

**POLIS25**  
ANNUAL CONFERENCE

26-27 November 2025  
Royal Jaarbeurs | Utrecht, Netherlands

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# POLIS25

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Session:  
Mobility as a right –  
Public transport as a service

Utrecht, 27.11.2025



Quelle: WS

## Ex-ante and ex-post assessment of the German flatrate for public transport (so called Deutschlandticket, D-Ticket)

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# Development of Deutschlandticket



- 9-€-Ticket in response to energy price crisis in 2022
- ~50% of Germans bought the ticket

## Major objectives:

- D-Ticket as part of climate policy programme for transport
- Simplify overly complex diversity of German public transport tariff system
- Job-ticket at reduced price to support businesses to comply with CSR
- Accelerate digitalisation of PT



# Use of Deutschlandticket (in short D-Ticket)

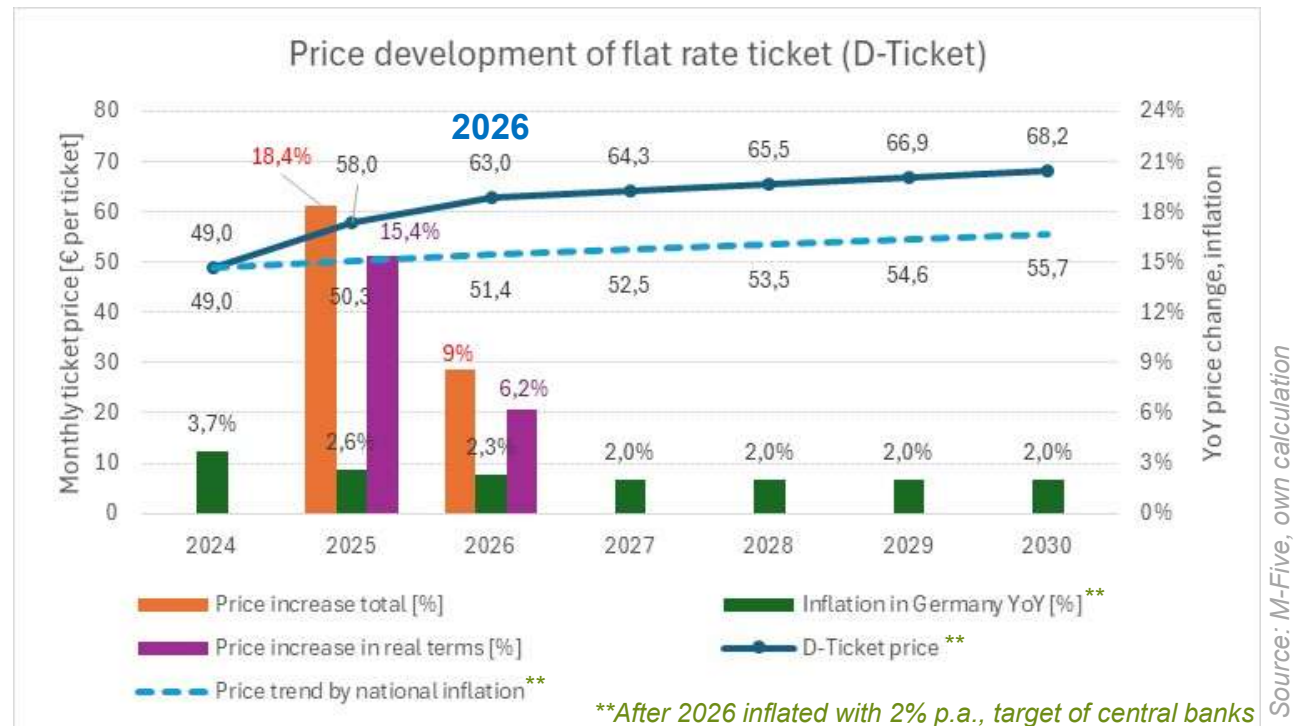
## All local and regional public transport

- Tram
- Metro
- S-Bahn
- Regional trains
  
- Urban bus
- Regional bus
  
- Ferries if part of public transport services
  
- On-demand shuttles (if available, and if part of public transport services)
  
