



Ministerie van Infrastructuur en Milieu

## Mobiliteitspanel Nederland

2.000 huishoudens  
4.000 respondenten  
3 dagen per jaar



2<sup>nd</sup> MPN-symposium  
September, 12<sup>th</sup> 2016



# Second MPN symposium





## Background

- In The Netherlands we have several long-term surveys that collect travel data in differing levels of details
- Time budget survey (TBO):
  - every 5 years; last time in 2011; executed by SCP/SN;  $\pm$  2000 households; cross-section; record all activities during one week for every 10 min; extensive list of personal and household characteristics; limited amount of mobility data
- Dutch National Travel Survey (OVG/MON/OViN):
  - continuous survey;  $\pm$  40,000 individuals; executed by SN; cross-section; record all trips/trip stages for one day; limited number of personal and household characteristics; more elaborate mobility data



## Background

- Longitudinal Mobility Survey (LVO):
  - 1984-1989; ± 1,500 households; same group of respondents (panel); record all trips/trip stages for one week; extensive list of personal and household characteristics; more elaborate mobility data
- KiM, Twente University and Goudappel Coffeng initiated development of new travel panel survey – The Netherlands Mobility Panel (MPN)



## Why a travel panel survey?

- explain trends in travel behaviour on an aggregated as well as an individual level
- uncover individual day-to-day variation (habit)
- uncover individual year-to-year variation (life events)
- study influence of intra-household interaction on travel behaviour
- enable estimation of behavioural travel choice models
- better calibrate/validate large strategic transport models



## Main research questions

- How do changes in people's lives, such as changing jobs, births of children or divorce, influence travel behaviour?
- How do changes in purchasing behaviour and ownership and use of cars, bicycles and public transport develop over time?
- How does people's preferences in terms of transport modes, homes and lifestyle influence travel behaviour?
- How do changes in spatial environment, such as new train stations, bicycle stalls or parking regulations, influence travel behaviour?



## Size and composition

- Aim was net response of 2000 complete households
- Including incomplete households MPN consists of 6000-7000 respondents
- All household members 12+ were asked to participate
- Funding for 2013-2016, 1 wave per year
- Funding extended to 2020 with option of 2x2 years extension
- Online screening, household and individual questionnaires, and three-day online travel diary
- Conducted from September till November (except fall holidays)
- Opportunity to ask additional questions to same respondents or repeat survey for new respondents



## Sample

- Stratified sample drawn from existing access panel
- Representative sample was drawn with respect to age, gender, education, household size, main occupation, and urbanisation level (Golden standard)
- MPN is also representative with respect to car ownership
- Specific groups were oversampled (adolescents, elderly and lower education)
- Additional respondents are drawn yearly to account for nonresponse





# Research instruments

Research instrument	What?
Screening questionnaire	<ul style="list-style-type: none"><li>• willingness to participate</li><li>• travel data for the non-response analysis</li></ul>
Household questionnaire	<ul style="list-style-type: none"><li>• composition of household, main wage-earner</li><li>• annual gross household income</li><li>• ownership of desktop computers and laptops</li><li>• transport vehicles owned by a household</li><li>• car details (licence plate number, annual mileage, main user)</li><li>• car parking possibilities</li></ul>
Individual questionnaire	<ul style="list-style-type: none"><li>• age, gender, monthly salary</li><li>• respondent's motherland, their father's and mother's</li><li>• number of contracted working hours, number of average working hours in practice, type of work and workplace</li><li>• travel costs subsidies</li><li>• driving licence, type of travel cards and transport vehicle availability</li><li>• preferred mode of transport</li><li>• valuation of transport facilities and traffic conditions in the neighbourhood</li><li>• access to, and use of, Internet facilities</li></ul>
Additional individual questionnaire	<ul style="list-style-type: none"><li>• <u>even</u> years: preferences towards car ownership and use, the environment, the economy and housing location</li><li>• <u>uneven</u> years: the impact of ICT use on mobility for working and shopping, and the impact of social media on social networks and on mobility for social activities</li></ul>
Travel diary	<ul style="list-style-type: none"><li>• addresses of visited locations and main activities</li><li>• trips in terms of departure and arrival times, order in which transport modes were used, distances covered, parking costs, delays and travel companion</li></ul>



