Insights from the German National Travel Survey for an integrated Planning & Mobility Strategy

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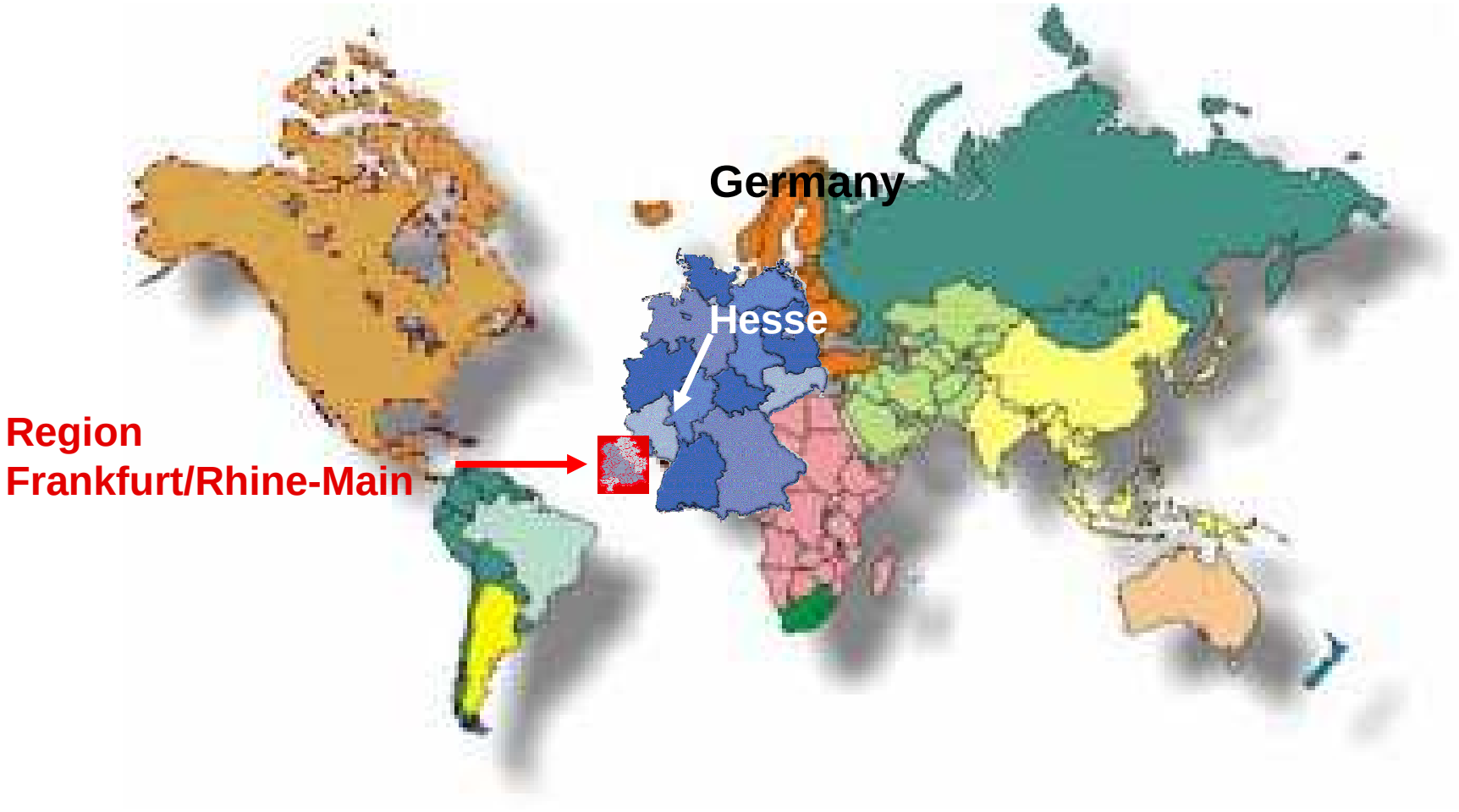
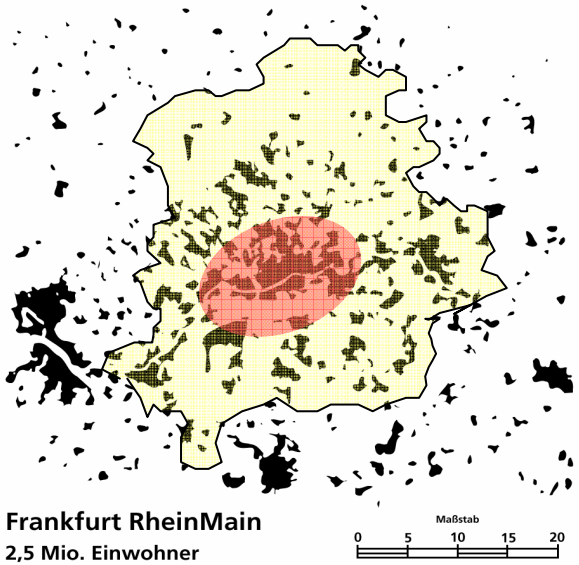
Structure of Presentation

1. Region‘s Characteristics
2. MiD: Scope & Method
3. Overall Results
4. Which Lessons for Sustainable Strategies
5. Consequences for Travel Demand Prediction
6. MiD: A Tool for Planning?

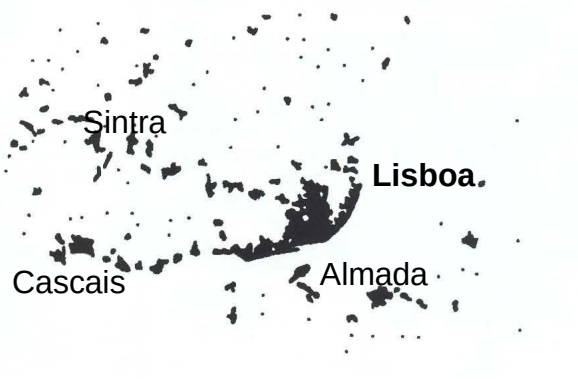
Location of Frankfurt/Rhine-Main



Comparison with European Agglomerations



Frankfurt RheinMain
2,5 Mio. Einwohner



Area Metropolitana de Lisboa
2.6 Mio. Inhabitants

- Population: 2.2 million *(Frankfurt+Offenbach 35 %)*
- Working places: 1.0 million *(Frankfurt+Offenbach 52 %)*
- Vehicles: 1.3 million *(Frankfurt+Offenbach 31 %)*
- Area: 2,459 km² *(Frankfurt+Offenbach 12 %)*

∑ 75 Member Municipalities

Survey Contents of ”Mobility in Germany” (MiD 2002)

Household *(selection)*

- Household size
- Vehicle ownership
- Living area
- Profile of household members
- Income
- Mobile phone availability
- Computer availability
- Internet access
- …

Person *(selection)*

- Age
- Sex
- Current situation
- Driving license
- Car availability *(general+day)*
- Bicycle availability *(general)*
- Season ticket *(general)*
- Public transport access
- Mode usage habits
- Accessibility of usual destinations
- Handicaps

Trip

- Purpose
- Mode of transport
- Distance
- Time/duration
- Destination *(if geo-coded)*
- Regular business trips
- Private business trips
- Escorting persons

Only
Persons > 13 years
interviewed

More about MiD: www.mid2002.de

Overall Results

Rhine-Main Figures

- 3,083 households
- 7,471 persons
- 26,440 trips
- 23,716 without regular business trips
- 86 % out of home
- Ø 3.2 trips
- Ø 3.7 trips/mobile person
- Ø 74 min. daily travel time
- Ø 28 km per day
  - 25 km core
  - 30 km surroundings