- Excluded: ICE, IC, Flixbus/Flixtrain, RJ/NJ/TGV, other long distance services

# Development of price of Deutschlandticket

## Price increase far beyond inflation

- Real price increase was above 15% in 2025, and will be above 6% in 2026
- Compensating only for inflation price increase would be much lower
- Price in 2026 should be 51,4 € instead of 63 €
- After 2026 an index will be constructed to annually adapt price of D-Ticket
- Permanence of ticket long unclear





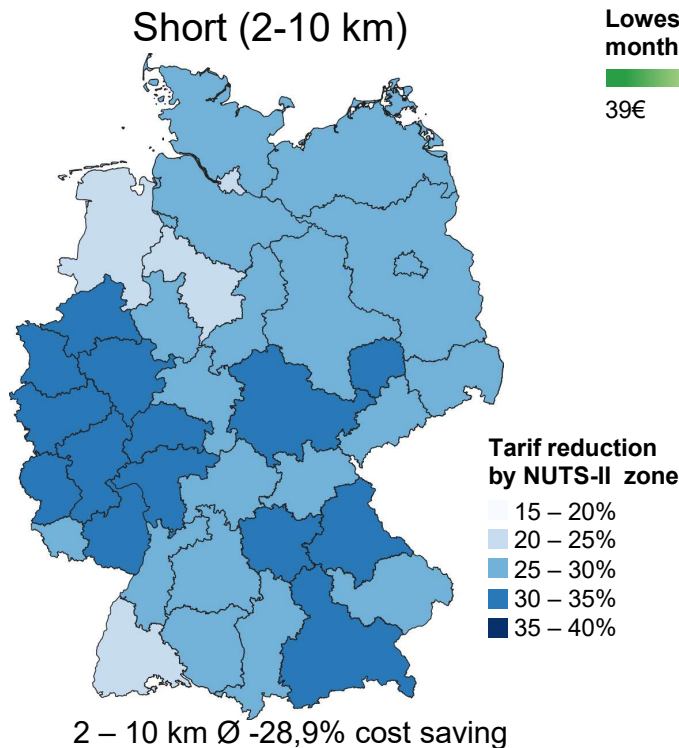
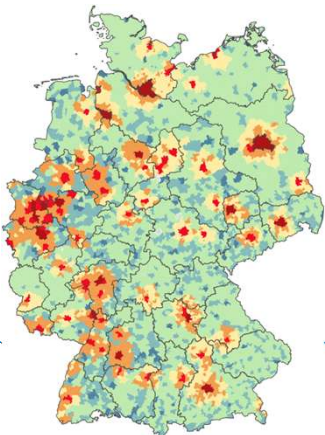
Quelle: WS

## Ex-ante assessment

# Database on German public transport (PT)

## Tarifs, supply (number of daily departures), capacity (NUTS-III)

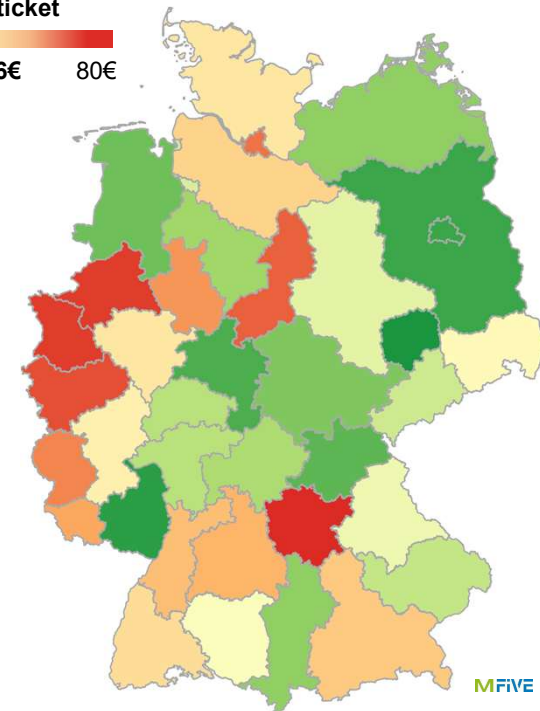
- Data based on M-Five research of ticket prices in 55 transport areas (out of 70 in Germany)
- Different ticket options (single, reduced, weekly, monthly, smallest area, whole network ...)
- Supply of departures based on DELFI e.V. (today Mobilithek)
- Based on NUTS-III level and RegioStar 7



