THE VELOPASS BIKE SHARING SYSTEM

Evaluating the potential for intercity travel combining public transport and active modes





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12-25 March 2010

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Marbella, Chile

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Bike sharing around the world...



The Bike-sharing Blog (http://bike-sharing.blogspot.com) by MetroBike, LLC (http://MetroBike.net)



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Bike sharing in Europe...



The Bike-sharing Blog (http://bike-sharing.blogspot.com) by MetroBike, LLC (http://MetroBike.net)



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High Speed Rail in Europe...

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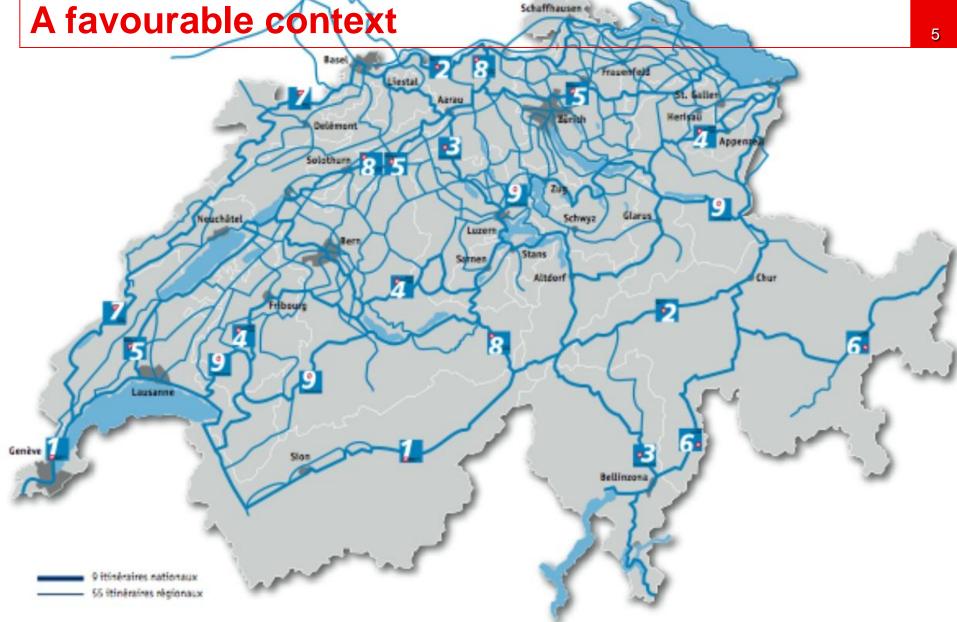
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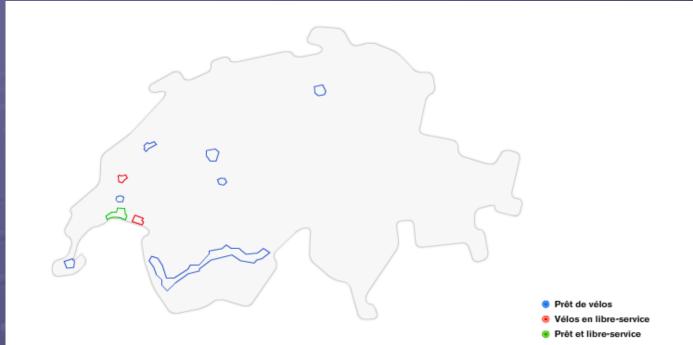
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Bike sharing in Switzerland 1st Generation

- Lausanneroule
- Genèveroule
- Bernrollt
- Zürirollt
- Yverdon
- Fribourg
- **Neuchâtelroule**
- Valaisroule



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www.velopass.ch (COLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

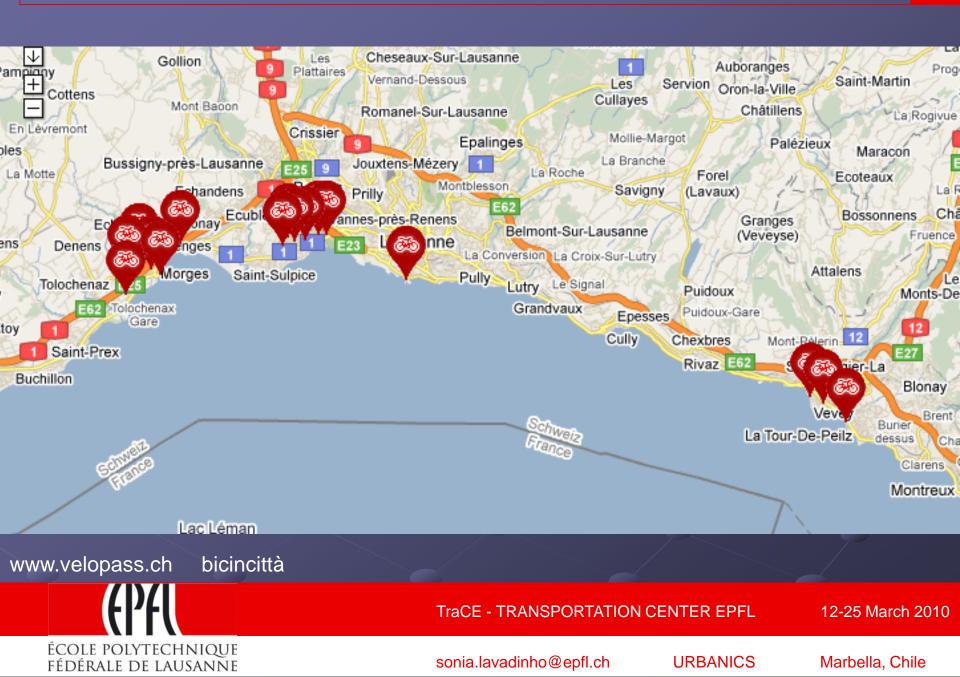
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Bike sharing in Switzerland 2nd generation



4 networks and counting...



