ADVANCING PUBLIC TRANSPORT

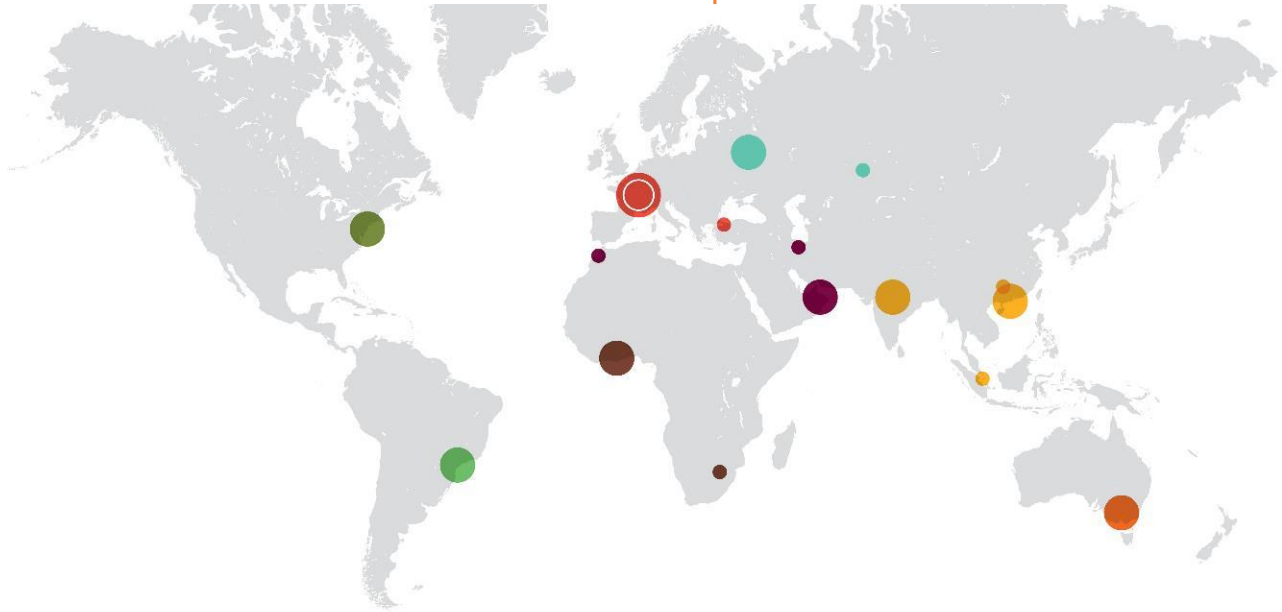
# LEADING THE TRANSITION FOR BETTER MOBILITY

## Be part of it

**ALAIN FLAUSCH**
**SECRETARY GENERAL, UITP**

# A WORLDWIDE ASSOCIATION

15 offices + 2 centres for transport excellence



### EUROPE
- Main Office | Belgium (Brussels)
- Liaison Office | Turkey (Istanbul)

### EURASIA
- Regional Office | Russian Federation (Moscow)
- Liaison Office | Kazakhstan (Astana)

### ASIA-PACIFIC
- Regional Office | India (Bangalore/New Delhi)
- Regional Office | China (Hong Kong)
- Liaison Office | China (Shenzhen)
- Centre for Transport Excellence | Singapore

### AFRICA
- Regional Office | Ivory Coast (Abidjan)
- Liaison Office | South Africa (Johannesburg)

### AUSTRALIA & NEW ZEALAND
- Regional Office | Australia (Melbourne)

### LATIN AMERICA
- Regional Office | Brazil (São Paulo)

### NORTH AMERICA
- Regional Office | United States (New York)

### MIDDLE EAST & NORTH AFRICA
- Regional Office & Centre for Transport Excellence | United Arab Emirates (Dubai)
- Liaison Office | Morocco (Casablanca)
- Liaison Office | Iran (Tehran)

