

## Becoming a real mobility provider

### Combined Mobility: public transport in synergy with other modes like car-sharing, taxi and cycling...

#### Successful cities rely on effective public transport ...

The vicious circle of urban sprawl problems, congestion and lack of space is choking our cities and leading to a decline in quality of life as mobility demand rises. The urban population is expected to double within the next 40 years in many areas of the world. Cities will face inevitable socio-economic, logistical and ecological challenges that, in turn, will force many daily commuters out of the city and into the suburbs, making traffic volumes skyrocket. As municipalities and governments push for better solutions to improve accessibility and liveability in cities, it is time to take stock of recent developments. Public transport is by far the most efficient solution in terms of required space and forms the core of an effective transport system for successful cities.

Yet, the pace of urban life has sped up and many cities are now 'open' 24 hours a day, 7 days a week to meet city dwellers' demand to access urban services whenever and wherever they want. This has resulted in more frequent and varied trips, but many of these trips cannot efficiently be provided by conventional public transport. Public transport is being challenged to become a key player in providing ever-more flexible and varied mobility services. UITP's strategy for the sector, which aims to double

the public transport market share worldwide by 2025<sup>1</sup>, therefore encourages its members to build intermodal strategic alliances with Combined Mobility services such as taxis, bikes and car-sharing. This is the key to becoming real mobility providers, enabling a more complete offer for customers and delivering lifestyle services.

#### ... in synergy with Combined Mobility services

The common and undeniable target is to change citizens' travel behaviour and offer a genuine alternative to the car.

Modern mobility is based on flexibility and a high level of convenience. Combined Mobility is the answer: car-sharing, taxis and shared taxis, bicycle and bike-sharing, car-pooling, demand-responsive transport, car-rental, etc., are services that can complement the classic fixed line- and timetable-bound public transport services and, together with walking, they form a complete and coherent mobility solution. Public transport should no longer consider these forms of mobility as competitive but rather as services that can be mutually beneficial. They

<sup>1</sup> For more information, see [www.uitp.org/advocacy/public\\_transport.cfm](http://www.uitp.org/advocacy/public_transport.cfm)

help households to refrain from purchasing a car (or an additional one). Indeed, Combined Mobility can compete with the privately owned car in terms of convenience and cost-structure and thus can help improve the quality of life in our cities.

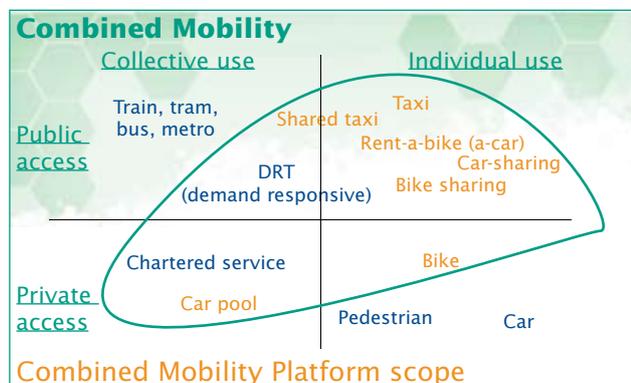


Figure 1: This illustration shows the different transport modes and mobility services classified by collective or individual use, and public or private access. Orange: Mobility services that are clearly within the scope of the UITP Combined Mobility Platform. Blue: Mobility services that are closer to public transport but could contribute to a Combined Mobility offer.

This Focus Paper is put forward by the UITP Combined Mobility Platform with the aim of convincing public transport organising authorities and operators of the benefits of Combined Mobility services and of showing them what services are missing in their product portfolio in order to become real mobility providers. The objective here is to present the different Combined Mobility services, show the economic and ecological advantages of partnerships, highlight areas where coordination is mutually beneficial and give advice on how best to collaborate.

This Focus Paper will demonstrate that Combined Mobility services are not just a separate add-on but are an integral part of the mobility product range!

