Mobidrive: A six-week diary

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Questions

Natural variability

- Activity demand
- Mode choice
- Departure time

Rhythms:

- Temporal spacing
- Variety seeking and habit in leisure travel

Activity spaces
Measurement of natural variability

Requirement:

- Multi-day diary

Approach

- BMBF research project (PTV, RWTH, ETH)
- Six week diary
- Small incentives (100-200 DM/household)
- 362 persons in 162 households
- Karlsruhe and Halle
- Spring and fall of 1999
Implementation

Format:
- Trip-based
- 6 weekly diaries (25 pages each)
- Weekly telephone contact and clarification

Special features:
- Two open purpose categories (leisure, other) (400 different entries)
- Expenditure for travel and activities
- Presence of a dog
Form
Response issues

Response: 21% of eligible recruited, 19% participated

Selectivity: Karlsruhe none, Halle: more car owners

Unit attrition: Some between household interview and diary, Few during the first week of the diary

Reporting fatigue: None detectable (so far)

Trip making: Slightly higher than local one-day diaries
Trip reporting (main study)
Data enrichment

- Additional attitude and value survey using existing scales
- Geocoding of all trips within the study area
- Provision of network shortest paths (road and public transport)
- Weather data
Aggregate weekly rhythms

Discretionary

Compulsory

Home

Travel

Mo  Tu  We  Th  Fr  Sa  Su

50%

Halle/S.  Karlsruhe
Personal rhythms

- Home
- Work related business
- Work
- School
- Private Business
- Pick up/Drop off
- Shopping: Daily
- Shopping: Long Term
- Leisure
- Other
Personal rhythms: Daily shopping

![Graph showing survival rate and hazard rate over duration in days.](image)
Personal rhythms: Sport
Distribution of trip making

- No car: Gini (0.171)
- 1 car: Gini (0.145)
- 2 and more cars: Gini (0.135)
Activity mixture: work days

Fulltime ○ Others ●

Leisure

Compulsory

Household rel.
Activity mixture: weekend

Diagram showing a triangular plot for activity mixture: weekend with categories of Leisure, Compulsory, and Fulltime/Others. The plot indicates different activity percentages with data points representing various household relationships.
Modal mixture: work days
First departure (full time employed, week days)
Number of locations used and their share of all activities

Cumulative sum of shares [%]

Leisure related
All (regional) trips

Number of activity locations
Activity spaces (Jennrich-Turner-home range)

Male
Full time
With car
Married
One child

95% of local activities:

Working days
Weekend
Activity spaces (Jennrich-Turner-home range)

Female student licence, no car living alone

95% of local activities:

Working days
Weekend