















Changes of Mobility and Travel Behavior in Crises

How the COVID-19 experiences and increased costs of living shape our everyday mobility

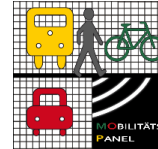
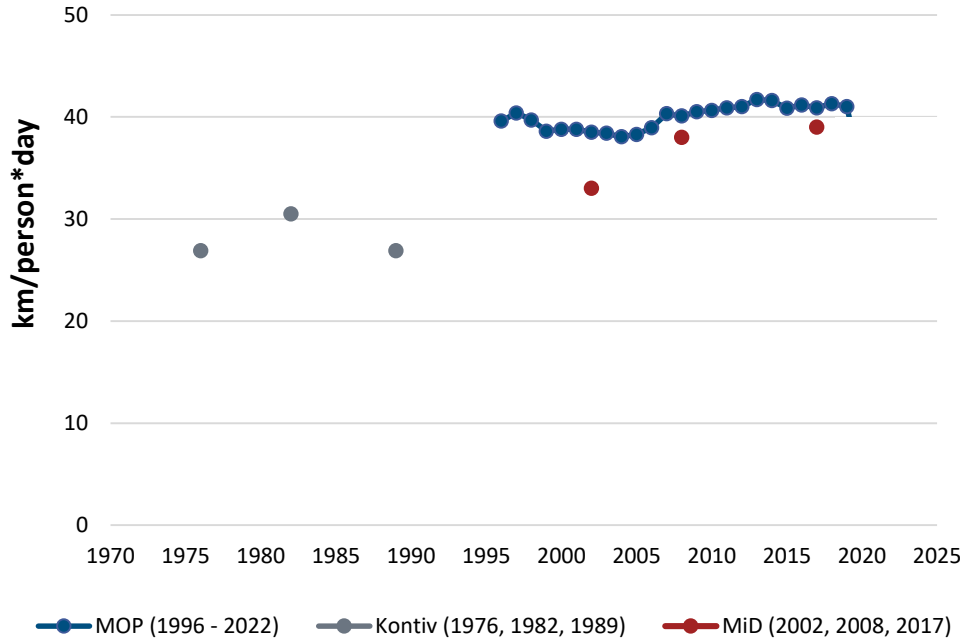
Lisa Ecke & Bastian Chlond



MPN and MOP – Similarities and differences

Start	Participants	Duration of participation	Method	Reporting period
 <p>1994</p> 	 1.800  ± 3.000	 3 year rotation		<p>7 days</p> 
<p>1990 2000 2010 2023</p>				
 <p>2013</p> 	 2.500  ± 5.000	 no limit		<p>3 days</p> 

The long term observation over decades – daily travel shaped by demographic processes



- For decades daily travel was determined by demographic processes

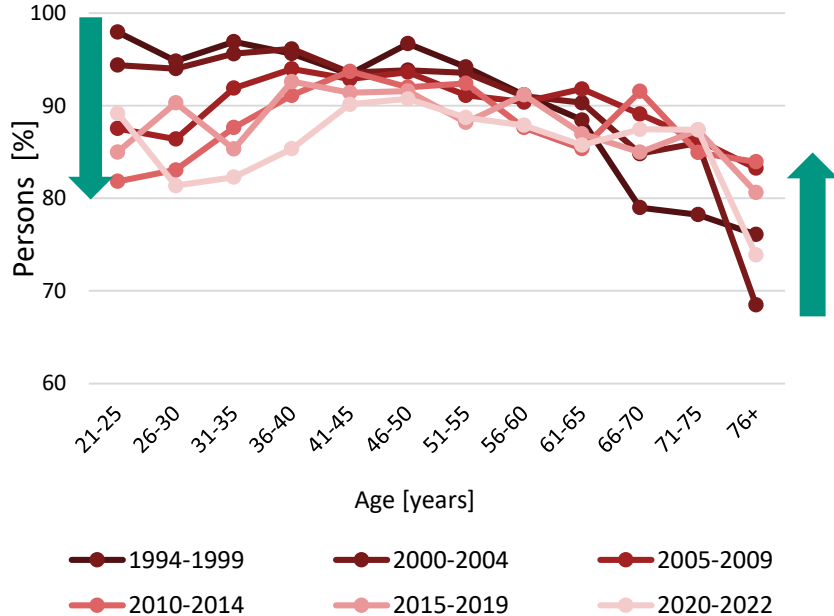
- slow exchange of groups in the population with different socialisations