## What is Combined Mobility?

Combined Mobility is the result of public transport in synergy with other modes, like car-sharing, taxis, cycling... (see Figure 1).

A closer look at the different Combined Mobility services shows the ways in which a close collaboration with or even an integration of these services is beneficial to public transport.

### Car-sharing

**Car-sharing (car clubs** in the UK) is a system that enables people to share a fleet of different cars. It is a membership-based service where no separate written agreement is required each time a member reserves and uses a vehicle. All car-sharing organisations offer members access to a spread-out network of shared vehicles 24 hours a day and

7 days a week at unattended self-service locations and affordable ‘pay-as-you-drive’ rates that include fuels, insurance and maintenance. Prices are directly proportional to usage and are lower than the costs of personal car ownership and, as with car-sharing, costs are shared.

It shifts the focus away from ownership of the car towards a more rationalised approach to car usage. The ‘pay-as-you-drive’ principle leads to mobility behaviour that is no longer dominated by the car, as most trips are made by public transport and other sustainable modes. Using modern technology like the internet, e-ticketing, zero-emission vehicles, etc., is an opportunity to mould car-sharing into a Combined Mobility offer that is suited to the challenges of a 21<sup>st</sup> century urban environment.



Figure 2: Greenwheels offers car-sharing services in the Netherlands and Germany.

In terms of *integrated spatial planning of the networks, joint promotional and marketing activities, combined ticketing and joint information*, it is important to develop strong alliances between the car-sharing operator and the public transport operator and/or the public transport authority.

### Cycling

Bikes contribute to the common goal of achieving sustainable mobility patterns in several ways. Three different initiatives combine the bicycle (possibly also the electrically assisted bicycle) with public transport and other modes.

Firstly, purpose-built **cycle parking** at stations is increasingly used by passengers to get to and from stations. It provides security and some facilities also offer advice, maintenance and rental services.

Secondly, there are two types of **cycle rental** scheme operated at stations or service points: **short- and long-term bicycle rental**, or the **rental of folding bikes** to season ticket holders. This service is mainly designed for regular commuters.

Finally, **‘bike-sharing’ schemes** have, in recent years, made cycling a popular way to get to your final destination. For station-based schemes, bikes are available

at self-service stations spread throughout the city 24 hours a day, 7 days a week, and can be returned to any station after rental. In flexible schemes, bikes are available everywhere in the city and not just at rental stations. They can be reserved and unlocked via a phone call and parked anywhere in the city after rental. The pricing for both schemes is time-based.



Figure 3: Integrated mobility in Berlin, through secure bicycle parking at public transport stations.

Transport for London has experienced rapid acceptance of its bike-sharing scheme with 2.5 million journeys recorded in the first six months of operation (August 2010 - January 2011). The scheme has just under 5,000 bicycles at 315 docking stations and the first half hour of use is free of charge.

Synergies are achievable in areas such as *integrated urban planning of public transport networks and cycling infrastructure* (including common use of reserved lanes, bicycle parking facilities at interchanges, etc.) and *communication* (including information on public transport maps, trip planners, signage in stations, shared branding in advertising and marketing, etc.). But cooperation is also essential in terms of the *adaptation of existing services* (including the installation of pathways, an integrated ticketing and fare system, etc.) or *operational issues* (such as bikes on buses or trams, liability issues, bike lockers or service points near public transport stations, etc.). This is not only beneficial for public transport and cycling, but also enhances the air quality and quality of life in cities, and improves public health!

## Taxis

**Taxi services** are increasingly seen to contribute to sustainable urban mobility, as they are a mobility solution that offers an alternative to the individual use of a private car. In general, a legal framework regulates the activity and fares of taxi services in a certain area. According to this legal framework, the booking centre and field operators are either public actors or private companies acting in a competitive context.

