

Integrated planning for bicycle and public transport – new approaches in Dresden

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Jörn Marx

Landeshauptstadt
Dresden

Geschäftsbereich
Stadtentwicklung



Outline

1. Situation in Dresden
2. What is changing?
3. Support by BMVBS (German Federal Ministry for Transport, Construction and Urban Development)
4. New approaches for an integrated bicycle and public transport planning

Situation in Dresden

■ transport policy targets

- Secure mobility and reasonably organize commercial transport
- Protection of resources and reduction in costs (infrastructure and mobility costs)
- High urban quality of life/city of short distances
- Relieve residential areas from disturbing effects of traffic
- Effective use of existing transport infrastructure:
 - Continue motorized individual transport and give priority to public transport
 - Influence choice of means of transport in favour of public transport and bicycle traffic

→ Organize mobility, don't cope with traffic

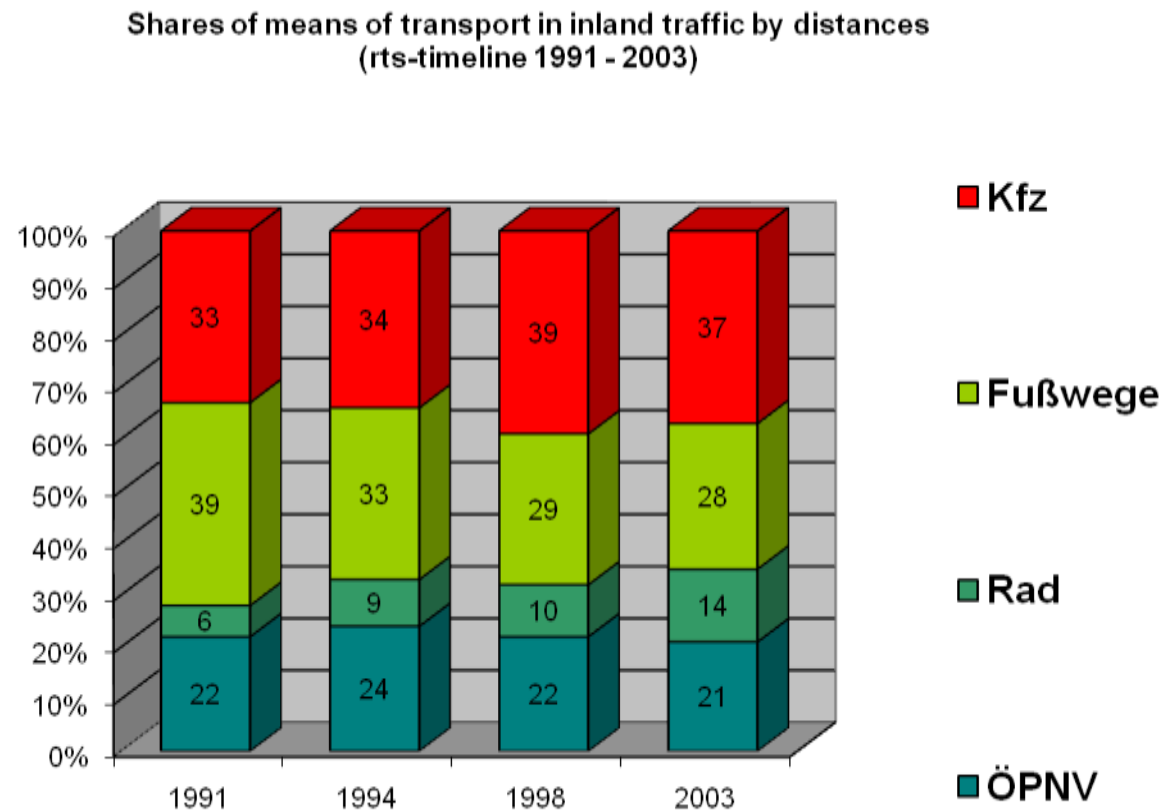
Situation in Dresden

- 508,000 inhabitants
- on average, every inhabitant covers constantly about 3.1 distances per day
- the Dresdeners need constantly about 1.25 h per day for their trips
- the average length of distances increased from 5.9 km (1991) to 6.8 km (2003)

Situation in Dresden

Mobility indexes from the system of representative transport surveys (RTS)

■ Which modes of transport do the Dresdeners use in their town?

