

Results from the research project Interdependencies of Bicycle and Public Transport Use

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2 Important project results

- Cooperated marketing strategies for use of environmentally friendly modes
- Bicycle parking facilities
- Public bicycle rental and public transport
- Transportation of bicycles in public transport vehicles

3 Conclusion and Outlook

Idea of the project

Objective:

Increasing the share of the environmentally friendly modes through more multi- und intermodal choice of transport mode

Key issues of the project:

Interdependencies of bicycle and public transport use

Involved partners:

Cities,
Municipalities

User of transport
systems

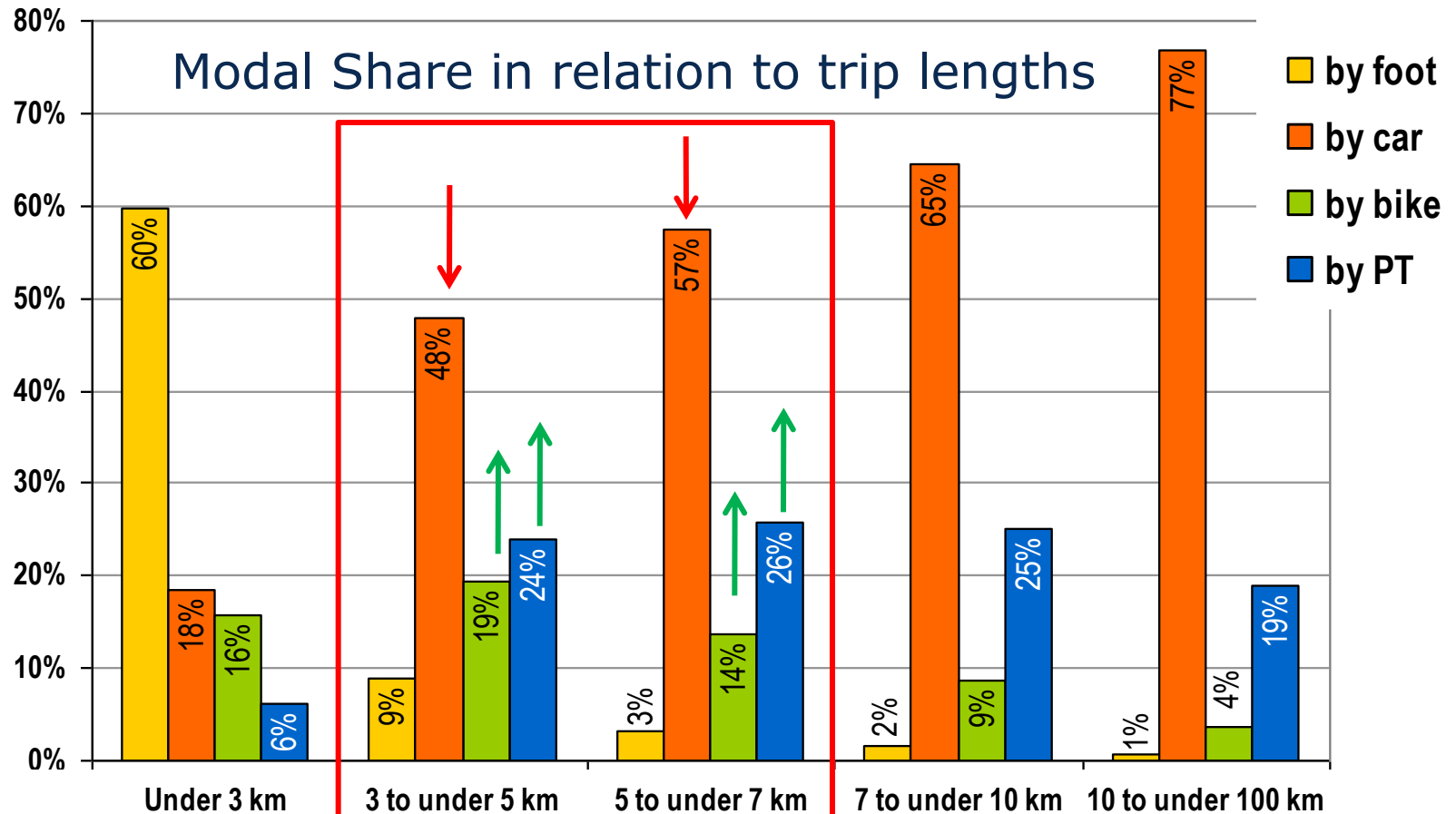
Operators,
Transport
companies

Organisational Structure

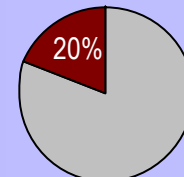
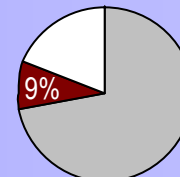
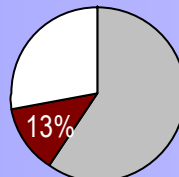
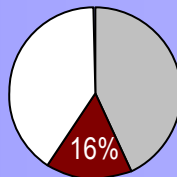
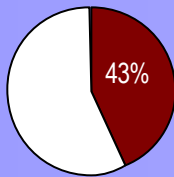
Funded by:	Federal Ministry of Transport, Building and Urban Affairs (BMVBS)
Contracting entity:	City of Dresden (LH DD)
Research partner:	Technische Universität Dresden, Chair of Transport and Infrastructure Planning (vip)
Project partners:	Dresdener Verkehrsbetriebe AG (DVB) Verkehrsverbund Oberelbe GmbH (VVO)
Participating cities:	Berlin, Chemnitz, Dresden, Leipzig, Rostock
Task force:	on local and national level
Duration:	May 2007 – July 2009



