BRT Developments in China

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PURPOSE
- Briefing on Planning and Operation of Bus Rapid Transit Systems in Chinese Cities
- Discuss Some Critical Issues in Development of BRT

Urban Transportation Issues

China has announced Public Transport Policy in 1995
Urban Rail + Bus

Beijing BRT Network
By 2008
Urban Rail 300 km
+ BRT 100 km

Future Network
Total Length: 360km
22 Routes:
- Rail Extension: 2
- Radial Line: 11
- Branch Line: 2
- Inner City: 5
- City Center: 2

Beijing BRT Network Short Term

The First BRT in Beijing
- 16 km from City Center to the South
- 18.3 m Low Floor Buses (First Stage: 50 veh; then 80 Veh)
- 18 Stations; Collect Fare in the Stations

- 2004.12.25 First Stage Commercial Operation (5km)
- $4 Mi per KM
South Gate of Tienanmen

Low Floor Bus

Exclusive Right of Way
**Key Factors for Success**

2003.03.18~2004.12.25

- Support from Mayor (s)
- Support from City Council
- Coordination Effort of the new Transportation Commission
- Comprehensive planning/design works
- Contribution of international teams

**BRT in Other Chinese Cities**

- **Shanghai**
  - (1) 250 KM BRT Network has been proposed;
  - (2) Feasibility study of BRT implemented in the middle ring road (elevated expressway) is conducted;
  - (3) BRT implemented in Pudong South Road and other potential corridors is also under planning;
  - (4) BRT has been considered for new towns in Shanghai Metropolitan.
BRT in Other Cities (Cont.)

- Chengdu: an original design of 28 km fully-elevated expressway has been changed to a full BRT in the 2nd ring road. The new design has 30 BRT stations in which design of two bus lanes in the station area is proposed.
- Chongqing: A preliminary planning of 15km BRT has been proposed.
- Hangzhou: Two dedicated bus lanes are under operation while two full BRT routes will be implemented by 2006.
- Jinan: Dedicated Bus Lane has been implemented in one arterial road while BRT is under planning for two major streets.

BRT in Other Cities (Cont.)

- Xian: a planning for BRT network of 48 km has been proposed and preliminary design works are conducted.
- Kunming: A “Double Ten” Network of 42 km has been developed and two third of the routes are under operation.
- Tianjin: A BRT Network of 145 km has been proposed.
- Shenyang: A BRT network is under planning; two BRT lines of 16 km have been considered for the first phase.
Shanghai BRT
BRT Planning for World Expo in Shanghai:
A double ten BRT network connecting Pudong and Puxi has been considered for the World Expo 2010.

Feasibility Study of Implementing BRT in Middle Ring Road
Physical Condition
- Total length: 70 km
  - Puxi: 39 km
  - Pudong: 31 km
- Total 8 lanes w/ design speed of 80 kph

BRT Service Areas
- More than 20 residential areas and commercial districts
- More than 14 transfer stations will be considered for future rail integration

Kunming Dedicated Bus Lane
- Upgrade to BRT
- Bus route optimization
Integration of Middle Ring Road BRT and Urban Rail

Proposed BRT Design in West Section of the Middle Ring Road

Chengdu BRT in the 2nd Ring Road
Conceptual Plan of ChongQing BRT

Bus Lanes on 8 Streets
Total Length: 57 km
Connecting 4 MRT Lines

Taipei Public Transportation Network

Before and After ……

CRITICAL ISSUES & FURTHER WORKS

- National Public Transport/BRT Policy
- Automobile/Economy Policy
- Bus Priority Schemes vs BRT System
- BRT + Bicycles
- BRT and Urban Development/Land Use Policy
- Integration on Network/Routes, Payment and Ticketing Systems, Pricing
- Public Private Partnership Approach for BRT development
- Education and Training Programs for Various Levels and Purposes
Thank you!

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