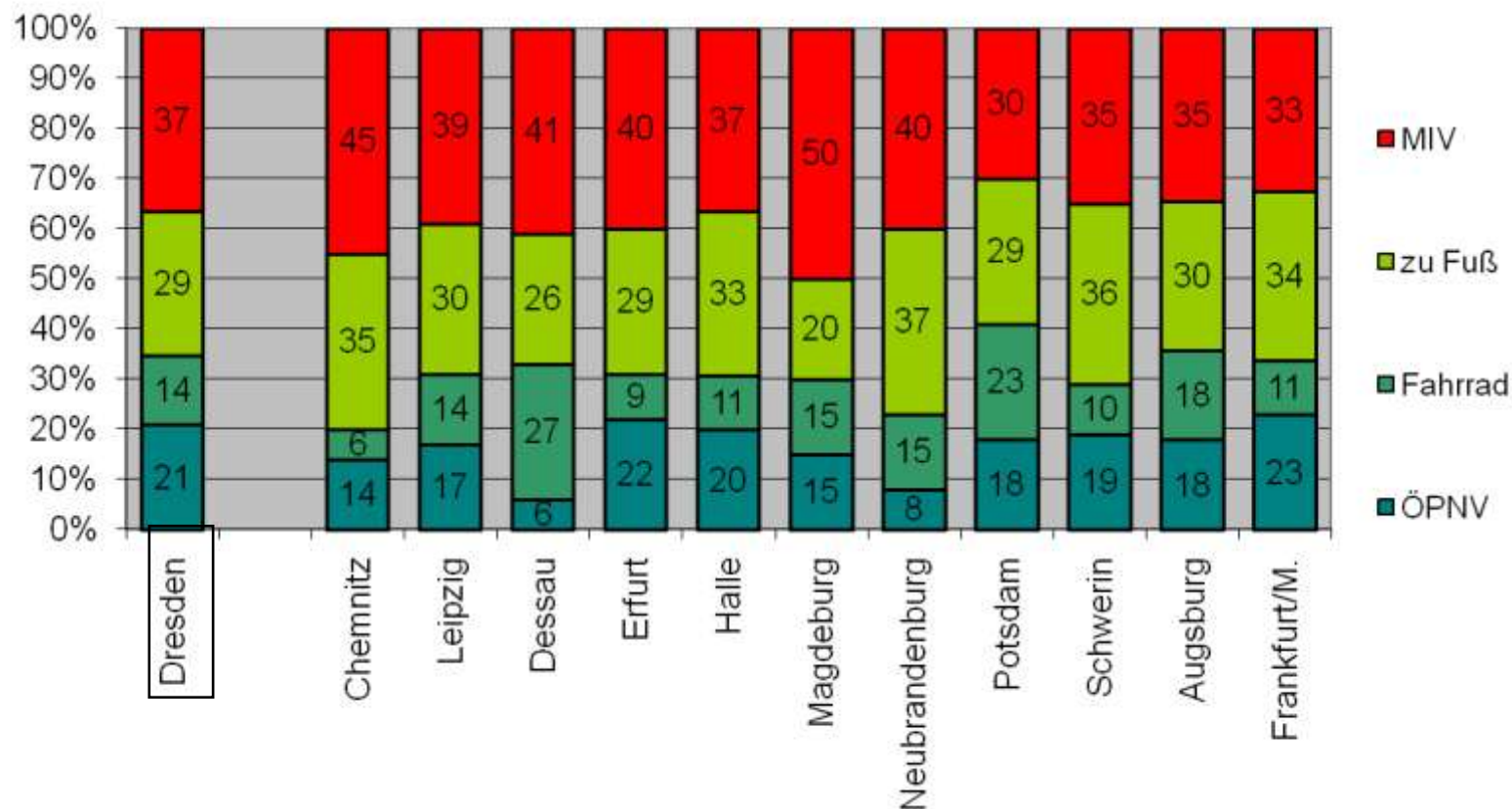


Situation in Dresden

Mobility indexes from the system of representative transport surveys (RTS)

Where is Dresden's position in a comparison of cities?