Analysis results



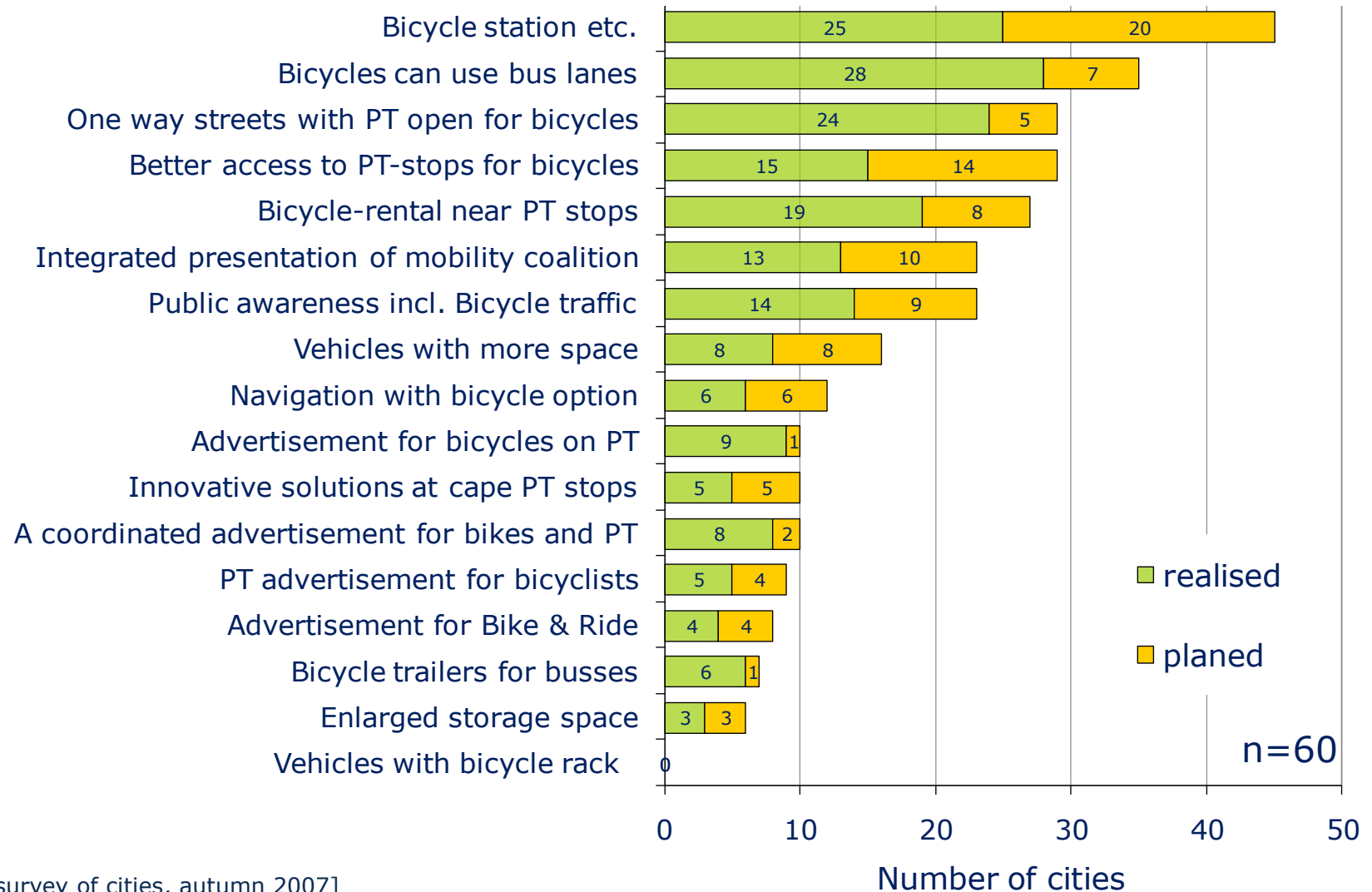
Share trips with
this trip length
in all trips



[Source :TUD vip, SrV 2003]

Presently realised and planned measures of cities concerning public transport and bicycle use

Measures of the cities for cooperation between PT and bicycle



[Source : vip, survey of cities, autumn 2007]

