

# **Workshop A6 “Moving from Cross-Sectional to Continuous Surveys”**

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Contents and Results

Chair: Dirk Zumkeller

## Participants

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## Presented Papers

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### ■ Resource Paper:

- Liz Ampt, Sinclair Knight Merz, Juan de Dios Ortuzar, Tony Richardson: On large Scale On-Going Mobility Surveys: The State of Practice

### ■ Contributed papers:

- Stopher, Kockelman, Greaves and Clifford: Sample Size Requirements for Multi-Day Travel Surveys: Some Findings
- Zumkeller, Chlond, Kagerbauer: Regional Panels against the Background of the German Mobility Panel – An Integrated Approach
- Ruiz, Timmermanns, Polak: Improving Continuous surveys: Analysis of Attrition and Reported Immobility in the Madrid-Barcelona Corridor Panel Survey

## Some Definitions of terms

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- **Continuous survey:** *Ambiguous (rather a matter of administration)*
- **Cross-sectional survey:** *Snapshot of one independent sample for a given time*
- **Repeated cross-sections:** *Sequence of independent cross sectional samples*
- **Panel:** *One sample, two or more observation periods*
- **Pseudo Panel:** *Repeated measurements of similar individuals, different times*
- **Rotating Panel:** *Exchange of panelists to keep sample according to population*
- **Longitudinal / ongoing:** *Ambiguous...*
- **Multiday:** *Continuous reporting period > one day*
- **Multiperiod:** *Interrupted reports by same individuals at different times*

## Some Definitions of terms (2)

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- **Time Series:** *Any Indicator over time*
- **Attrition:** *Any loss of units in a panel for any reasons*
- **Mortality:** *Special case of attrition: death / dissolution*
- **Fatigue:** *Reduced reporting accuracy over time*
- **Conditioning:** *Adaption of behaviour or reporting to survey issues*
- **Unit non response:** *Non response per unit*
- **Item non response:** *Non response of any item (e.g. non reported trips)*
- **Non mobility / non Trippers:** *Usually relating to one day, person chooses not to leave home*

# State of the Art

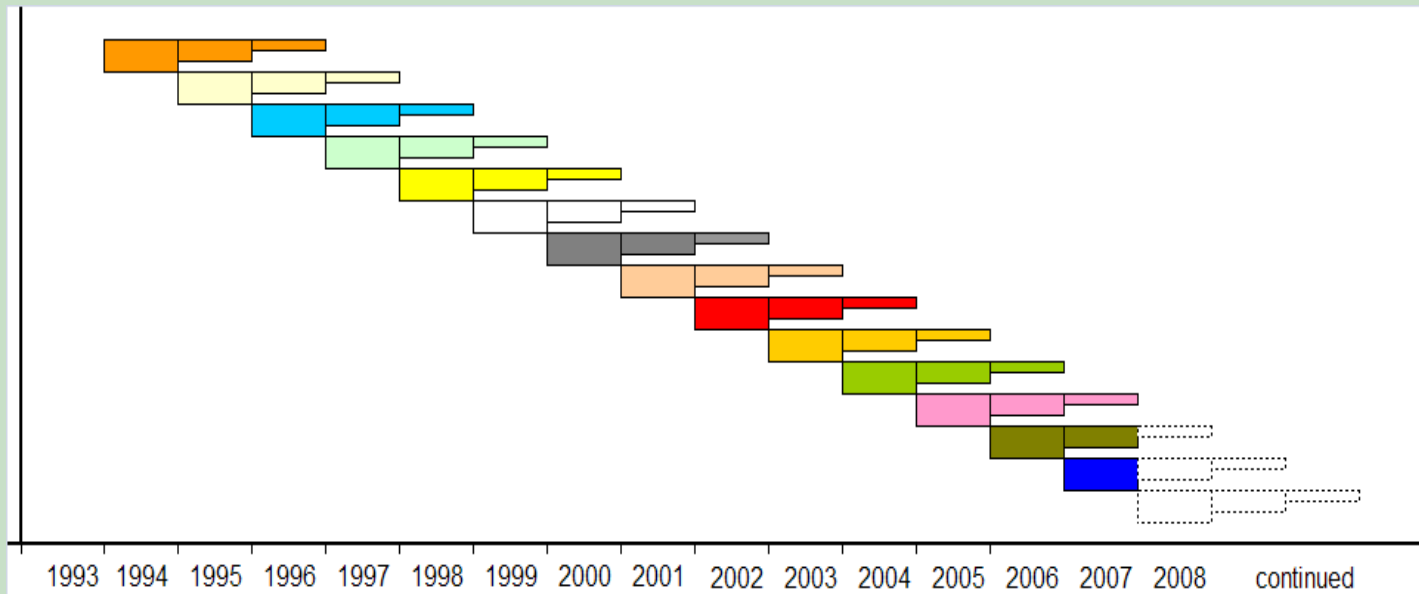
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The picture of the state of the art covered:

- Australia
  - *Lots of snapshots in metropolitan areas*
  - *Sequence of cross-sections in Australia, Canada, US, Chile for metropolitan areas*
- Latin America
  - *Large National Travel Surveys in US, parts of Europe*
- Japan
  - *No NTS in Canada , Australia, Japan, Latin America*
- USA
  - *Some Developments towards continuous surveys (Sequence of cross-sections, panels and any hybrids) in*
    - *Australia*
    - *Europe*
    - *USA*
- Europe
- Canada

# Illustration of a Rotating Panel Approach

- 7-day 24-h reports (multiday)
- participation in three consecutive years (panel)
- annual refreshment of sample (rotation)



**Allows for:**

**-e.g. Dynamics in Public Transport Patronage**

# Strategic Research Gaps

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## Why do we consider to move from cross-sectional to continuous surveys?

- Recency of data
  - Conclusion: Combination of cross-section and longitudinal survey
- The client's perspective
  - Conclusion: Continuous survey shows more robustness against changing requirements, Funding easier to obtain for ongoing surveys
- Measurement of change
  - External factors → cross-section or a panel
  - Change in behaviour → panel
  - Composition of the population → rotating panel (combination of cross section and panel / how to rotate depending on questions to be answered)
  - Methodological artefacts → no change of methodology over time
- Methodological issues
  - Careful alterations of survey design → innovation has to be introduced in a staged process