Packaging Bicycle Sharing (Public Bicycle) with other Infrastructure Initiatives

Bradley Schroeder
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With input from: Li Shanshan
Liu Shaokun
Bram Van Ooijen
Gail Jennings *Mobility Magazine*
Integration with Guangzhou BRT Case Study
Integration of Bicycle Parking and Public Bicycle into the Guangzhou BRT

• Guangzhou BRT incorporated both bicycle parking and the creation of the Guangzhou Public Bicycle Project

• Almost every BRT station has some form of bicycle parking

• Many Public Bicycle stations also cater to private bicycle parking as well
Integration of Public Bicycle into the Guangzhou BRT

• Initially set up in June 2010
• Guangzhou Public Bicycle
  – Launched June 2010
  – 5000 Bicycles
  – 109 Stations
  – 2298 Docks
  – 4.2 Trips/Bicycle/Day
Map of BRT Corridor and Public Bicycle Stations
Organizational Structure of Public Bicycle

- The Guangzhou Public Bicycle Company is a subsidiary of the bus company. Benefits include:
  - Easier access to streetside property
  - Bus stations (potential public bicycle station) have existing electrical infrastructure
  - Maintenance, depot and control center infrastructure already exists
Payment integration

• The YongChengTong card
  – Public Bicycle
  – Metro
  – BRT/Bus
  – Various Convenience Stores such as 7/11

• Adds value to the user by making payment simple and easy across different modes of public transport
Lessons Learned

• Promote Public Bicycle as a part of the BRT project from conception.
• Include Public Bicycle into NMT infrastructure planning during the BRT planning phase
• The cost of BRT ($138 million) is significantly more than Public Bicycle and NMT ($12.2 million) and is almost insignificant in the total budget – 8%
The way forward

• Integrating maps so users can find all forms of public transportation and the best mode(s) to take.

• Working with the city to mandate that systems must be integrated whether or not there is one operator or many ie. Fushan
Integration with Guangzhou Greenways Case Study
Integration of Public Bicycle into the Guangzhou Greenways

- Guangzhou is currently building 1500 kilometers of greenways in all 8 districts
  - Public Bicycle is being implemented at a district level
  - Districts can choose the company that operates the public bicycle system
  - Individual contracts are signed at a district level
Map of Greenways and Public Bicycle Stations
Current Challenges of Greenway/Public Bicycle integration

• Each district greenway office has the option to choose a different system
  – This creates lack of integration across the city
• Educating each district on best practices in 3rd generation public bicycle is time consuming
Bicycle Sharing and Public/Private partnership
Public/Private Partnership Solution

• Problem
  – Urban pavement space is scarce and has a high value in cities, making it hard to find space for public bicycle stations
  – The capital cost of the station is a significant barrier to expansion whereby the operational cost of an additional station is very small

• Solution
  – Private entities (hotels, shopping centers, real estate developments) give space on their property and provide the capital to have a station set up on their premise
ITDP China’s Solution

ITDP China has worked with the Guangzhou Public Bicycle Company on costing and implementing this idea.

<table>
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<tr>
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<th>Unit Cost in RMB</th>
<th>10 Dock Station</th>
<th>20 Dock Station</th>
<th>30 Dock Station</th>
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<tr>
<td>Capital Costs</td>
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<td>75656</td>
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</tbody>
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Successes/Challenges

• Successes
  – Property developers and management agencies seem interested and not scared away by the cost
  – Although time consuming, ITDP China hopes to encourage the GPBC to push this in the future

• Challenges
  – Identifying and setting up meetings with those who can make the decision
  – Finding the right person to sell the idea – add a commission in?
Integrating Cape Town’s IRT and the World Cup Case Study
With Cape Town having both the World Cup and the IRT opening ...

- The City of Cape Town and the Provincial Government each hired an NMT Officer to develop an NMT Strategy
  - A bicycle master plan
  - Regional network plans
With Cape Town having both the World Cup and the IRT opening ...

• These two very large projects created a unique platform to implement NMT projects that would have otherwise been almost impossible to implement

  – 16km of segregated bicycle ways
Cape Town Fan Walk

• The fan walk is a pedestrian boulevard built initially to get football fans from the station to the stadium
  – Estimates were that 2000 people/day would walk on the fan walk
  – Actual number turned out to be 90,000 people took the fan walk

• Since the World Cup the Fan Walk has become a popular, safe nighttime avenue providing access to many previously segregated parts of the city
Examples of NMT infrastructure along the IRT corridor in Cape Town

Picture credit: Mobility Magazine
Cape Town’s IRT and World Cup NMT Infrastructure

Examples of NMT infrastructure along the IRT corridor in Cape Town

Picture credit: Moonshine Media
Cape Town’s IRT and World Cup NMT Infrastructure
Challenges

• Public transport costs the state or local authority "Which we got in 2010, but that was then," says a senior Transport official at the City. "Using your own car, and paying for parking, is at your expense, it costs the local authority nothing. And, of course, if you end up parking illegally, we get the revenue. With our severe budget limitations, I can't see a new public transport strategy taking off just yet...“

Gail Jennings: An Analysis of NMT (written for the Cape Argus)
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