RTS 2003, choice of means of transport in inland traffic



Situation in Dresden

Mobility indexes from the system of representative transport surveys (RTS)

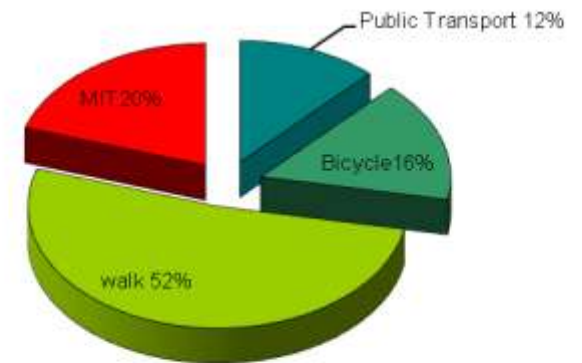
■ How many distances are covered in the local range?

- 46 % of all trips in Dresden are not longer than 3 km (figure from 2003).

- short distances are slightly declining, in 1994 55 % of all trips were within a range of up to 3 km, in 1998 only 50 %.

- However, the „Umweltverbund“ (ecological integration of traffic modes) is increasingly more often used for short trips.

Modal split for distances up to 3 km (SrT 2003)



Situation in Dresden

Mobility indexes from the system of representative transport surveys (RTS)

■ Motorization

- 50 % of all Dresden households have a motorcar
- 12.5 % have a number of motorcars
- 37.5 % of all Dresden households live without a motorcar

■ Is every car used every day?

- no, not quite 2/3 of all motorcars are only used every day

■ Bicycle ownership

- almost double as high as car ownership

What is changing?

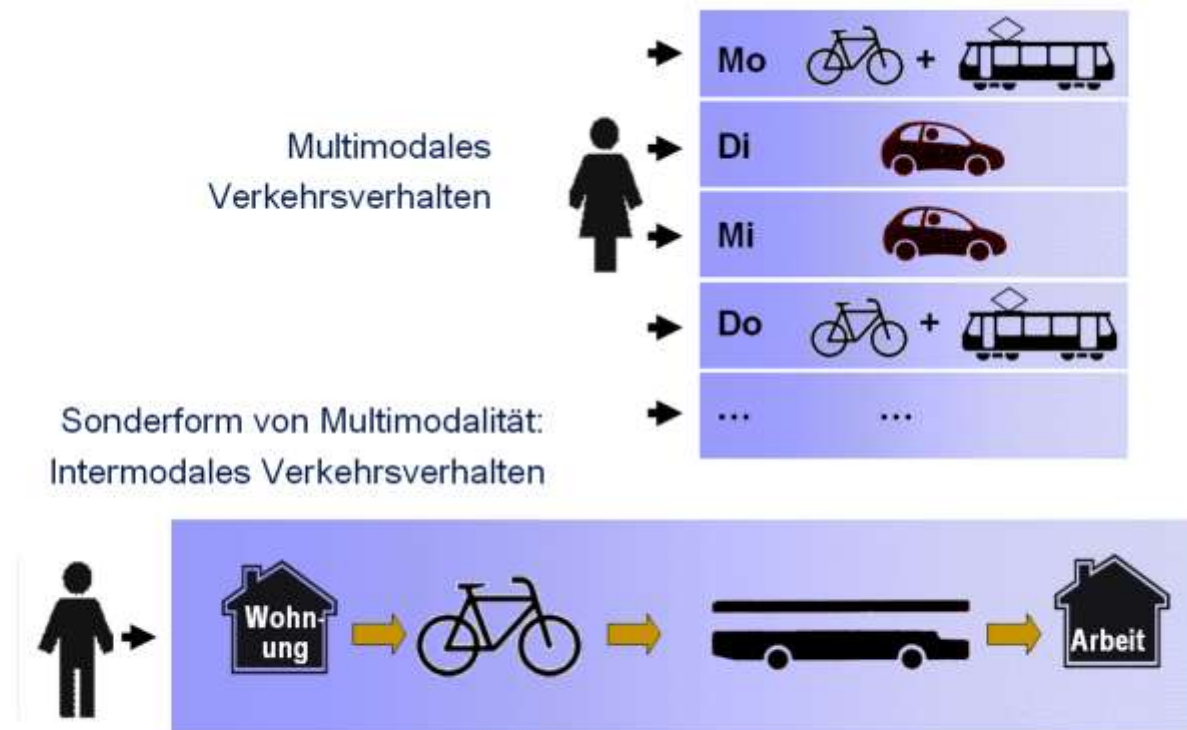
■ Changes in traffic behaviour:

- increasing share of bicycle traffic in leisure traffic and especially in everyday traffic
- increasing transportation of bicycles by public means of transport
in public rail transport/suburban trains in one year by up to 30 %
- changed behaviour:
less „confirmed“ users of means of transport, but more often more flexible choice of means of transport
→ more often inter- and multimodal behaviour
- new fields of conflict → also bicycle – public transport

→ Question and challenge: How can bicycle traffic and public transport be specifically promoted in a coordinated way?

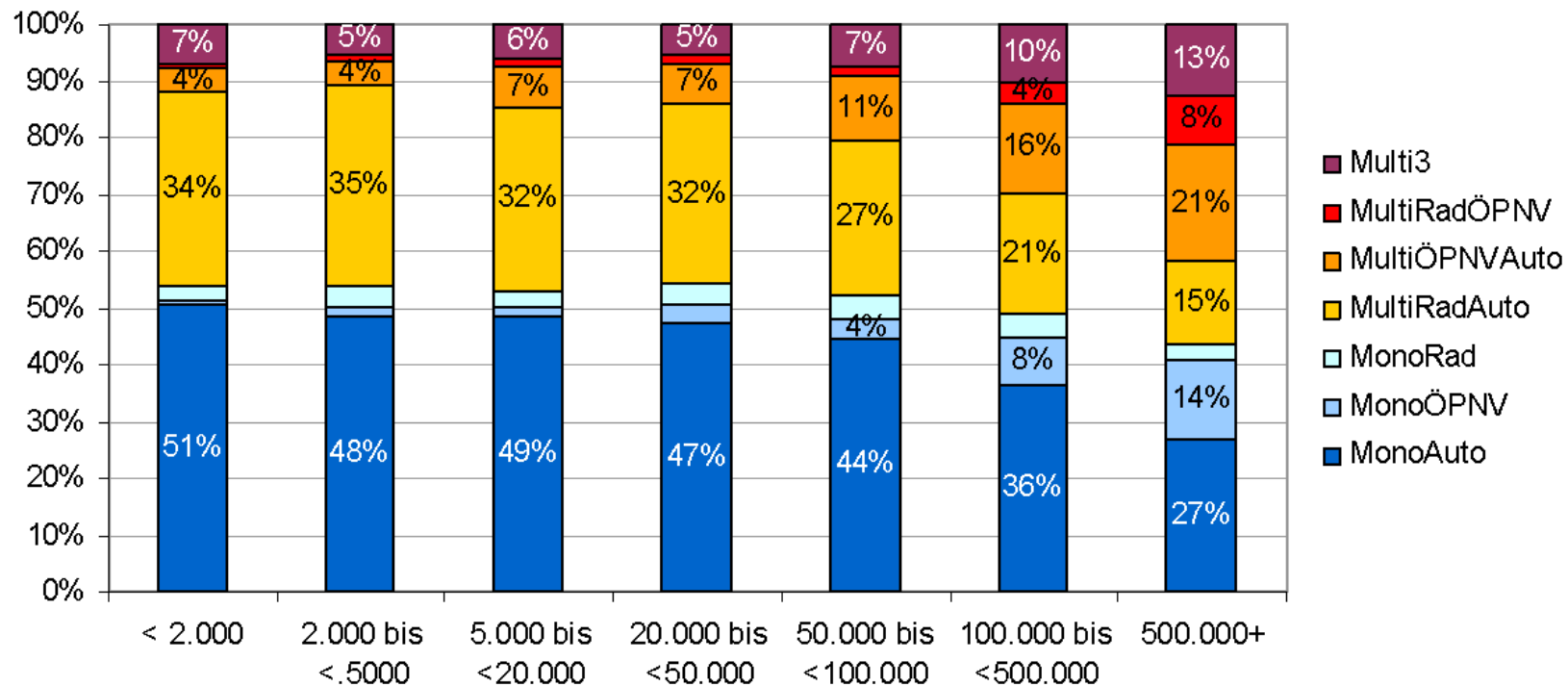
What is changing?