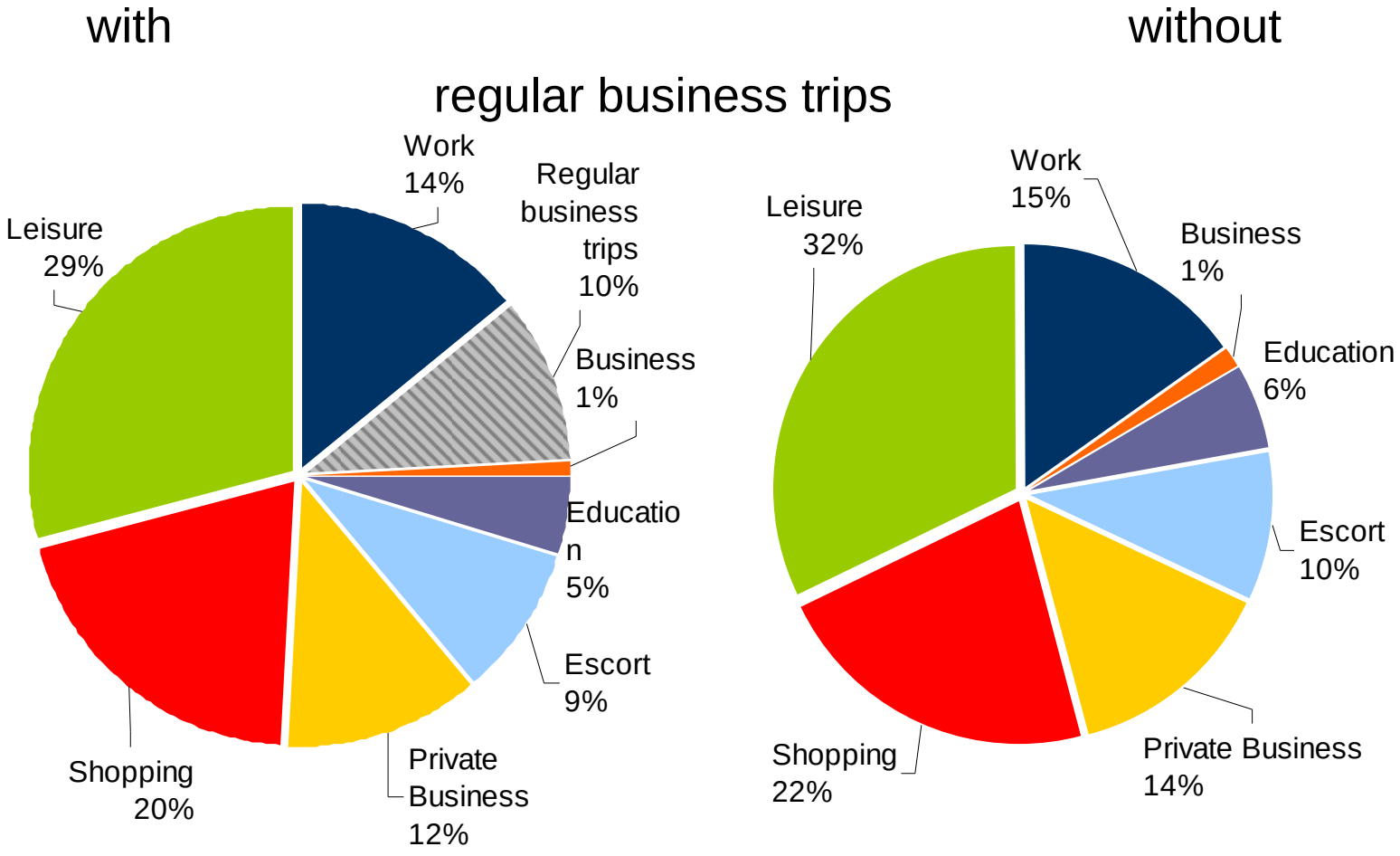
Respondents‘ Characteristics

	Rhine-Main	Core area	Surroundings
Household size		***Households (in %)***	
1	38	48	31
2	36	34	37
3+	27	19	32
Ø persons per household	2,1	1,8	2,2
Age		***Households (in %)***	
≤17	18	15	19
18 to 59	58	58	59
60+	25	27	23
Current situation		***All persons (in %)***	
working	52	51	54
student	9	18	9

Mobility Options

	Rhine-Main	Core area	Surroundings
Car ownership		***Households (in %)***	
without car	19	33	11
one car	56	54	56
two and more cars	25	13	33
Bicycle ownership		***Households (in %)***	
without bicycle	21	29	17
one bicycle	25	30	21
two and more bicycle	54	41	62
Public transport availability		***Persons over 13 years (in %)***	
living ≤ 1 km to rail stop	52	68	42
season ticket	22	31	16

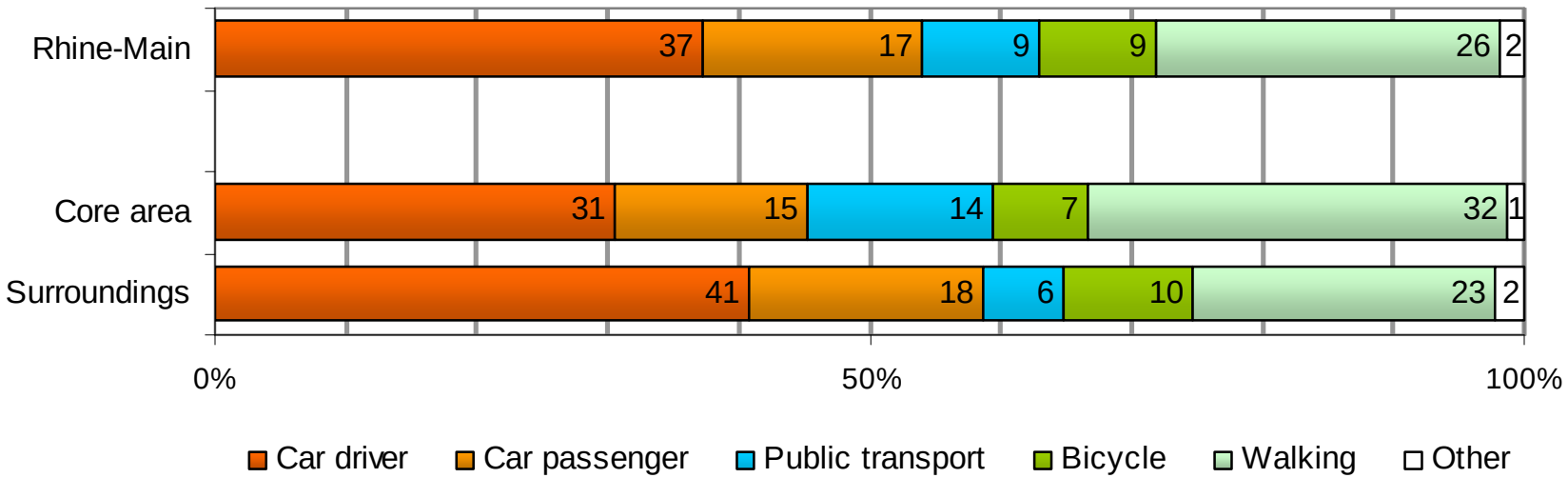
Distribution of Trips by Purpose



n = 26,440 resp. 23718 trips, Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

