Knowledge Sharing Seminar on Good Practice on TOD

Transit-Oriented Development in Ho Chi Minh City: Opportunities & Challenges

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1. Overview of HCMC
2. Urban Transport Problems
3. Urban-Transport Planning
4. TOD Potential: Metro 1 & BRT 1
5. Forward Looking
1. Overview of Ho Chi Minh City

- The biggest city and economic centre of Vietnam
- Land area = 2,095 km²
- Population = 8.0 million (0.9%/yr)
  (Metropolitan = 12.87 million)
- GRDP/cap = 5,131 USD (price 2014)
- Motorcycles = 4,491,597 (yr 2010)
- Car = 446,956 (yr 2010)
2. Urban Transport Problems/Challenges (1)

- High population density in urban centres of HCMC (500 persons / ha < )
- Density gradually decrease in urban centres (mostly 50 persons/ha >).
- Rapid growth of population and expansion of urban areas towards outer areas (HCMC, Dong Nai and Binh Duong), with low population density.

Source: JICA (2015)
2. Urban Transport Problems/Challenges (2)

- Huge & increasing travel demand
- Insufficient road infrastructure
- Limited public transport services
- Congestions, pollutions, accidents

### Travel Demand by Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>2002 (HOUTRANS)</th>
<th>2013 (METROS)</th>
<th>Growth (2013/02)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(000)</td>
<td>(000)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td>(%)</td>
<td></td>
</tr>
<tr>
<td>Bicycle</td>
<td>1,080</td>
<td>690</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>9.4</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Motorcycle</td>
<td>9,429</td>
<td>17,135</td>
<td>1.82</td>
</tr>
<tr>
<td></td>
<td>81.8</td>
<td>81.4</td>
<td></td>
</tr>
<tr>
<td>Car</td>
<td>214</td>
<td>1,469</td>
<td>6.87</td>
</tr>
<tr>
<td></td>
<td>1.9</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td>485</td>
<td>1,329</td>
<td>2.74</td>
</tr>
<tr>
<td></td>
<td>4.2</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>313</td>
<td>437</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>2.7</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11,521</td>
<td>21,061</td>
<td>1.83</td>
</tr>
</tbody>
</table>

Source: JICA (2015)
3. Urban-Transport Planning (1)

Construction Master Plan HCMC 2025 - Proposed Polycentric Development
**Plan of 8 MRT lines (172.6 km)**

- **MRT 1**: Bến Thành - Suối Tiên (to Đồng Nai) 19.7 km.
- **MRT 2**: Củ Chi - Bến Thành - Thủ Thiêm 48 km.
- **MRT 3a**: Bến Thành - Tân Kiên (to Tân An, LA) 19.8 km.
- **MRT 3b**: Cống Hào Roundabout - Hiệp Bình Phước (to Thủ Dầu Một, Bình Dương) 12.1 km.
- **MRT 4**: Thành Xuân-Bến Thành-Hiệp Phước Port 36.2 km.
- **MRT 4b**: Gia Định Park-TSN Airport-Lảng Cha Cà 5.2 km.
- **MRT 5**: Căn Giước Bus Terminal-Sài Gòn Bridge 26 km.
- **MRT 6**: Bà Quốc - Phú Lâm Roundabout 5.6 km.

(TEDI South, 2013)
Plan of 3 LRT lines (56.5 km)

- **Tram Line 1**: Ba Son – Tôn Đức Thắng – Công trường Mê Linh – Võ Văn Kiệt – Lý Chiêu Hoàng - Miền Tây Bus Terminal (extension from Ba Son to Bình Quới New Town) 12.8 km.

- **Monorail Line 2**: NH50 (District 8) – Nguyễn Văn Linh – Trần Nào – Xuân Thủy – Bình Quới New Town (to be connected to MRT Line 3a at New Miền Tây Bus Terminal) 27.2 km.

- **Monorail Line 3**: Intersection (Phan Văn Trị - Nguyễn Oanh) – Phan Văn Trị - Quang Trung – Quang Trung Software Part- Tô Ký - Tân Chánh Hiệp Station 16.5 km.