■ multimodal traffic behaviour



What is changing?

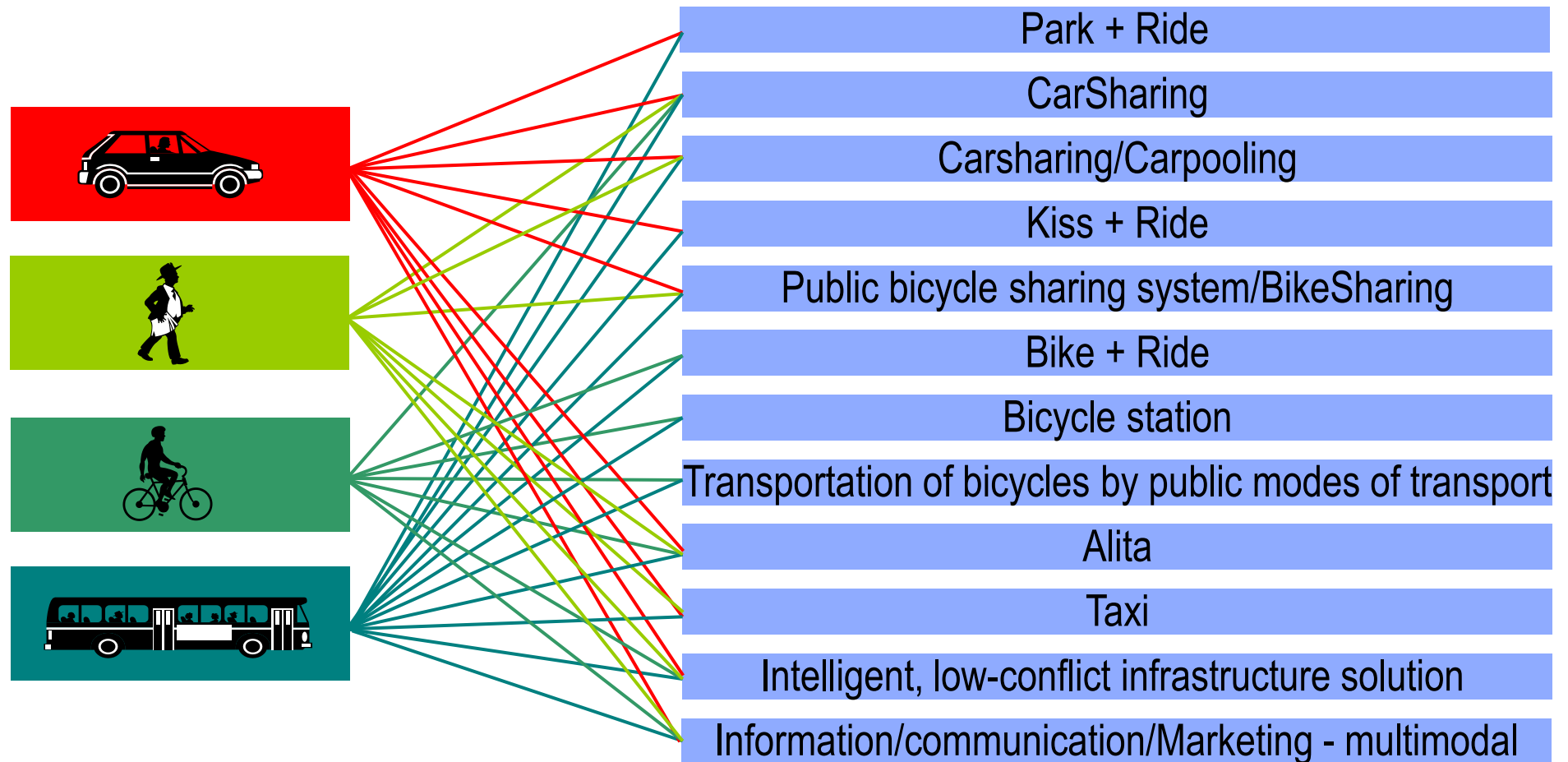
Evaluation „Mobility in Germany“ MiG



in cities > 500,000 inhabitants there are more multimodal than monomodal road users

What is changing?

■ Possibilities of using modes of transport increase



Support by BMVBS (German Federal Ministry for Transport, Construction and Urban Development)

■ Research project „Interdependencies between bicycle and public transport use. Analyses, strategies and measures of an integrated promotion in cities“

- with a comprehensive scientific study and recommendations for strategies and measures for cities
- joint project of LH Dresden, VVO, DVB and TU Dresden
- project term: May 2007 until July 2009
- financial support: EUR 192,034, own resources of city: EUR 33,120, own resources of VVO and DVB: EUR 10,000 each
- treatment by TU Dresden, Chair for Transport and Infrastructure Planning

Support by BMVBS (German Federal Ministry for Transport, Construction and Urban Development)

Bicycle - Public Transport

MIT and Car-Multimodal

Reduce conflicts

Create attractive offers,
integrated promotion

Get new user potentials

Monomodal car: 27 %
Multi public transport/car: 21 %
Multi bicycle/car: 15 %

63 %

according to MiG, cities >

500,000 inhabitants

Support by BMVBS (German Federal Ministry for Transport, Construction and Urban Development)

Measures/studies in Dresden

- Public bicycle sharing system
(local survey, more extensive study with proposals for Dresden)
- Transportation of bicycles by public means of transport on upward slopes
- B&R facilities:
 - Evaluation and monitoring of existing facilities
 - B&R concept for new facilities at tram stops
- Traffic control at bus boarders (analysis of planning for Dresden – Leipzig)
- Advertising campaigns/public relations work
- Bicycle stations (experience of other cities, appropriation for Dresden)