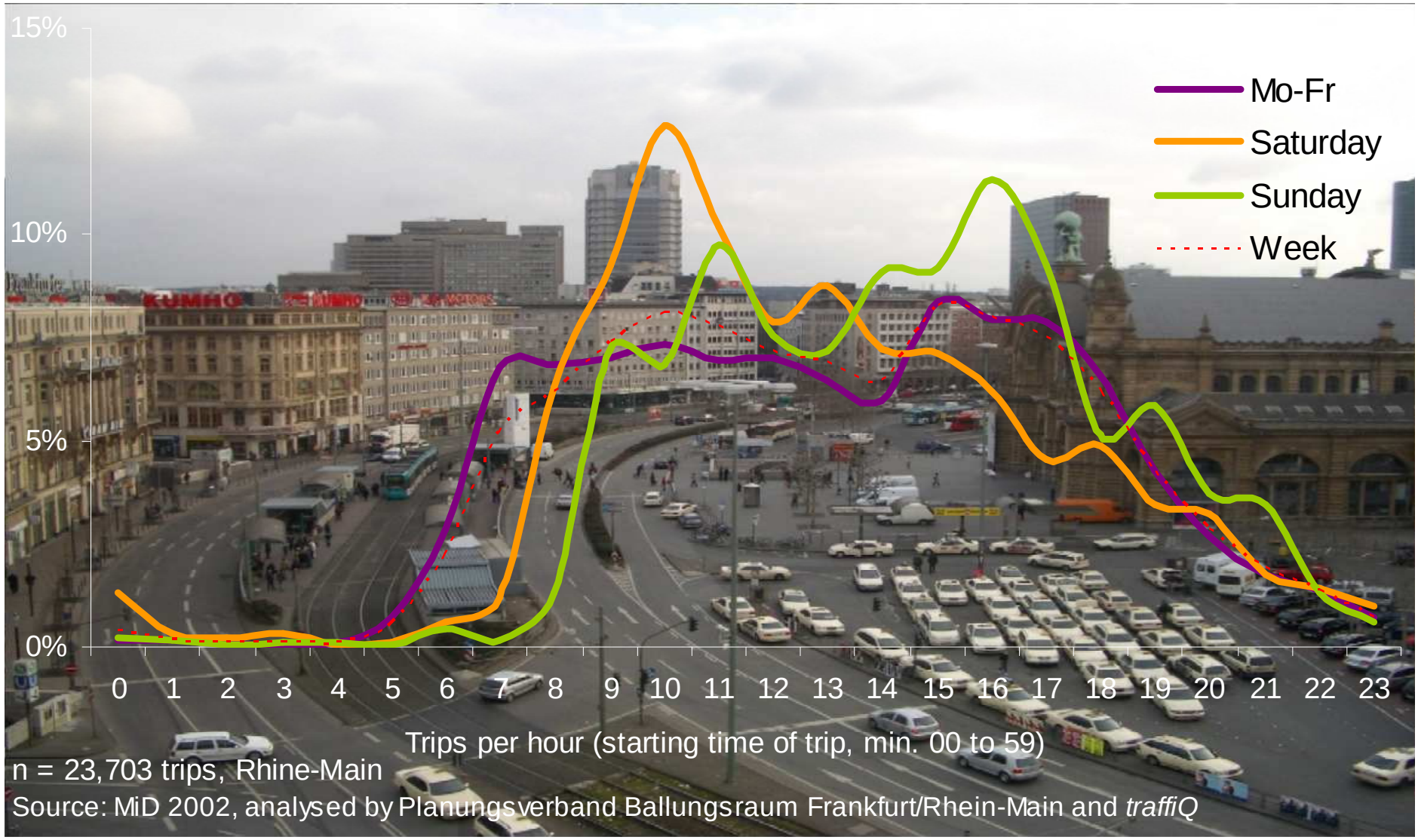
Overall Modal-Split



n = 23,716 trips, Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

The Region that never sleeps…?