# A DIVERSE MEMBERSHIP

**1400 member companies**

- Operators (all modes, also CS)
- Authorities
- Policy decision-makers
- Research institutes
- The sustainable mobility supply and service industry
- Associations

**18,000 contacts**

**96 countries**


## UITP unites the sustainable mobility community

# UITP COMBINED MOBILITY COMMISSION

Public transport in synergy with other modes like car-sharing, taxi, and cycling…

**Some of our members:**

# ONE OF THE GREATEST CHALLENGES FOR CITIES : MOBILITY

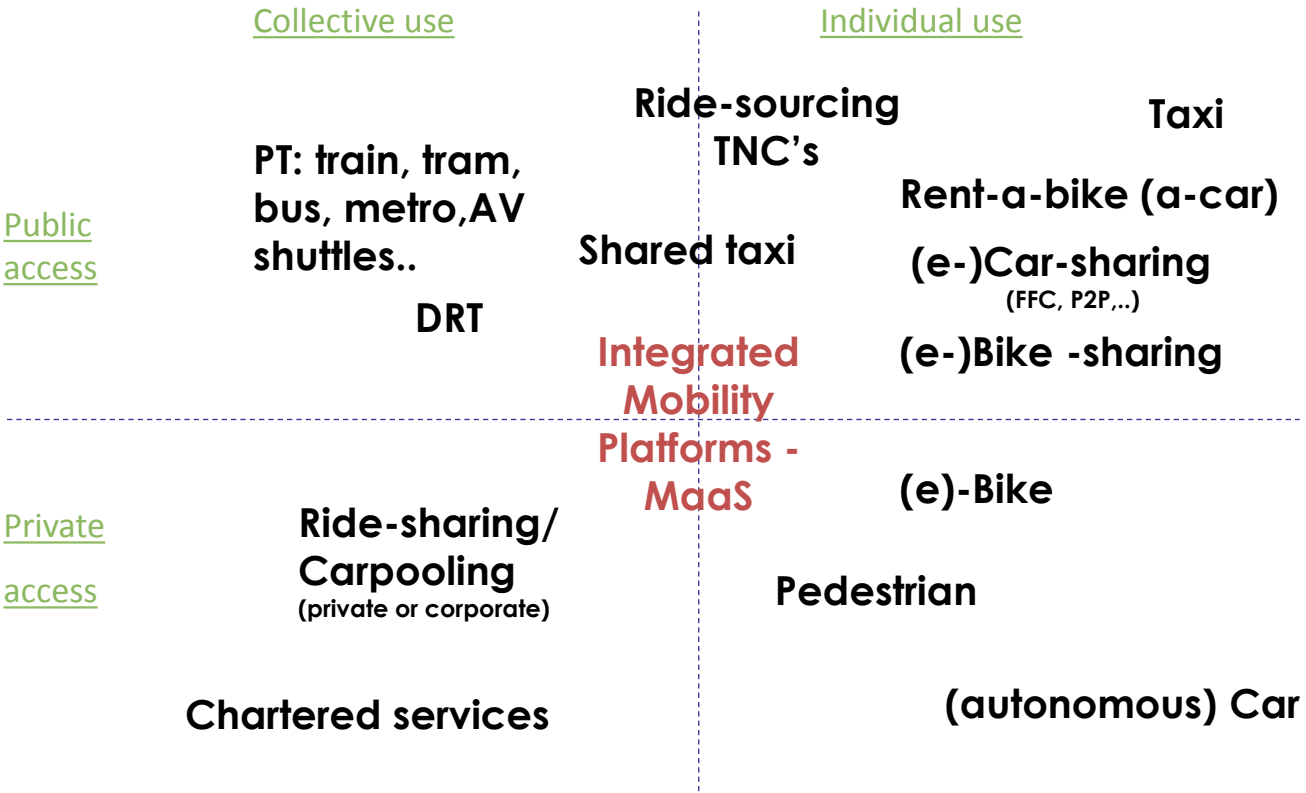
•Urbanisation, changes in society, digitalisation

