

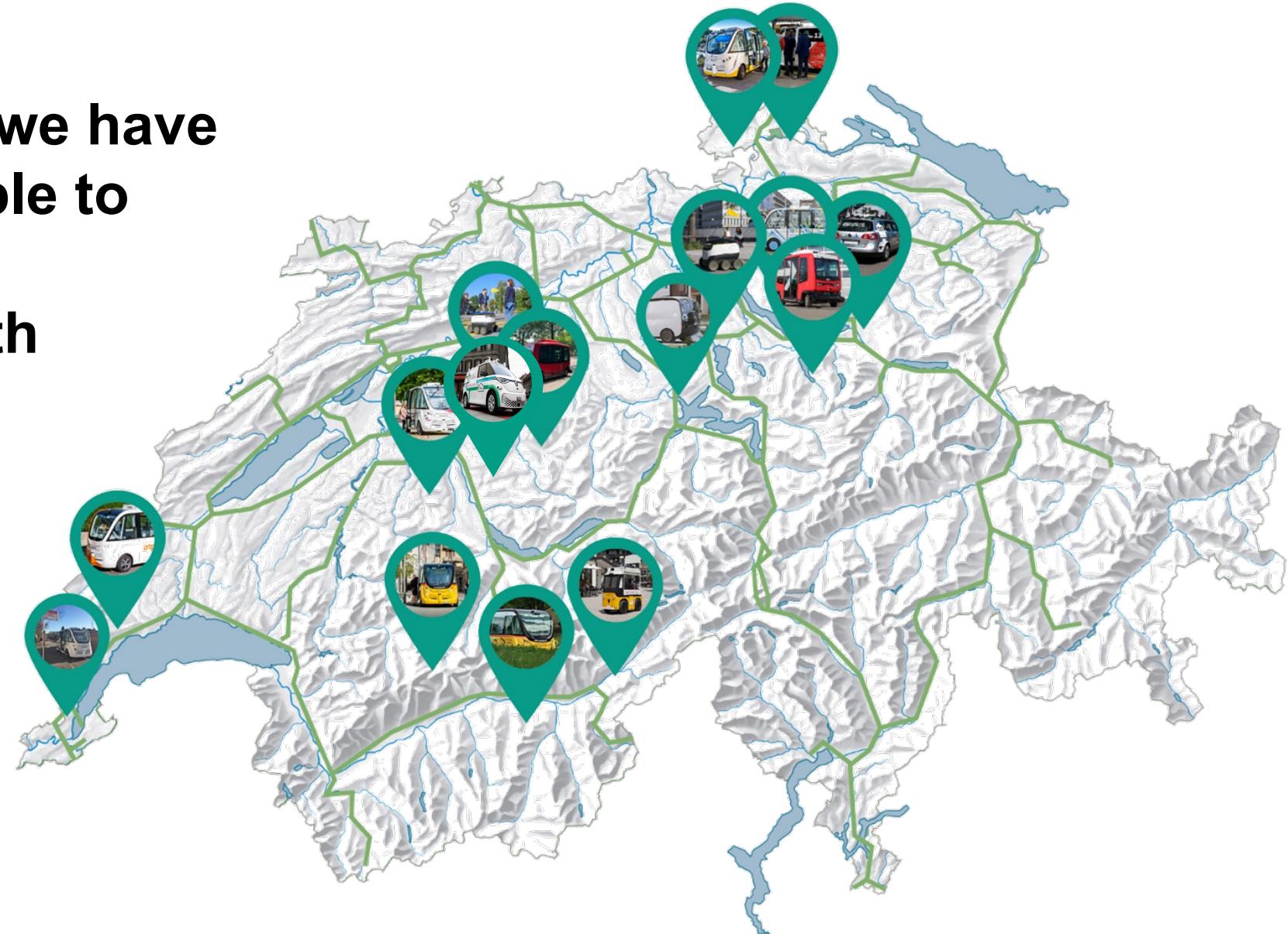


From Pilots to Progress: Shaping the Future of Mobility with Automated Vehicles

Innovate Mobility & Infrastructure 2025, 16.09.2025
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FEDRO - Head of Traffic and Innovation Management



In Switzerland, we have already been able to gather diverse experiences with various pilot trials with automated vehicles since 2015.