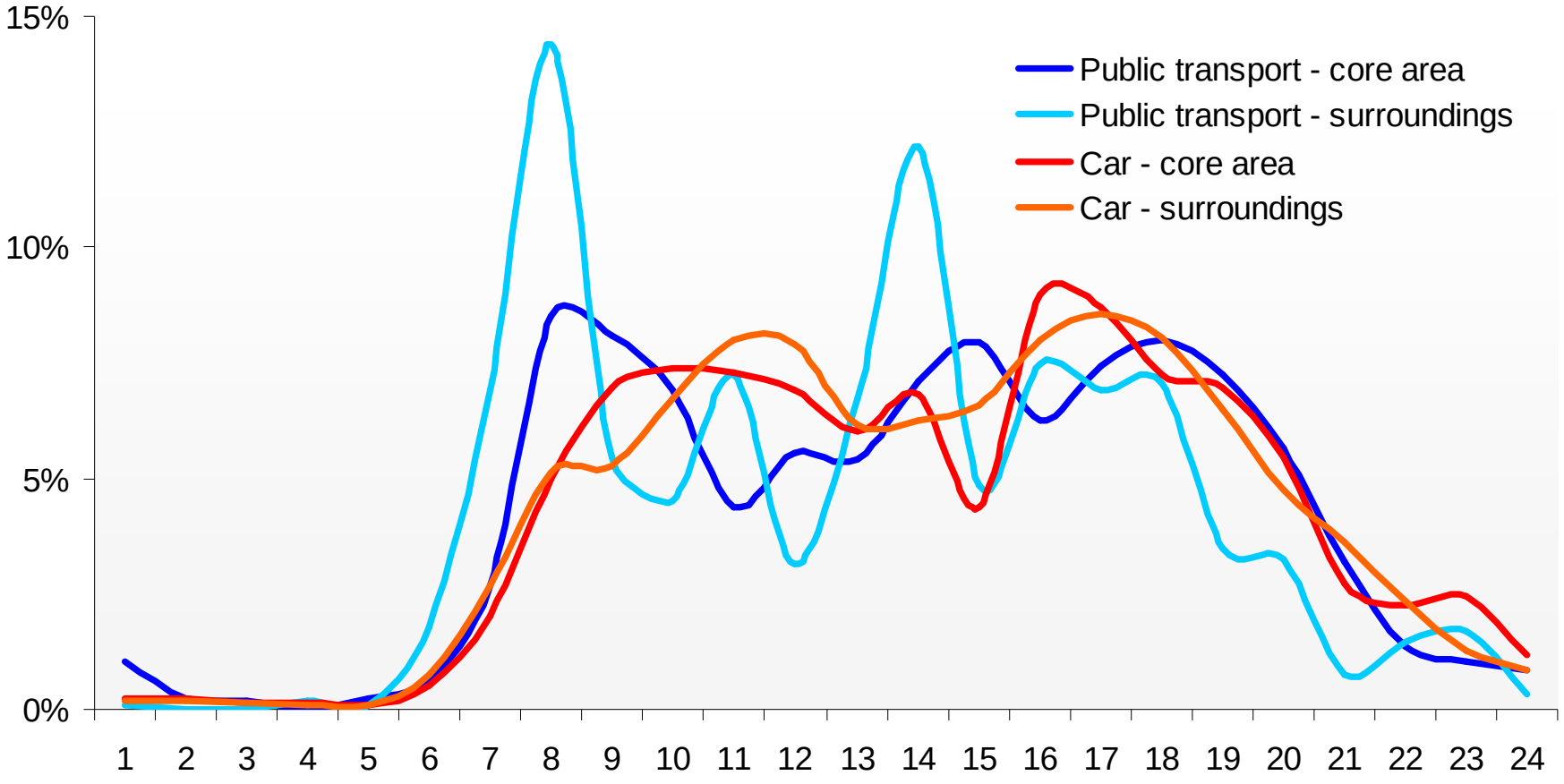


n = 23,703 trips, Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

Which Lessons for Sustainable Strategies

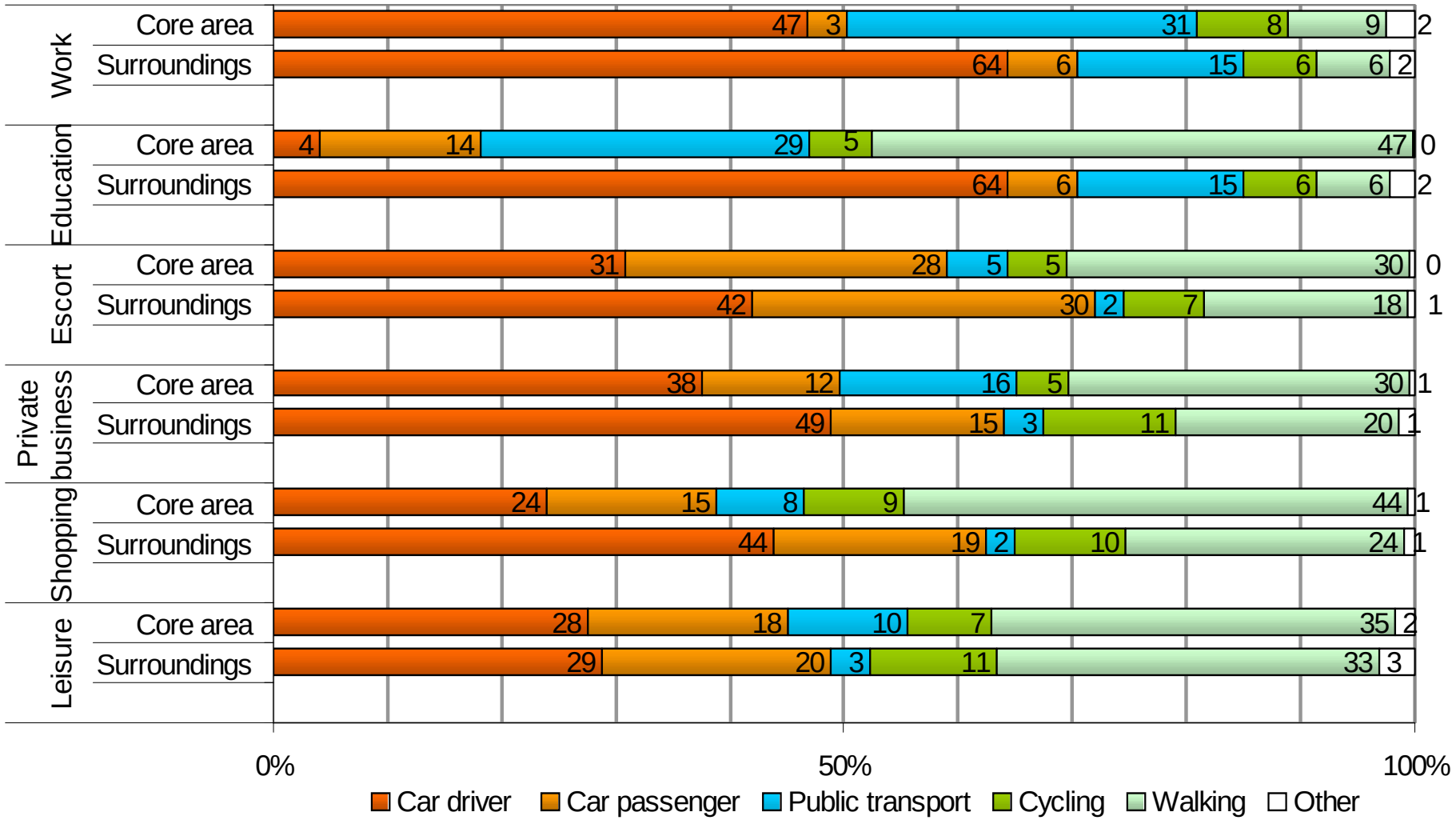
Flexible Time Structures needed!



n = 14,903 trips, Rhine-Main, car/public transport

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

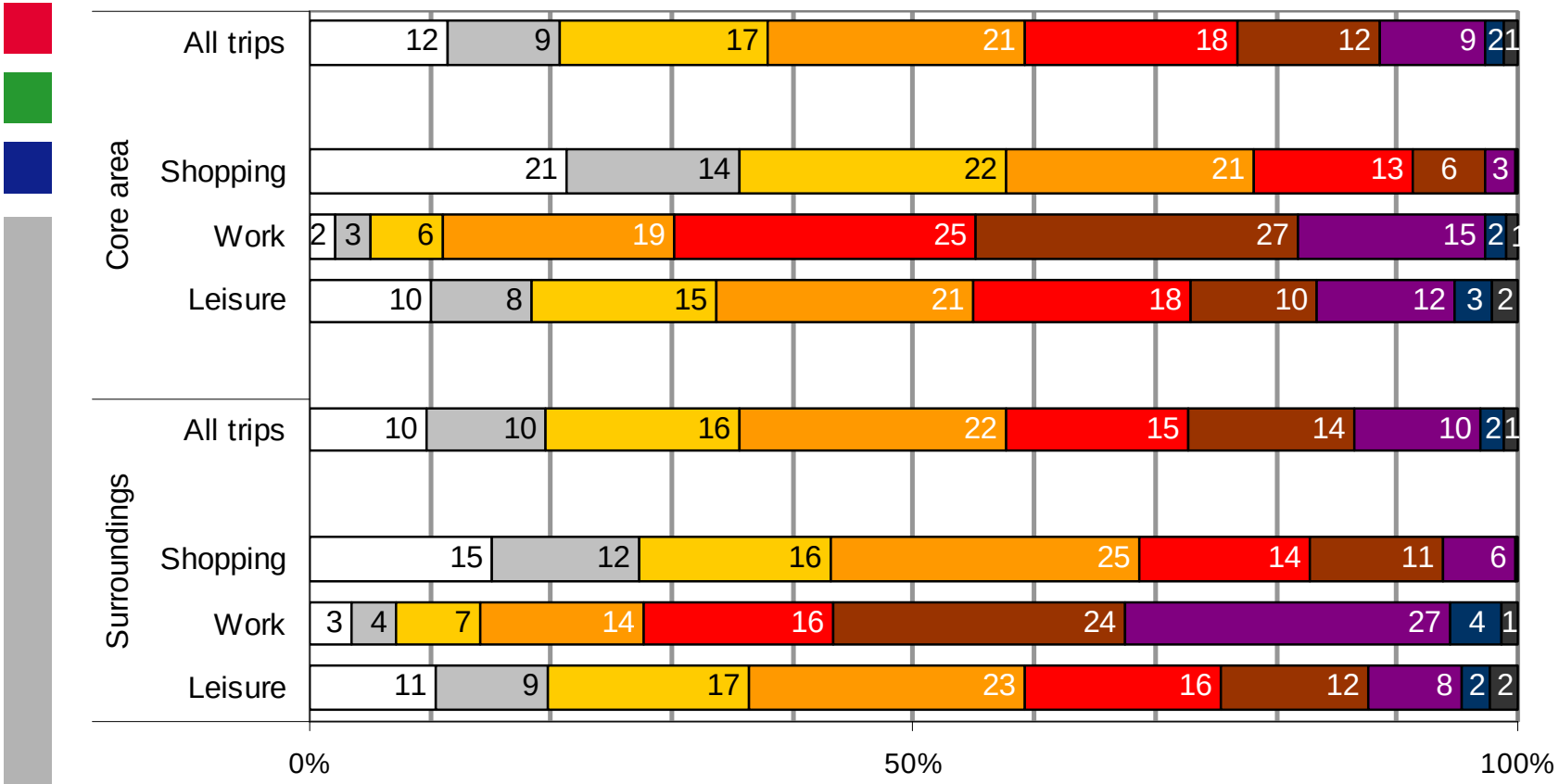
Non Work Trips - Potentials for Bus & Train (1)



