

FOUR YEARS DOWN THE PATH WHAT IS THE MOBILITY IMPACT OF VÉLO'V?



To overcome the excessive use of solo motorised means of transport and their negative external effects, soft mobility needs to be widely developed. This includes multi-, inter- and infomodality between active mobility, active mobility assistance, mass transport and shared cars. Active mobility describes mobility for which people only use their heart as motor: walking, cycling, skating, skiing, swimming...

OVER the past three to five years, cycling has become more accessible thanks to the fleets of public bicycles rolling into city streets across Europe. Vélo'v, the public bike service in the French city of Lyon*, was the first to be implemented on a wide scale in 2005. How has this fledgling mobility service and complex transport system impacted mobility in the city?

The Lyon experience

Vélo'v is a high density and homogeneous network comprising 350 docking stations, 6,600 parking spots in the public space and a fleet of 4,000 bikes available in Inner Lyon-Villeurbanne. "In contrast to a classic bike rental scheme, this kind of service is highly flexible and usually provides one-way capability, easy access, short term rentals, is open to a wide range of clients and based on a transferable system" (OBIS, 2009**). Users aren't responsible for maintenance, home parking

or insurance. They have 24/7 access to bicycles in many public locations with a single contract, plus membership options. As Gilles Vesco, elected representative in charge of Vélo'v, said: "We have rapidly moved from being a curiosity to a genuinely new, urban transport mode. We have invented individual public transport." Six and a half million trips in 2008, around 50,000 customers, between 15 to 25 thousand rentals a day! Vélo'v is an untold success story. Greater Lyon clearly paved the path for this kind of service. So if we look back, what is the mobility impact?

Petty modal shift from cars, but cycling almost double?

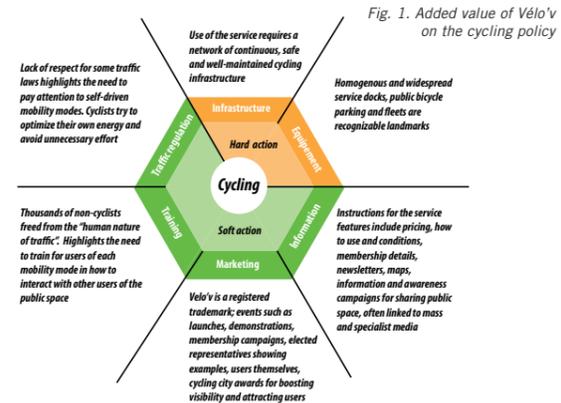
Five percent of Vélo'v users would travel by car if the service didn't exist. An average of 1,000 daily car trips have been saved, i.e. less than 0.01% of car trips for Inner Lyon-Villeurbanne. However Vélo'v already represents around 1.2% of the modal split of the Inner Lyon-Villeurbanne mobility market. From June 2005 to June

2009, bicycle use increased by 80%, and private bicycle by 24%. In June 2009, Vélo'v accounted for 31% of all bicycles being used (Greater Lyon, 2009).

Enhancement of the bicycle policy

As a complement, but more than other bike services or action plans, Vélo'v questions and/or impacts the six features of any cycling policy.

Vélo'v has changed individual social picturing and behaviour toward cycling. A greater part of the population climbs 1, 2, 3 or 4 steps (see Fig. 2 below) and 96% of Vélo'v users are new cyclists (Greater Lyon, 2008). The service has become an integral part of the cityscape of Lyon. As a symbol it generates a certain degree of cycling awareness among the general public, technicians, politicians and mobility professionals, ... beyond Lyon!