New approaches for an integrated planning: The Dresden Mobility Strategy

**Urban
development and
transport**

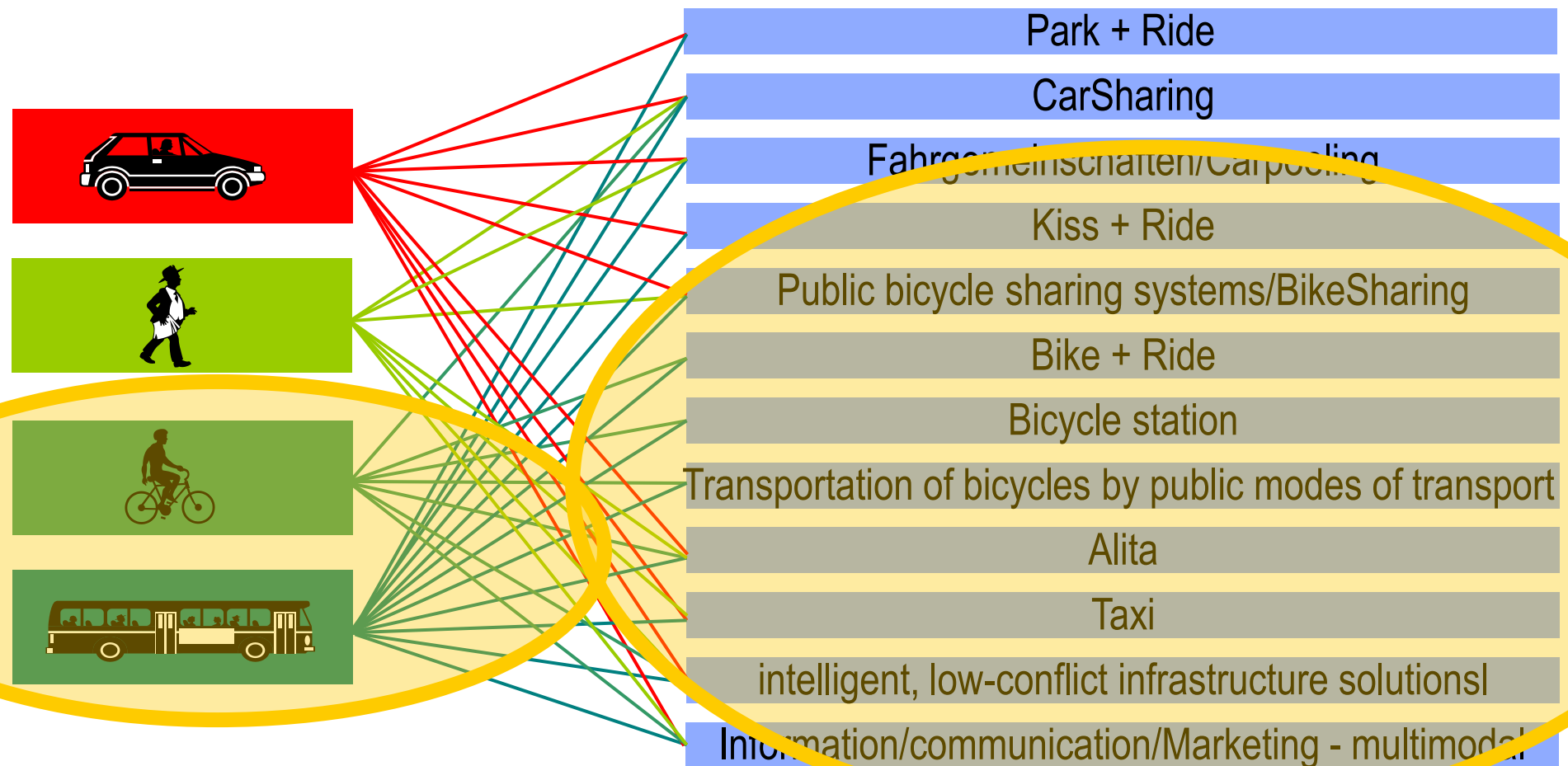
**Transport
infrastructure**

**Transport
management**

**Mobility
management**

New approaches for an integrated bicycle and public transport planning

■ Focus: stronger networking of modes of transport



New approaches for an integrated bicycle and public transport planning

■ Junctions - Bike + Ride

Extension of existing facilities and new construction of new facilities, in particular at tram and bus stops



Bundesministerium
für Verkehr, Bau
und Stadtentwicklung



verkehrs- und
infrastrukturplanung



Landeshauptstadt
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Stadtentwicklung

Dresden.
DIE STADT



New approaches for an integrated bicycle and public transport planning

■ Public bicycle sharing system

Study on the introduction of a bicycle sharing system

Costs (investments, fixed costs etc.), operator/agency, current contracts, financing, number of bicycles and stations/standard concept sharing conditions and tariffs, user groups, ...

