The S4C Colloquium 2015 in Nantes
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News from Cycling Research in Asia
Public Bike Schemes: Research and Planning Challenges

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Agenda

• Public Bike/ Bike Sharing Schemes in Asia
• Public Bike in Taiwan
• Challenges for Research and Planning
• Concluding Remarks
Basic Data PBS in Asia

- # of Cities: 170 (140 in China)
- # Rental Stations: 15,000
- # of Bikes: 800,000
- Daily Trips: 3.6 mi

Source: The Bike-sharing World Map [www.bikesharingmap.com](http://www.bikesharingmap.com)
PBS in Taiwan

• # of Cities: 8 (4 in planning)
• # Rental Stations: 595 (Taipei 196)
• # of Bikes: 20,300 (Taipei 6,405)
• Daily Trips: 150,000 (Taipei 56,000)
• Turnover Rate in Taipei: 8.65/veh/day (Range: 4 ~15)
• PPP Approach and Kaohsiung Metro operates the PBS
### Taipei Metropolitan U-Bike Turnover Rate

<table>
<thead>
<tr>
<th></th>
<th>Taipei</th>
<th>New Taipei</th>
<th>Taichung</th>
<th>Chunghua</th>
<th>Kaohsiung</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Since</strong></td>
<td>2009</td>
<td>2013</td>
<td>2014</td>
<td>2014</td>
<td>2009</td>
</tr>
<tr>
<td><strong>Stations</strong></td>
<td>196</td>
<td>120</td>
<td>45</td>
<td>68</td>
<td>162</td>
</tr>
<tr>
<td><strong>Fleet Size</strong></td>
<td>6,406</td>
<td>3,500</td>
<td>1,600</td>
<td>1,700</td>
<td>7,000</td>
</tr>
<tr>
<td><strong>Turnover Rate (April, 2015)</strong></td>
<td><strong>8.65</strong></td>
<td><strong>7.34</strong></td>
<td><strong>6.44</strong></td>
<td><strong>4.67</strong></td>
<td></td>
</tr>
</tbody>
</table>

Taipei Bike Lane has 382 km and Mayor Ko has announced:

1. Another 150km Bike Lanes and Facilities in 2 years
2. U-Bike 2.0 Double Fleet Size Innovative Services
Intermodal Mobility
Bike + Metro, Railway, and Ferry
Strong Leadership and Collaborative Efforts with Industry, Academia and NGOs
Some Observations from Asian Cities

Bike-Sharing in Asia: Station & Years

Under construction/In Planning
China, India, Vietnam, Malaysia...
Some Observations from Asian Cities

Bike-Sharing in Asia: Station & Fleet

[Bar chart showing the number of stations and fleet size for various cities in Asia, including Hangzhou, Shanghai, Beijing, Taiyuan, Weifang, Foshan, Zhuhai, Shenzhen, Ningbo, Suzhou, Xuzhou, Hong Kong, Taipei, New Taipei, Taichung, Changhua, Kaohsiung, Seoul, Changwon, Ansan, Goyang, Sapporo, Sendai, Toyama, Kanazawa, Tokyo, Yokohama, and Bangkok.]
Some Observations from Asian Cities

Station v.s Fleet

Fleet size vs Stations for various cities:
- Hangzhou
- Taiyuan
- Zhuzhou
- Xuzhou
- Suzhou
- Shenzhen
- Shanghai
- Beijing
- Foshan
- Taipei
- Ningbo

The chart illustrates the relationship between the number of stations and the fleet size for different cities, with Hangzhou having a notably higher fleet size compared to other cities.
Some Observations from Asian Cities

Operated years v.s Fleet

- Kaoshiung
- Taipei
- New Taipei
- Taichung
- ChangHua
- Bangkok
- Sendai
- Kanazawa
- Sapporo
- Tokyo
- Yokohama
- Toyama
- Goyang
- Seoul
- Changwon
- Ansan
Research and Planning
Challenges of PBS and Cycling Environment in Asia
Possible Changes?
Research and Planning Challenges on PBS and Cycling Environment in Asia

• Mixed Traffic Flow
• Traffic Safety
• Law and Regulation
• Logistics and Technology Applications
• Sustainably Financial Scheme
• Street and Facility Design for Active Mobility
• e-Bike vs. e-Motorcycle
• Sports/ Leisure Purposes vs. Cycling to Work
• Value and Behavior
Welcome you to Taipei and Asia
Top 10 Classic Cycling Routes

10大經典自行車路線

top10cycling.tw

台灣真美，幸福有感

主辦單位：教育部體育署
協辦單位：交通部觀光局、交通部運輸研究所、內政部營建署
協辦單位：中華民國道路協會、中華民國運輸協會
承辦單位：國立臺灣大學、中華大學、台灣樂活自行車協會

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Conference Theme - Evolution of Cycling

EVOLUTION OF CYCLING

URBAN REFORM

DESIGN IN MOTION

REFINED LIFESTYLES

SHARING

CYCLING ECONOMICS

Taipei - On Par With the World’s Best

Located at the center of the Asia-Pacific region, Taipei is the political, financial, and cultural lifeline of Taiwan, and lauded as one of Asia’s most fascinating cities.
Thanks

Welcome all of you to Taipei Taiwan for the Velo-City Global 2016 Febrary 26~ March 1, 2016