2 – 10 km Ø -28,9% cost saving

0 – 2 km: Ø -24,3% cost saving

10 – 50 km: Ø -31,3% cost saving

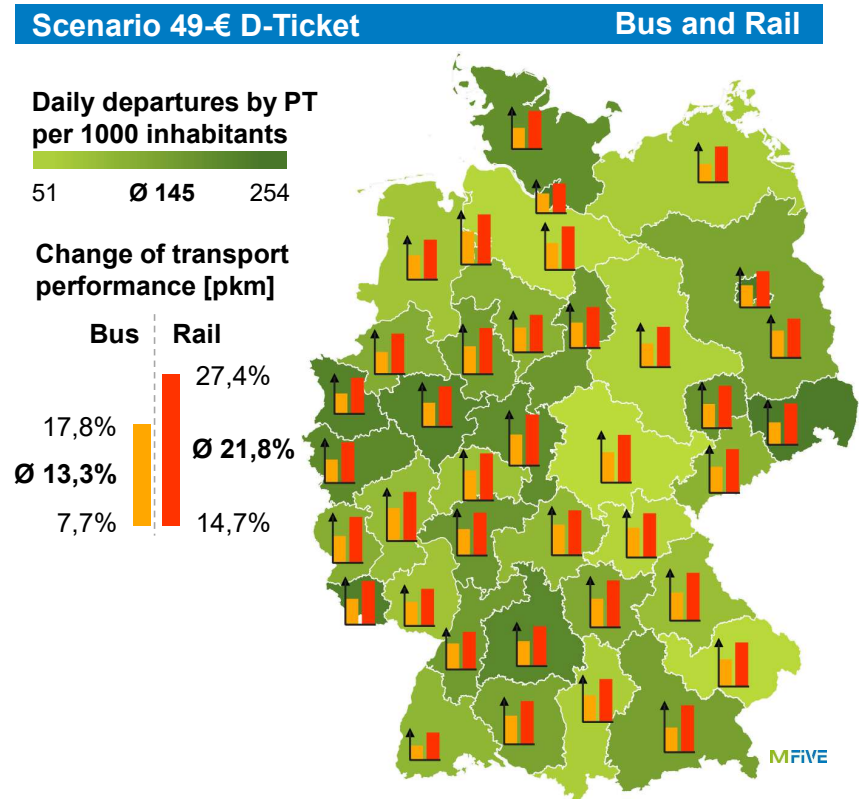


Source: M-Five, own research

# Model-based ex-ante findings (1)

## Considering supply of PT, regional cost and trip purposes

- ASTRA model of M-Five
- 4-stage transport model
- NUTS-II zones
- Split into urban and rural area
- Modelling destination choice and modal choice (car, bus, rail, bike, walk, car-sharing, micro-sharing, pooling/on-demand)
- **Change of destinations on longer trips enables more frequent use of PT**
- Modal-share of car reduces by 2,6 %-points
- Rail (S-/U-/Tram/Regional) gain +2,1 %-points
- Bus +0,6 %-points