- compensation of counterrotating trends

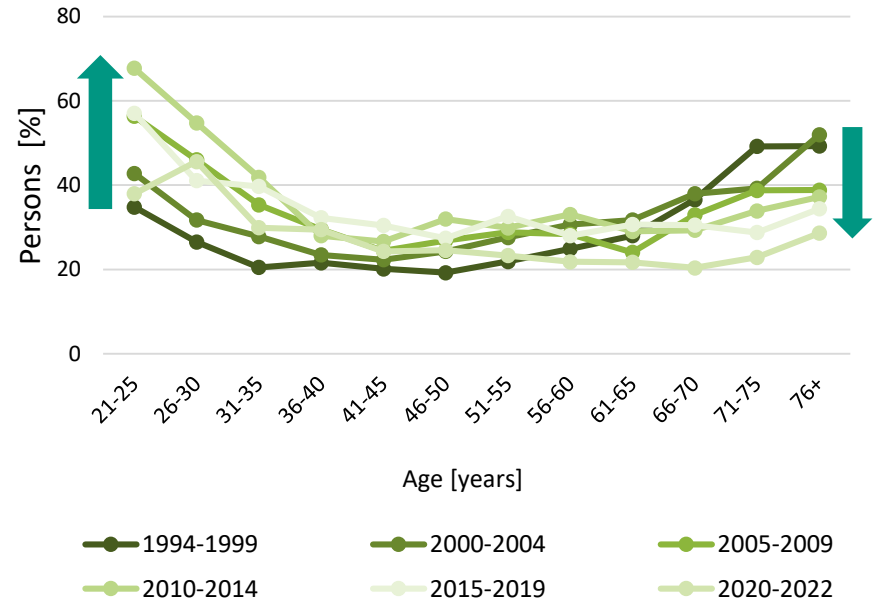
- comparably easy to predict!