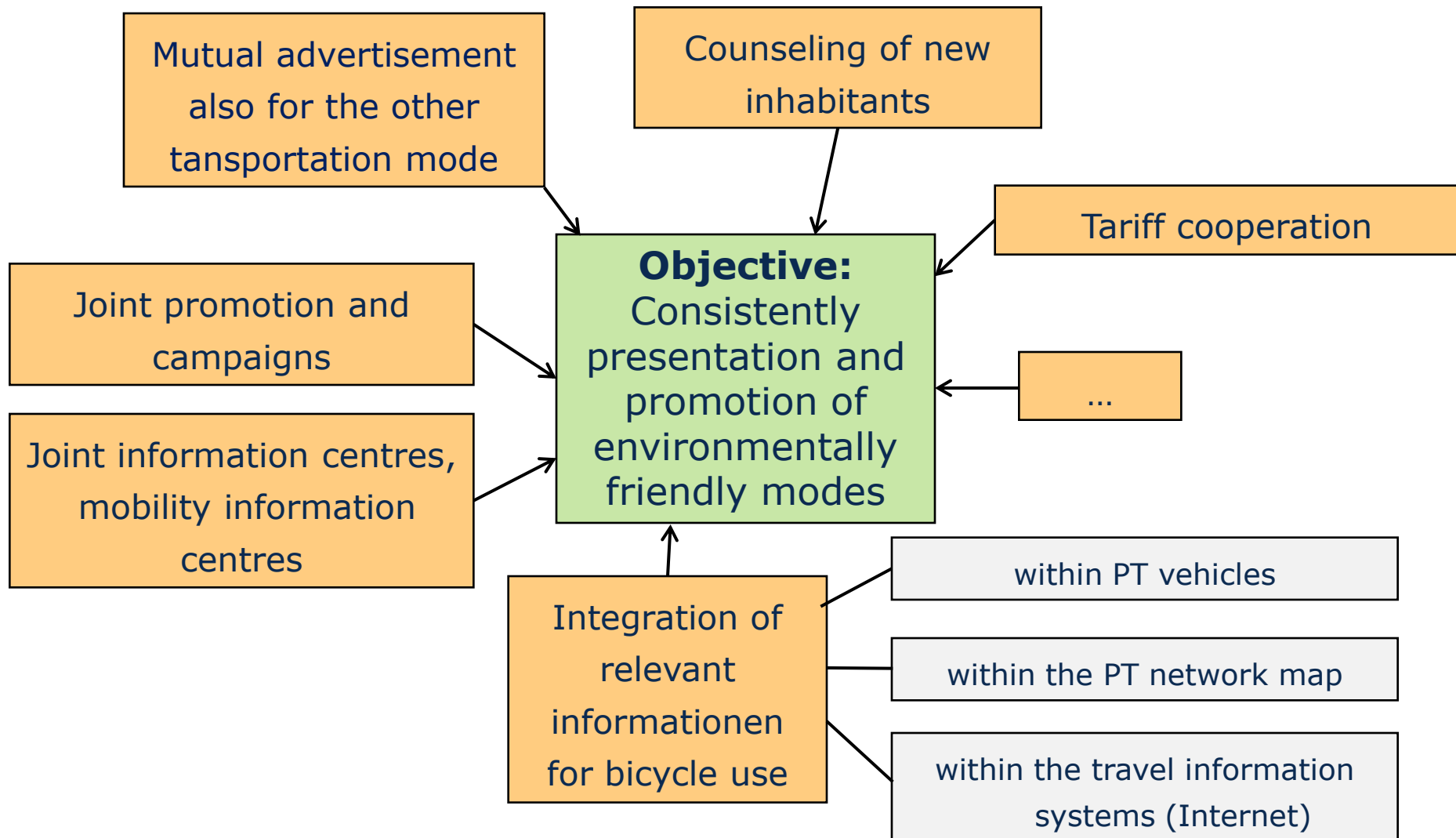
Key issues of the project

- Joint marketing strategies for use of environmentally friendly modes
- Bike and ride facilities
- Bicycle parking facilities
- Transportation of bicycles in public transport vehicles
- Public bicycles schemes and public transport
- Bicycle traffic (cycle lanes) around stops on roads with limited space
- Shared use of road lanes by bicycles and public transport vehicles (separate bus lanes, one-way streets)



[Source: Selfmade pictures, TUD vip]

Joint marketing strategies for use of environmentally friendly modes



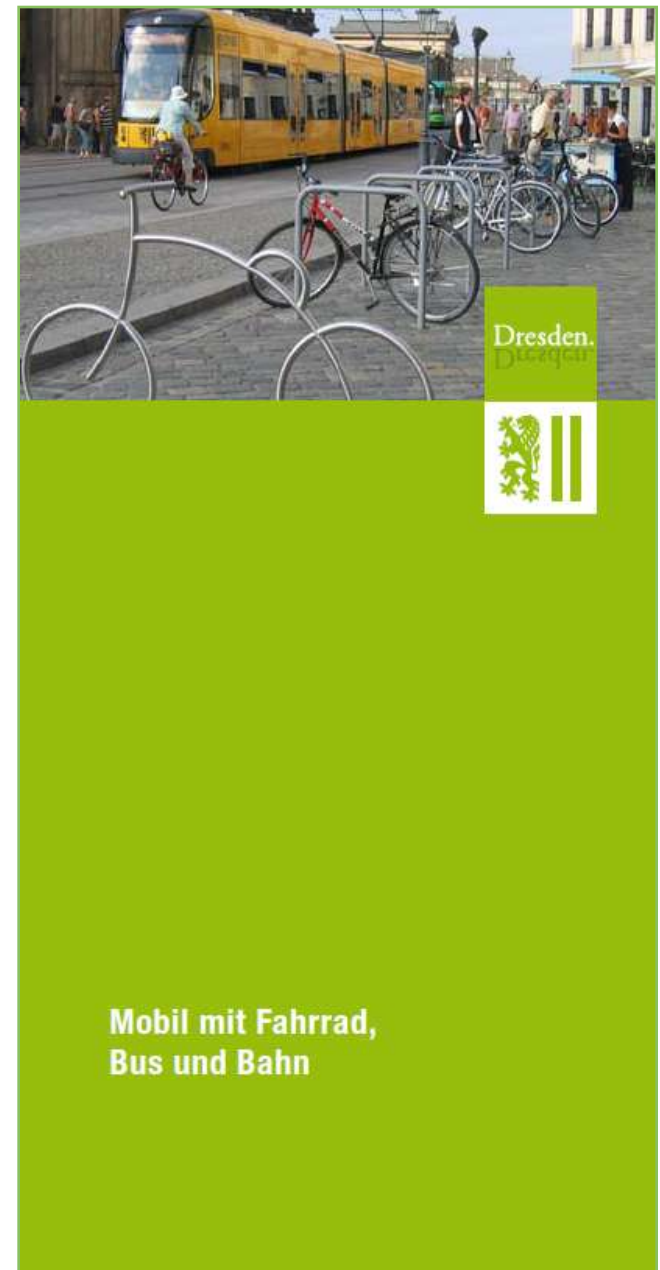
Example in Dresden: Leaflet „Mobil mit Fahrrad, Bus und Bahn“

Target group: User of transport systems

Content:

- Information about Bike&Ride
- Information about transportation of bicycles in PT vehicles
- Foretaste of what is to come concerning bicycle and PT use
 - Public bicycles schemes
 - bicycle parking facilities
- Facts about bicycle and PT use in Dresden