First automated vehicle in Switzerland

Zurich, 2015

- Test on public roads
- Trial lasted approx. 14 days
- VW Passat retrofitted with:
 - Sensors (Lidar/ Radar)
 - Cameras,
 - High-precision GPS system
 - Drive-by-wire- technology



Source: Swisscom AG



First automated shuttle bus in Switzerland

Sion, 2016 - 2020



Source: PostAuto AG

- 2 shuttle buses without steering wheel and without pedals
- A lot of attention worldwide
- On public roads in mixed traffic situations:
 - on routes with 50 km/h,
 - in pedestrian zones
 - very narrow lanes
 - etc.



Automated delivery robot in Saas Fee, 2021 - 2022



Source: PostAuto AG

- Operating in public, traffic-calmed zones
- Transport of goods up to 100 kg – specially for tourists
- Different test-phases,
- Finally 1-week automated driving = Level 4:
 - Remote surveillance only,
 - no on-site supervisor



Automated delivery vehicle manufactured in Switzerland

Ebikon/Lucerne, 2022 - 2024

- Transportation of orders from a supermarket to premises of nearby company
- No security operator on board, only monitored by a teleoperator
- Teleoperator can take control if needed



Source: LOXO, Migronomous



Automated Bus

Arbon, since August 2025



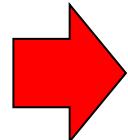
Source: Technische Gesellschaft Arbon (TGA)

- Full-size bus (not a shuttle)
- Operating in the narrow streets of Arbon's old town
- Gradual replacement of the on-board supervisor with a remote operator
- The automated vehicle is designed for dual-mode operation
- For the first time automated vehicle can be used with wheelchairs



Our experiences so far

- Different insights gained through each trial
- New technology trialled, companies able to gain knowledge and insights for future mobility offerings
- Technology not yet fully developed, but continuously being refined
- Access to data extremely valuable to be able to react quickly to problems
- Cooperation and open exchange between trial project team and authorities very valuable
- Allows public to better understand automation thereby contributing to a more informed discussion



Important insights and findings gathered to prepare ground for the revision of legal basis to allow automated driving in Switzerland!



Legal Basis – Revision of Road Traffic Act

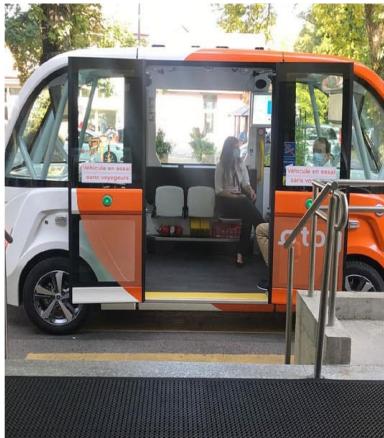
Into force since March 1, 2025: 3 Use Cases



