



# Shared use mobility services in a mid-size historic town: **LIFE-PERHT in Treviso**

Giorgio Ambrosino  
MemEx, Italy

John D Nelson  
Centre for Transport Research  
University of Aberdeen, UK

# Role of mobility and accessibility in lifestyle

Mobility is a key component of our lives and Mobility Governance is the major tool for addressing quality, equity and accessibility thus enhancing the cohesion of the city

- The mobility horizons of 2020 and beyond will have profound influences on lifestyles relative to those experienced in the late 20th century
- The internet and social media channels are transforming traditional concepts of mobility. Virtual mobility is now the primary driver of lifestyle development in Europe
- The mobility offer is becoming more varied, flexible, tailored and customised to suit individual lifestyles. These will quickly adapt to market desires
- Flexible Transport will become part of an overall mobility offer; a mainstream and not a market which is 'special needs driven

*L. Pickup*

# Contemporary Challenges

- People are **always on the move** – work, social, education, health
- High mobility **demand varied** in time and diverse in typology
- The **mobility is erratic** more than systematic....
- Transit services oriented to major axis of demand
- **Limited resources** and transport services. **Local travel** are poorly served (especially in periods/zones of low demand)
- The **commuter trips at 70-80%** are made by cars 85%-90% of commuting car with one occupant
- Currently **vehicle occupancy** continues to decrease and is between 1.15 and 1.2
- Private cars use covering small distance: 50% under 5 Km, 25% under 2 Km,..... in urban areas
- The priority for “**own car**” among the young generation is largely decreasing



**PT services in Europe are based at 80% on Bus**

# Urban Mobility Approach in Europe

EU Strategies  
Best Practices in Towns/Urban Areas

Action Plan on Urban Mobility COM (2009)  
**WHITE PAPER (2011)**  
**URBAN MOBILITY PACKAGE (2013)**  
SUMP ACTION (2011-2014)

- Integration of land use and transport planning (TOD approach),
- Actions towards **public transport priority**, green and active modalities, city logistics, cooperation among modalities,
- Improve fuel and vehicle technologies towards e-mobility



*Planning for the people*

Integrated  
Sustainable Urban  
Mobility Policy

Smart City is based on an  
**efficient and extended  
Collective/Public  
Transport**

# Main Trends in PT services

## At high level

- PT network based on **dedicated and priority corridor** -> **approach BHLS-BRT**
- **Management of the quantity/quality of the PT services** acting on regularity, speed, reliability and comfort...
- **Interoperability** with other mobility services (ITS systems, e-ticketing ,...)



## At low level

- **Feeder services**
- **Flexible services DRT services**
- **last mile services**
- **Paratransit**
- **“shared” mobility services**

Which services, scale and support are appropriate to the local area ?

**Large Urban Area <>SM Towns**



# Emerging New (private) Mobility Schemes Options

→ **established schemes:** bike and car sharing, collective taxi and car pooling



**ICT 2.0:** pre-on trip **access, tailored** services, **real time** control, resources **coordination, cooperation/networking**



*new alternatives to public supplied schemes and car ownership:*

- **FreeFloating car-sharing** schemes (such as Car2Go, DriveNow and Zipcar)
- Dynamic **ridesharing** services (like BlaBlaCar and Fliinc)
- **peer-to-peer transport** arrangement schemes (such as Uber, UberPop and Lyft)
- and brand **new forms of "institutionalized hitchhiking"** (i.e. RezoPouce)



# FT Services Experience

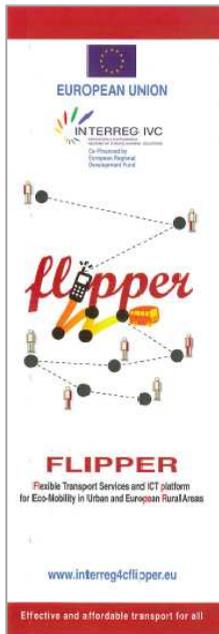
- ➔ **Wide range European projects and real applications (1996-2010)**
- ➔ **Wide range of services :**
  - "niche" SOLUTION (for specific area, time period, day, etc.)
  - FTS- Demand Responsive Transport (DRT)
  - collective taxis, Car-pooling
  - Dedicated services for specific groups
  - Health care needs.....
  - High value services (Hotels, Airport, ..)
- ➔ **Cover the "space" between conventional PT and taxi services**
- ➔ **Consolidated Products and Systems**
- ➔ **Different operational schemes Urban, peri urban and rural area**