•Green smart and sustainable mobility is part of the **top priorities** for urban decision makers

•**New innovative services** are on everyone's lips, but still very small scale


UBER

# URBAN MOBILITY SOLUTIONS : MORE AND MORE OPTIONS



# CITY PERSPECTIVE : PUBLIC TRANSPORT IS THE MOST EFFICIENT IN TERMS OF SPACE AND CAPACITY


Daily trips in urban areas worldwide are going to rise from **7.5 billion** in 2005 to **11.5 billion** in 2025

# BUT..

- Better match of supply and demand with new mobility services
- Difficulty to efficiently serve less densely populated areas
- Need for extended operational times
- Traveller's perspective : ever more complex mobility needs

**Public Transport on its own is not able to compete with the private car in terms of flexibility and convenience**

# COMBINED MOBILITY

## Combined Mobility is the answer!

### Flexibility + convenience = Door-to-door solution

**Public transport +**

Car-sharing

Bicycle and bike-sharing

Walking

Ride-sharing

Ridesourcing/TNC's

Taxis and shared taxis

On-demand transport

**A real alternative to the private car**

**A key to change citizens travel behaviour**

# HOW NEW MOBILITY SERVICES CAN HELP TO MEET PUBLIC POLICY GOALS

**Principles for a city :**

**accessible, safe, green, affordable, equitable, inclusive mobility**

- **Role of Authorities :** a framework and measures needed to ensure new mobility services bring benefits to principles and modal split objectives
- **Urban space** = most precious good, need to use it wisely
- **Role of integrated multimodal mobility platforms – MaaS** is to connect all urban mobility services **now and in the future**

  Examples : **Wienmobil** (Wiener Linien) & **Mobility Shop** (üstra)

# WHY PT IS THE BACKBONE OF INTEGRATED URBAN MOBILITY

- **High quality public transport** is the only alternative able **to fulfil the lion's share of trips by using a minimum of space**
- Without public transport, other sustainable & innovative mobility services cannot **offer an affordable alternative to car ownership**
- Public transport is the **backbone of sustainable mobility and expert in the organisation of mobility solutions**

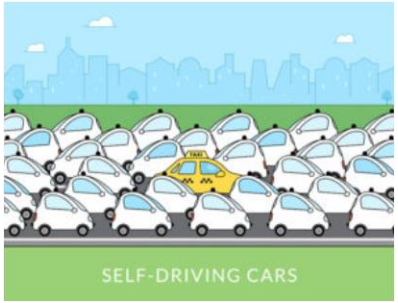
# FUTURE CHALLENGES FOR CITIES: AUTONOMOUS VEHICLES

Increase of individual comfort

- Time saving
- Smart driving
- Personal preferences
- Liberty

« Natural » choice for the individual

# FUTURE CHALLENGES FOR CITIES




Consequences

- More purchase of cars
- Average A.V. drives more
- Empty cars on the road
- Urban sprawl
- Loss of public space
- For the rich
- Decrease of use of PT, walking and cycling


**Challenge:**
**Convince the <u>individual</u> to make a shift to shared AV's**

# Autonomous vehicles will only help to meet public policy goals if they come as shared fleets integrated with public transport

## Autonomous vehicles

### Privately owned cars

- ⊖ No effect on car ownership
- ⊖ No effect on number of parked cars (cars unused most of the day)
- ⊖ No effects on costs /km
- ⊖ No effects on mobility for people that do not own a car
- ⊖ Even more car traffic (as it is even more comfortable and attractive to go by car)

**> Unsustainable, even more car traffic**

### Shared fleet of vehicles

- ⊕ Strong reduction in number of cars (reduced car ownership, effective use of cars as they operate most time of the day)
- ⊕ Drastically improved mobility for people that do not own a car