n = 23,370 trips, Rhine-Main

Source MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

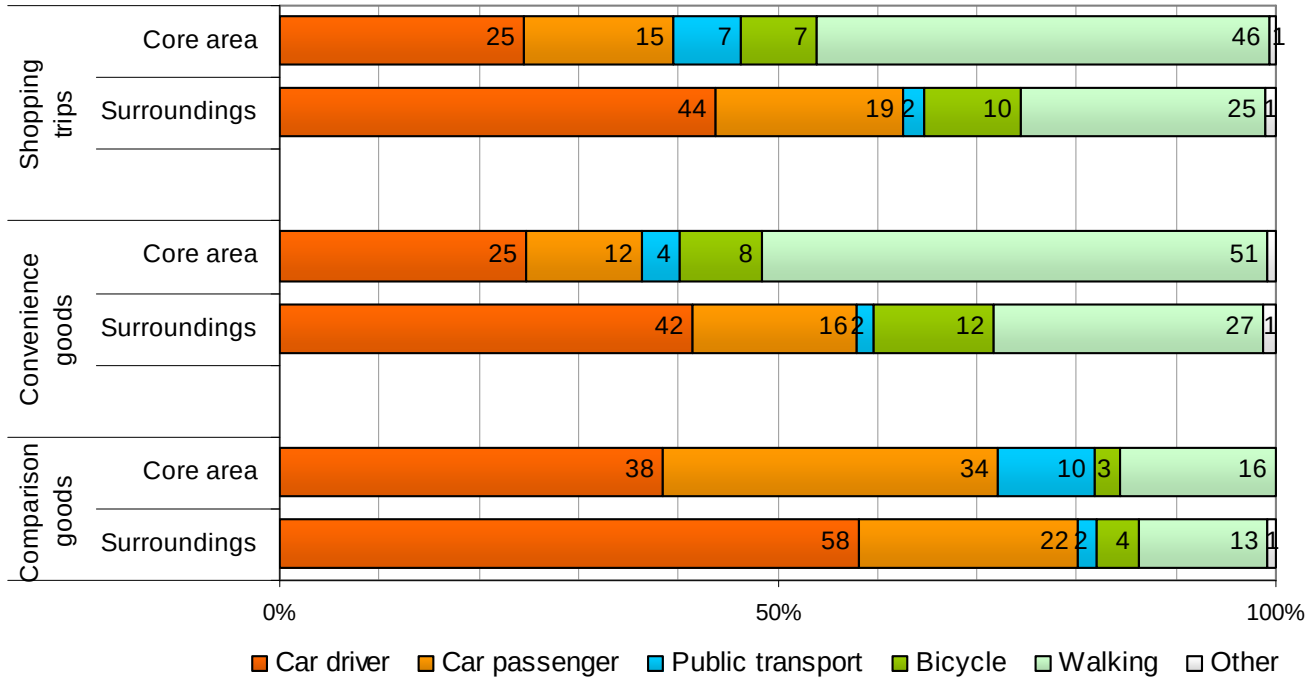
Non Work Trips - Potentials for Bus & Train (2)



n = 23,716 trips, Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main

Neighbourhood Shopping Facilities needed



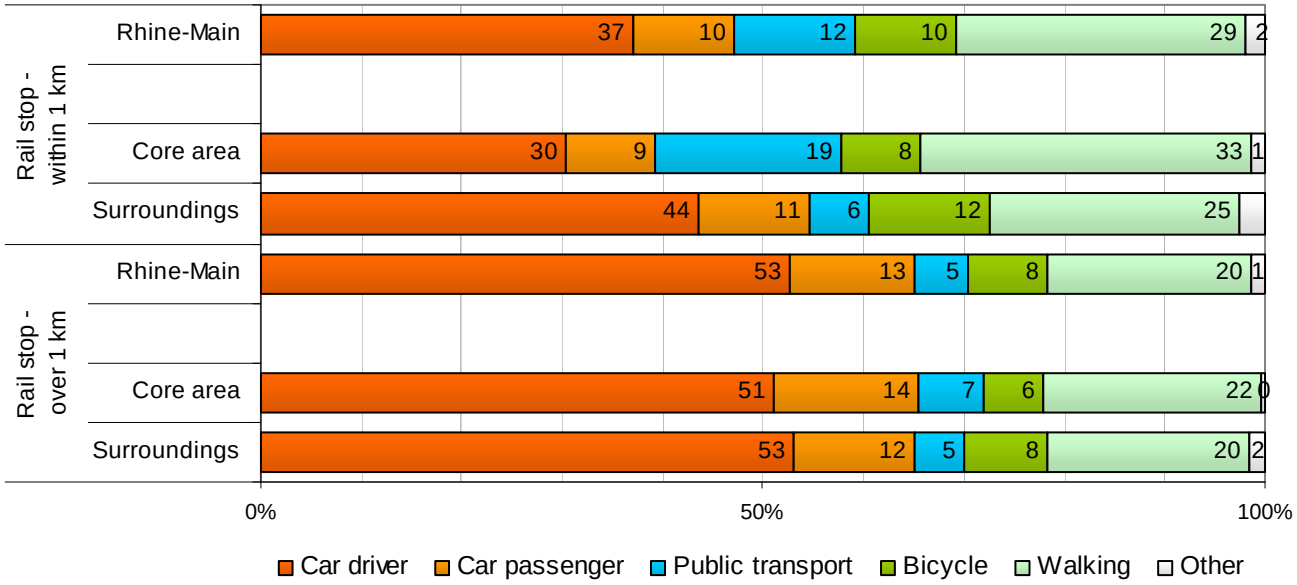
n = 4,156 shopping trips; Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

Highlighting trips for convenience goods

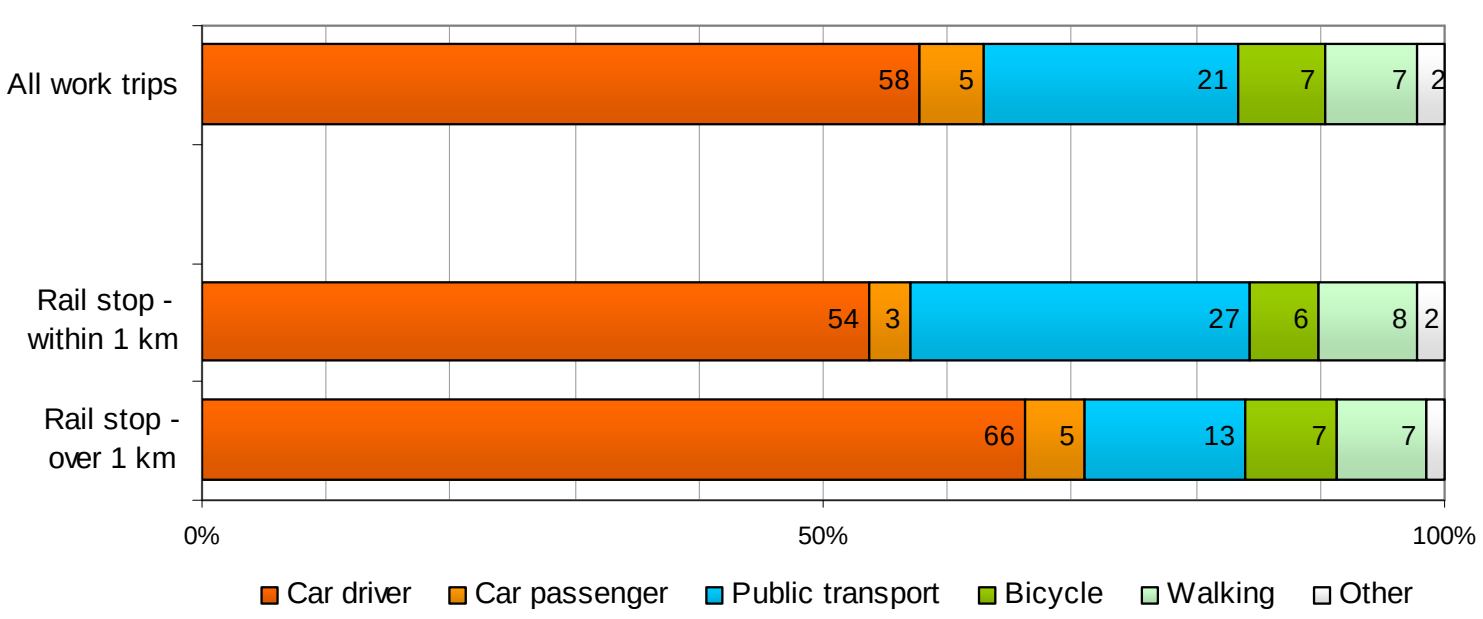
- 70% of all shopping trips
- Share of green modes:
  - 62% in core cities
  - 40% in the surroundings
- Car was available
  - 45% in core cities
  - 63% in the surroundings
- Trips at walkable distance
  - 42% in core cities
  - 32% in the surroundings