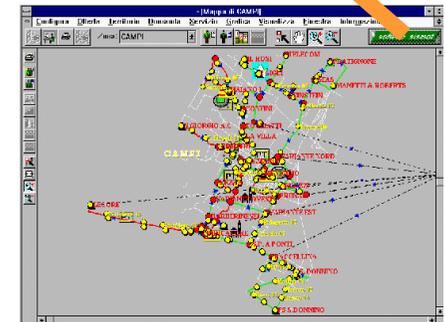
***First victim of Economic Crisis.  
Lack of an effective business model***

# FT services vs UBER

To be "Large" in terms of scale, coverage frequency



TDC



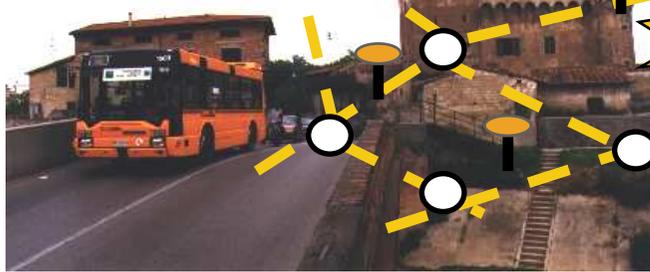
Trip request

Confirmation/refusal

Service



Journey Plan modification



# Mobility as Service vs Public Transport

- The traditional contrast between collective and individual transport solutions is gradually blurring respect specific needs
- **Mobility as a Service** is becoming a concrete market option new alternatives to public schemes and car ownership
- Users/citizens gradually are going to become potential mobility service providers

Some issues are still to be clarified

- Which regulation framework for the service provider ?
- How to guarantee the skill in the service provision ?
- How to make possible the creation of other platform ?
- How to avoid the sort of "social dumping"?

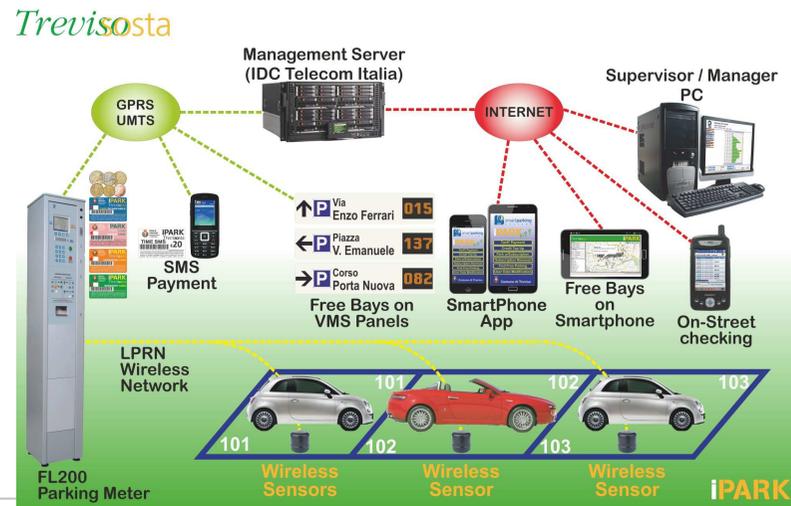
At Mobility Policy Level implication

- Which role in the overall Public Transport offer
- "complimentary or substitutive" role
- Which is the appropriate form of regulation and governance

# Treviso: a Small Historic Town



- 52 km<sup>2</sup>
- 82.000 inh.
- 1583 inh/sqkm
- Walled town with small historic centre
- Well-know tourist destination