Spreading: Citizens registration office, mobility information centres



Bicycle parking facilities

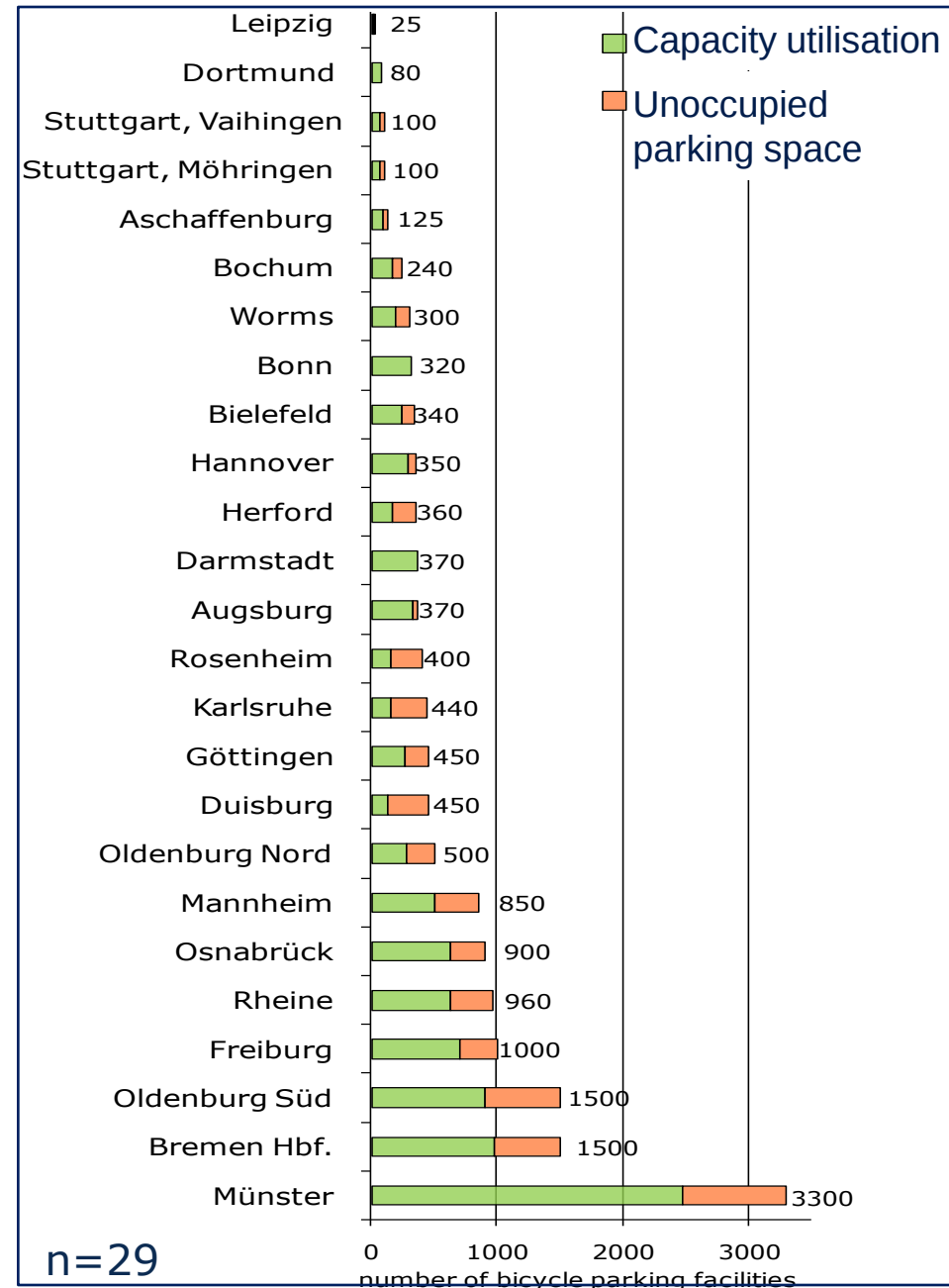
Content of exploration:

Investigation and surveys of municipalities in Germany with bicycle parking facilities

Important project results:

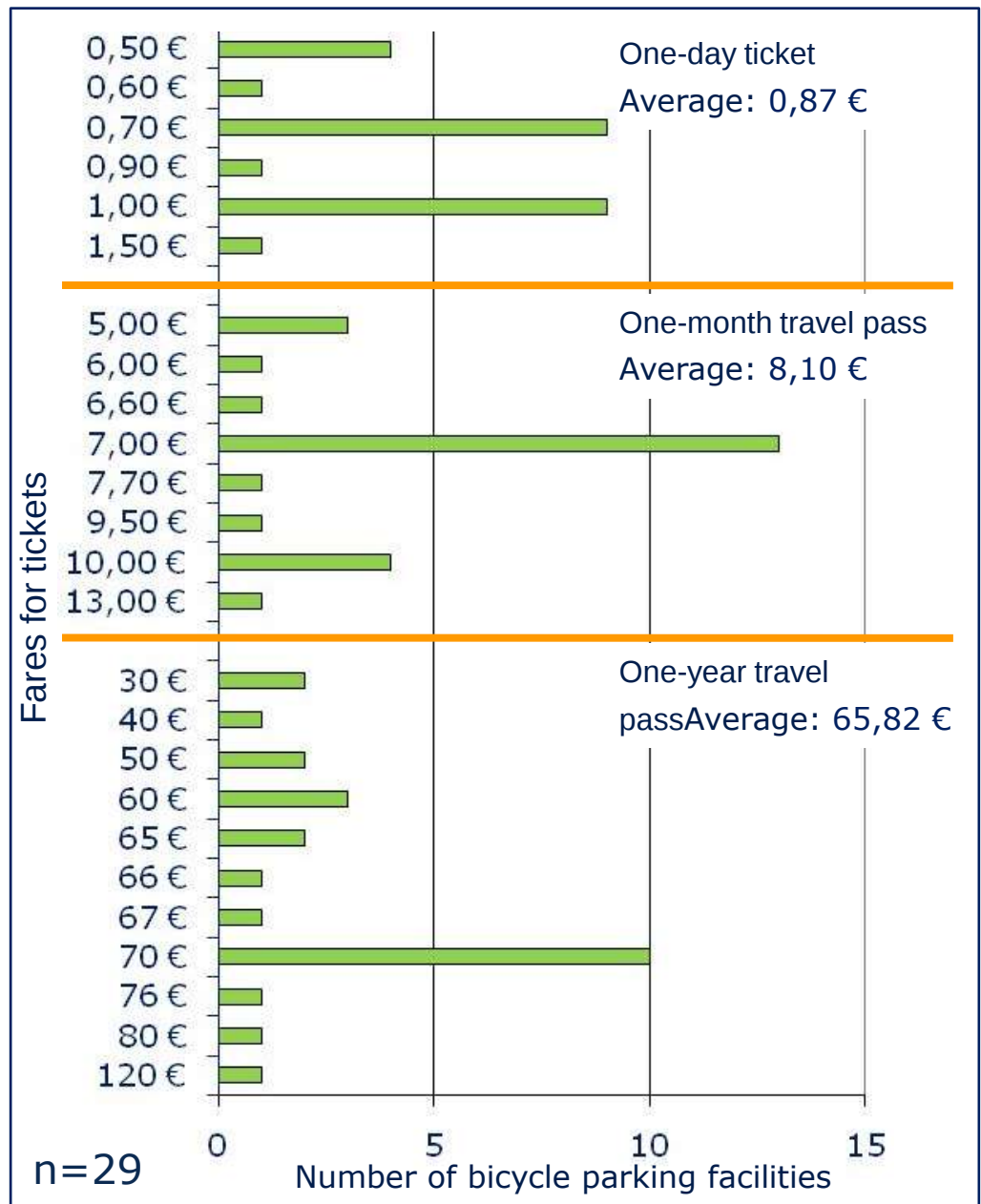
Capacity and
occupancy of bicycle
parking facilities in
Germany

[Source : Zürner, SA, TUD vip, 2009]



Bicycle parking facilities

Tariff structures



[Source : Zürner, SA, TUD vip, 2009]

Bicycle parking facilities

Conclusions und Recommendations:

- NRW is benchmark in Germany
- Facilities are mostly within 60 m (max. 150 m) from PT-station
- Access 24/7 by automated system
- Storing position: two-story-parking
- Tariff: 0,70 €/d, 7 €/m, 70 €/y
- Cooperation with german rail provider



