



TRANSPORTATION AGENCY
DKI JAKARTA PROVINCIAL GOVERNMENT (INDONESIA)
FERDINAND GINTING

Toward A Better
JAKARTA TRANSPORTATION

Jakarta – a Capital City, and many more roles!



**Capital City of Indonesia
and Centre for Government
Activity**



**Centre for Economic - Regional,
National and International scale**

Almost 80% Indonesian economic activity is centralized in Jakarta



**Centre for both ASEAN and
Asia Pacific political activity**



Centre for Cultural Activity



**Centre for research, education,
technology and intellectual
activity**



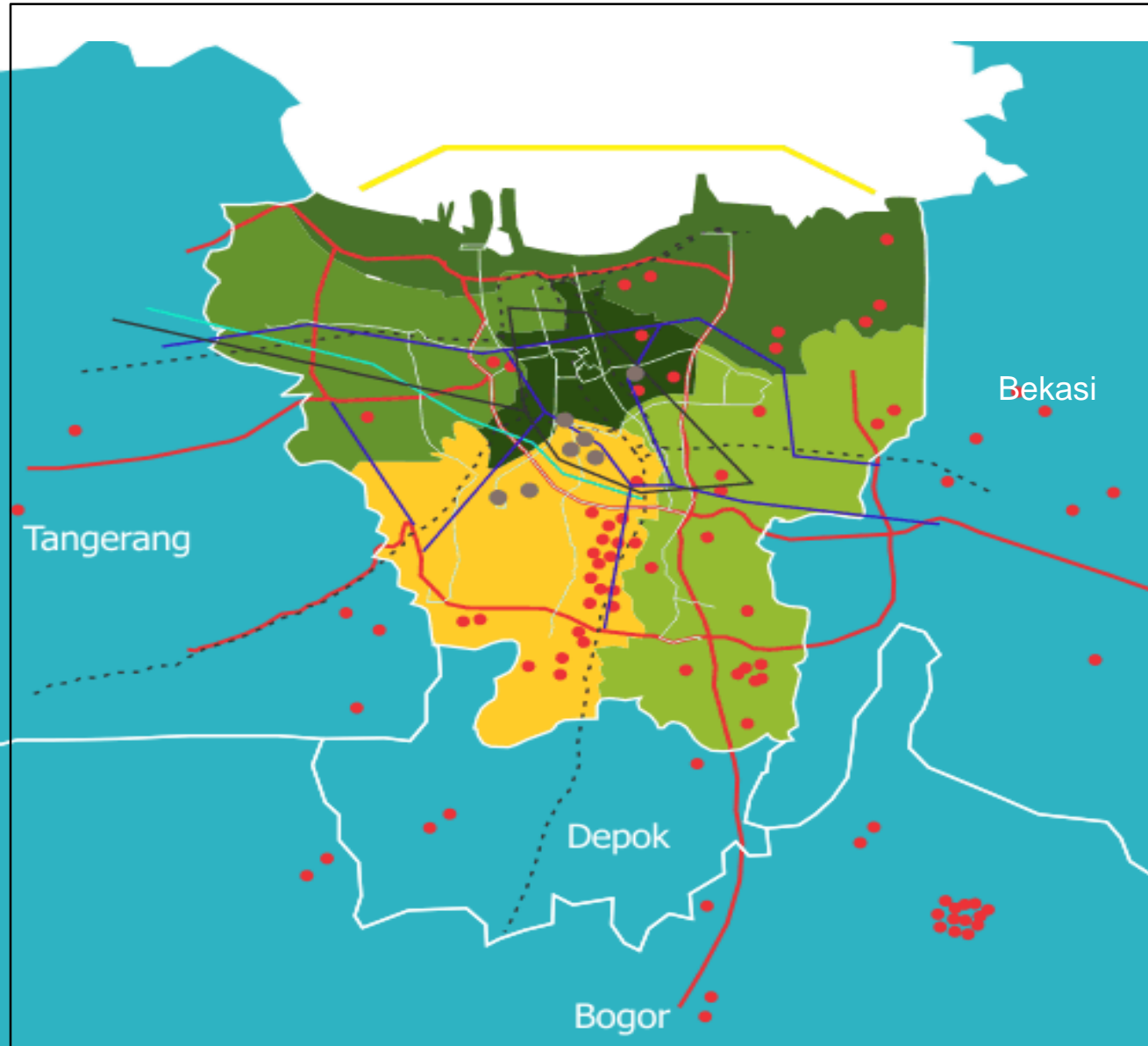
**Indonesia's Main gate for
International World**