**Vehicles with
take-over
requests**



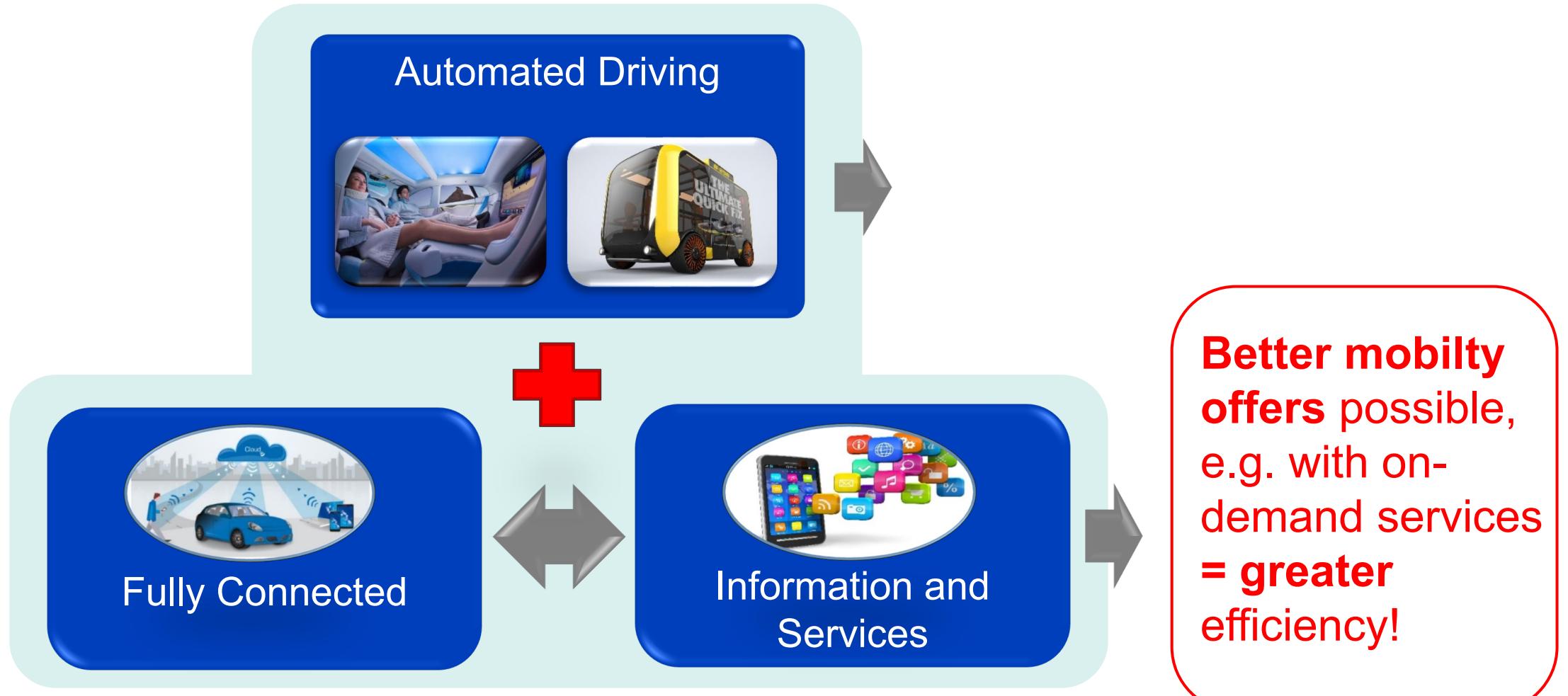
**Vehicles with an
automation system
for parking**



**Driverless
vehicles on
authorized routes**



Automation only reaches its full potential when it is combined with digitalization





Automation and digitalization bring opportunities, but also risks



Positive effects

Increased traffic safety

More comfort,
better offers,
greater accessibility

Better use of existing
infrastructure

Depending on market-
penetration



Positive or negative



Lower / higher
traffic volume

Lower/higher land use for
infrastructure

Lower/higher energy
efficiency and emissions

Depending on usage:
«Share it» / «Own it»



Yet unclear

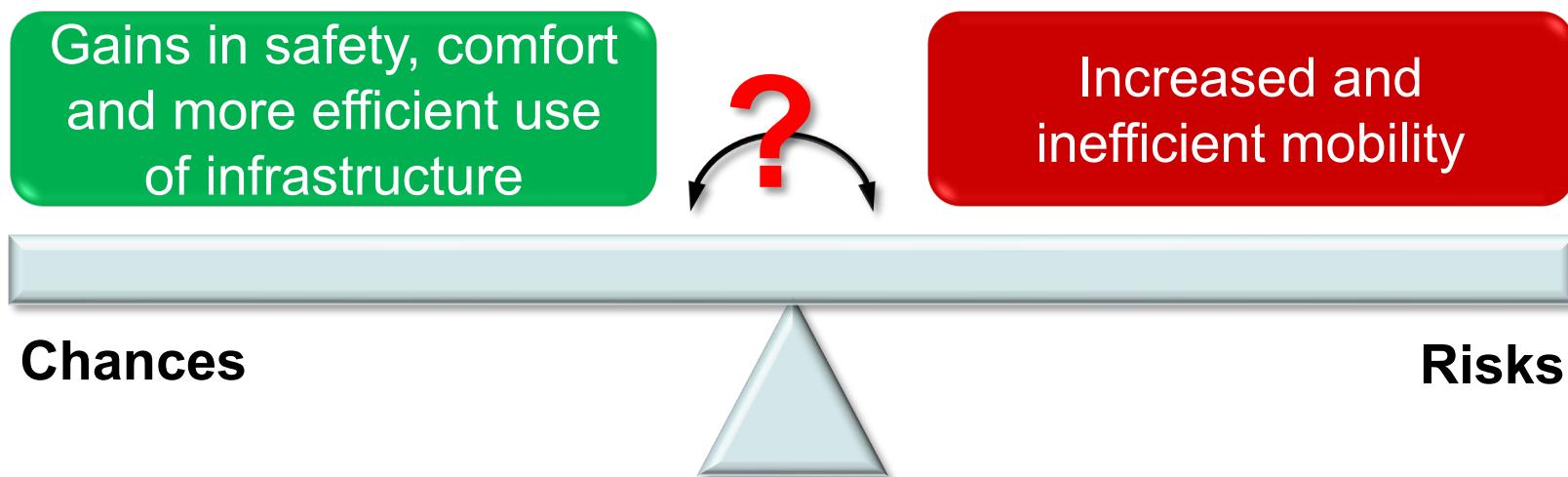
Further urban sprawl ?