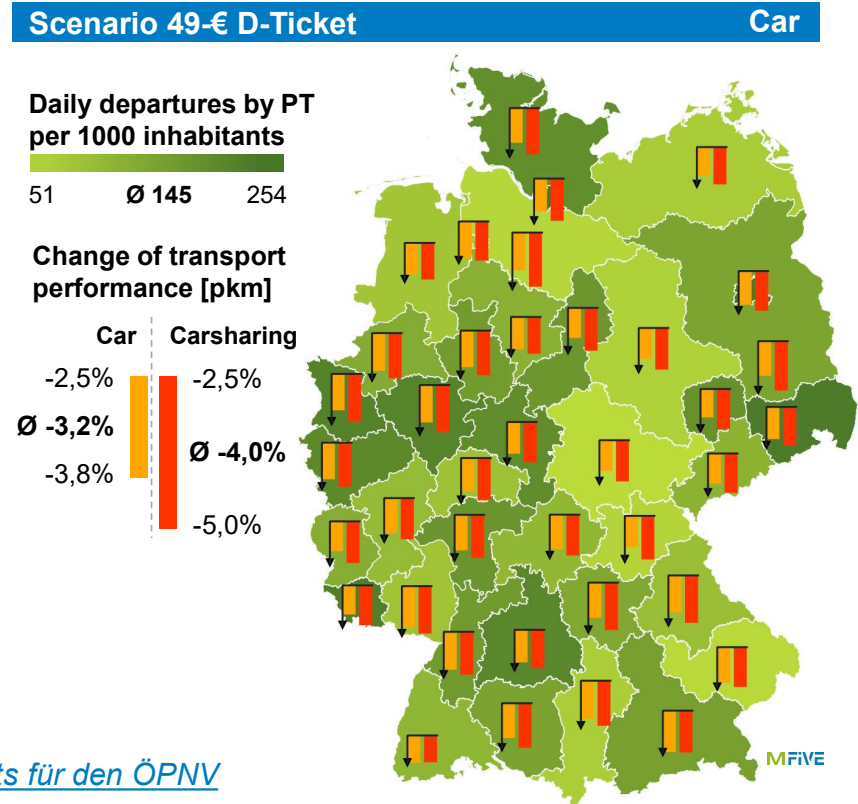


Source: M-Five, own calculations, ASTRA model

# Model-based ex-ante findings (2)

## Considering supply of PT, regional cost and trip purposes

- **Average transport performance by car is reduced by -3,2 %**
- For car-sharing the reduction is slightly larger with -4 %
- Impacts are stronger where the tariffs have been higher prior to D-Ticket
- Ride-pooling services increase
- Greenhouse gas emission (GHG) reduction: 2,5 to 2,8 Mt CO<sub>2</sub><sub>äq.</sub>



M-Five (2023): [Bewertung von Ausgestaltungsvarianten des Deutschlandtickets für den ÖPNV](#)

Source: M-Five, own calculations, ASTRA model



Quelle: WS

## Ex-post / ongoing assessments

# Short-term impacts 3 months after introduction of D-Ticket



## Germany

### VDV market research 07/08 2023:

- Ca. 11 Mio. D-Tickets per sold, of which
  - 42% Previous subscribers,
  - 47% New subscribers, prior PT users
  - 8% Non-users of PT

Share of population owning a D-Ticket:

- urban 20-30%
- rural ca. 6%

Modal-shift to PT:

- since 05/2023: 5% of car trips

### DB-Regio 07/2023:

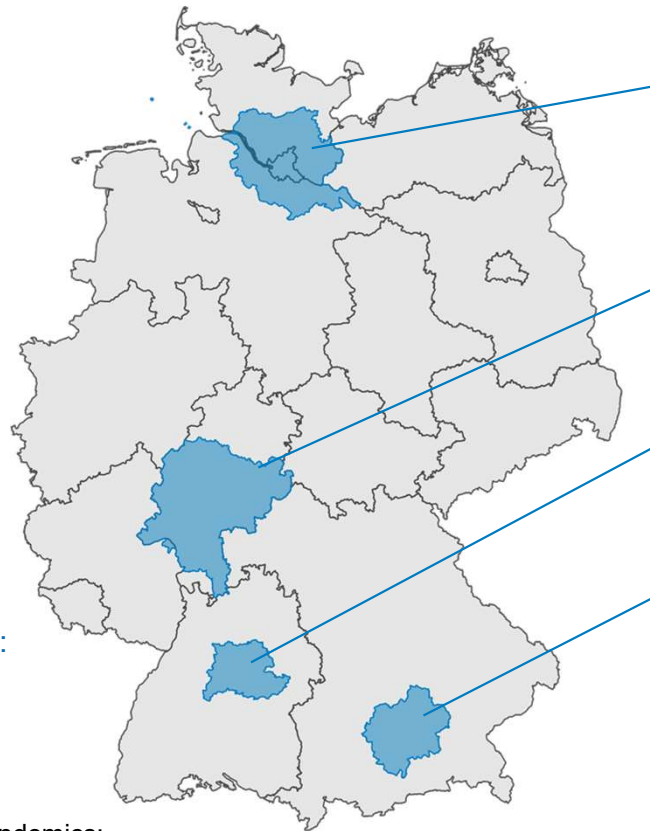
Increase of trips on regional trains:

- 06/2023 versus 04/2023 +25%

### O2 Telefónica Mobility Monitor – number 3:

All trips >30 km 06/2023 versus 06/2019:

- Bus +8% trips
- Rail +13%
- Commute by PT +11.8%
- Commute by car -11.2%
- But also behavioural change due to Covid pandemics:
  - In 2019 87.9% of inhabitants left at least once per day their house, in 2023 this shrank to only 80.2% [O2 MM Ausgabe 1]



