Mobility Patterns and Lifestyles in Vienna – Case Study Liesing

Local mobility behavior – views from Vienna

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Analysis of mobility patterns and lifestyles in Vienna

Background:
- Urban development area Liesing in the south of Vienna
- Road network and Transport infrastructure at capacity limits
- Challenge: car traffic, housing development and green spaces

Objectives of our research:
- Analysis of the relationship between Housing, Lifestyles and Mobility
- Focus on leisure activities
- Testing methods to convince residents of sustainable mobility behaviour
Characteristics of the district Liesing

- ULL Liesing as one of Vienna’s areas of main future housing development
- Liesing 95,000 inhabitants (2012); in ULL up to +35,000 by 2025
- Offers huge reserves for settlement activity
- District with low settlement density and many green spaces
- Proximity to green belt of Vienna ("Wienerwald")

Source: Perspektive Liesing, 2014
Characteristics of the district Liesing

- High-level public transport (railway and metro) in two South-North directed corridors
- High traffic loads in road network, commuter traffic from the southern hinterland
- Connection of local centers within the district unsatisfactory
- Network of cycle paths and footpaths is fragmentary and of low quality
- Highest motorization & modal split car in Vienna

Source: Perspektive Liesing, 2014
Methodological Approach

- **Survey**
  - 424 semi-structured telephone interviews

- **“Communal Probes”**
  - Creative public participation to reflect individual mobility behaviour

- **Exhibition**
  - Presenting Casual and its results
  - Wall of ideas, inspiration catalogue
  - Discussions with stakeholders
Mobility behaviour and parameters influencing it
Defining mobility patterns and lifestyle

- **Mobility patterns:**
  - habitual behavior of individuals in order to satisfy their mobility demand (choice of transport mode and travel distance)

- **Lifestyle:**
  - Goals in life, importance of certain areas, values (Hammer, Steiner 2006)
  - Individuals express their social position through specific patterns of behavior, consumption and leisure (Weber (1972), Bourdieu (1984))
  - These behavioral patterns are shaped by underlying opinions and orientations, including beliefs, interests and attitudes
The data

- Representative stated preferences survey (n > 400):
  - Housing situation, housing form, green space availability
  - Orientations and opinions with regard to leisure and travel infrastructure
  - Resident’s leisure behavior
  - Mobility patterns (primarily mode choice) for leisure activities

- Communal probes:
  - Support the interpretation of the quantitative hard facts by providing a phenomenological perspective
  - Inquiry of subjective needs towards infrastructure, important places in the neighborhood, qualitative aspects of trips and trip alternatives
  - Desired mobility versus practicability, assessment of means of transport, mobility barriers, daily mobility chains
The construct of lifestyle

- Built from the elements mobility orientations, leisure orientations and leisure behavior, representing customary leisure activities (rating scales)

Social situation

Suburban
- Family with children
- Middle age
- Higher income

Urban
- Older persons
- No children
- Lower income

Ecological
- Younger persons
- No children
- Lower income

Neighbourhood
- Singles
- Couples, no children
- Middle age

What is important to me?

Suburban
- Car
- Social infrastructure
- Neighbourhood
- Green Spaces

Urban
- Public transport
- Culture
- Culinary art
- Shopping

Ecological
- PT, bicycle, footpaths
- Culture
- Shopping
- Sports

Neighbourhood
- All modes
- Sports
- Community

Source: CASUAL, 2016
Lifestyle types and mode choice

Modal Split for shopping for daily needs in clusters

- **C1: "Car, Green Spaces" (102)**
- **C2: "Public transport, City-oriented" (69)**
- **C3: "Multi-Modal, Bicycle, Sports" (60)**
- **C4: "Bicycle, Walking, Multi-Modal, Neighborhood" (181)**
- **Total (412)**

- **Walk**  - Green
- **Bicycle** - Light Green
- **Public Transport** - Orange
- **Car** - Blue
- **Other** - Brown

Percentages and counts are shown in the diagram.
Dichotomy between desired and actual mobility

Mobility data Liesing

- Modal split of individual motorized traffic and motorization are high
- Car-centred mobility in daily trips (45% to work and for daily shopping)

Mobility orientations survey and identified lifestyle types

- The connection to public transport is most important
- Judgement of individual motorized mobility is significantly below
- Negative image due to traffic and high transit mobility
- Multi-modality of mobility orientations
Actual versus desired mobility

- Criticism on connections from east to west
- Accessibility advantage of car
- PT desired for tangential connections
- Missing alternatives for mobility

This analysis shows planners

- Infrastructural constraints
- De-facto mobility and room for change
Complex relationships between lifestyle, social factors, location and mobility

- Analysis of the identified clusters showed
  - Relationships between personal and household characteristics, housing location, availability of green areas, availability of transport modes and the chosen lifestyle
  - The decision on the place of residence and the possibility and desire to own certain private goods is influenced by socio-economic factors and the stage of life
  - The location within the city on the other hand determines the availability and accessibility of public infrastructure
  - This influences freedom of choice of transport mode
Modal choice for daily and leisure trips

- A mixture of lifestyle, social factors and location factors impacts mode choice
- Trip purpose (daily trip or leisure trip), related destination and accessibility constraints form the decision
- Survey results:
  - Picture of multi-modality regarding mobility orientations
  - For trips to work and training as well as for shopping for daily needs opposing reality
  - Factors location, accessibility and travel time emerge
  - Modal split for leisure trips better represents the multi-modal mobility orientations: The share of trips done by car is lower
  - In this case lifestyle overlays and stratifies the influence of locational factors
Mobility chains and multi-modality

Woman / 40 years old
Mr. P. combines city train and tram to get to her workplace in Favoriten. Alternatively, she uses the longer, but more comfortable connection by bus. Sports and shopping activities are done in the neighborhood.

"The fastest way to work is by city train. Sadly, the intervals at rush hour are often very long and trains are often totally overcrowded."

Man / 35 years old
Mr. P. commutes to his workplace by car.

"My workplace is easy to reach by car. Of course I would sometimes prefer to have less congestion. For art, culture and leisure I mostly use the metro to get into the city."

Girl / 13 years old
M. mostly uses her scooter for her way to school. In case of bad weather, she uses the bus. After school, she often attends music lessons. M. also does many other trips on foot. For example visiting her friends or walking the dog.

"I don’t like to walk in pitch-dark. There are also criminals out there. When it’s dark, I don’t use the bus line U6A, the bus stop of the S0A is closer."

Legend:
- Home
- School
- Office
- Friends
- Leisure
- Shopping
- On foot
- Car
- Metro
- Bike
- Tram
- Bus
- City train
- Change
- Round trip
Leisure orientation
Liesing

- Attractiveness of green space versus other infrastructure
- Leisure activities in the district
- Arts, culture, gastronomy in city centre
Thank you for your attention!

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