(TEDI South, 2013)
6 BRT Lines

(103.3 km)

- **BRT 1** (Võ Văn Kiệt – Mai Chí Thọ) 28.6 km;
- **BRT 2** (New Mien Tay Bus Terminal-Nguyễn Văn Linh - Phú Mỹ Bridge) 24 km;
- **BRT 3** (An Sương Bus Terminal – Ring Road 2 – New Miền Tây Terminal) 19 km;
- **BRT 4** (Kha Văn Can - Phạm Văn Đồng - Hoàng Văn Thư Park) 14.5 km;
- **BRT 5** (Thoại Ngọc Hầu – Vành Đai Trong – Nguyễn Văn Linh) 8.7 km;
- **BRT 6** (Quang Trung - MNR 3) 8.5 km.

(TEDI South, 2013)
### Targets for Public Transport Development until 2025

**Revised Urban Transport Master Plan 2012-2020** *(Decision 568/QD-TTg dated 08.03.2012)*

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total demand for public transport (million pax/day)</strong></td>
<td>3.172</td>
<td>6.480</td>
<td>10.636</td>
</tr>
<tr>
<td><strong>Urban Railway network</strong></td>
<td>1 line (Ben Thanh-SuoiTien) / 0.81 million pass.</td>
<td>4 lines (3 metro + 1 tram) / 1.51 million pass.</td>
<td>10 lines (7 metro + 3 tram) / 3.81 million pass.</td>
</tr>
<tr>
<td><strong>Conventional Bus network</strong></td>
<td>115 lines (2.112 km) / 2.36 million pass.</td>
<td>179 lines / 3.48 million pass.</td>
<td>212 lines / 4.45 million pass.</td>
</tr>
<tr>
<td><strong>BRT network</strong></td>
<td>NA</td>
<td>3 lines / 0.6 million pass.</td>
<td>6 lines / 1.8 million pass.</td>
</tr>
<tr>
<td><strong>Total no. of buses (all types)</strong></td>
<td>3,100</td>
<td>5,261</td>
<td>7,901</td>
</tr>
<tr>
<td><strong>Number of standard buses</strong></td>
<td>1,489</td>
<td>2,701</td>
<td>4,329</td>
</tr>
<tr>
<td><strong>Number of medium buses</strong></td>
<td>1,035</td>
<td>1,662</td>
<td>2,350</td>
</tr>
<tr>
<td><strong>Number of mini buses</strong></td>
<td>576</td>
<td>898</td>
<td>1,222</td>
</tr>
</tbody>
</table>
4.1. TOD Potential: Metro 1 Corridor (1)

- Basic Concept for Urban Development along Metro 1
  19.7 km (underground 2.5km, elevated 17.2km)
  14 stations (underground 3, elevated 11)

To increase the ridership, urban developments along the line have to be formulated or amended with the station area urban development concept: promoting sports facilities in the south of Rach Chiec Station, Suoi Tien Water Park and educational facilities near Suoi Tien Station, etc.

Source: JICA (2014)
4.1. TOD Potential: Metro 1 Corridor (2)

**Phuoc Long Station**

Focus on high- and middle-income families because of its location facing to the river and nearer to the CBD.

**Thu Duc Station**

Develop as a new district center with high density and mixed use.

Source: JICA (2014)
4.1. TOD Potential: BRT 1 Corridor (1)

- Total length: 23km
- 28 stations

- A wide corridor – mostly free flowing
- BRT in the middle of the road accessed by pedestrian crossing and some pedestrian bridges

Source: ITP (2014)
4.2 TOD Potential: BRT 1 Corridor (2)

- District 1 BRT Station

Source: ITP (2014)
4.2. TOD Potential: BRT 1 Corridor (3)

District 1 BRT Station area has a high potential for TOD:

Opportunities
- Highly mixed land-uses
- High density
- Available parking lots near station

Challenges
- Some sidewalks still poor
- Parks and open spaces not yet attractive
4.2. TOD Potential : BRT 1 Corridor (4)

• Thu Thiem New Town BRT Station

• Currently under construction
• Planned for 160,000 new residents over the next 20 years and new workers.
• The Thu Thiem master plan designates a broad mix of land uses and is envisaged to become the new civic and commercial centre for HCMC.
• The time frame for delivery of the area including all infrastructure such as bridges is approximately 50 years.

Source: ITP (2014)
5. Forward Looking

- TOD has a high potential in HCMC

- Challenges to TOD implementation
  - Weak coordination between authorities (Urban and Transport) in all stages from Planning to Design and Construction
  - Lack of land for Station City development
  - Lack of legal supports for land readjustments along transit corridors

- UCCI is willing to cooperate with international institutions to adopt and implement the best practices of TOD in HCMC
Thank you for attention.