Rail-oriented Development Promising…



n = 9,180 trips, core area, rail stop within 1 km; 9,024 trips, surroundings, rail stop over 1 km; Rhine-Main
Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

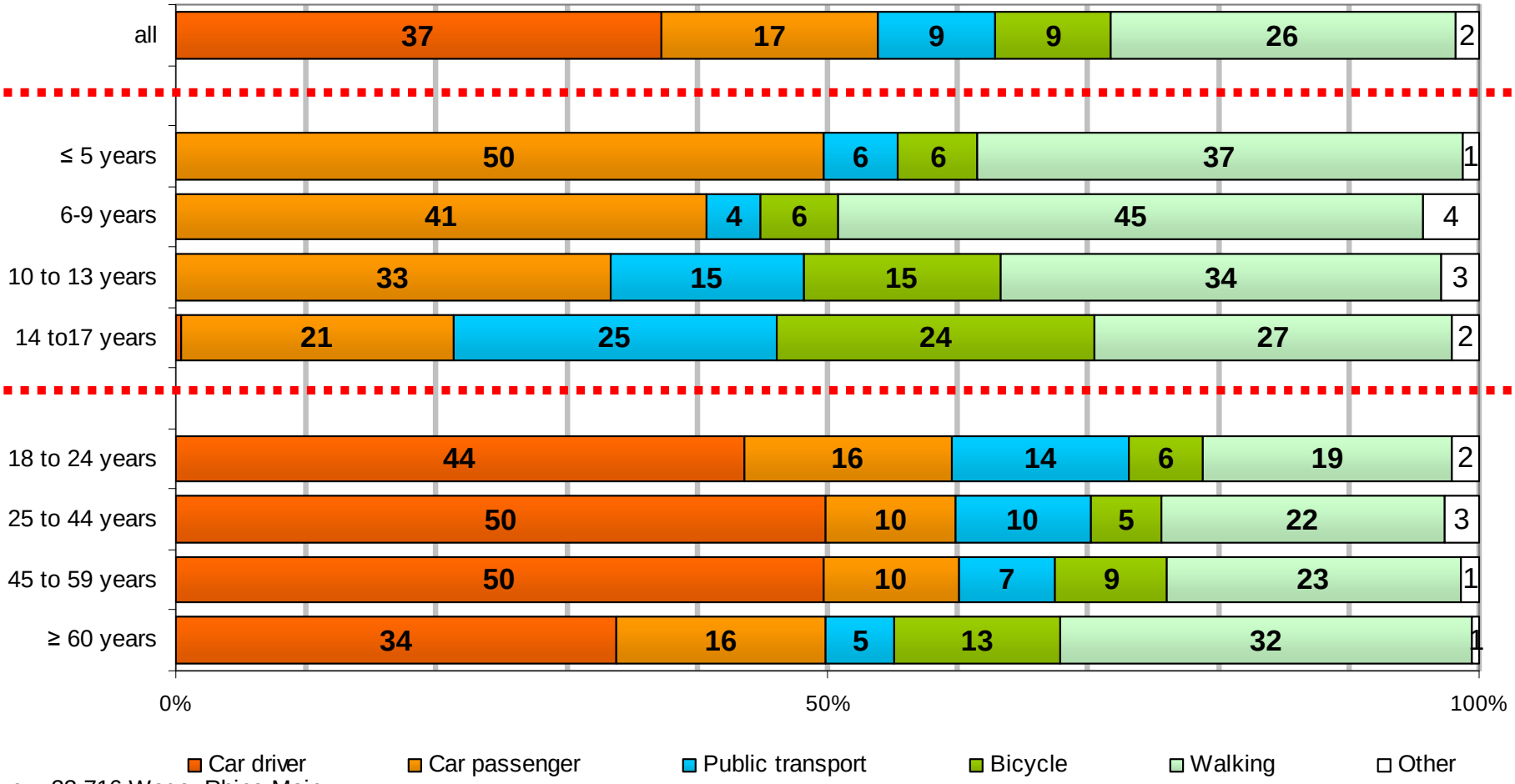
… for Commuters



n = 3,620 work trips, 1,344 trips, rail stop within 1 km; 1.371 trips, rail stop over 1 km; Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

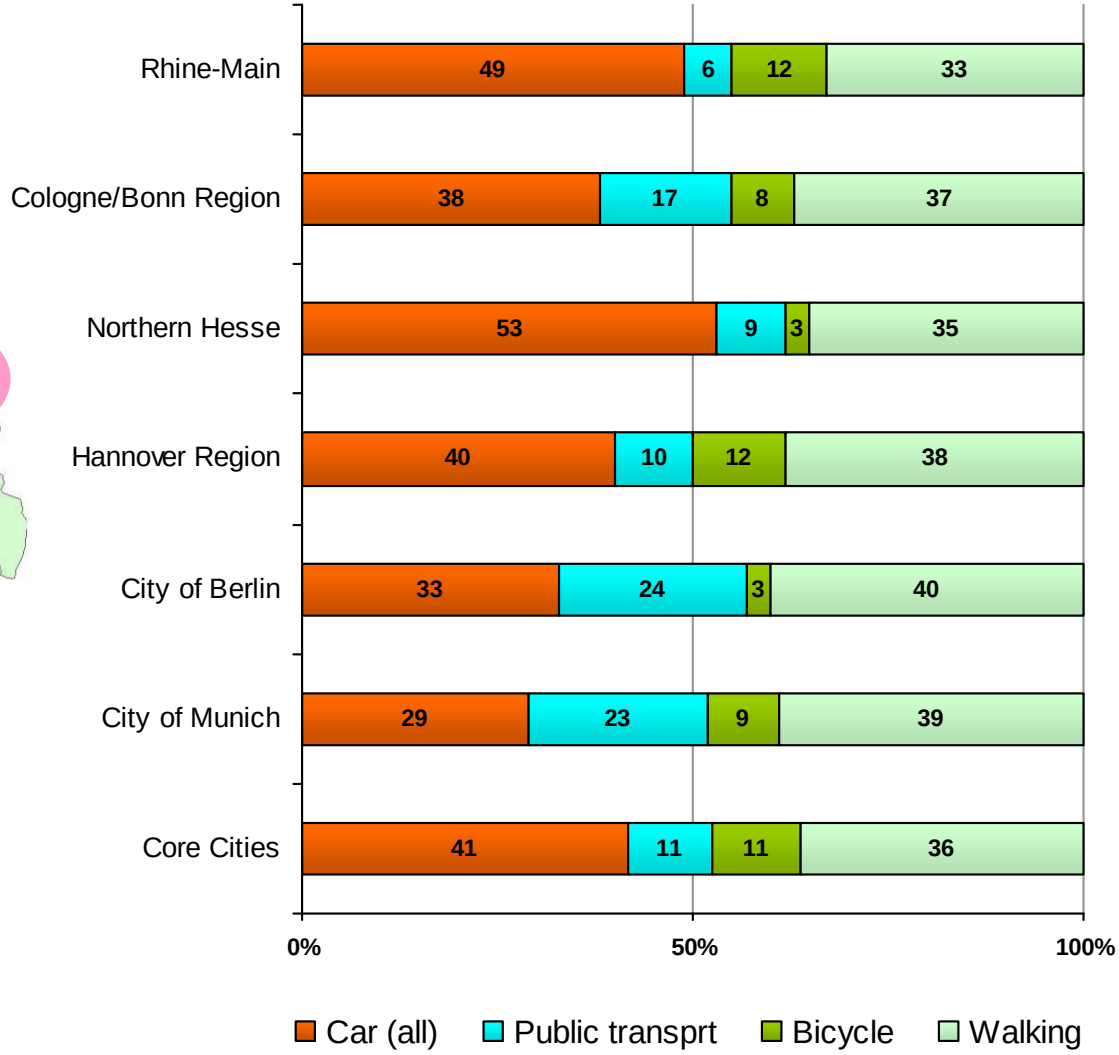
Between “Mama”-Taxi and sprightly pensioners