## HVV Hamburger Verkehrsverbund

- 250,000 D-Tickets sold
- Passenger increase 07/2023 vs. 07/2019: +8%
- Modal-shift to PT:
  - 05-07/2023: 19% of car trips



## RMV Rhein-Main-Verkehrsverbund

- 09/2023: 310,000 D-Tickets sold
- Passenger increase 07/23 vs. 04/2023: +10%



## VVS Verkehrs- und Tarifverbund Stuttgart

- Trips increase 2023 vs. 2019: +7,8%



## MVV Münchner Verkehrs- und Tarifverbund

Bus passengers in district of Fürstenfeldbruck:

- Increase of daily demand in 2023 vs. 2019: +27%

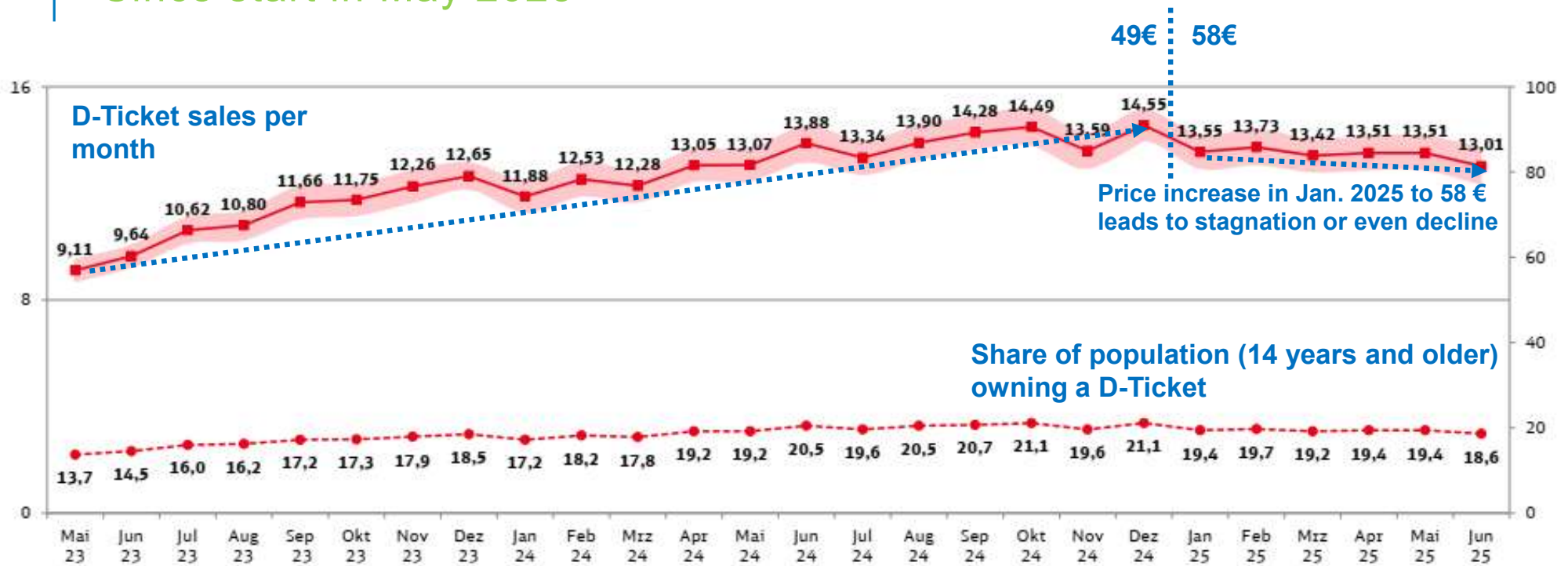
### Legend:

- Länder borders (NUTS-1)
- Tarif borders of PT
- Shares urban/rural by inhabitants
- Shares urban/rural by area

Source: M-Five, own analysis

# Development of D-Ticket sales and ownership

Since start in May 2023



Source: VDV / DB (2025): Evaluation zum Deutschland-Ticket, Halbjahresbericht 2025