New approaches for an integrated bicycle and public transport planning

■ Transportation of bicycles by public means of transport

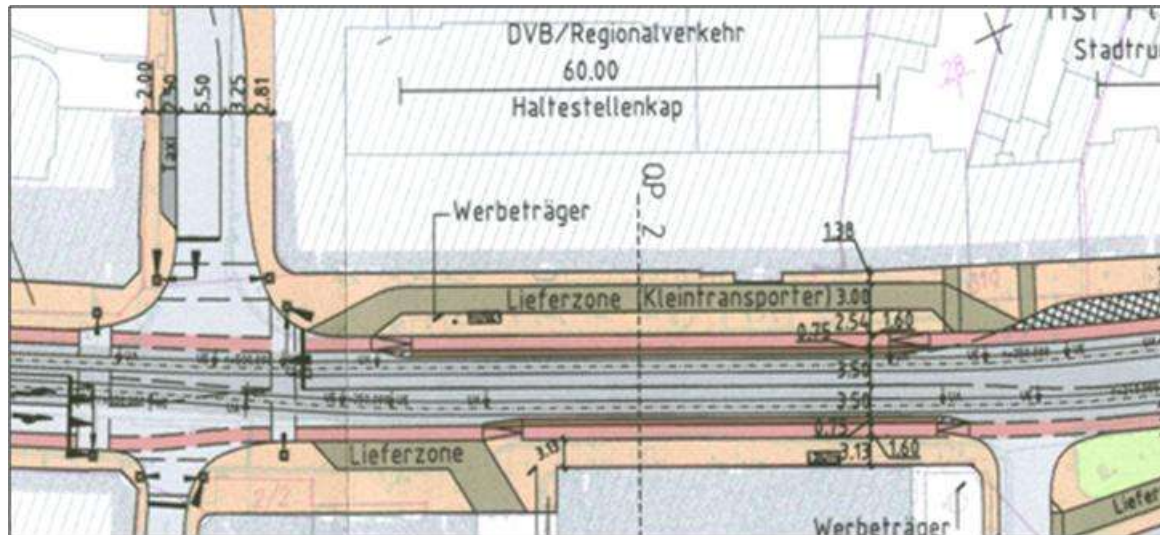
- Tariff determination, consideration, training of personnel
- Transportation of bicycles on upward slopes
- More Bike+Ride facilities



New approaches for an integrated bicycle and public transport planning

■ Bicycle traffic control at bus boarders

- Dresden solution: raised lane
- planned: raised cycle lane



New approaches for an integrated bicycle and public transport planning

■ Advertising campaign/public relations work

- Advertisement for Bike+Ride → leaflet
- Information on network of modes of transport shall be increasingly given, for instance by a new edition of a bicycle city map,....
- Also at and in public transport companies
-

New approaches for an integrated bicycle and public transport planning

■ Bicycle stations

- Studies on bicycle stations at the two railway stations of Dresden „Hauptbahnhof „ and „Neustädter Bahnhof“ have been made,
- the realization was not yet settled (rebuilding of railway stations, financing (no financial support by the Land like in North-Rhine-Westphalia), suitable operator model must still be found,...)

New approaches for an integrated planning



Landeshauptstadt
Dresden

Intermodale Verknüpfungspunkte

geplantes ÖPNV-Netz

Wichtige Verknüpfungspunkte

Verknüpfungspunkte an Eisenbahnstationen	Verknüpfungspunkte im einzeligen ÖPNV-Netz	
		Verknüpfungen mit bzw. innerhalb Straßenbahnnetz
		Verknüpfung mit bzw. zwischen Straßenbahn- und Busnetz
		Verknüpfung mit bzw. innerhalb Busnetz
		P + R-Anlage (Realisierung bis 2015)
		kombinierte B + R / P + R-Anlage (Realisierung bis 2015)
		B + R-Anlage (Realisierung bis 2015)

- Straßenbahn (geplantes Netz 2015)
- Bergbahn, Fähre
- Eisenbahn mit Station
- Eisenbahn Netzergänzung, Option
- Bus-Regionalverkehr

Intermodal junctions,,
planned public transport
network

New approaches for an integrated planning

■ Information and communication media facilitate multmodal behaviour very much

- Multi-media mobility portal of VVO
Infos via Internet, Terminals, SMS, WAP
- Cross-company passenger information at bus stops (real time)
- Future: VVO information via mobile phone



Abb. 1: Entwurf: Handy mit „VVO mobil“



Das hat nur der Schillergarten – den weltweit ersten Elektro-Fahrplan im Biergarten. Foto: S. Füssel





Contact: +49 351 488 4240, JMarx@dresden.de

Thank you very much for your attention!