Developments in mode use of age groups over three decades

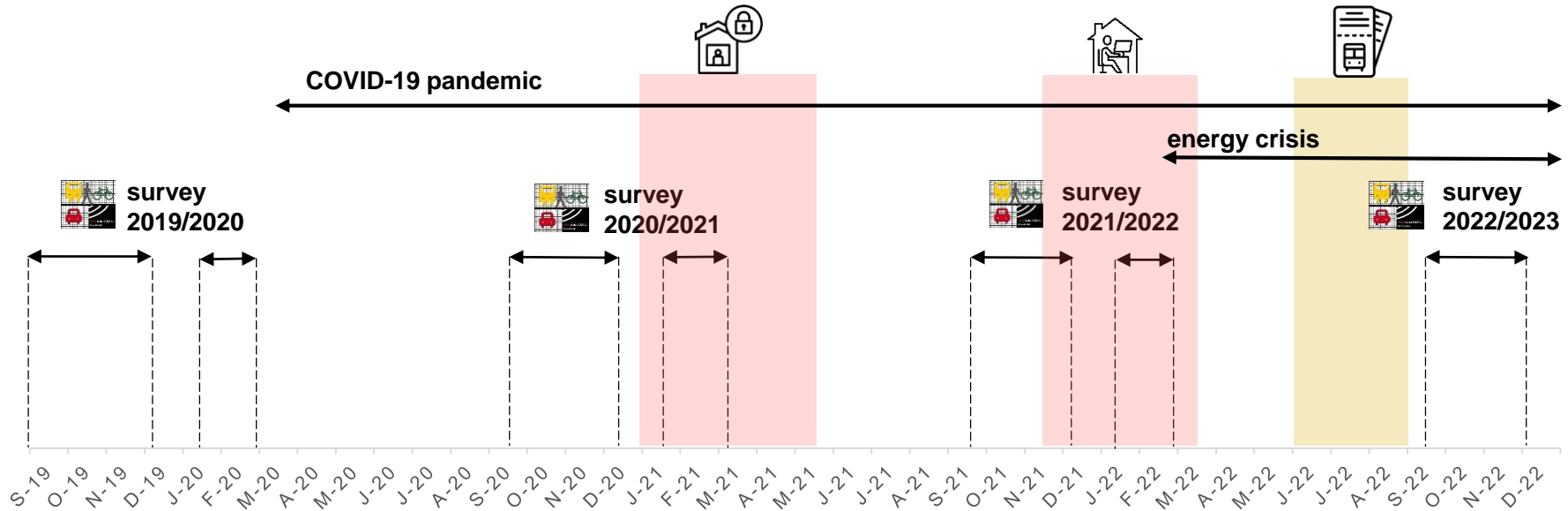
Share of car users



Share of Public Transport users

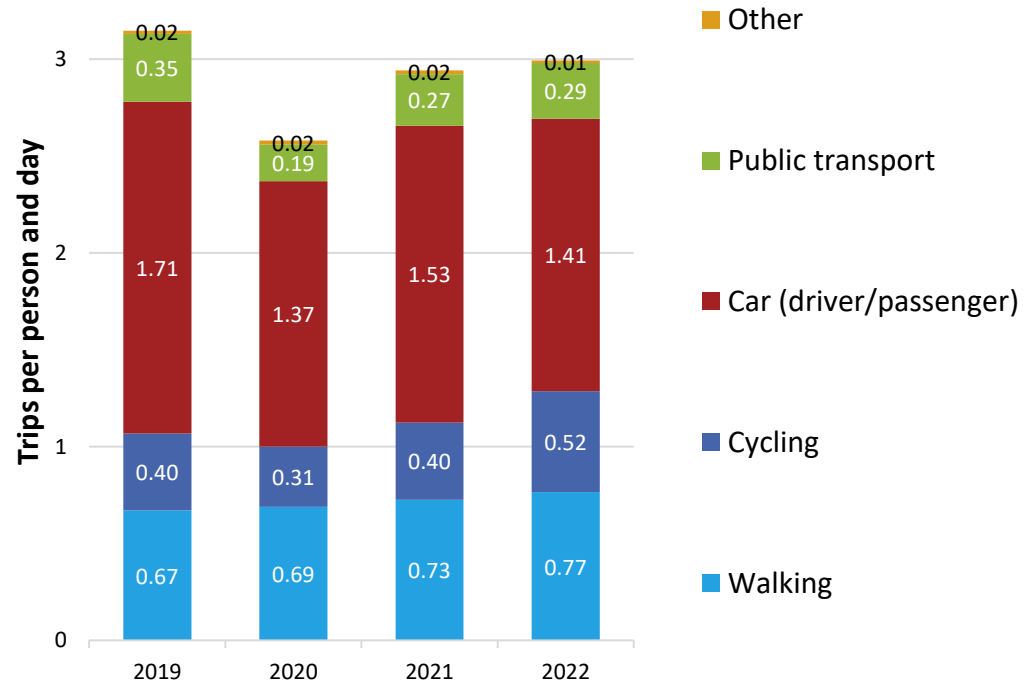
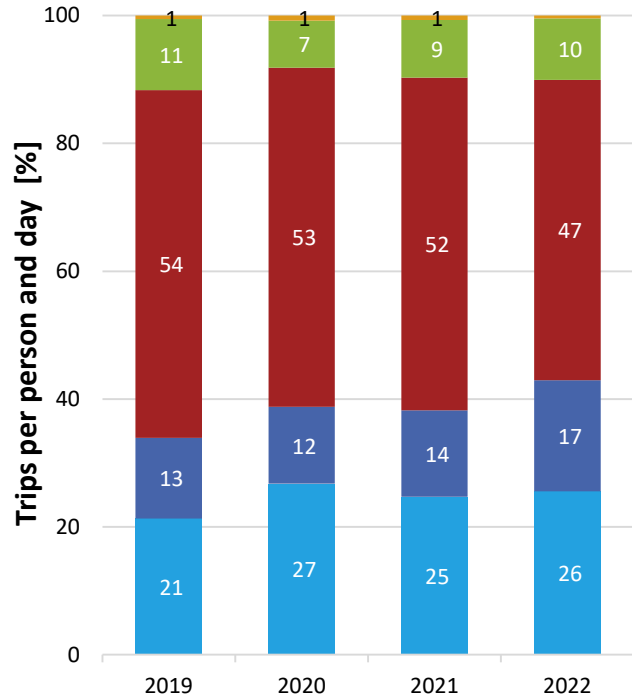


And then came the COVID-19 pandemic - MOP survey periods in times of multiple crises