# Selection of ex-post studies on D-Ticket

Study, Paper	Year	Source / Database	D-Ticket Sales p.m.	Rail increase % pkm, pax	Car reduction, % pkm or share of D-Ticket trips	GHG savings Mt CO2eq.
Ex-ante assessment, M-Five	2022	ASTRA model, PT database	14,8 Mio.	+21,8% (pkm)	-3,2% (pkm)	-2,5 to -2,8
VDV market research	2023	Survey	11,2 Mio.	---	7,1% (trips)	~ -1,3
VDV market research	2024	Survey	14 Mio.	---	7,8% (trips)	~ -1,45
VDV market research	2025	Survey	13,3 Mio.	---	-1% pkm, 8,4% (trips)	~ -1,56
ARIADNE D-Ticket monitor	2025	Digital tracking, Modelling	n.a.	+33,7% (pax)	-2,5% to -3,9% (pkm)	-4,2 to -6,5
DZSF Analysis	2025	Survey	n.a.	---	7% (trips)	- 1,3

Sources: M-Five (2023): *Bewertung von Ausgestaltungsvarianten des Deutschlandtickets für den ÖPNV*  
 ARIADNE / Koch et al. (2025): *Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz*  
 VDV / DB (2024): *Interpretierende Zusammenfassung, Berichtszeitraum 1. Halbjahr 2024*  
 VDV / DB (2025): *Evaluation zum Deutschland-Ticket, Halbjahresbericht 2025*  
 DZSF, Lutz/Rollin (2025): *Neue Mobilitätsroutinen dank Deutschlandticket?, in: Internationales Verkehrswesen*

# Summary and conclusions

- 49 €<sub>2022</sub> seems the maximum price of all options, balancing effectiveness (modal-shift, climate) and PT revenues
- Between >1% to 5% reduced demand of car transport, savings of GHG 1,5 to 6 Mt CO<sub>2</sub>eq.
- Estimations of impacts based on surveys differ significantly from comprehensive model-based approaches
- Behavioral change is induced, but duration, yet, not long enough to fully unfold
- Still large untapped potential for increase of modal-share of PT and reduction of car use
- BUT: potential of D-Ticket is reduced by
  - Recent increases of prices far above inflation
  - Uncertainty about long-term existence of D-Ticket (reduces job-tickets, lack of incentive to consider D-Ticket in moving decisions)
- The simplification advantage of having one single ticket (mostly digital) in Germany is still not conceived by all stakeholders



# Thank you for your attention!

## For more information:

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# POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION



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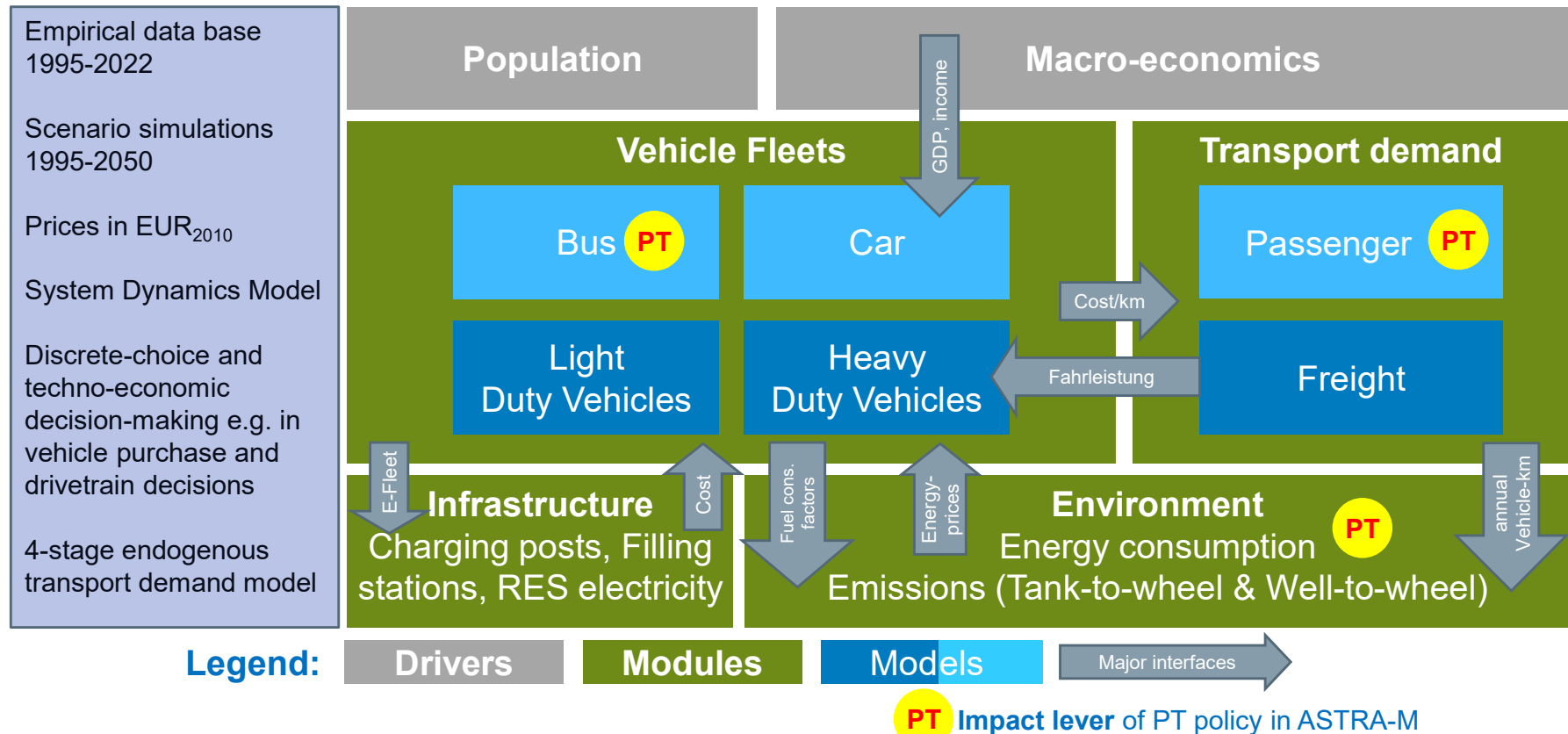