**A shared taxi is a** service where different clients share the use of a taxi for a part of or the whole journey. The fare is thus reduced and therefore lower than the fare for individual taxi use. Depending on how the system works, customers are either picked up at pre-defined meeting points or the taxis follow virtual service lines. The journeys and pick-up points are planned thanks to specific software. The shared taxi is an alternative to public transport at times and in areas where the demand is more diffuse, (e.g. in big cities at night or rural areas). It is beneficial to establish a *coordinated planning* of taxi stations and the public transport network, as well as *common marketing and information campaigns* and agreements on *operational issues* such as the common use of reserved lanes.

## Carpooling

**Carpooling** (also known as **ride-sharing** and **lift-sharing**), is the sharing of private car journeys so that more than one person travels in a car. The driver has no commercial agenda. Carpooling is based on the concept of sharing the costs among the carpool team members and works best if it is organised through online matching software. The user of car pooling may pay a small fee to the service provider for making a successful journey match. Carpooling has a direct impact on the environment and congestion, as it ensures that fewer cars are on the road.

Public transport operators and organising authorities can support carpooling by *raising awareness, integrating carpool matching software* in public transport route planners, *adding carpool information* on websites or in brochures on accessibility for railway stations and bus stops or by providing *accessibility to Park&Ride or carpool parkings*.

## The importance of becoming a real mobility provider: Why engage with Combined Mobility services?

The primary objective of cities in terms of mobility and space allocation is to reduce car use and encourage the use of public transport and other alternative modes, sometimes called 'active modes' - mainly walking and cycling. Nevertheless, it is well known that the emotional element of car ownership and mainly the fixed costs incurred lead car owners to spontaneously use their vehicles for every trip. The main challenge facing authorities is thus to decrease significantly the number of private cars and consequently implement a global mobility policy that makes it possible to live and move around in the city without having to own a car.

The backbone of every mobility policy obviously remains an efficient public transport system, the role of which is

to ensure the majority of all motorised trips. Nevertheless, regardless of the level of performance of the public transport service, there will always be situations where, according to the time or nature of the journey, car usage is not only necessary but also justified.

In these situations, taxi services and especially car-sharing are the obvious services that can complement public transport as they offer the benefits linked to car usage without the need to own the car!

## Benefits of car-sharing

Several customer surveys have proven that, after joining a car-sharing scheme, clients walk, cycle and use public transport much more often than before. The Muheim study in Switzerland showed that public transport use by car-sharing members increased by 25% after they joined Mobility, the Swiss car-sharing provider. The below illustration shows the results of this study and clearly demonstrates that car-sharing users travel in a more sustainable way and confirms the modal shift towards more sustainable modes!

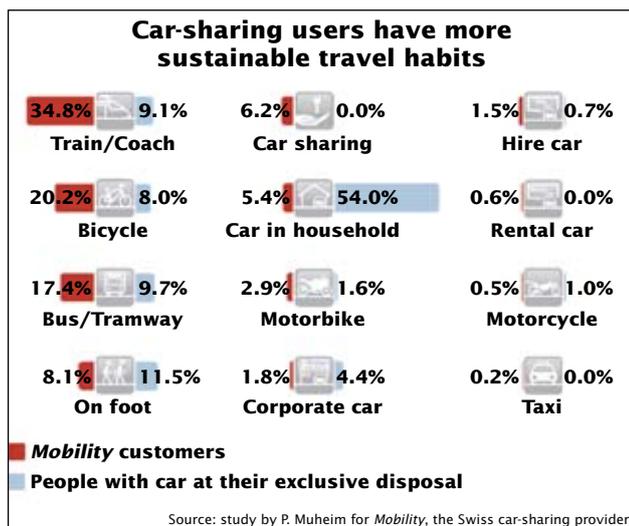


Figure 4: Comparison of the modal split of Mobility car-sharing users (red) and people with a car at their exclusive disposal (blue).

