging Infrastructure Data Collection Contribution from The Netherlands

1. Regional distribution of electric passenger cars by *Judith Nijenhuis*
2. Input data to plan charging infrastructure by *Jacqueline van Beuningen*

9-11-2023



Regional distribution of electric passenger cars

Judith Nijenhuis

9-11-2023

Goals

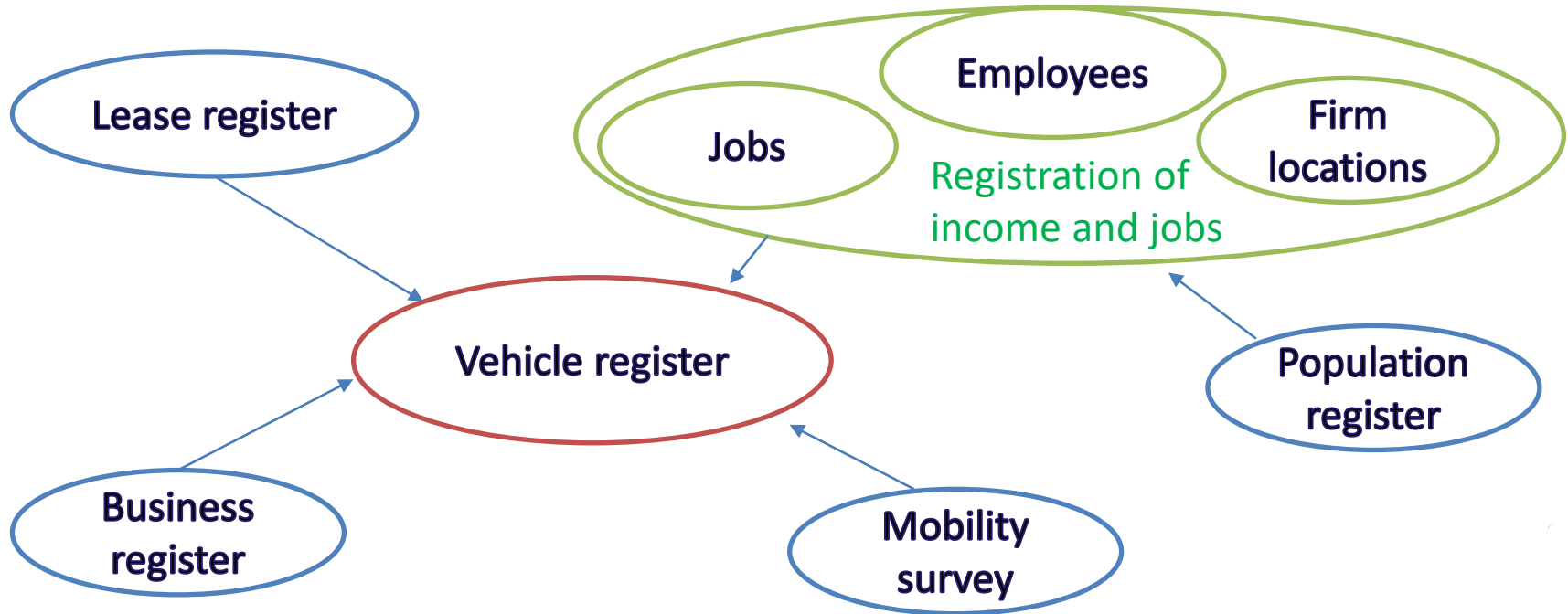
- Number of electric passenger cars at the provincial/municipality level
- Relevant for charging infra
- Based on the location of the vehicle user (not the registered vehicle owner!)
- Financed by the Netherlands enterprise agency, in cooperation with ELaadNL

The problem: unknown location of lease/company cars

- Source data: licence plate register of the Dutch Road Authority
- Problem: only the location of the administrative owner is registered
- Most electric passenger cars are lease/company cars
- Results in large clusters of vehicles in area's where lease companies are located