- Jakarta is continuously perceived as a promising land, a city of hope, a place for better living,
- Thus massive urbanization occurs

- Space is becoming more limited
- Infrastructure is in high demand and the provision tightly competes with the population growth

**Big Challenge
for Jakarta !!**

Description of Jakarta



- Area of 661.52 km
- Population of Jakarta:
 - ± 12 million (day)
 - ± 10 million (night)
- Population of greater Jakarta: ± 27 million
- Growth Population: 1,1 %, which in that number, urbanization contributes quite high percentage
- Density: 15.173 people/km²
- Economic growth 2014: 5,95%
- Priority sectors: finance, bank, transportation, telecommunication, business and service
- Commuter per day: ± 2 million people
- 18% of Jakarta area is affected flooded by high tide sea level
- Land subsidence: 4-6 cm/year
- Is a *Delta City*, traversed by 13 rivers which the upstream are outside Jakarta, and estuary in the Jakarta Bay

Description of Jakarta



TRANSPORT – RELATED FIGURES

ROAD NETWORK

- Length 6,936 km (48.4 km square)
- Road ratio 7.3% from total city
- growth of road length $\pm 0.01\%$ /year

TRAVEL NEEDS

- 25.7 Mil Trips/day (incl. commuters), in which 75% trips using private vehicle

MOTOR VEHICLE NUMBER

- Number of vehicles :
 ± 9.9 Million units, which private vehicle is 98.9% and public transport is 1.1%
- Average growth : $\pm 8.1\%$ per-year

MODAL SHARE

- Car: 23.9 % trips per day
- Motorcycle: 50.8 % trips per day
- Public Transport: 25.3 % trips per day

PROBLEMS






1. Public Transport is still not sufficient, both in quantity and quality, thus trips almost solely depend on private vehicle usage
2. Main obstacles in developing a Mass Transit Network is usually the availability of land, as almost all Jakarta is now built.
3. Private vehicle ownership grows rapidly every year
4. Lack of discipline on the road
5. Roads are often used for illegal parking and street vendor

Congestion is still one of the city's main problem, its cost is estimated reaches *Rp. 45.2 Trillion/year ~ USD. 3.4 billion*

New Jakarta is ready for the make over



Target for the Year 2030

-  **7 % per year Economic Growth**
-  **60% Trip Using Public Transport**
-  **35 km/hour minimum road average speed**
-  **10% road ratio**
-  **30% Decrease of GHG Emission**

To achieve them,

- Implementing Conventional ways And Do Business as Usual **are no longer applicable for Jakarta**
- Instead we must **explore every potency of the city and turn challenges into opportunity**

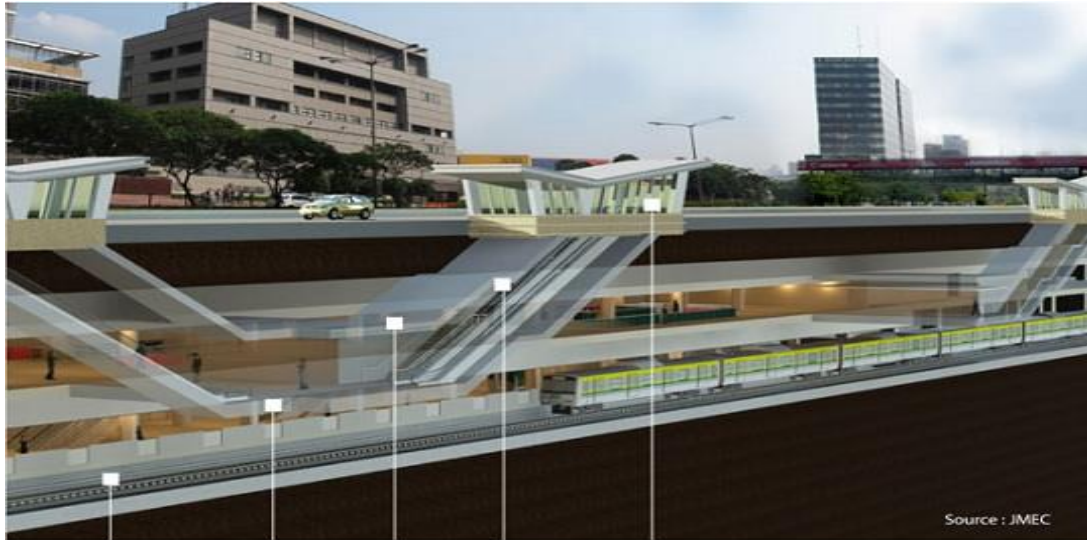
The Legal Bases are ready, now time to implement it:

- *Provincial Regulation No. 12/2002 on DKI Jakarta Macro Transportation Scheme*
- *Governor of DKI Jakarta Regulation No 109/2007 on Jakarta Macro Transportation Scheme*
- *Provincial Regulation No.5/2014 on DKI Jakarta Transportation*

Spatial Regulation:

- *Provincial Regulation No. 1/2012 on Jakarta Spatial Plan 2030*
- *Provincial Regulation No. 1/2014 on Jakarta Detail Spatial Plan and Zoning Regulation 2030*

1. Explore the Potential Of Underground And Overground Spaces for Public Transport Network



Source : JMEC

Underground Station Entrance

- Jakarta Land limitation encourages Government to explore new spaces utilization: Underground and Overground
- We are now having MRT Jakarta under construction and LRT Jakarta in now on the planning phase



1. Explore the Potential Of Underground And Overground Spaces for Public Transport Network



LRT Corridors

Legends

— Proposed LRT Corridors

● LRT Stations

— 6 Inner City Toll Roads

— Busway Lines

— MRT Lines

--- JABODETABEK Commuter Train Lines

Corridor 1 : Kebayoran Lama – Kelapa Gading

Corridor 2 : Pulo Mas – Tanah Abang

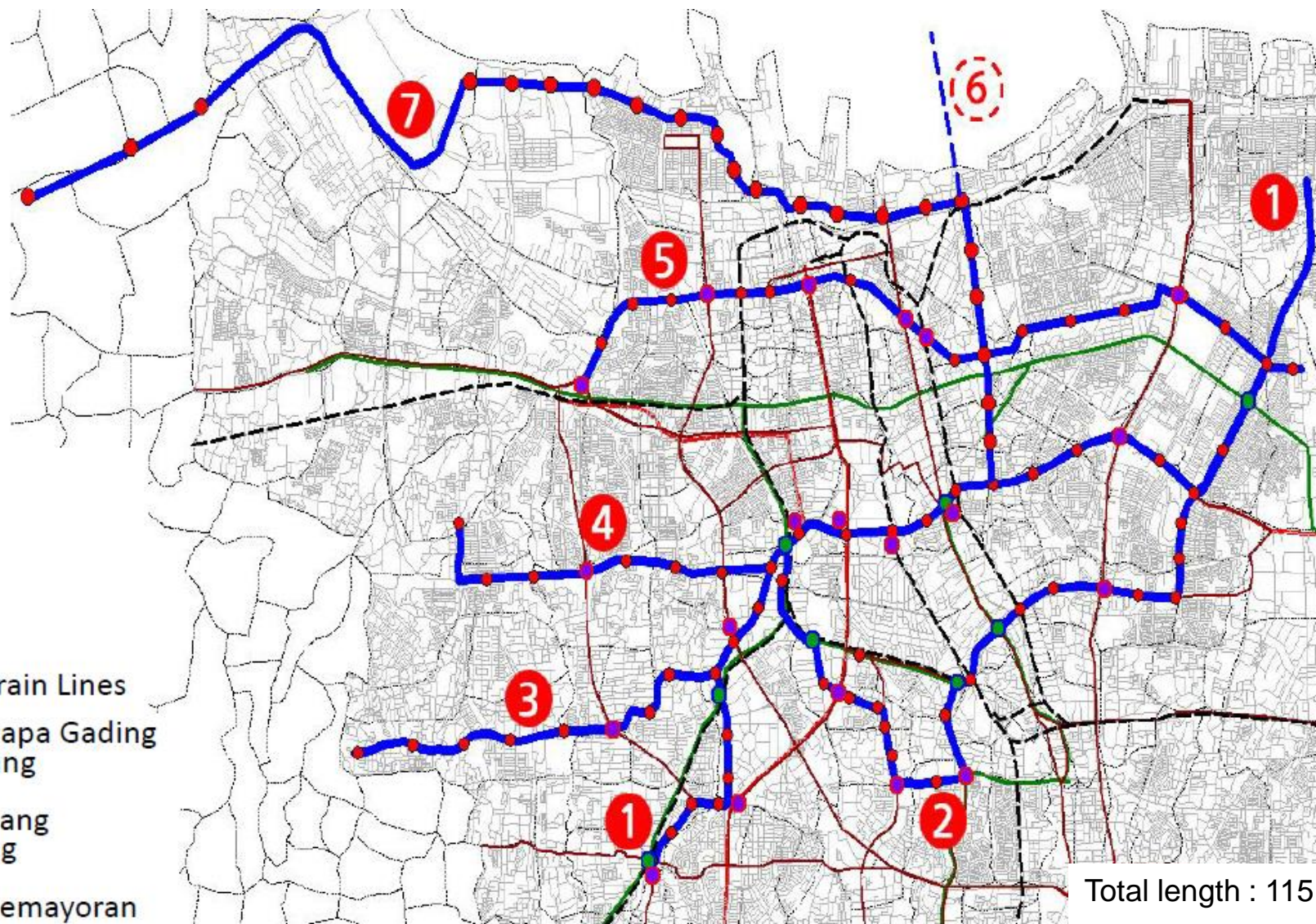
Corridor 3 : Joglo – Tanah Abang

Corridor 4 : Puri Indah – Tanah Abang

Corridor 5 : Pesing – Kelapa Gading

Corridor 6 : Ancol – Kemayoran

Corridor 7 : Soetta Int'l Airport - Kemayoran

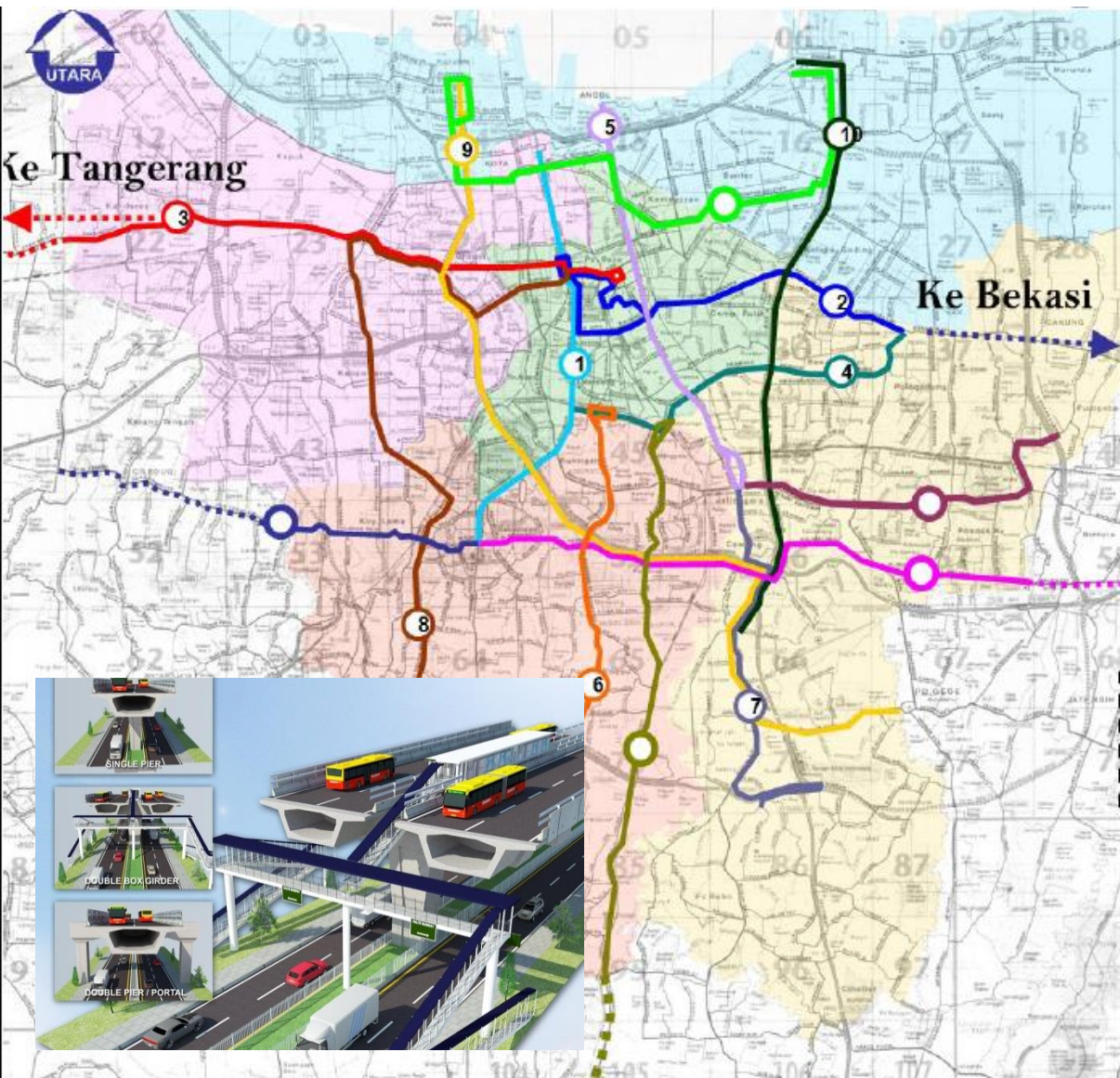


Total length : 115.7 km

