KUALA LUMPUR
URBAN RAIL DEVELOPMENT:
MALAYSIA EXPERIENCE

CAPACITY BUILDING WORKSHOP ON SUSTAINABLE URBAN TRANSPORT
INDEX
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COLOMBO, SRI LANKA
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National & Regional Land Public Transport Master Plans

Under section 3, subsection (3), states that the Commission shall develop, for the approval of the Minister:

(a) a 20-year National Land Public Transport Master Plan
(b) a 20-year Regional Land Public Transport Master Plans
Rail usage is the fastest growing among all modes of urban public transportation. Daily ridership for urban rail services rose 8.5% to 631,988 commuters in 2015 from 557,921 in 2011.
Rail as the artery for the movement of urban people

- Paving way to green mobility
- Reducing the road traffic
- Reduction of carbon emissions
Rail Services In Kuala Lumpur/Malaysia
KERETAPI TANAH MELAYU BERHAD (KTM)

• Introduced in 1995 to provide local rail services in Kuala Lumpur and the surrounding Klang Valley suburban areas, covering 280km from the Greater Kuala Lumpur/ Klang Valley and beyond connecting 57 stations and several integrated hubs such as KL Sentral and Bandar Tasik Selatan.

• Service operates on a daily basis with two lines for the Central Sector, namely, the Seremban - Batu Caves Line, and the Tanjung Malim - Pelabuhan Klang Line.
KL MONORAIL

- InterCity public transit system that links many key destinations within Kuala Lumpur’s busiest areas

- The 8.6km long KL Monorail system runs across 11 stations

- From KL Sentral in Brickfields that passes through the Central Business District (CBD) of Kuala Lumpur and ends at Titiwangsa Station on Jalan Tun Razak.
The **LRT or Light Rail Transit** train service is operated by Prasarana Sdn. Bhd. Currently, the two lines available from the LRT services are the Kelana Jaya line, running from Gombak to Kelana Jaya and the Ampang line, which runs from Sentul Timur to Ampang and Bandar Kinrara.

**Ampang Line Extension**
- Length – 17.7 km
- No. of stations – 12 stations + 1 integrated with Kelana Jaya Line at Putra Heights
- No. Park n Ride – 7 (multi storey)
- Projected daily ridership – 247,000

**Kelana Jaya Line Extension**
- Length – 17 km
- No. of stations – 12 stations + 1 integrated with Ampang Line at Putra Heights
- No. Park n Ride – 5 (multi storey)
- Projected daily ridership – 292,000

LRT3, a new LRT line which will run from Bandar Utama to Klang. Route mapping and pre-development matters are currently being formulated.
ABOUT MRT

• The project was announced in December 2010 by the Government of Malaysia, and was launched by Prime Minister Datuk Seri Najib Tun Razak on 8 July 2011.

• Sungai Buloh – Kajang (SB-K) is the first corridor identified to proceed. Other corridors will be identified by Urban Rail Development Plan.

MRT Line 1 (SBK)
• Sungai Buloh - Kajang
• Population catchment = 1.2 mil
• Daily Ridership = ~400,000
• Length = 51km (9.5km underground)
• Station = 31 (elevated 24, underground 7 )
• Park n’ Ride = 13
• Phase 1 = Sg. Buloh – Semantan (end of 2016)
• Phase 2 = Semantan – Kajang (July 2017)

MRT Line 2 (SSP)
• Sungai Buloh- Serdang-Putrajaya Link
• Population catchment = around 2 mil
• Length = 52.2 km (include 13.5km underground and 38.7 km of via duct)
• Station = 37 Stations (26 elevated and 11 underground)
• Park n Ride = 15
• Estimated end to end journey time = 85 min

MRT Line 3
• Final line for the KV MRT.
• Planning and development stage.
Project structure

SUPERVISING AGENCY
- Authority over corridors and alignment
- Develop integrated master plan
- Approve railway schemes
- Interface with working agencies

Funding Company
- Advise, manage and raise funding for infra projects

Independent Consulting Engineer
- Design compliance
- Payment vetting

Auditor General

PROJECT COMPANY
- Project and asset owner
- Submission of all key project documents (railway scheme, LA plan, EIA etc.)
- Appoint PDP
- Verify PDP target cost and target time
- Platform for payment disbursement
- Joint management of procurement process
- Undertake property development potential