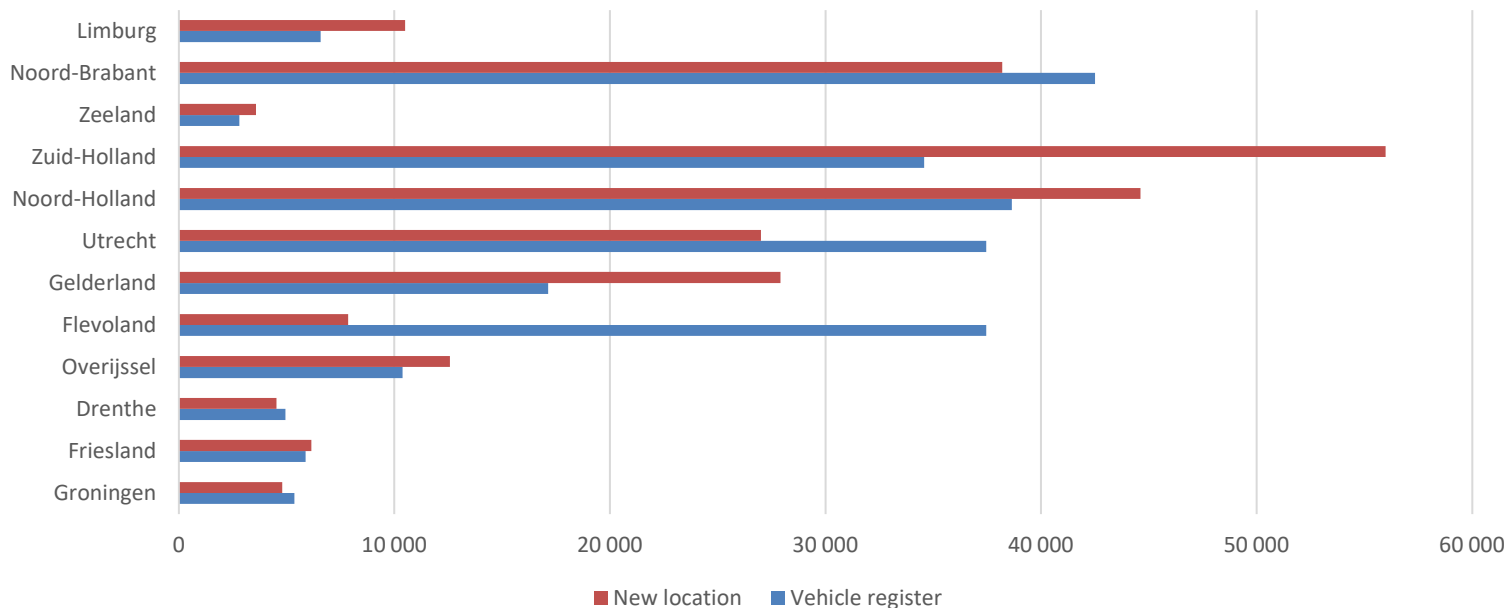


Solution: tracing the vehicle user through data merging



Result – new location vs. old registered location

Electric passenger cars by province, 1-1-2022





Freight vehicles parking

Input data to plan charging infrastructure

Jacqueline van Beuningen

9-11-2023

Goals

- Provide input for prognosis necessary charging infra for light and heavy freight vehicles.
- Based on the current situation: where is the main parking location?
- Focus on estimation of number of vehicles rather than allocation of individual vehicle to specific location.
- Vehicle numbers for neighborhoods and industrial estates.



Data

- Vehicle register data on vehicle's primary location:
 - Mostly inadequate as proxy for actual most used parking location
- Firm register data on firm address:
 - Head office and local branches
- Survey data:
 - Previously: pre-filled from register, general instead of specific (municipality instead of postal code)
 - New (2022 onwards): not pre-filled, more specific



Method

- Correction for leased vehicles
- Register data: firm address in firm / vehicle register if firm address is unavailable
- For heavy freight vehicles: number is estimated per location:
 - Known for some vehicles from surveys
 - If possible: split across most known loading locations in survey
 - Allocation of firm's vehicles based on firm branch size in terms of FTE for professional transporters
 - Otherwise: firm address

Results

- Validation based on aerial photos/firm websites/location visits/local firm surveys.
- Validation by comparing known locations of vehicles with estimation results for these vehicles.
 - Especially tricky to allocate correct number of vehicles to distribution centers: vehicles are parked at customer location, unavailable in register data.



Facts that matter