1. Explore the Potential Of Underground And Overground Spaces for Public Transport Network



Building Long Elevated Roads only for BRT Corridors



12 Corridors are operated at grade (134 km):

- 1 Blok M - Kota
- 2 P.Gadung - Harmoni
- 3 Kalideres - Harmoni
- 4 P.Gadung - Dukuh Atas
- 5 Kp.Melayu - Ancol
- 6 Ragunan - Kuningan
- 7 Kp.Melayu - Kp.Rambutan
- 8 Lebak Bulus - Harmoni
- 9 Pinangranti - Pluit
- 10 Cililitan - Tanjung Priok
- 11 Pulo Gebang - Kp. Melayu
- 12 Tanjung Priok - Pluit

- 852 Buses Operation
- \pm 101.674.000 pass (2015)
- \pm 75.771.000 pass (Aug 2016)

3 New Corridors are planned **elevated**:

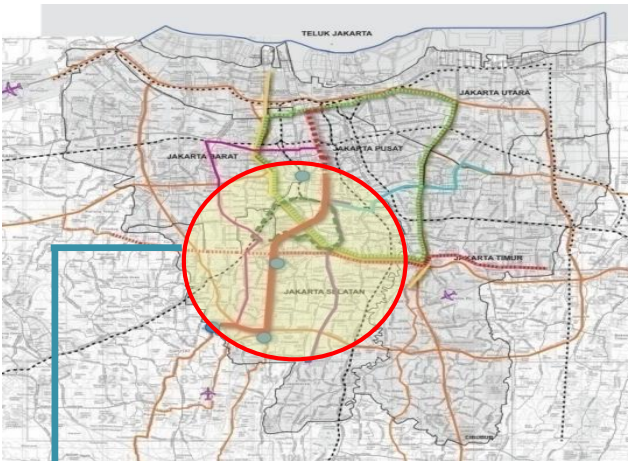
- Ciledug - Blok M (14.6 km)
- Kalimalang - Blok M (17.7km)
- Depok Manggarai (17 km)