#### Fleet cars COMPETING with traditional public transport services

- ⊕ Street reclaiming (less parked cars)
- ⊕ Improved access to public transport
- ⊕ Improved mobility for people that do not own a car
- ⊖ More traffic (strong increase in Vehicle Miles Traveled - VMT)
- ⊖ Inefficency (small vehicles replacing buses and trains)
- ⊖ Passenger loss for traditional public transport walking and cycling

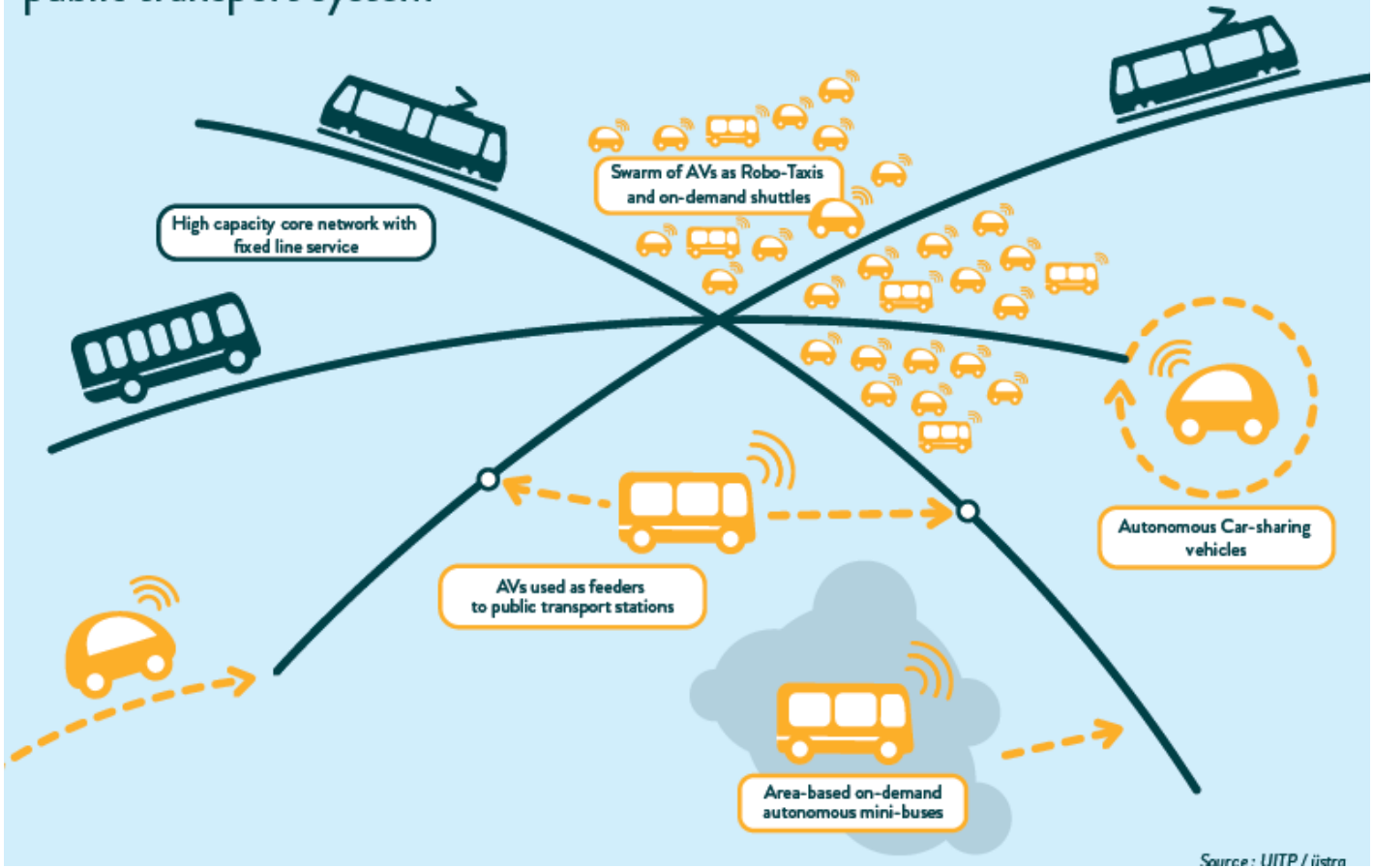
**> Better mobility, less efficency**

#### Fleet cars INTEGRATED with traditional public transport services

- ⊕ Large scale street reclaiming
- ⊕ Highly improved access to public transport
- ⊕ Highly improved mobility for people that do not own a car
- ⊕ Strong decrease in VMT
- ⊕ High gain of efficency (large and small vehicles perfectly mixed)
- ⊕ Low costs/km

**> Sustainable, better mobility and equity**

# Possible applications of autonomous vehicles (AVs) as part of a diversified public transport system




Source: UITP / ústra

# WHAT ABOUT CARSHARING?

- What does the arrival of autonomous vehicles represent for carsharing companies?

- Will there be a difference between round trip, point to point or free-floating carsharing offers?

- Will there be a difference between taxis, TNC's and carsharing?

# LEADING THE TRANSITION

**To reach the vision of a diversified integrated urban transport system, we need (amongst others):**

- **High quality high capacity public transport system**
- **Better walking & cycling infrastructure**
- **Integrated mobility platforms – MaaS**
- **Fleets of shared AV's of different sizes for different needs: shuttles, mini-buses, robo-taxis**
  - ➢ Who will operate these fleets?

# JOIN THE TRANSITION

- UITP & car-sharing association share the same values
- Long history of cooperation between Public Transport & Carsharing
- Let's join forces to lead the transition

# LEADING THE TRANSITION

- Partnerships : shared mobility providers & public transport
- Integrated mobility platform - MaaS
- Prepare citizens for shared mobility

# CONCLUSION

**Let‘s partner up to build liveable cities that provide access for all and respond to today‘s and tomorrow‘s lifestyle**

UITP ADVANCING PUBLIC TRANSPORT

