Data needs for the analysis of social network geographies and transport

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Size of an individual’s activity spaces: A hypothesis

**Wages**

- Activities
- Fleet comfort
- Housing consumption
- Energy costs
- vtt et al.

**Specialisation**

- Tours
- pkm
- vkm

**Migration**

**Professional and personal activity space**

- Number of networks
- Network overlap
- Local anomie

**Network geography**

- Elasticity > 0
- Elasticity < 0
Objects of interest (cross section)

- Name, type and membership of the networks (groups)
- Name and type of the contacts (strength of the link)

- Home location of the contacts
- Places, dates and duration of meetings with the networks (or subsets)
  - Role, cost and cost allocation of the meeting
  - Cost, cost allocation and duration of associated trip

- Channel, dates, size of other interactions with the contacts
  - Cost of interaction and its allocation
  - Location of the persons during the interaction
Objects of interest (panel/retrospective)

- Mobility biography:
  - Home locations
  - Work/school locations
  - Mobility tools (car, season tickets, cycles, licences)
  - Income
  - Household structure

- All of the cross-sectional items across time
Sources:

- Memory:
  - Interviews
  - Paper/web-based self-administered questionnaires
- Records:
  - Diaries and agendas
  - Personal phone books/email lists
  - Email and letters (collections)
  - Phone bills / Income tax returns / credit card bills
  - Photo albums / personal web pages
  - Minutes and yearbooks
  - Databases, such as [www.google.scholar.com](http://www.google.scholar.com)
- [Observation]
Example: Contact frequency – emails to kwa (Outlook)
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Example: long-distance travel (kwa) (agenda/tax returns)
Current IVT experiences

- Face-to-face interviews (Mobility biographies; “most important contacts”; mobile phone book lists; Zürich, Berlin, Lancaster) (about 50 € incentives; 2-3 h + questionnaire) (No problems recruiting; even to quota)

- Mobility biographies (Zürich, postal questionnaire) (No incentive, but some were “motivated” with a phone call) 22% response, but see below

- Mobility biographies plus contact geographies (Zürich, Bern Basel; postal and web-based questionnaire) (No incentive) Expected response about 5-8% percent
Zürich Mobility biographies – Response rate by area
Current IVT experiences: Easy add-ons

Context of a trip/activity diary:
- Number of persons meet at the activity travelled to
  - By type (household, non-household member, dog)
  - Home location of non-household members met (even retrospectively in the 12 week leisure diary)

Context of a face-to-face interview:
- Names, type, meeting frequency and home locations of relatives and friends (up to five of each category)
- Mobility biographies (last ten April 1st) (part of Univox)
Example: Contact costs, frequency and type of contact

Meeting frequency

Relationsship
- Friend
- "Kollege"
- Acquaintance
- Children
- Parents
- Siblings
- Other family

Median distance between homes

- 50
- 40
- 30
- 20
- 10
- 0

- More than weekly
- More than monthly
- Up to more than year
Outlook

• Development of common questions

• Allocation of questions blocks between survey modes

• Incentive versus intrusiveness trade-off

• Tools to extract administrative records and to support their coding
Size of goods markets and productivity: A hypothesis

Economies of scale
Economies of scope

Activity
Tours
t/pkm
vkm

GDP
Fleet comfort
slots
vtts et al.
vkm

Market size
Energy costs

+Elasticity > 0
Slots: possibilities to move goods or people

-Elasticity < 0
For a given infrastructure and commercial and private fleet
Size of goods markets and productivity: A hypothesis

+ Elastizität > 0  k: Generalisierte
- Elastizität < 0  Kosten
Spatial and social density

- Dense/tight
- Sparse/tight
- Dense/loose
- Sparse/loose