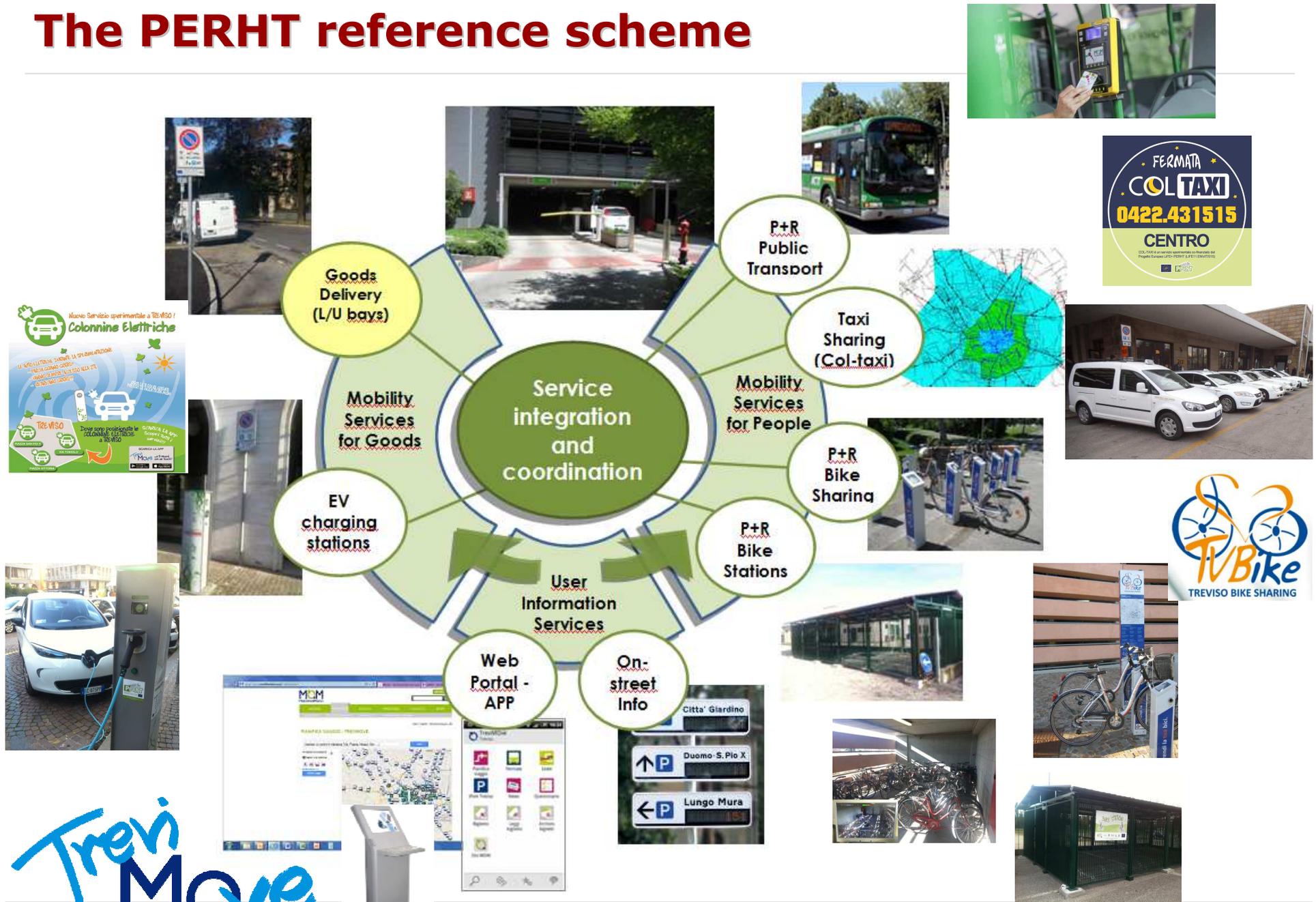


PARKING GREEN SERVICES FOR BETTER ENVIRONMENT IN HISTORIC TOWNS



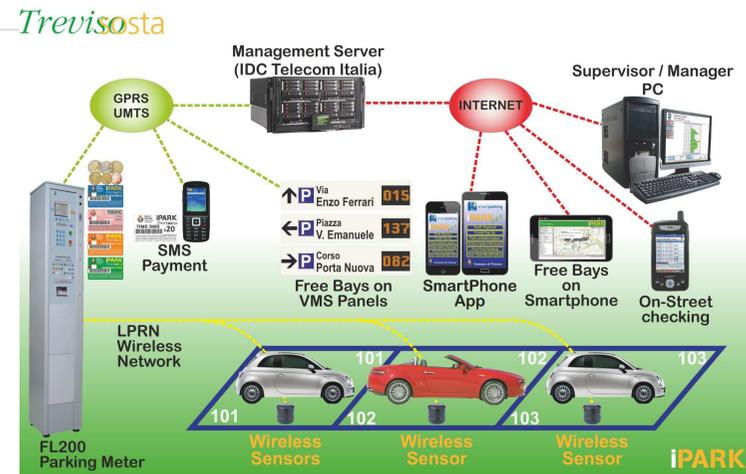
**SMTs in Europe are over 1500**

# The PERHT reference scheme



# The project approach and results

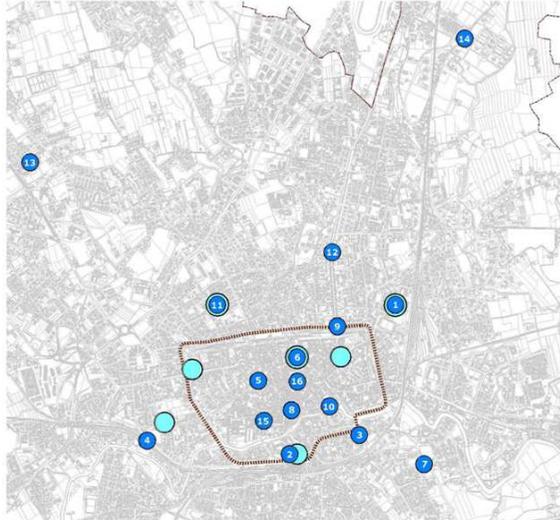
on road parking system as a core asset for the development of integrated sustainable urban mobility



- Automated monitoring and control of L/U freight bays
- Extension of existing **Bike Sharing** service
- Realization of **Bike stations** service
- Operation of **collective taxi** for night hours
- Promotion of **e-mobility** by deployment of recharging stations
- Realization **infomobility services** platform and APP
- Definition of suitable regulation and incentives for FEV
- Use a common smart card for services interoperability

# Bike Sharing extension

- 1 Stadio
- 2 Stazione FFSS
- 3 Dal Negro
- 4 Miani
- 5 Duomo
- 6 Rinaldi
- 7 Ca' Foncello
- 8 Borsa
- 9 Porta S. Tommaso
- 10 Università
- 11 Lanceri di Novara
- 12 S. Camillo
- 13 Piscine
- 14 Sede Provinciale S. Artemio
- 15 Vittoria
- 16 Monte di Pietà



- Based on 16 pick up stations located in the urban area with 70 bikes (more than 120 available slots).
- +6 new PERHT stations (60 bikes)
- 1500 frequent users of the service.
- Around 36000 yearly pick-up operations for a total amount of 45000 Km travelled

**+14 bike lanes for 160 Km**

# Bike Stations

- **Installation of n.3 bike stations**
  - ✓ near railways station
  - ✓ at Foro Boario parking
  - ✓ at Miani parking house
- Improvement of P+R services (train/car+bike)
- **Individual bike use alternative to bike sharing**
  - Service free of charge
  - Available only for PT subscriber
  - Video surveillance
  - Possibility to use PT smart card