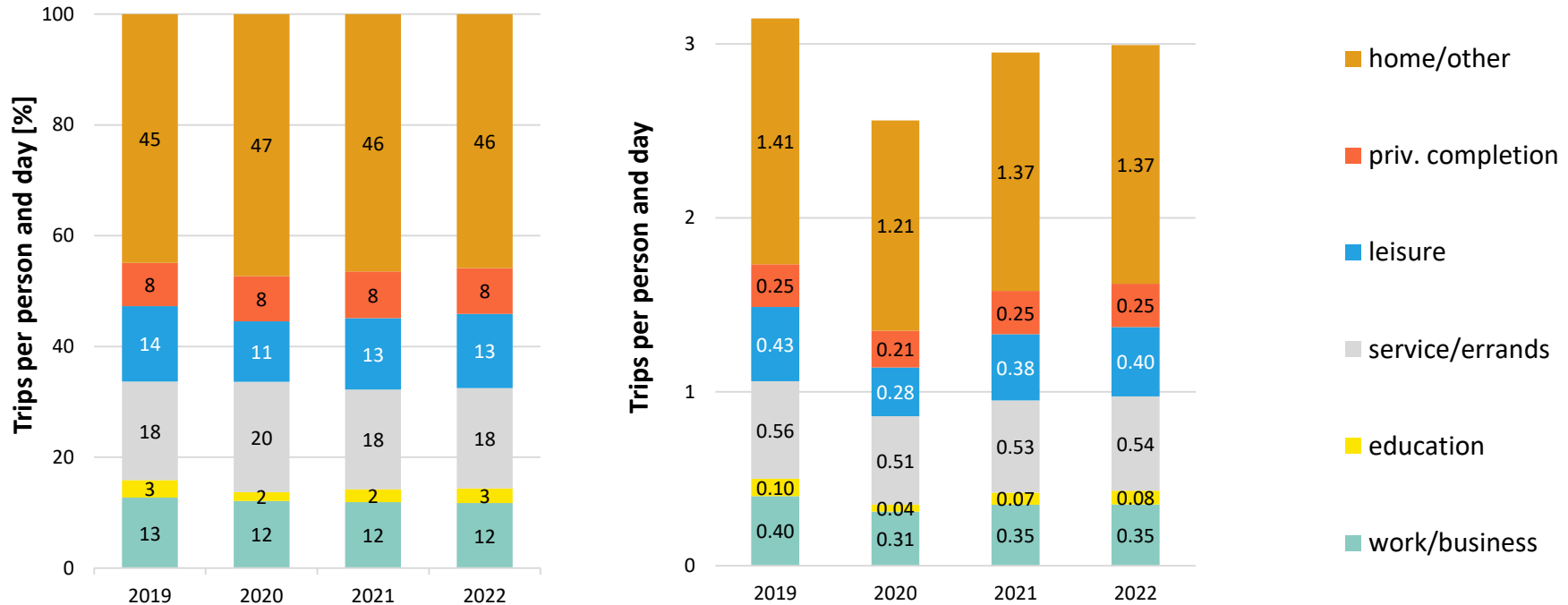
Changes due to COVID-19 – what remained?

Trip based modal shares

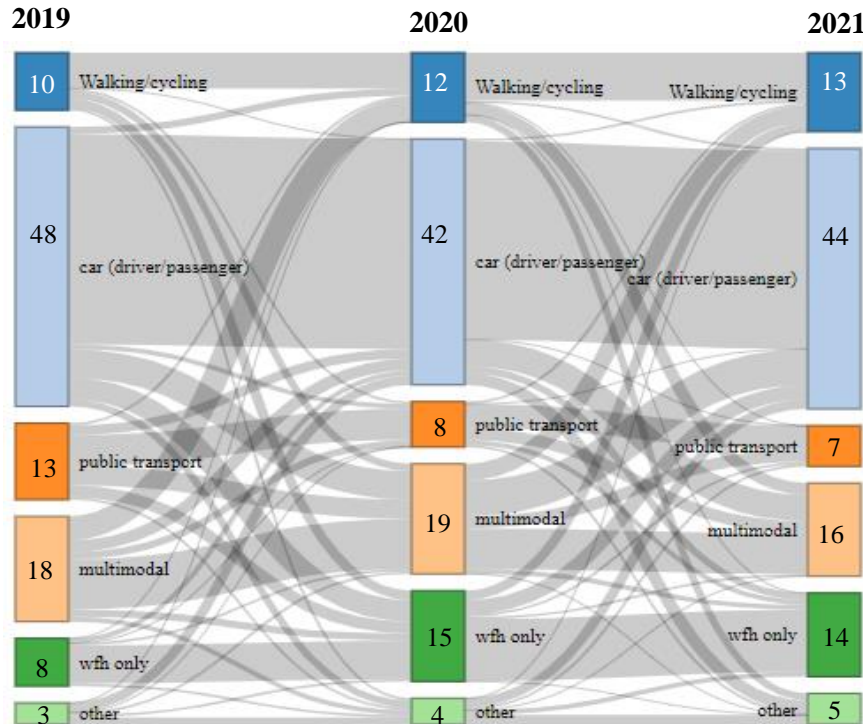


Changes due to COVID-19 –what remained?