n = 23,716 Wege, Rhine-Main

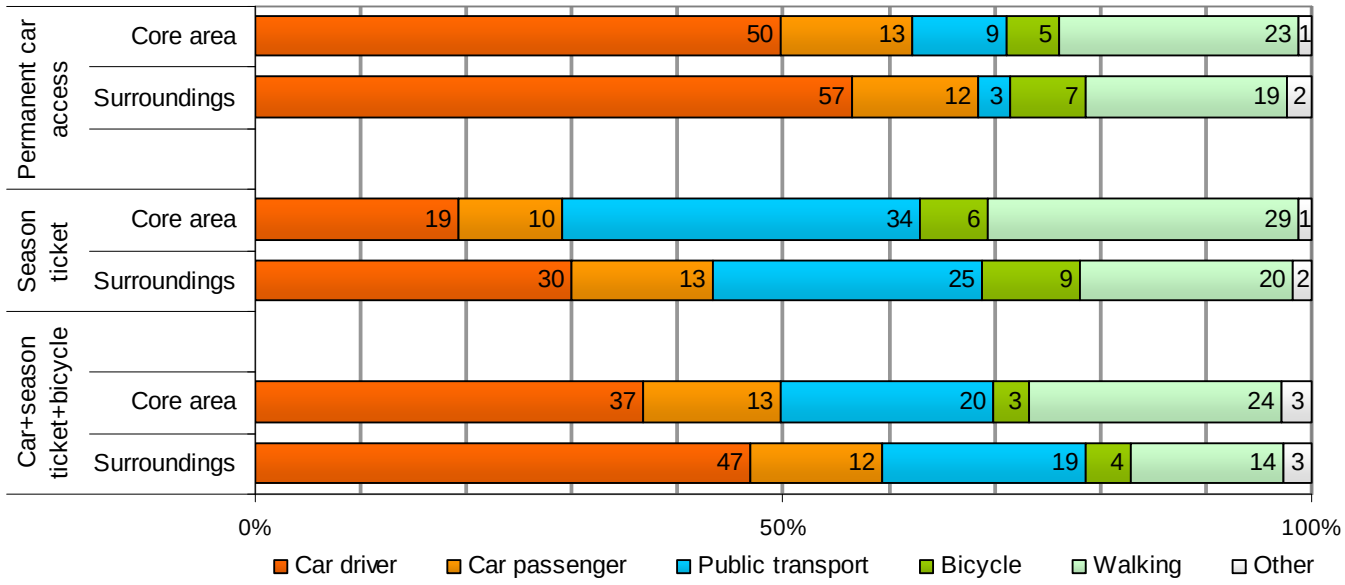
Source MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

Pensioners: “Take care” - growing target group



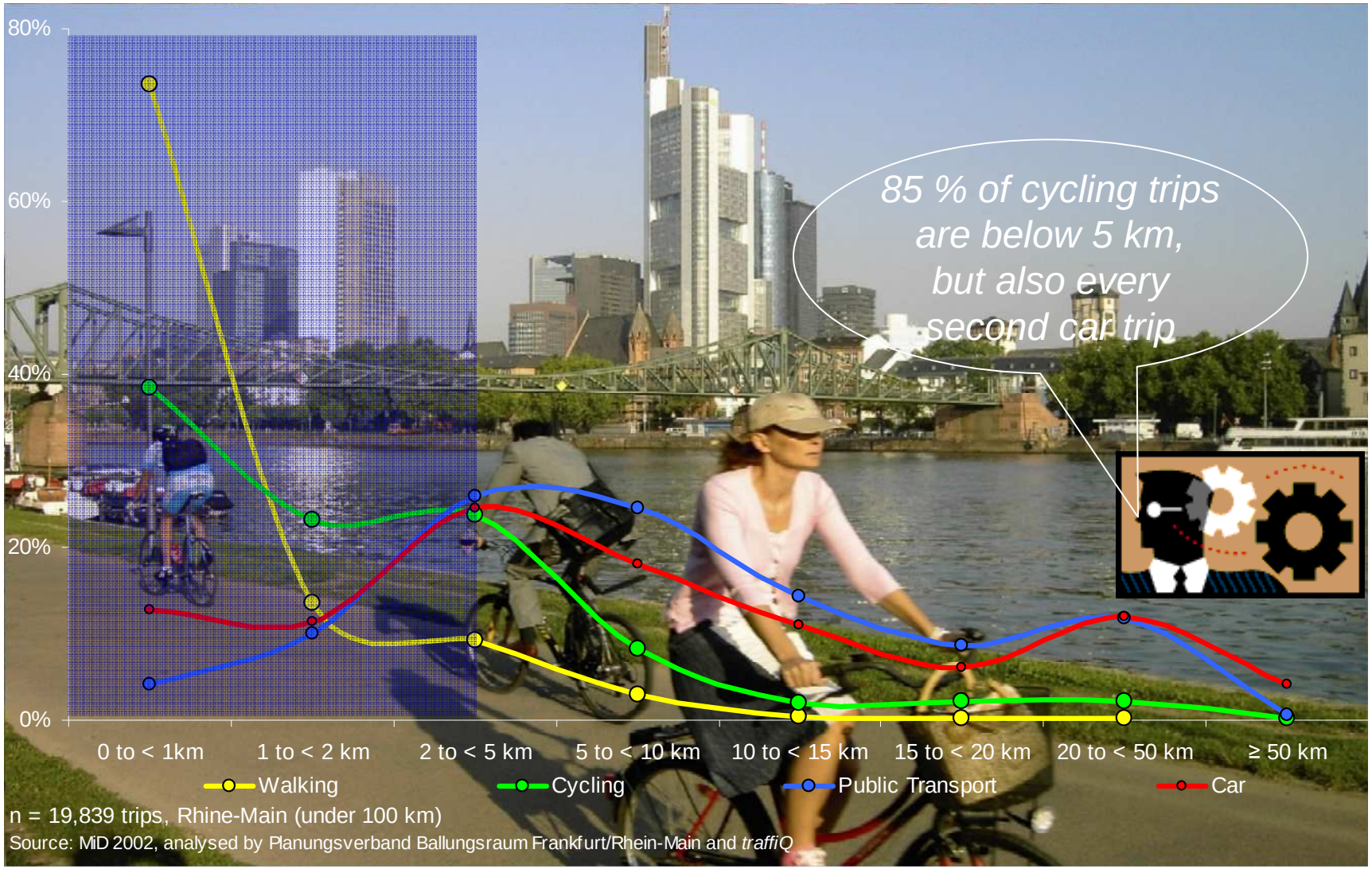
Source: infas 2004 and MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