[Quelle: Radstation Augsburg,
<http://www.radstation-augsburg.de>, 2009]

Public bicycle rentals and public transport

Content of exploration:

- Discription and analysis of existing systems
- Questioning of operators and municipalities
- Specific attention is given to existing cooperations between public bicycle rentals and public transport

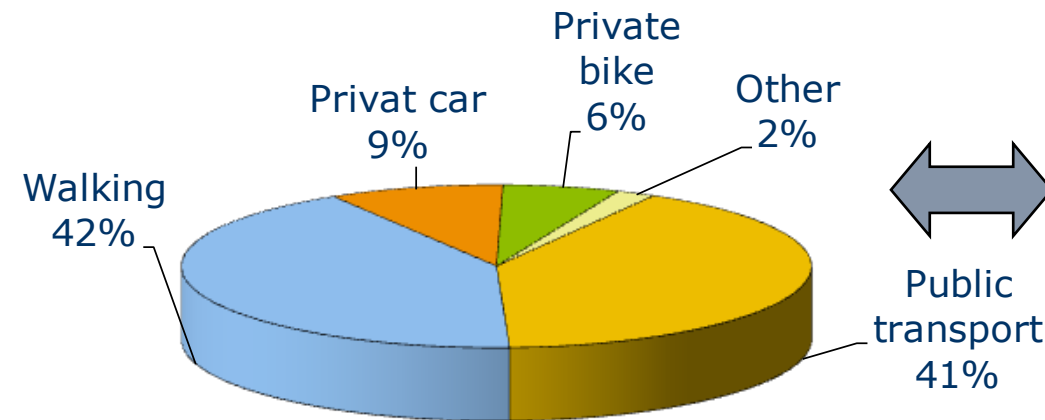
Important results:

e.g Lyon:

Witch mode would you have used instead of a public bicycle for this trip?

But:

- Mostly short, urban trips
- Many intermodal trips Bike/PT
- High percentage of seasonal tickets
- Casual PT user account for an increase of PT trips



n=990

[Source: Keolis Lyon / SYTRAL 2007]

Public bicycle rental and public transport

Conclusions und Recommendations:

- Currently very early stage of development in Germany
- So far only marginal cooperations with public transport providers
- Public bicycle schemes should be considered to be a part of public transport
- Shows parallels to Carsharing
- Integrated measures are required for
 - a) Conjoint marketing
 - b) Combined tariffs
 - c) Location-optimisation of bike rental stations



[Quelle: Flickr ,Berlín - Bicieta de la DB, 2009

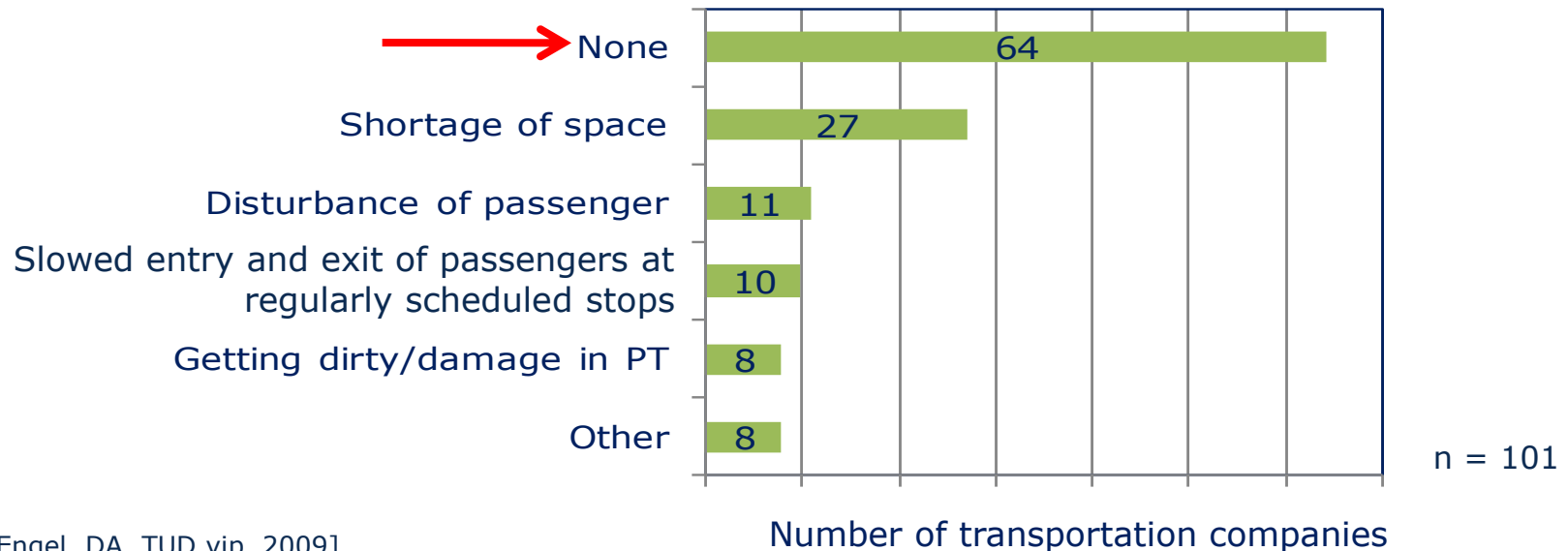
Transportation of bicycles in public transport vehicles

Content of exploration:

- Analysis of conflict potentials
- Solutions for capacity constraints
- Survey amongst providers of public transport

Important results:

Potential conflicts based on bike portage as stated by providers

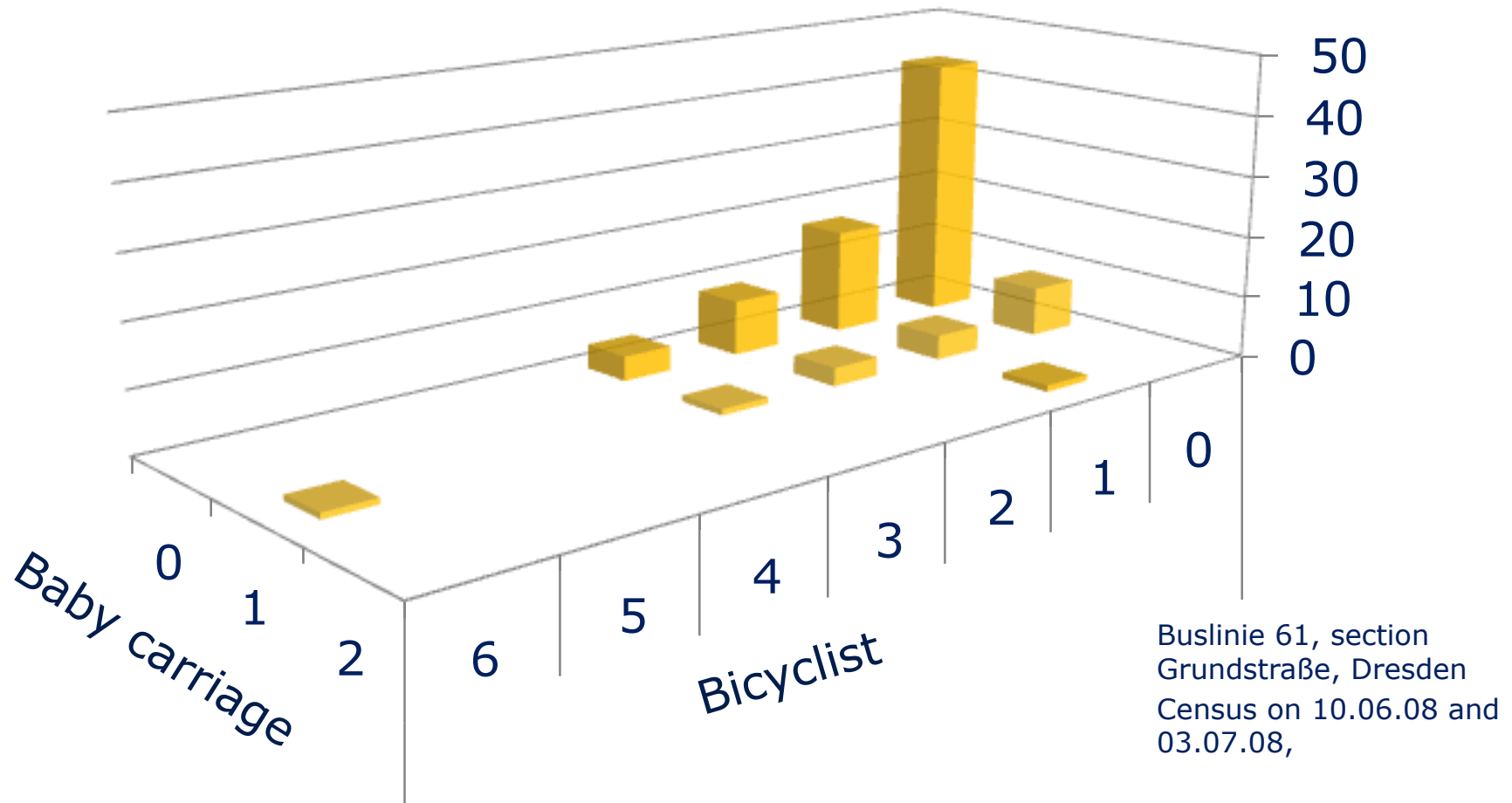


[Source: Engel, DA, TUD vip, 2009]

Transportation of bicycles in public transport vehicles

Questioning of bikers in public transport vehicles at incline areas

Observed frequency of portage combinations

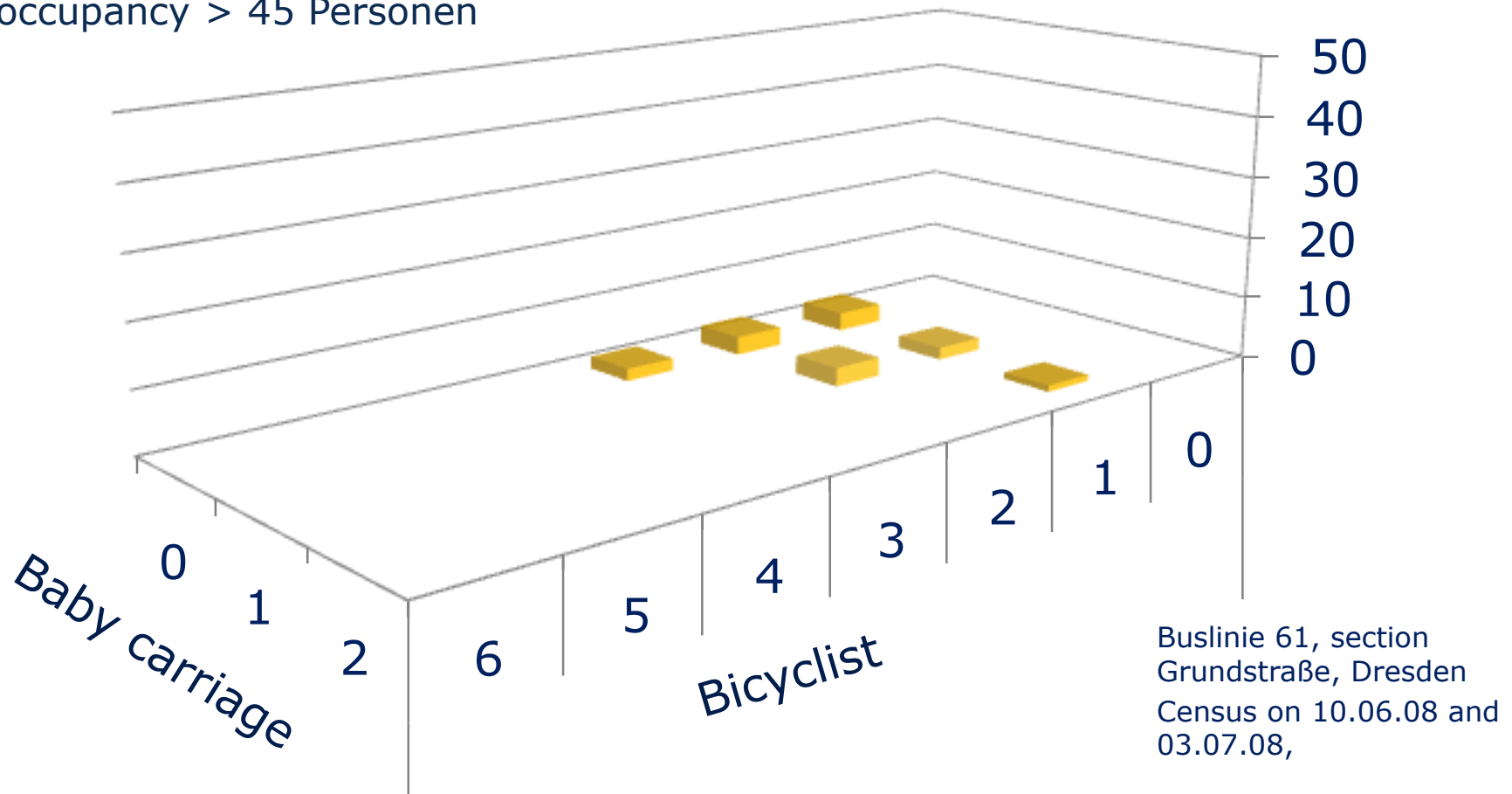


[Source: Weidner, PA, TUD vip/LH DD, 2008]