# Additional data

Additional data	What?
Added information from registers (e.g. RDW and CBS)	additional car details, such as brand name, model, year of construction, type of fuel, and additional tax for car lease socio-economic characteristics of neighbourhoods, such as number of jobs and number of residences
Added information from PBL	spatial transport-related characteristics, such as straight-line distances of each postal code to the nearest centre of a region, the nearest motorway exit, the nearest (Intercity) train station, and the nearest metro, tram and bus stop for different frequencies
Added information from trip planners	travel distances and times computed for car, bike and public transport using dedicated trip planning tools
Added information from KNMI	Weather information



# Animation



## More information and access to the data

For more information:

<http://english.kimnet.nl/the-netherlands-mobility-panel>

For access to the data:

<http://english.kimnet.nl/the-netherlands-mobility-panel/contents/access-to-mpn-data>

Login information for access to the data can be obtained by filling in and signing a declaration and sending it to KiM.

Data from 2013 and 2014 (wave 1 and wave 2) are now available for scientific and policy research!



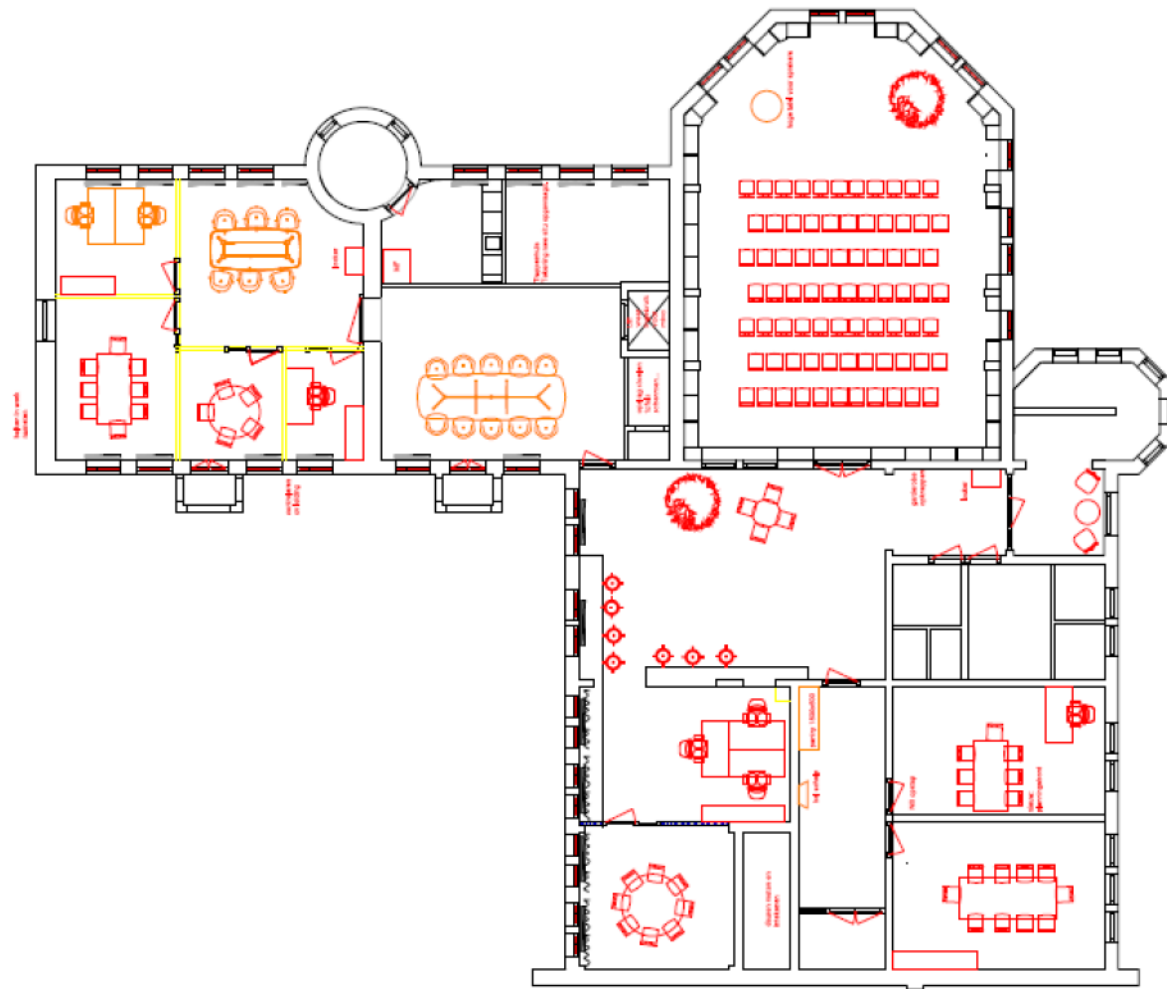
# Program Plenary session 1

09.30 – 10.00	Introduction	Sascha Hoogendoorn - Lanser & Eline Scheepers (KiM Netherlands Institute for Transport Policy Analysis)
10.00 – 11.15	<b>Plenary session 1</b>	
10.00 – 10.25	MEILI, a small step towards automation of activity travel diary collection in Stockholm	Yusak Susilo (KTH Royal Institute of Technology, Stockholm)
10.25 – 10.50	Understanding non-response behavior during screening	Raymond Hoogendoorn (KiM Netherlands Institute for Transport Policy Analysis)
10.50 – 11.15	More cycling or more cyclists – Dynamics and potentials of bicycle use in Germany by an approach based on the German Mobility Panel	Bastian Chlond (Karlsruhe Institute of Technology – Institute for Transport Studies)
11.15 – 11.30	<b>Break</b>	



# Program Plenary session 2

11.30 – 12.45	<b>Plenary session 2</b>	
11.30 – 11.55	Life events as a window of opportunity. Wonderful data and great results, but what should policy makers do?	Jaco Berveling (KiM Netherlands Institute for Transport Policy Analysis)
