The Kaohsiung Public Bike Rental System

By Kaohsiung Rapid Transit Corp.
1. The framework of rental system
2. Installation principle and promotion
3. Performance and analysis
4. Sustainability
In 2007, Mayor Chen Chu had an investigation on Velib’s in Paris, France and came up with the idea of developing public bike rental system, which can also be coordinated with the activation of Kaohsiung MRT and Urban bikeway since the amount of vehicles and motorcycles in Kaohsiung is the highest in Taiwan.

In the same year, The Environmental Protection Administration learned the idea of public bike sharing plan and selected Kaohsiung to be the first city in Taiwan to pilot automatic bicycle rental system on Nov. 20th.
Area Coverage

Distribution:
Red line: 30km
Orange line: 16km
Station to station: 300~500m

182 Rental Stations
2,400 Bikes
6 Bike Distribution Truck
38 Information Centers
24H Customer Service
The Framework of the Public Bike Rental System

1. Users
2. Rental Stations
3. Management System
4. Customer Service
5. Distribution/Maintenance
6. Maintenance
Installation principle

- Rental Stations need to be near MRT station (<10KM) and located near:
  - Institutions
  - Schools
  - Factories
  - Cohousing communities
  - Office buildings
  - Tourist regions
  - Others that approved to be operationally beneficial by the authorities.

Promotion strategy

- First hour free
- Discount available when transfer from/to MRT.
- Smartcard ticketing Integration
- 24hr free customer helpline
- Traffic accident assistance & roadside aid
- Information interface integration
- Social resources combination
Service Performance (1)

Frequency of use & Number of Stations

Time of use proportion

Card | iPAss | Credit card
--- | --- | ---
Usage proportion | 88% | 12%
Free-charged ratio | 92% | 80%
Average time used | 20~25 Min | 30~40 Min
Service Performance (2)

Type of rental:  
Sports and Leisure type  
(A Leases and A Returns)

Transfer Type  
(A Leases and B Returns)

Cycling has gradually become an inner urban transport option in Kaohsiung city. Apart from the traditional, sports and leisure-oriented use of bicycle, it is now used more as a transporting tool.

<table>
<thead>
<tr>
<th>Year/Month</th>
<th>A to A</th>
<th>A to B</th>
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<tbody>
<tr>
<td>2011.08.</td>
<td>51.4%</td>
<td>48.6%</td>
</tr>
<tr>
<td>2011.09.</td>
<td>44.9%</td>
<td>55.1%</td>
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<tr>
<td>2011.10.</td>
<td>42.5%</td>
<td>57.5%</td>
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<tr>
<td>2011.11.</td>
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<td>61.4%</td>
</tr>
<tr>
<td>2011.12.</td>
<td>31.2%</td>
<td>68.8%</td>
</tr>
<tr>
<td>2012.01.</td>
<td>35.2%</td>
<td>64.8%</td>
</tr>
<tr>
<td>2012.02.</td>
<td>31.5%</td>
<td>68.5%</td>
</tr>
<tr>
<td>2015.10.</td>
<td>25.1%</td>
<td>74.9%</td>
</tr>
<tr>
<td>2015.11.</td>
<td>24.1%</td>
<td>75.9%</td>
</tr>
<tr>
<td>2015.12.</td>
<td>23.0%</td>
<td>77.0%</td>
</tr>
</tbody>
</table>
Satisfaction Survey

**Operability**

- 不滿意: 4.4%
- 非常不滿意: 0.8%
- 非常滿意: 14.8%
- 滿意: 49.7%
- 普通: 30.3%

**comfort**

- 不滿意: 5.4%
- 非常不滿意: 0.5%
- 非常滿意: 13.0%
- 滿意: 41.5%
- 普通: 39.6%

**convenience**

- 不滿意: 3.6%
- 非常不滿意: 0.7%
- 非常滿意: 15.1%
- 滿意: 46.5%
- 普通: 34.2%

**Charge Policies**

- 不滿意: 6.0%
- 非常不滿意: 0.9%
- 非常滿意: 16.5%
- 滿意: 47.3%
- 普通: 29.2%

**Safety**

- 不滿意: 3.7%
- 非常不滿意: 0.4%
- 非常滿意: 12.7%
- 滿意: 43.3%
- 普通: 39.9%

2014/7/1~ 2014/10/31
Service Performance (4)

• The first public bike rental system in Taiwan.
• In 2010, Kaohsiung was featured by CNN as being one of the top cyclist friendly cities in Asia.
• Kaohsiung city was selected for 2012 Guangzhou International Award for Urban Innovation [城市創新獎]
Rental Location Analysis (1)

Central Park ⇔ 
Kaohsiung Municipal Girls' Senior High School

7:30 ~ 8:00
Central Park => KGHS
!7:00 ~ 18:30
KGHS => Central Park

2,100 rentals/month
1,600 rentals/month
600 rentals/month
500 rentals/month

Rental Location Analysis (2)

Cultural Center ⇔ National Kaohsiung Normal University

8:30 ~ 9:00
Cultural Center => NKNU
16:30 ~ 19:00
NKNU => Cultural Center

- 2,000 rentals/month
- 900 rentals/month
- 200 rentals/month
- 100 rentals/month

備註：計算起迄日為2015/10/1 ~ 2015/12/31
Rental Location Analysis (3)

Houyi ⇔ Kaohsiung Medical University
8:00 ~ 9:00
Houyi => KMU
17:00 ~ 18:00
KMU => Houyi

- 3,000 rentals/month
- 1,300 rentals/month
- 800 rentals/month
- 700 rentals/month

備註：計算起迄日為2015/10/1~ 2015/12/31
Sustainable Development

- Social Justice and Equality
  - Public Finance
  - Environmental Defense Fund
  - Low fees

- Financial Self-liquidating
  - Breakeven
  - Surplus
  - Reduce the fiscal burden of government
What is EcoMobility?

- EcoMobility is a way to prioritize such opportunities — such as walking, cycling, and public transport — in an integrated fashion and offer multi-modal transport options that meet the needs of most people.
- Establish a sustainable, eco-friendly transportation system and lifestyle.

What are the festival activities?

1. EcoMobility Area
2. International Conferences
3. Community and Local Activities
4. Low-carbon Vehicle Exhibitions

Date: 1-31 Oct., 2017
Location: Hamasen Area in Kaohsiung
We Invite You to Participate 2017 EcoMobility World Festival and Visit Kaohsiung!

For more information:
- ICLEI : http://www.iclei.org/
Thank you!