Impact on workplaces

Paying particular attention
to during implementation

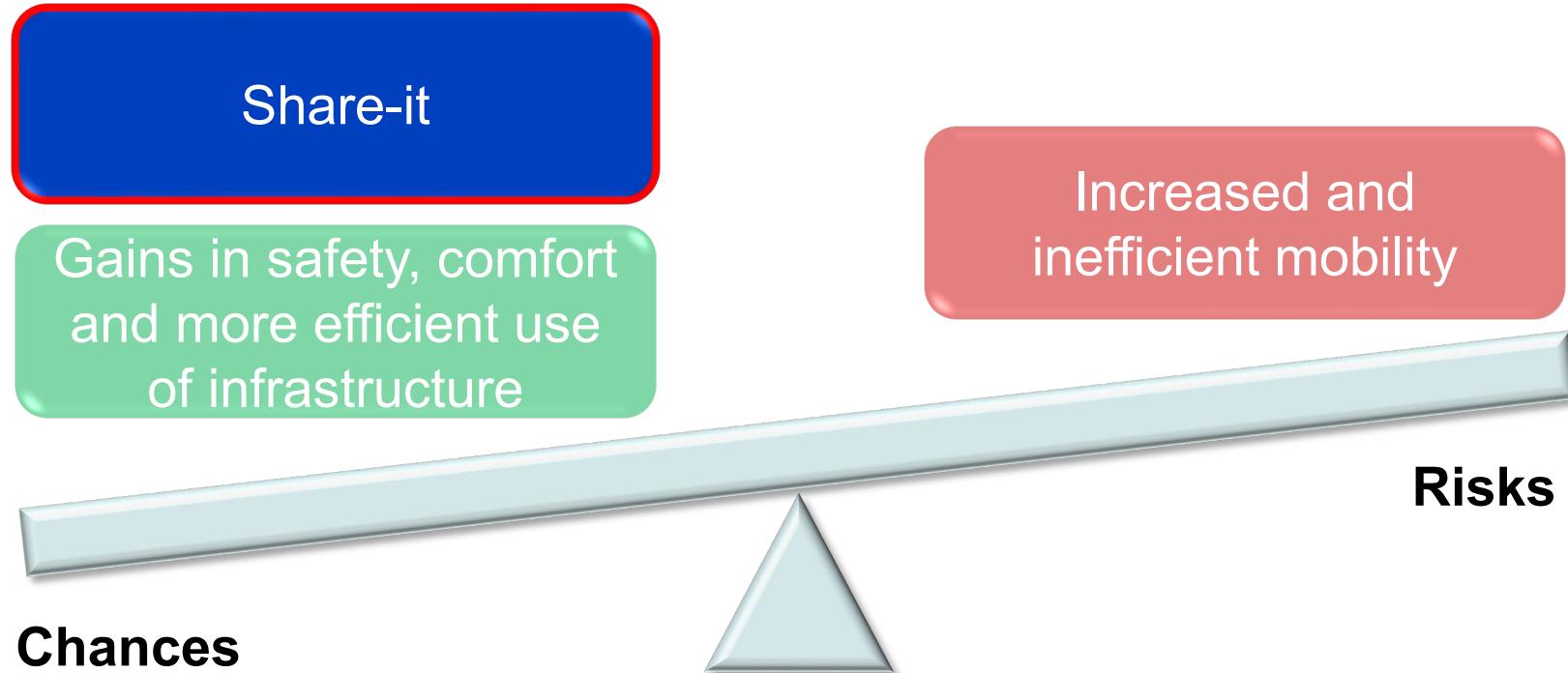


It's all about implementation...