# Development avenues of D-Ticket...

- D-Ticket becomes **one of many ticket options** of each PT association
- D-Ticket is **abolished after 2030**
- **D-Ticket as at the start** (price level 49 €<sub>2023</sub>, and social discount option)
- **D-Ticket+** add further flat-rate services to provide flexible new mobility (micro-sharing, car-sharing, ride-sharing)
- **Objective: capture the potential** of the 45% of potential PT users!

# Backup

# ASTRA-M model overview



Source: M-Five

# Tarif difference in Public Transport (PT) by NUTS-II Zone

## Status September 2022

### Long-term subscription

Ø Minimum price/month

27€ 64,95€

Ø Maximum price/month

67,24€ 310€

### Monthly ticket

Ø Minimum price/month

39€ 80,10€

Ø Maximum price/month

84,60€ 326,60€

### Single ticket

Ø Minimum price/month

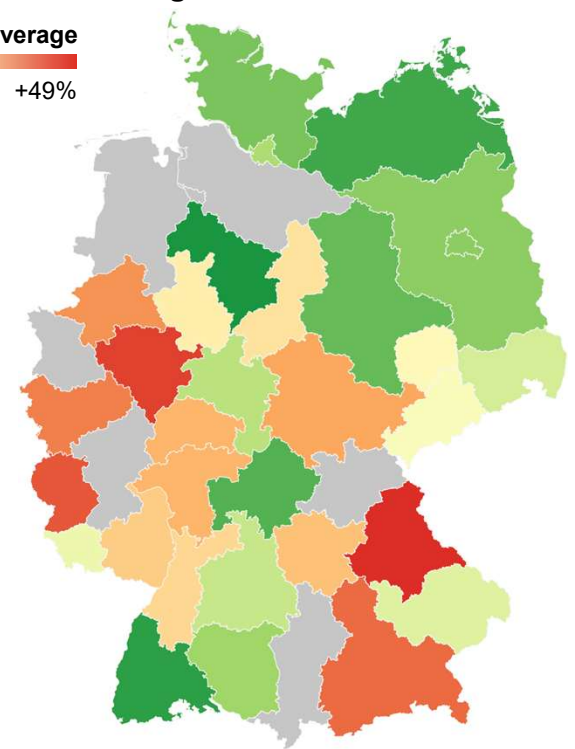
1,40€ 3,50€

Ø Maximum price/month

3,80€ 24,60€

Difference of average monthly tariffs compared with the German average tariff

Difference to average  
-31% 0% +49%



Source: M-Five research and analysis