11.55 – 12.20	Understanding e-shopping: Analysis of ICT relation with shopping and shopping mobility	Olga Huibregtse (KiM Netherlands Institute for Transport Policy Analysis)
12.20 – 12.45	Analysis of the effects of additional survey modes on reporting behavior and results	Christine Weiss (Karlsruhe Institute of Technology – Institute for Transport Studies)
12.45 – 14.00	<b>Lunch</b>	





# Program Parallel session 1

14.00 – 15.00	<b>Parallel session 1a: New data collection techniques</b>	
14.00 – 14.30	Active and passive time use registration through web and smartphone: How to discover people's h:bits?	Joeri Minnen (Vrije Universiteit Brussel Tempus Omnia Revelat)
14.30 – 15.00	Big data to tackle urban mobility challenges	Marta González (Massachusetts Institute of Technology)
14.00 – 15.00	<b>Parallel session 1b: Life events</b>	
14.00 – 14.30	Travel pattern transitions: a study on the effects of life events on changes in travel patterns	Mathijs de Haas (Delft University of Technology)
14.30-15.00	Mode choices and gendered key events in the life course	Joachim Scheiner (Technical University Dortmund)
15.00 – 15.15	<b>Break</b>	





## Program Parallel session 2

15.15 – 16.15	<b>Parallel session 2a: Effects of attrition and fatigue of respondents</b>	
15.15 – 15.45	Panel attrition: earlier Dutch experiences with relevance for current practice.	Henk Meurs (MuConsult BV / Radboud University Nijmegen)
15.45 – 16.15	Measurement of non-random attrition effects on mobility rates using trip diary data	Lissy La Paix (University of Twente)
15.15 – 16.15	<b>Parallel session 2b: Attitudes</b>	
15.15 – 15.45	Do attitudes cause travel behavior or vice versa? Results from a panel analysis.	Maarten Kroesen (Delft University of Technology)
15.45 – 16.15	Attitudes and travel behavior: Changing mode preferences to change behavior?	Marie-José Olde Kalter (University of Twente / Goudappel Coffeng)
16.15 – 17.00	<b>Panel discussion</b>	
17.00 – 19.00	<b>Drinks</b>	



# Panel discussion



## Question 1

How does initial non-response and attrition influence the validity of panel data?



## Question 2

What is the role of incentives in panel studies?



## Question 3

People are bad estimators of travel distance. How can the accuracy of these estimations be increased?



## Question 4

How can new data collection modes best be introduced in an ongoing panel?



## Question 5

How can a survey best be made suitable for the use of smartphones and tablets?