Promoting Multi-Modal Mobility

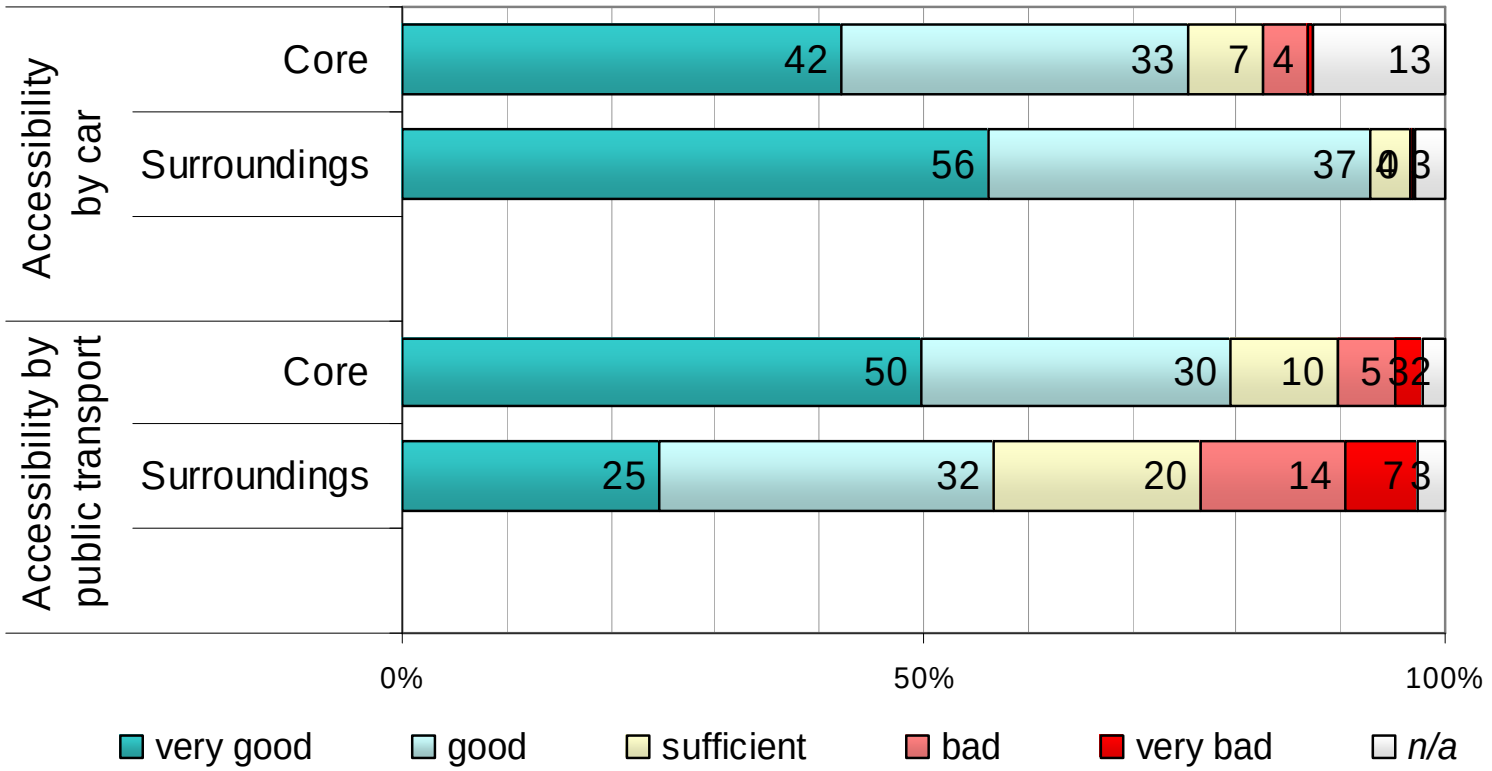


n = 15,377 trips, permanent car access; 4,053 trips, season ticket; 1,828 trips, car+season ticket+bicycle
Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

Investing for a Cycle-friendly Climate



More car infrastructure needed?

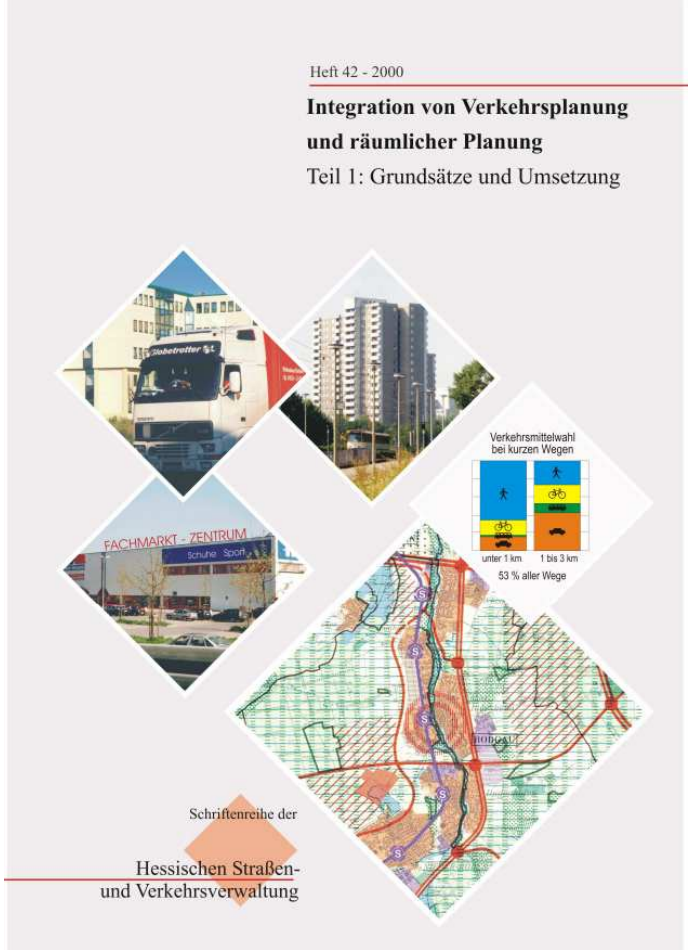


n = 5,804 interviewed persons over 13 years, Rhine-Main

Source: MiD 2002, analysed by Planungsverband Ballungsraum Frankfurt/Rhein-Main and *traffiQ*

Consequences for Travel Prediction?

- Trip timing: Lower level for peak hour suggested
- Accessibility measures must include other modes than individual car
- More average trips per day to be considered
- Less importance of primary purposes
- Increase in motorisation but spatial differentiation is needed



MiD – Complete Tool for Planning?

- Own car or car sharing car used for each trip
- Own or transferred public transport ticket used for each trip
- Limits of sample size
- Accessibility of usual destinations by bicycle
- Accessibility of usual destinations discriminated for purposes
- Moving people (reasons, estimation of former usage habits)
- Regular business trips should be included in the dataset
- Infrastructure quality in the view of respondents
- Geo-coding procedures need to be improved in order to avoid “missings” especially for leisure trips and to better evaluate public transport supply
- Ensuring continuous monitoring in the future (time series)


Obrigado para su atenção
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