Creation of a Database for Delivery Journeys in Urban Centres

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Structure

1. Research Lab for Urban Transport (ReLUT)
2. Need for Action
3. Quantitative Data
4. Practical Approach: LastMileTram
1. Research Lab for Urban Transport (ReLUT)

Frankfurt University of Applied Sciences

- 15,000 students
- Research Focus: Mobility and Logistics
- Research Lab for Urban Transport
  focus on current and future challenges in the field of urban transport (goods & people)
1. Research Lab for Urban Transport (ReLUT)

Research focus

- Transport Planning
- Logistics
- Economics & Data Science
1. Research Lab for Urban Transport (ReLUT)

Research focus

- Interdisciplinary team (Transport Planning, Logistics, Economics, Law, ...)
- Focus on current and future challenges in the field of urban transport (goods & people)
- Development of economical and ecological solutions in the field of delivery traffic (especially: CEP sector, LastMile solutions)
1. Research Lab for Urban Transport (ReLUT)

Homepage

www.RelUT.de (German)  www.RelUT.net (English)
2. Need for Action

Impressions of Frankfurt/Main
2. Need for Action

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Impressions of Frankfurt/Main
2. Need for Action

Research Questions

• How comprehensive is the issue of commercial transport?

• What are promising approaches?
2. Need for Action

Amount of Shipments in the German CEP market

Shipment volume in the German CEP market [in mio. shipment], source: BIEK, KEP-Studie 2018, KE-Consult Marktanalyse
2. Need for Action

Just blame the CEP-market!?
3. Quantitative Data

Data base

example: Frankfurt city center (source: Frankfurt UAS)
3. Quantitative Data

Data base

Location of stopping and parking processes (n=1,077)

- Parking area: 40%
- Driving lane: 36%
- Sidewalk: 14%
- Loading yard: 8%
- Cycling infrastructure: 1%
- Bicycle parking lot: 1%

example: Frankfurt city center (source: Frankfurt UAS)
3. Quantitative Data

Data base

Location of stopping and parking processes
(n=1,077)

example: Frankfurt city center (source: Frankfurt UAS)
3. Quantitative Data

Data base

example: Frankfurt city center (source: Frankfurt UAS)
3. Quantitative Data

Data base

Temporal start of stopping and parking processes

example: Frankfurt city center (source: Frankfurt UAS)
3. Quantitative Data

Data base

example: Frankfurt city center (source: Frankfurt UAS)
4. Practical Approach: LastMileTram
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**Basic requirements, transhipment: vehicle -> tram**
- close to and in the direction of a distribution center
- in the outskirts
- barrier-free station access

**Basic requirements, transhipment: tram -> cargo bike**
- minimal longer stopping time of the tram
- Parking option for the cargo bike
- barrier-free station access
4. Practical Approach: LastMileTram
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Thank you for your attention!

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