Trip based shares of travel purposes



Commuting during the COVID-19 pandemic



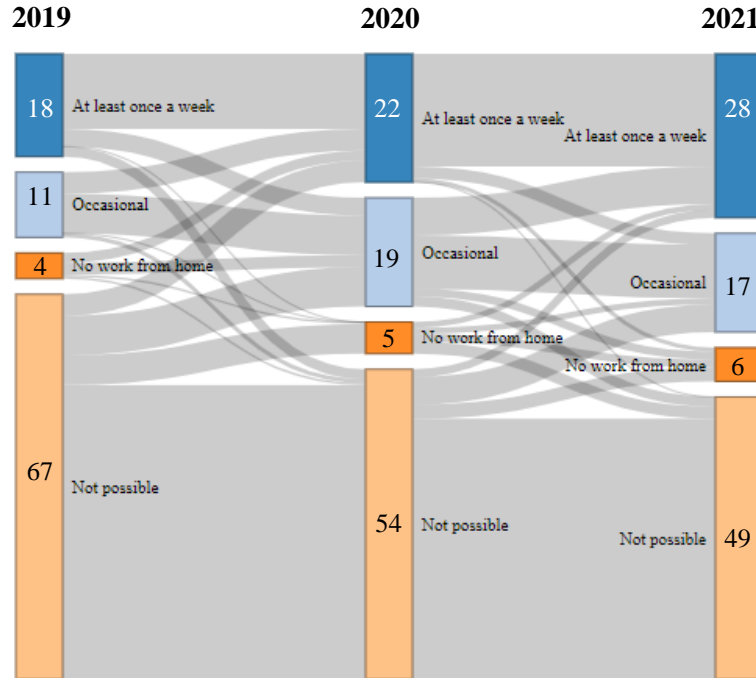
* Employees, who participated in the MOP 2019-2021

- Substitution of physical commuting during the COVID-19 pandemic
 - as a preventive measure set by authorities
 - the fear of infection (especially in public transport)

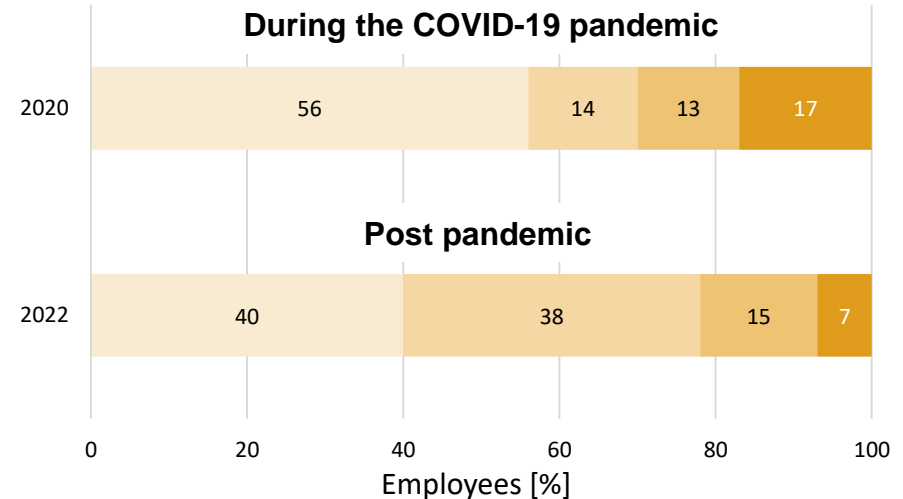
- Working from home (wfh) remains after the COVID-19 pandemic
 - Implications on commuting in general
 - Implications on residential location
 - some will not return to their former commuting and office workplace

- Homeoffice / wfh must be regarded as a relevant additional mode!