	Inner Lyon-Villeurbanne	Inner Greater Lyon
Population(1)	620,000	1,253,200
All modes daily trips %(2)	1,661,000 – 100%	3,783,500 – 100%
Car daily trips %(2)	419,000 – 25%	1,730,500 – 46%
Bicycle daily trips %(2)	46,500 – 2.8%	64,500 – 1.7%
Vélo'v daily trips %(2008)	~ 20,000 – 1.2%	~ 20,000 – 0.5%
Car trips shifted to Vélo'v %(2008)	1,000 – less than 0.01%	1,000 – less than 0.001%

(1)INSEE, 2006;
(2)SYTRAL, 2006 household transport survey for the conurbation of Lyon, 2007

Table 1. Mobility data for Inner Lyon-Villeurbanne & Inner Greater Lyon (2006)

Boosting other soft mobility offers

Among other mobility action, public bicycles contribute directly or indirectly to improving soft mobility in general:

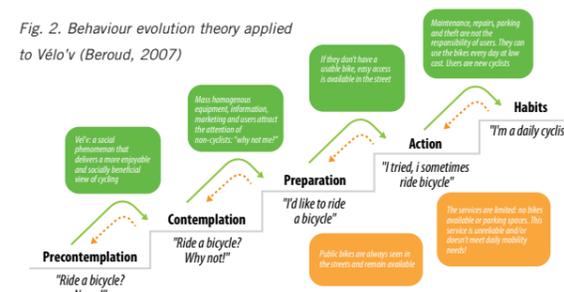
- The introduction of a new mobility service encourages existing providers to step up their efficiency and become partners. In Lyon, ticketing intermodality has been developed with local and regional transport, car parking and car sharing passes
- A multimodal soft mobility user is obliged to master several different modes. Since 93% of Vélo'v users are

still also travelling by public transport (Greater Lyon, 2008), they are simultaneously pedestrians, cyclists and public transport passengers

- Public bicycle investments are a point of no return for developing cycling. A growing proportion of citizens, cyclists or not, constitutes a non-identified mass lobby capable of putting the pressure on decision makers to continue developing cycling facilities. Four years after implementing Vélo'v, Greater Lyon launched a five-year cycling master plan worth €90 million to develop the cycling network and a new rental service (Greater Lyon, 2009)



Fig. 2. Behaviour evolution theory applied to Vélo'v (Beroud, 2007)



Name	Public Bicycles (PB)
Date of birth	July 28, 1965 (De Maio, 2009)
Place of birth	Amsterdam, the Netherlands, Europe
Evolution	Four generations defined by encouraging sharing; The 4 th is Bicimia in Brescia, Italy
Number of services worldwide	> 200 in 25 countries and 4 continents; ¼ are in Europe
Coordinators	Private (Next Bike); city council (Paris, France), greater city or conurbation (Lyon, France); local public transport authority (La Rochelle, France); region (Reggio Emilia, Italy)
Providers/operators operational	> 20: external companies, transport operators, public bike companies...
Implementation and operation costs	Between €2,000 to €3,000 per bike (GART, 2008)
Key success factors	High density of landmark service docks and parking, null use cost of the identification means, sweetener price policy (Beroud, 2007)

- The integration of a shared fleet capable of calming the city, increasing the safety of cyclists and pedestrians as well as improving the overall quality of the urban environment. Nevertheless the arrival of many cyclists on the roads may initially create conflict with cars, buses and pedestrians unaccustomed to dealing with them. In Lyon, awareness campaigns focused on sharing public spaces between the various human flows and respecting the mobility modes employed. Conflicts reveal that experiments and training are required to ensure all these modes smoothly interact. Vélo'v highlights the self-driven common behaviour of users: they try to optimise their own energy and avoid superfluous efforts (Beroud, 2008)

city, boosts the efficient use of public spaces and encourages cyclists to ride on the road (Beroud, 2006)

Conclusion

Although Vélo'v can't tackle high car use by itself, it is a key tool for developing and stimulating cycling. Moreover it is helping kick start soft mobility by questioning the allocation of public spaces and mobility needs. After a decade of innovations, trials and readjustments, and in the aftermath of the frenzy that grabbed cities across Europe, public bicycles should no longer be considered as just bikes in the street. Are cities ready and willing to exploit their full potential? ●

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