**Modal Shift**  
From Parking house/Railway  
to bike

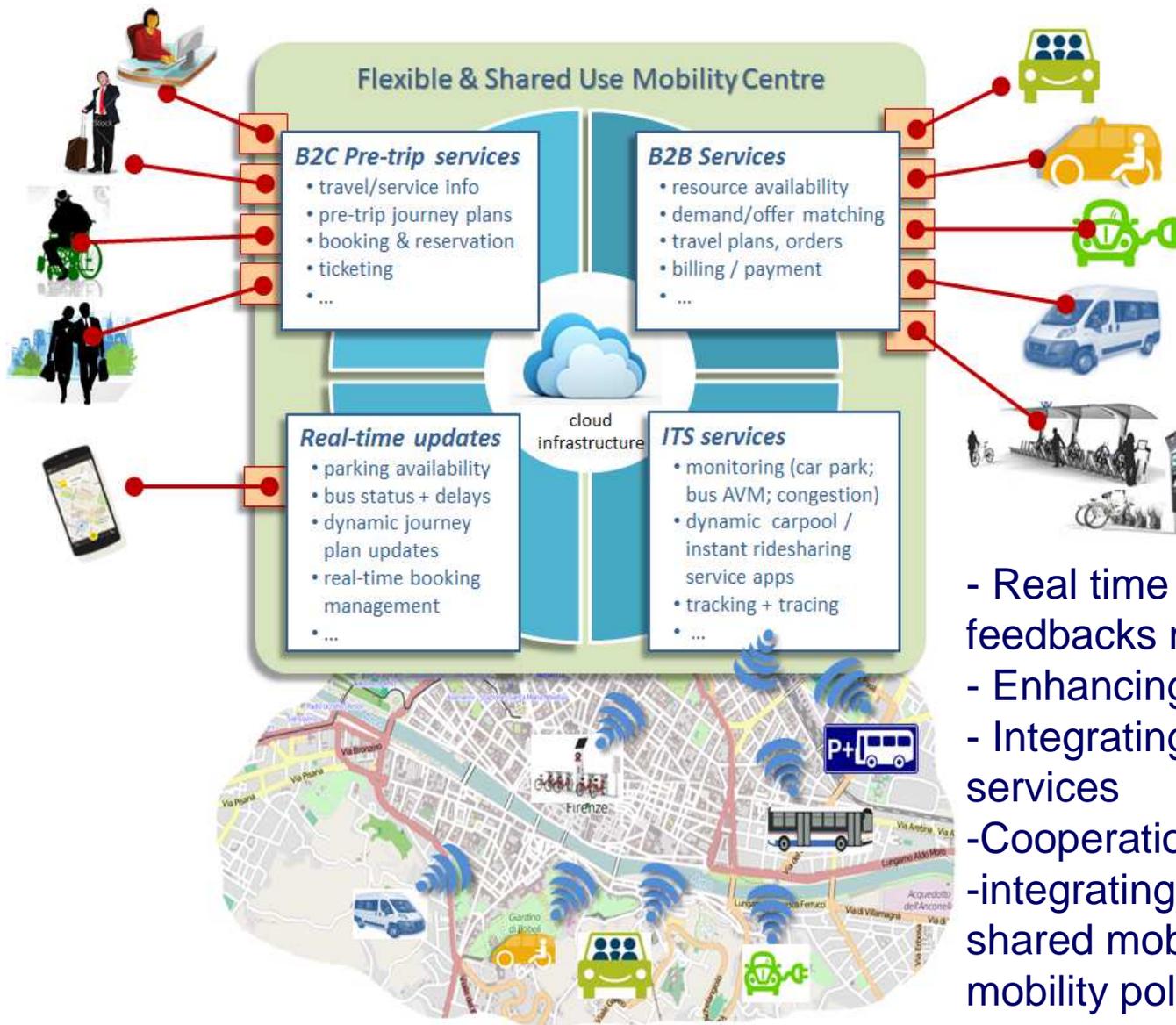


# EV recharging stations and dedicated parking lots





# Towards the Flexible and Shared Use Mobility Centre



-Connecting different mobility services: conventional, ride-sharing services, etc.)  
 – feeder to the main conventional public transport network/axes and modalities

-Serve mobility niche market

- Real time information and user feedbacks management

- Enhancing the user accessibility  
 - Integrating the other city mobility services

-Cooperation among operators  
 -integrating the overall FTS and shared mobility system with local mobility policies and operation schemes

## Some considerations

---

- The “UBER” Model is not new! What is new is the easiness and effective capability to realize these “shared” services due to the ICT 2.0 devices
- The new “shared” mobility schemes should be considered as complimentary to the “conventional” services (in success case cover less than 1% of the mobility demand)
- Policy-makers should better understand that these are not the “solution” for mass transport demand and at max can be considered part of FTS
- We need an active role of the Municipality-Mobility Agency for planning and coordinating FT and PT services and governing the “shared” model
- Recognize the FT sector as component of an expanded PT offer
- FT has the potential to become a “transport mode” with clear regulatory and financial schemes
- It is now responsibility of policy-makers to consider FTS as part of PT services and mobility solutions



PARKING GREEN SERVICES FOR BETTER  
ENVIRONMENT IN HISTORIC TOWNS



[www.perht-lifeplus.org](http://www.perht-lifeplus.org)

**Thanks for your  
attention!**

[giorgio.ambrosino@memexitaly.it](mailto:giorgio.ambrosino@memexitaly.it)