Evaluating the potential for intercity travel combining public transport and active modes
Bike sharing around the world…

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

The Bike-sharing Blog (http://bike-sharing.blogspot.com) by MetroBike, LLC (http://MetroBike.net)
High Speed Rail in Europe…
A favourable context
TraCE - TRANSPORTATION CENTER EPFL

sonia.lavadinho@epfl.ch

URBANICS

Marbella, Chile

12-25 March 2010
Bike sharing in Switzerland 1st Generation

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

www.velopass.ch
4 networks and counting...

- 15 stations, 220 bikes
- 3 stations, 45 bikes
- 7 stations, 90 bikes (April 2010)
- 3 stations, 40 bikes (April 2010)
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)
Pay per use: large scope, time and spacewise

- **Commuting**
- **Short trips**
- **Tourism**

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*encaissés uniquement lors de la première inscription*

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

www.velopass.ch
### Velopass Bici application for Iphone

**www.velopass.ch**

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**Ouchy (Lausanne) - 3.6 km**

- 9 vélos libres
- 6 bornes libres

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- **Cliquez sur une station pour plus de détails.**
- **Trier les stations:**
  - alphabet
  - par réseau
  - par distance

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**Bici v1.2**

Design: Laurent Gillard
Application: François Vessaz

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TraCE - TRANSPORTATION CENTER EPFL  
12-25 March 2010  
sonia.lavadinho@epfl.ch  
URBANICS  
Marbella, Chile
Advantages

- 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
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)
Barriers of entry

- 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)
Barriers of entry

- 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
Benefits

- Virtuous cycle of biking:

  - Bike sharing
  - More bikes in the streets
  - Less accidents**
  - Increase in awareness of bicycles as a good (feasible) transport mode
  - New bicycle users*

* Lyon, France: increase in bike trips share from 0.6% (1995) to 1.7% (2006)
Entreprises using Velopass

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

- McDonald’s
- BCV
- Nestlé Suisse et International
- Fondation étudiants EPFL
- Loterie Romande
- Villes de Morges, Lausanne, Vevey, Fribourg, Yverdon
A philosophy of sharing rather than possessing

Stay outta my lane

A concept by Evan Gant and Alex Tee
Conclusions

- 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)
Your comments & questions are welcomed

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