Transportation of bicycles in public transport vehicles

Questioning of bikers in public transport vehicles at incline areas

Observed frequency of portage combinations – Busses with occupancy > 45 Personen

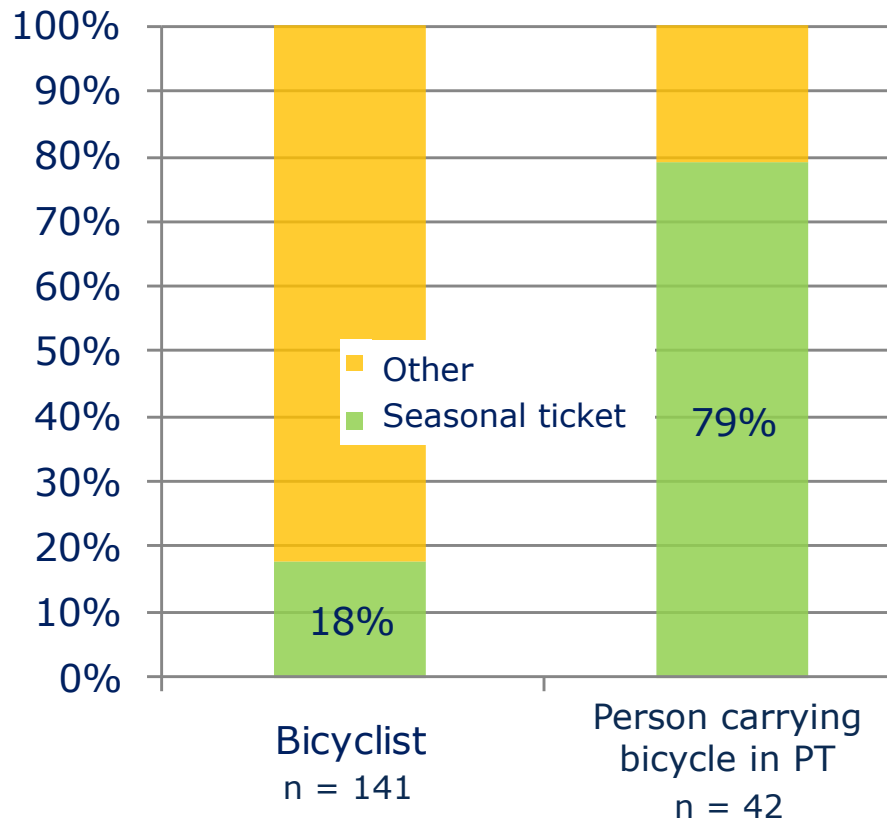


[Source : Weidner, PA, TUD vip/LH DD, 2008]

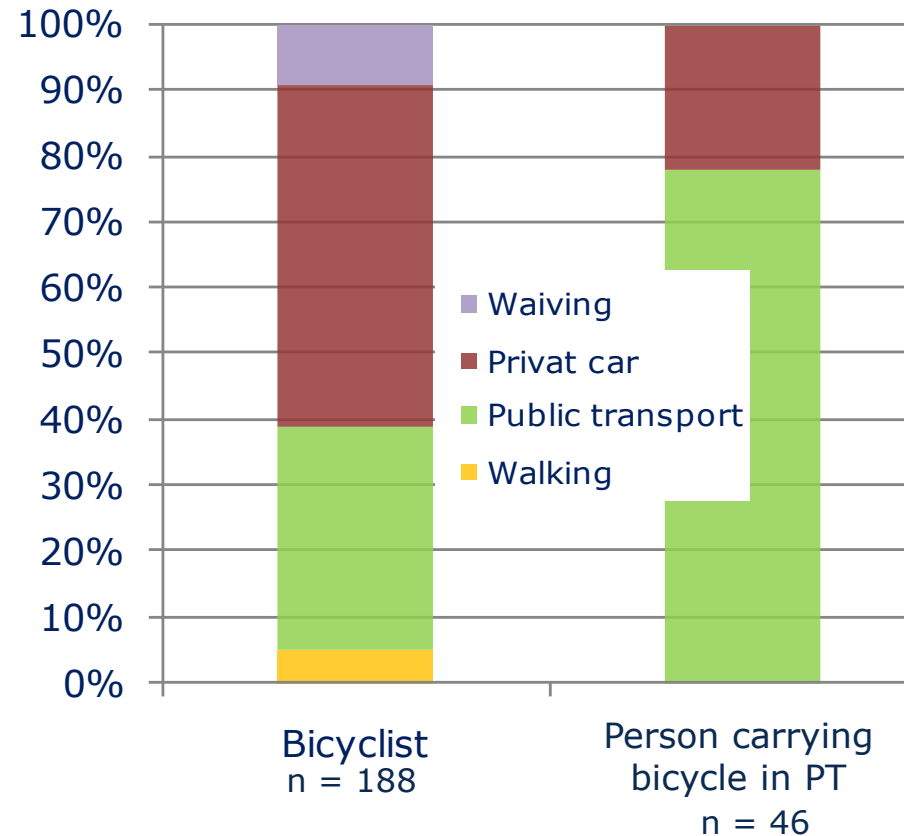
Transportation of bicycles in public transport vehicles

Questioning of bikers in public transport vehicles at incline areas

rate of seasonal ticket ownership



hypothetical alternative choice of mode at date of questioning



[Source: Weidner, PA , TUD vip, 2008]