Working from home in a (Post-)COVID-19-era

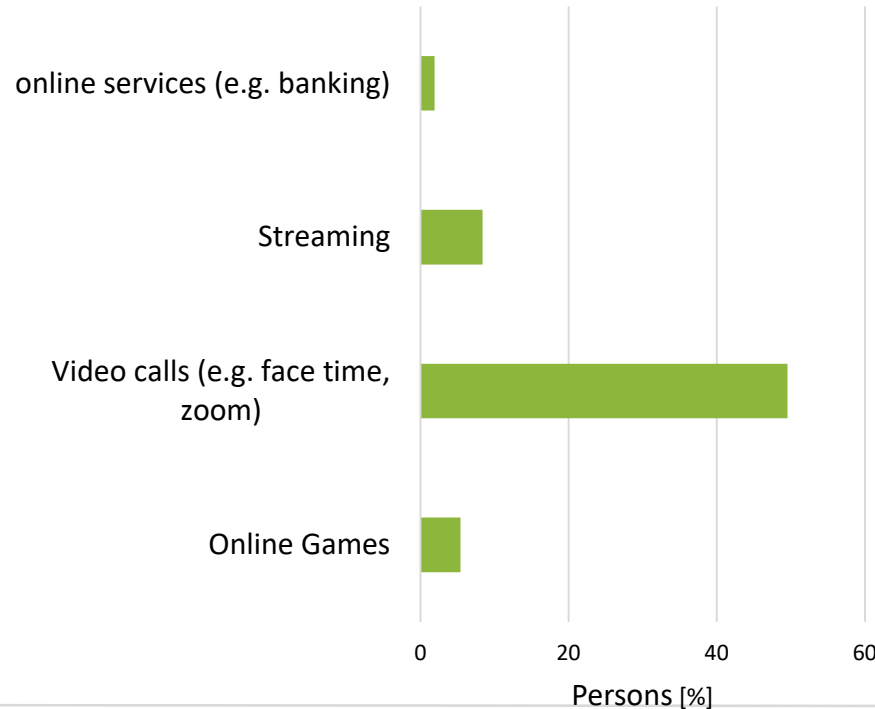


* Employees, who participated in the MOP 2019-2021



- No working from home
- < 50% work from home
- ≥ 50% work from home
- Exclusively work from home

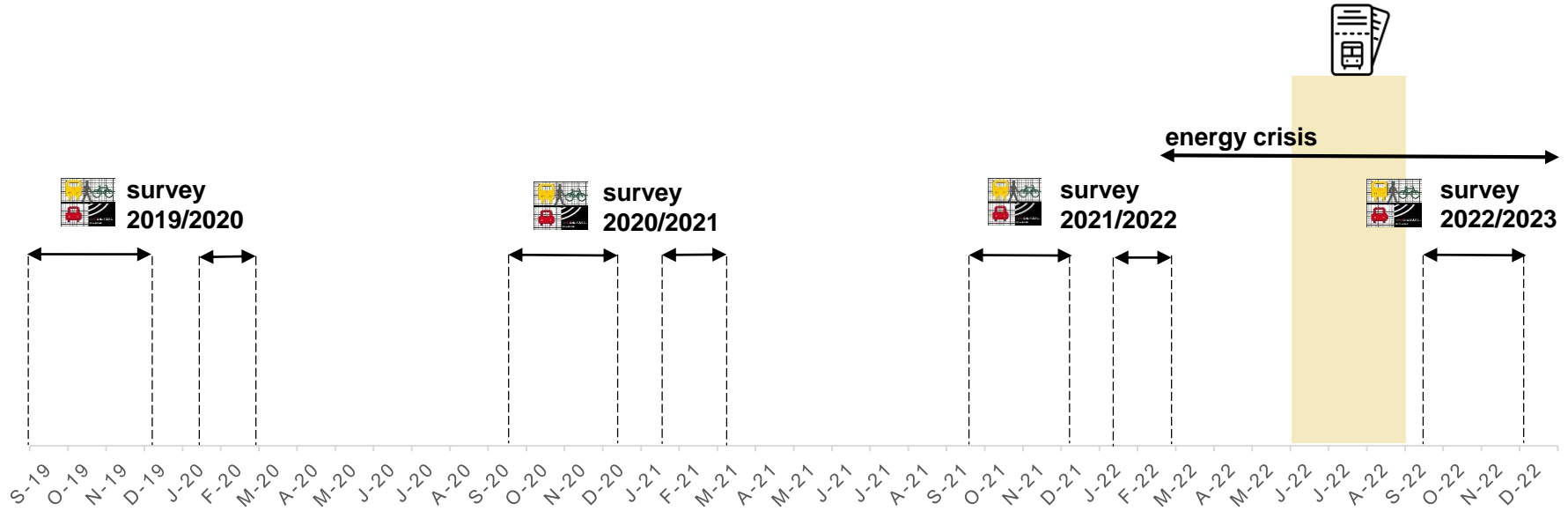
Initial use of digital tools and services during the Covid-19 pandemic