 15 stations, 220 bikes

 3 stations, 45 bikes

7 stations, 90
 bikes (April 2010)

3 stations, 40 bikes (April 2010)

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How does it work?

- Available anytime, anywhere in Switzerland.
- The same card for any station, any network
- Synergies in system management = substantial reductions in cost
- National coordination by Velopass + decentralized day-to-day management by local associations (maintenance and shuffling bikes between stations)



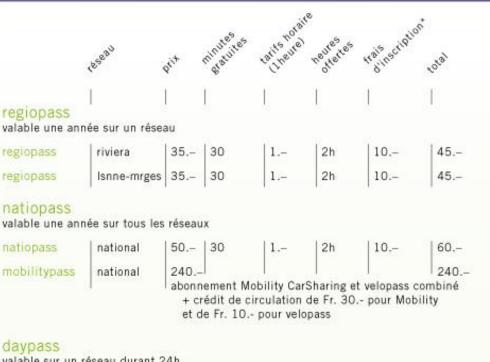
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Pay per use: large scope, time and spacewise



valable sur un réseau durant 24h

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daypass

5.- + caution de 90.-

*encaissés uniquement lors de la première inscription

Commuting Short trips **Tourism**

- **Regiopass (yr, month, day 1N)**
 - Natiopass (yr, allN)
- Mobilitypass (yr)
- Daypass (24h)
 - First 30 min free, then 1 CHF/h



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Velopass Bici application for Iphone

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- A single, easy to use system identical for all cities joining the program
- Access to all the networks with the same card
- Communication campaigns leveraged at national scale
- Centralized backoffice and callcenter services
- Uniform pricing system
- Dedicated web platforms for the user (account management) and the manager (network management and cycle maintenance)
- Publicity in bikes
- Compatible with Mobility CarSharing
- Complies with LEGIC®, the most common RFID standard in Switzerland



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Figures 1st season (june-nov 2009)

- 1'522 in Vevey-Riviera
- 11'213 in Lausanne-Morges (13'850 in 2008 with old system)
- 13'496 inside EPFL-UNIL campus (aug 09 jan 2010)





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- Visibility
- User-friendliness
- Knowledge of the network
- Pre-registering
- Payment / Pricing
- Real-time information (smartphone; social inequity)
- Possibility of booking ahead
- Alternatives if system unavailable
- Network grid density
- Limited radius of action => pertinent location of stations (entreprises, railway stations, other attractors)



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- The system is unlikely to work if proper conditions are not provided:
 - Infrastructure for bikes (bike-lanes, parking)
 - Education campaigns (for both car and bike drivers)
 - Promotion / information
 - Good multimodal connections
- Bike redistribution problem:
 - Unbalanced demand
 - Currently modeling demand and destination choice to better define optimal location for stations



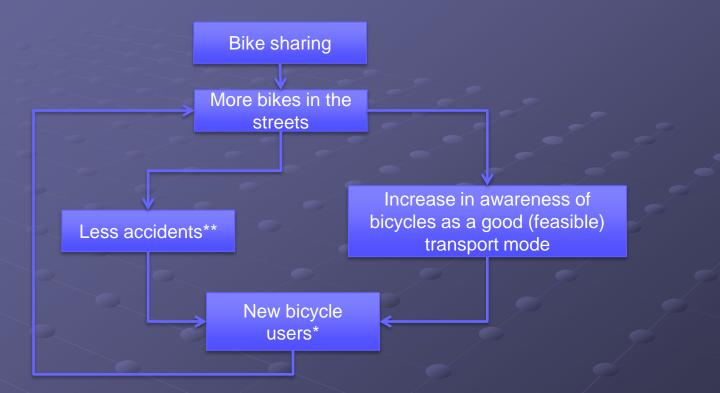
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Benefits

Virtuous cycle of biking:



* Lyon, France: increase in bike trips share from 0.6% (1995) to 1.7% (2006)
** Jacobsen P. (2004) Safety in numbers: more walkers and bicyclists, safer walking and bicycling. Injury Prevention; 10: 127



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- Medtronic, Tolochenaz
- Campusroule EPFL-UNIL, Ecublens
- Heig-VD, Yverdon
- Nestlé Suisse, La Tour-de-Peilz
- Nestlé International, Vevey





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Sponsoring

- McDonald's
- BCV
- Nestlé Suisse et International
- Fondation étudiants EPFL
- Loterie Romande
- Villes de Morges, Lausanne, Vevey, Fribourg, Yverdon





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A philosophy of sharing rather than possessing

Stay outta my lane

A concept by Evan Gant and Alex Tee

(P4)

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- Enormous exponential growth in bike sharing systems throughout the world, including emerging countries
 => trend will keep up the pace in the future
- Great potential for intercity travel, especially interesting for commuting between cities belonging to the same cluster economy
- Tourism and leisure and the potential for modal transfer regarding short trips (less than 5 km) provide other good reasons for expanding these systems
- It's essential to provide good multimodal connections to both PT and other individual modes (P+R, car sharing)



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Thank you for your attention



Your comments & questions are welcomed

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