It's all about implementation...





Especially vehicles without drivers offer opportunity for new mobility services



Free
Carsharing

Pay for use –
Individual Public
Transport



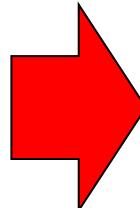
New type of
public transport

- Smaller vessels,
- Lower costs,
- More frequent, no fix timetables or routes



Mobility as
a Service

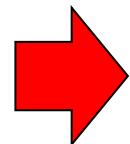
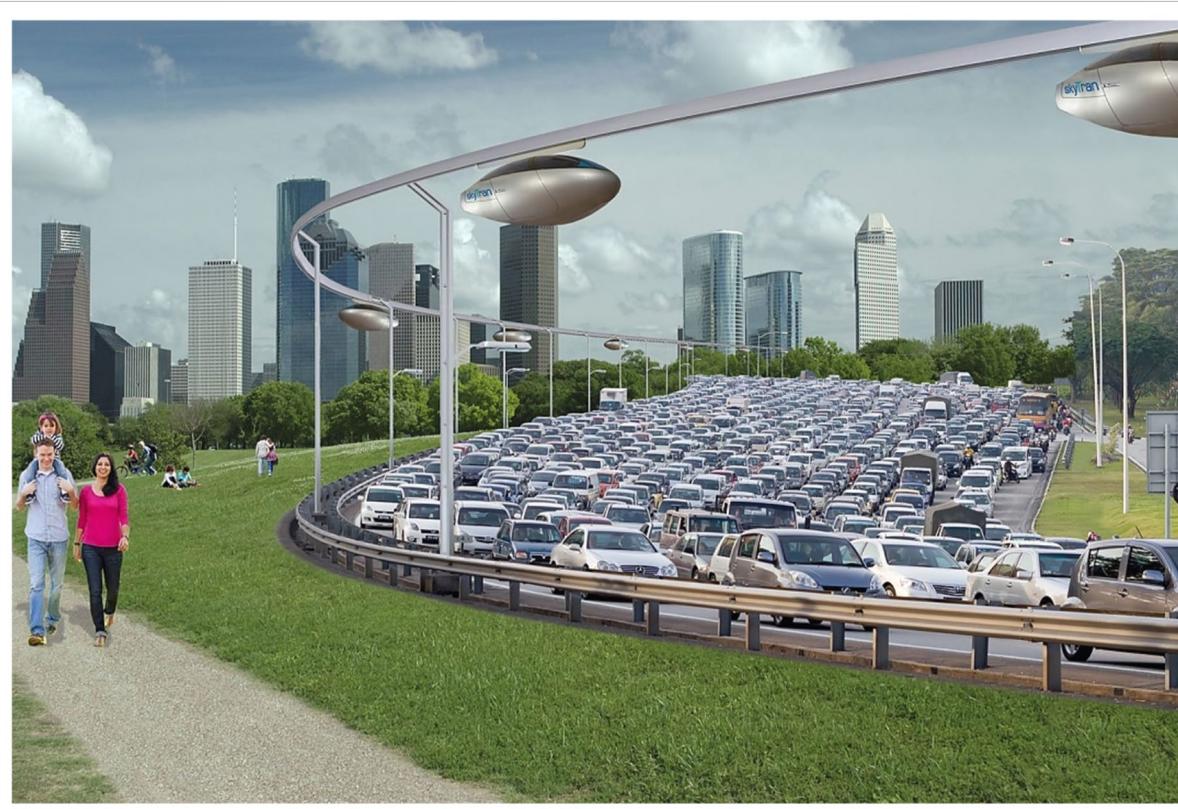
My mobility assistant
takes over!



- Should meet social expectations
- Should be attractive enough to encourage people to give up their own cars
- Must be economically viable



What kind of mobility do we want?



Social discourse is necessary. It's the key to actively shaping innovation in mobility and transport systems.

A vibrant, modern city street scene. In the foreground, a white tram is stopped at a platform. The street is lined with modern buildings, including a multi-story structure with a glass facade and a building with a green roof. There are several cars on the road, and many people are walking or sitting on the sidewalks and in small parks. A large, semi-transparent white text box is overlaid on the top half of the image, containing the text "Thank you for your attention!"

Thank you for your attention!

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