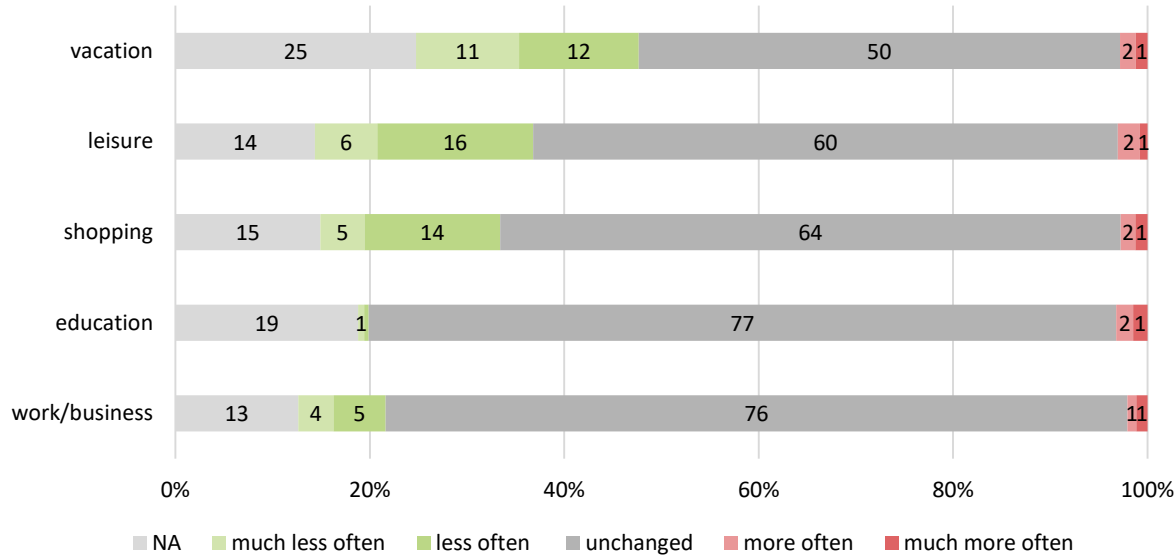
Effects on how and how much we travel:

- Substitution of physical travel
- Options for reducing temporal constraints
- Video-Calls as the one relevant technology and service for remote work
- „New“ forms of time use, e.g. for leisure (e.g. online gaming)
- It is still open to what extent the use will intensify

Changes caused by increases in cost of living



Subjective perception of changes in travel purposes by reasons of increased cost for travel



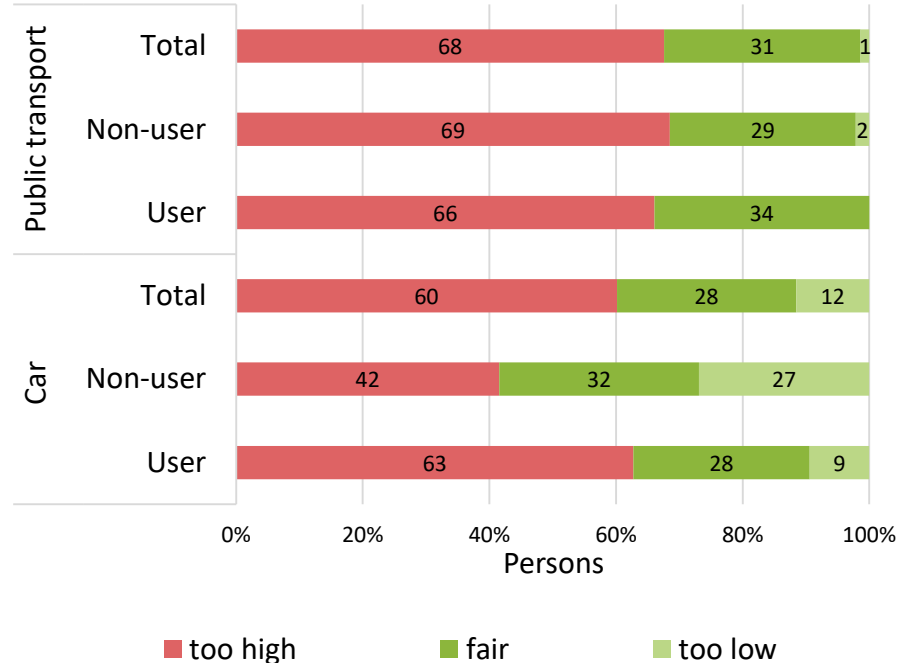
■ inelastic reactions to rising costs

- education
- work/business

■ elastic reactions to rising costs

- vacation
- leisure
- shopping

Transport mode use and perception of costs



People assess the costs of mobility differently:

- People rate general transport costs as (too) high in autumn 2022
- Car use is considered as less costly than public transport
- Differences between users and non-users is relevant, especially for the car



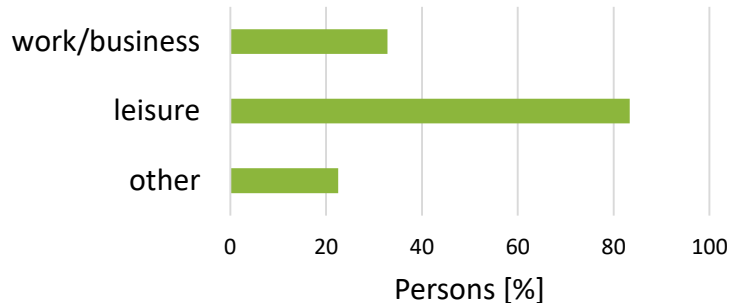
Relief programs in spring/summer 2022:

- 9€-public transport-flatrate
- Fuel discount

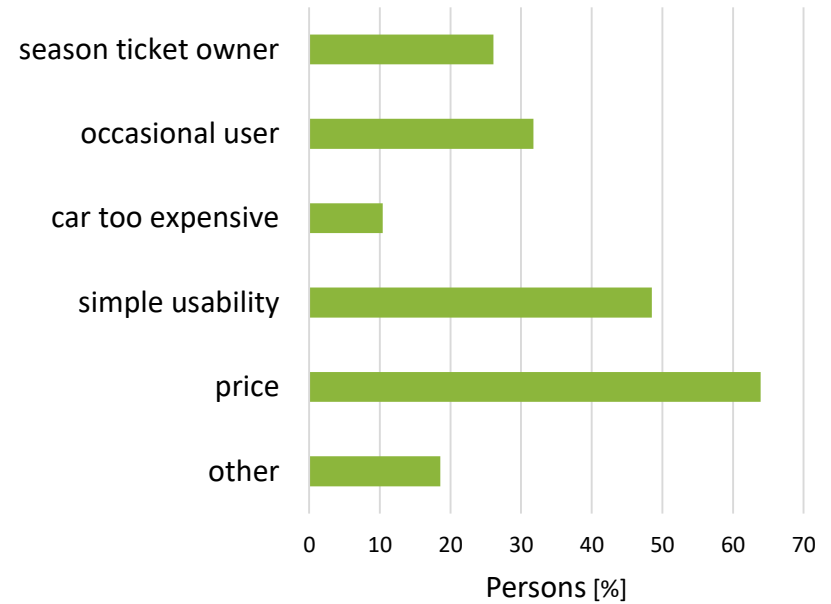
9 €-ticket - a measure to relieve the burden on citizens due to inflation in the spring of 2022.

- Valid throughout Germany on buses and trains on local and regional services
- 52 million 9-euro tickets sold (+ 10 million subscribers for the 3 months)

Main purpose of use



Reasons for 9 €-ticket purchase




Summary and Conclusion

- The COVID-19 pandemic has reinforced already ongoing processes
 - digitalisation and substitution of physical travel
 - Work-from-home will remain and affect the amount of travel as well as mode use
 - cycling became more popular in Germany
- A return to the situation and mode use before the COVID-19 pandemic is unlikely
 - by reasons of the virtual substitution of trips
 - by reasons of the relevance of socialisation
 - by the discussion about climate change.



Crises must be understood as a chance to make people reconsider their behavior!



M.Sc. Lisa Ecke
Institute for Transport Studies
Karlsruhe Institute of Technology (KIT)

lisa.ecke@kit.edu
www.ifv.kit.edu

Dr. Bastian Chlond
Institute for Transport Studies
Karlsruhe Institute of Technology (KIT)

bastian.chlond@kit.edu
www.ifv.kit.edu