### Car-sharing changes travel behaviour and encourages a modal shift towards more sustainable transport modes!

Many car-sharing clients get rid of their car or do not buy a car (or an extra car) although they had originally planned to. Indeed a customer survey was carried out in 2009 by Taxistop-Cambio amongst its clients in Brussels, Belgium as part of the EU project momo ([www.momo-cs.eu](http://www.momo-cs.eu)). The survey showed that 18% of the clients got rid of their car after joining Cambio. Eleven percent said they would have bought a car if they had not become a Cambio member and 14.2 % said they would probably have bought a car.

This means that in Brussels, one Cambio car replaces 8.6 private cars and this figure is similar in other re-

gions where car-sharing schemes are in operation. This decrease in the number of cars also brings about savings in terms of costs and space needed for parking. The money and space saved can then be used for social, green or business use. **Car-sharing saves public space!**

**Car-sharing brings more customers to public transport.** The same customer survey in Brussels showed that 60% of the Cambio clients are public transport (STIB) season ticket holders and 22% have become new season ticket holders since they signed up to Cambio.

In Quebec, thanks to the combined offer 'duo auto+bus' from RTC, the local public transport operator, and Communauto, the car-sharing provider, the number of monthly public transport passes purchased by car-sharing clients rose by 45% following the launch of the offer.

Moreover, **collaboration with car-sharing offers public transport a more dynamic image** and brings a **more flexible and wider mobility offer**. These arguments clearly show that car-sharing has become an important element of sustainable transport strategies. However, it still remains relatively unknown and underestimated despite its huge potential. In Zurich, Switzerland, 6% of the inhabitants are car-sharing customers; imagine if this proportion was the same in a mega city like Paris, London or Shanghai...!

## Benefits of cycling

In parallel, investing in cycling infrastructure, making cities attractive for cyclists and implementing bike-sharing schemes helps develop sustainable mobility patterns.



Figure 5: In Wallonia (Belgium), C-TEC folding bikes are offered as part of a combined season ticket from the public transport operator TEC in order to extend the catchment area of the bus stations in less densely populated zones.

To a certain extent, bicycles are no longer exclusively personal mobility modes, as there are ever-more bike-sharing schemes in operation. As a result, bicycles are increasingly seen as the solution of choice for the first/last mile issue, which reveals the emergence of a new paradigm: bikes are becoming collective transport! Indeed, bike-sharing schemes are springing up in cities all over the world: Mexico City, Barcelona, Shanghai, Changwon,...

Cycling supports public transport by **extending the catchment area** of public transport stations far beyond walking range. It **enlarges the public transport offer in time** (24/7 service) and **geographically** (where the public transport offer is low) and contributes to giving public transport a **fresher and healthier image**. To encourage cyclists to use public transport it is important to build safe bicycle facilities next to public transport stops. Bike-and-ride parking facilities cost much less than P&R facilities for cars. Through coordinated pricing, ticketing and marketing, the integration of cycling into the public transport offer will **increase customer loyalty** and **attract new customers**.

**Transdev** has integrated the bicycle into a global transport service and has invested in a broad range of bicycle schemes, namely a 24h public bicycle sharing scheme, short- and long-term cycle hire schemes at service points and secured bicycle parking facilities.

In 2010, Transdev managed 6,000 bicycles and 1,300 bicycle parking facilities, which represents 1,000,000 bicycle trips and EUR 1.8 million of turnover.

From a cyclist's point of view, access to public transport helps cyclists make trips that are longer than those possible by bike alone and also provides convenient alternatives when they encounter bad weather, difficult topography, gaps in the cycle network and mechanical failures.