Transportation of bicycles in public transport vehicles

Conclusions und Recommendations

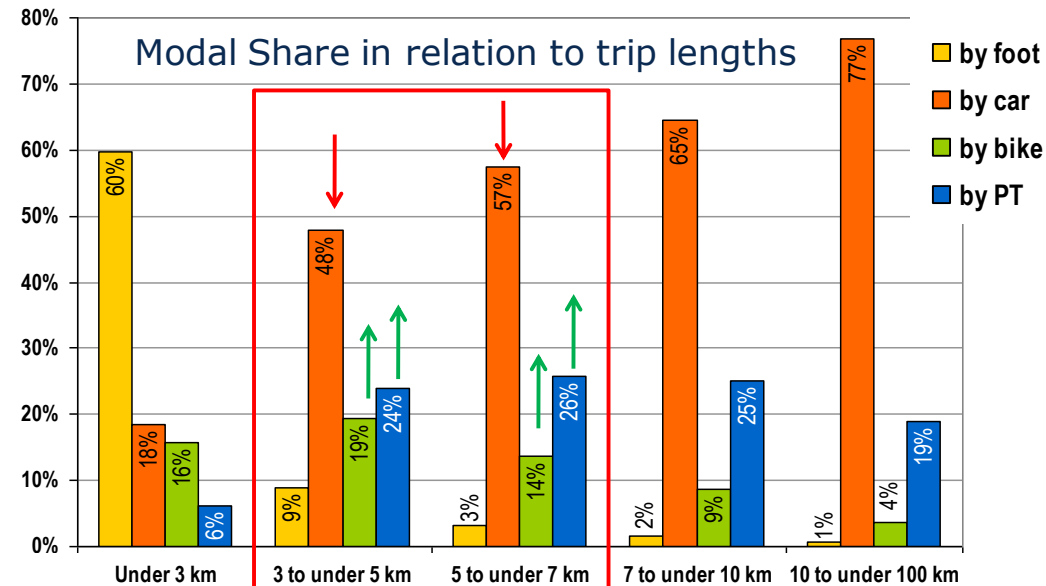
- Good service quality
- Conflicts where hardly detectable
- Promotion of the linkage between environmentally friendly modes
- Promotion and marketing of bike portage alternatives
- Intensified communication of bike portage rules
- Implementation of adequate measure in case of capacity constraints :
 - a) Ban of bikes in peak hours
 - b) Tariff measures
 - c) Capacity expansion



[Source: TUD vip, 2008]

Conclusions

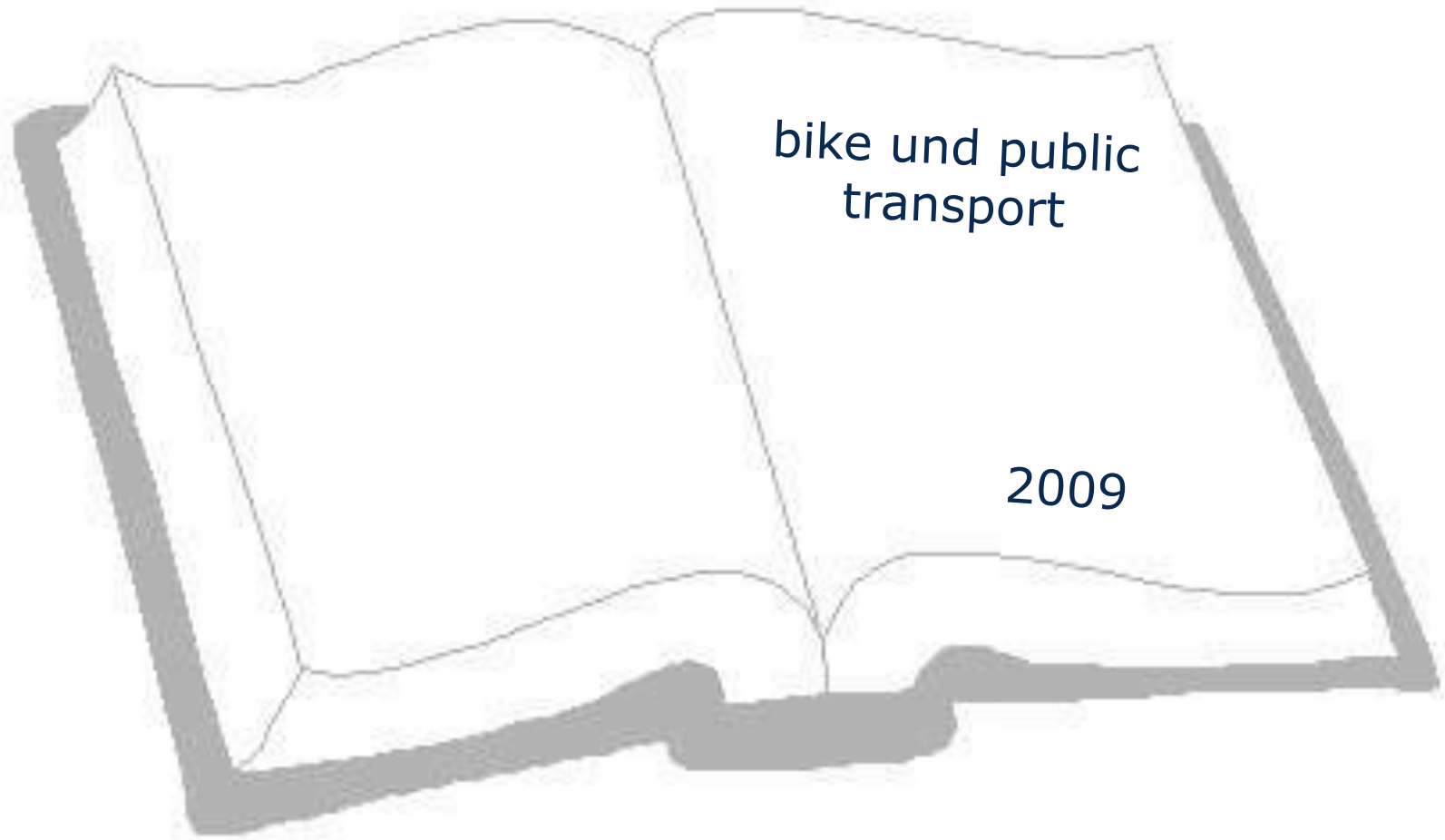
- Distance based potential for model-shift from car to environmentally friendly modes
- Combined and systematic approach to promote environmentally friendly modes
- Marketing measures have been proven especially effective in order to create synergistic effects
- Assumed conflicts between bike and public transport where not confirmed
- Further research is needed



[Source: TUD vip, SrV 2003]

Outlook

Development of a compendium





Thank you for your attention!