# POLICY BRIEF

## AUTONOMOUS VEHICLES: A POTENTIAL GAME CHANGER FOR URBAN MOBILITY

### INTRODUCTION

*Imagine providing affordable, sustainable and convenient mobility options to all citizens including less mobile persons, the elderly, children and people living in suburban or rural areas. Autonomous vehicles (AVs) can help to build that future.*

### A NEW CHANCE FOR AN EVER-PRESENT PUBLIC TRANSPORT SYSTEM

Cities play a crucial role as engines of the economy, as places of connectivity, creativity and innovation. The arrival of driverless autonomous vehicles represents a unique opportunity for a fundamental change in urban mobility and could lead to healthier, more competitive and greener cities - but only if public authorities and public transport companies take an active role now and integrate AVs into an effective public transport network. If employed as shared 'robo-taxis' and mini-buses as well as used to reduce car ownership through more effective car-sharing schemes, driverless AVs could dramatically enhance public transport. This paper details the challenges ahead and outlines a way forward for the introduction of autonomous vehicles in our cities.

Indeed, a future with autonomous and connected vehicles can have various outcomes depending on how they are to be regulated and used. Will they lead to even more cars on the road, more urban sprawl and more congestion? Or will they contribute to shaping sustainable and liveable cities, the regaining of urban space, less vehicles on the road and a higher quality of life?

Imagine providing affordable, sustainable and convenient mobility options to all citizens including less mobile persons, the elderly, children and people living in suburban or rural areas. Imagine these mobility solutions opening the way for decarbonisation, to enable your city to regain valuable urban space to be reallocated to green zones, economic activities or affordable housing and to provide flexible, around the clock on-demand transport that is safe and cost-efficient. Autonomous vehicles can help to build that future.

Which future will you choose?

**More information in the latest UITP Position on Autonomous vehicles on [www.uitp.org](http://www.uitp.org)**