### Benefits of the taxi

**Taxi** services **enlarge the public transport offer in space and time**, especially during the night, as an alternative to public transport, or in less densely populated areas, where public transport cannot be as efficient. Taxis and shared taxis can compete with private car use, as they can be **convenient solutions for persons not owning or not able to drive a car or as feeders for**

In Brussels, the Brussels Region reached an agreement with the taxi operator Taxis Verts. Thanks to this agreement, the public transport operator STIB was able to collaborate with Taxis Verts and redesign the night bus service offer. Indeed, the **shared taxi** service Collecto is a demand-responsive transport service offered at an affordable flat rate. Customers must make their request by phone. They are then picked up at one of the 210 pick-up points and they are free to choose their destination within the Brussels Region. Thanks to this shared taxi service, the night bus service has been optimised and the cost-efficiency of these night bus lines has been enhanced.

**the public transport** system, even though they require car use to transport individual clients.

The shared taxi can be the missing link between public transport and the individual taxi: it groups together clients on a part of their journey to respond to transport demand that, although more diffuse, is nonetheless quite significant.



Figure 6: In Brussels (Belgium), the shared taxi system Collecto can be an alternative to public transport at night, where demand is more diffuse.

## Conclusion: Become a real mobility provider!

Collaborating with or integrating Combined Mobility services into the public transport service portfolio can be ecologically and economically advantageous and the key for public transport operators to offer a real alternative to private car ownership. Only a Combined Mobility offer can compete with the privately owned car in terms of flexibility and cost-structure. The use of new technologies such as mobile phones will increasingly make end-to-end journeys even more convenient.

Combined Mobility services are not just a separate add-on, but instead form an integral part of the mobility product range.



Figure 7: In Hannover (Germany), Hannovermobil is a joint ticket that integrates public transport, car-sharing, taxis, German rail services, the bicycle and other services. Combining transport modes is the best way to meet today's diversified and complex transportation needs.



## Recommendations for successful collaboration between public transport & Combined Mobility services

- **Develop a genuine Combined Mobility policy.** This means not just putting supposedly competitive modes side by side, but detecting and developing all possible synergies between them.
- **Stronger together.** Uniting public transport and Combined Mobility services to fight the individual use of the car!
- **Let public transport play an active role or even take the lead** when developing partnerships.
- **Build strong alliances and partnerships.** The form these partnerships take is secondary and depends on the context.
- **Set up a department in charge of Combined Mobility** issues within the public transport operator and/or regional/local authority and/or organising authority to foster cooperation, partnerships and promotion.
- **Be aware of mutual benefits.** For public transport these include an enhanced image and more customers whilst Combined Mobility services will e.g. gain visibility and recognition as a serious partner.
- **The organising authority and/or regional/local authority must formally recognise the Combined Mobility service.** Recognise only business models that really complement public transport and help to reduce the number of private cars.
- **Build tomorrow's cities.** Integrate Combined Mobility infrastructure into urban planning and public transport infrastructure. This can include multimodal interchange hubs, car-sharing and bicycle parking facilities on the street and in new buildings, shared road space...
- **Use new technologies** to create new partnerships or provide new mobility services.
- **Develop global marketing campaigns** to promote better mobility through Combined Mobility, whilst leaving room for every operator to do their own marketing.
- **Encourage commercial cooperation** to give clients easy access to a Combined Mobility offer: combined ticketing, common service centres, integrated information...
- Opt for and privilege **combined mobility services with economic models** in which client tariff income reflects real costs as far as possible.
- **Quality as the leitmotif:** Only high-quality services can offer a long-term alternative to the private car.
- **Develop your mobility policy with one aim in mind: offering citizens the possibility to live in their city without owning a car!**

This is an official position of UITP, the International Association of Public Transport. UITP has over 3,400 members in 92 countries throughout the world and represents the interests of key players in this sector. Its membership includes transport authorities, operators, both private and public, in all modes of collective passenger transport, and the industry. UITP addresses the economic, technical, organisation and management aspects of passenger transport, as well as the development of policy for mobility and public transport world-wide.

This Focus Paper has been prepared by the UITP Combined Mobility Platform and approved by the UITP Policy Board. Downloadable in EN, FR, DE, ES at [www.uitp.org](http://www.uitp.org)

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