DESIGN CONSULTANTS (CIVIL/SYSTEMS)
- Design civil works

PROJECT DELIVERY PARTNER
- Joint management of the procurement process (except Underground Works)
- Quality, performance and supervision of Work Package Contractors
- Obtain local authority approvals

SYSTEM WORKS (Work Package Contractors)

ELEVATED/DEPOT (Work Package Contractors)

UNDERGROUND WORKS MMC-GAMUDA TUNNEL JV (Work Package Contractors)
MRT Line
Expected Outcome

Urban rail network grow up to 505km

Ability to move 400,000 daily commuters

Expected to remove 40,000 cars from the road daily

(utilization of park & ride facilities)
- **Route**: 1,556km
- **Track**: 2,330km

- **Kuala Lumpur – Singapore**
- 6 Stations (Putrajaya, Seremban, Ayer Keroh, Muar, Batu Pahat and Iskandar Puteri)
- 2 Terminals (Bandar Malaysia and Jurong East)

- **Port Klang – Gombak – Kuantan - Tumpat**
- **Length**: 660km

Source: SPAD website
Integrated ticketing system

Gunakan Kad MyRapid TnG atau mana-mana kad TnG untuk menikmati diskaun sehingga 20% bagi perjalanan anda

All Transport Tickets in One Card
Other considerations:

• Dedicated female coach

• The ageing society – appropriate facilities

• Disable community facilities & Disability Equality Training (DET- staff training)
The establishment of Land Public Transport Commission on 3rd June 2010
Gazetted : Land Public Transport Act 2010

• introducing public transport master plans for both the country as well as for localised regions. The master plans comprehensively detail the Commission and Government’s goals and vision for public transport, while at the same time specifying accompanying initiatives designed to raise the overall level of service and safety standards of public transport. This includes enforcement initiatives, which not only cover public transport operators, but also commercial vehicles on the road.
Establishment of Syarikat Prasarana Negara
(Government Link Company)

- First established in 1998 and operational since 2002, Prasarana is the asset owner and operator of Malaysia’s two LRT networks (Kelana Jaya Line & Ampang/Sri Petaling Line), the KL Monorail, Sunway-BRT and bus services in Kuala Lumpur, Penang, Kuantan and Kamunting. In December 2016, Prasarana under its service brand RapidKL was appointed as the official operator for the first MRT services in the Klang Valley.

- Beyond the efforts to transform the country’s public transport services via Rapid Rail Sdn Bhd and Rapid Bus Sdn Bhd, Prasarana has also established Prasarana Integrated Management and Engineering Services Sdn Bhd (PRIME) to provide management and engineering consultancy services, Prasarana Integrated Development Sdn Bhd (PRIDE) to undertake commercial and transit-oriented development projects to further strengthen the performance of the company and Prasarana Rail and Infrastructure Projects Sdn Bhd (PRAISE) to focus on major public transport infrastructure projects assigned to the Group.
Constraints

- Financial
- Land Acquisition
- Multi ministries roles

- Government/ Public Private Partnership
- Malaysia National Land Code
- Implementation of National Blue Ocean Strategies (NBOS) lead by Prime Minister Dept
Advocacy & Engagement

- Extensive stakeholder engagement –
  - Project will create minimal disturbance
  - Detail plan traffic management – run trial road closure
  - Public safety first
- Creating 100,000 technical & high skilled engineering jobs - local talents
  - Invest in strengthening human capital
  - Retain local talent
- Social & Economic spill over effects
- Rejuvenate businesses along the alignment
Last Mile Connectivity

- Bus services
- Taxi
- Grab
- Uber
- Promote walking culture

Continuous promotions & public relation exercise

- Share with public the performance
- Benefit derived from the projects implemented
  - Economic
    - Carve & Compete- bumiputra companies
  - Social
    - Transform lifestyles- more leisure time/ family time
    - Employment with MRT
  - Environmental
    - 40% reduction of carbon emission by 2020

Speak the language understood by public
Thank You
Terima Kasih

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