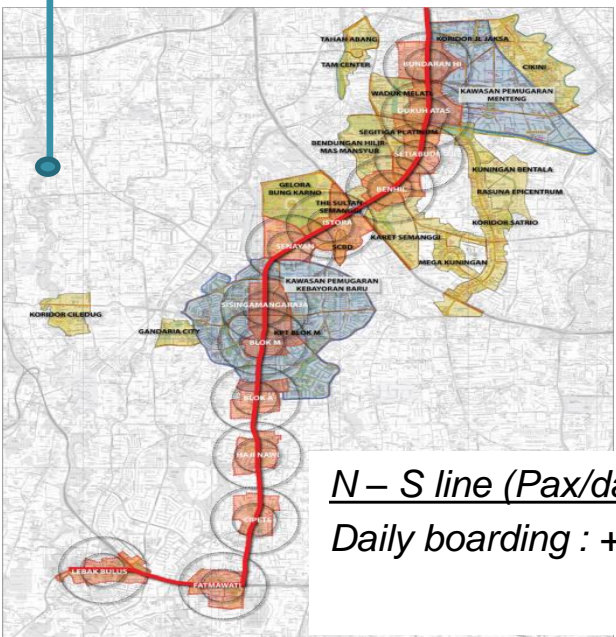
2. Making more efficient spaces in the city and encourage walking and cycling



Jakarta MRT Corridor



Potential TOD area



1

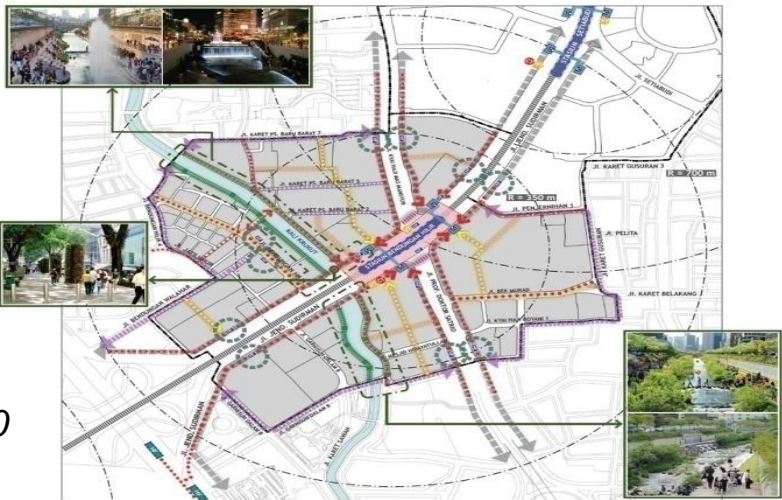
Transit Oriented Development Area

High Intensity with the MRT Station as the Area Center



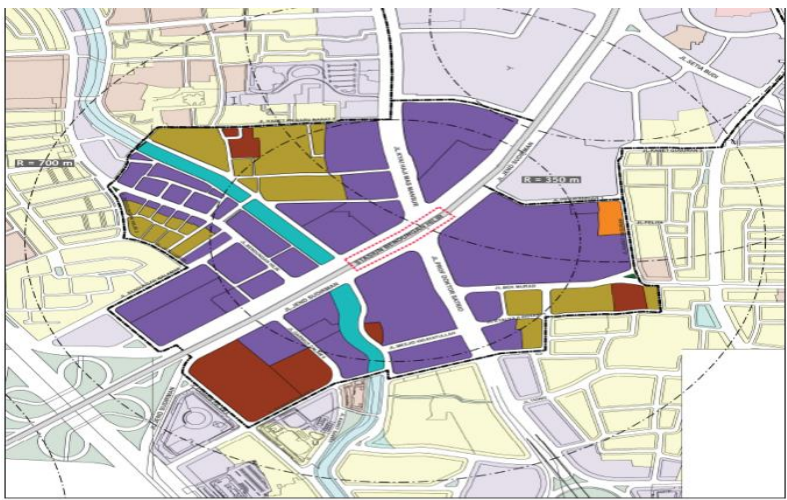
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Pedestrian Way and Bicycle Path Circulation



3

Mixed Land Use within Walking Distance



2. Making more efficient spaces in the city and encourage walking and cycling



Building wide pedestrian walk becoming priority this year



- Widening sidewalks by using “extra” space of the road through decreasing the lane width upto (3 – 3.25 m) while maintaining the number of lane
- Also by using closed sewerage system as sidewalks
- Average width of existing sidewalk ± 2 m to are going to be widened to 9 - 14 m
- Improvement focusing at:
 - Main roads
 - Public transport terminal/station area



2 m

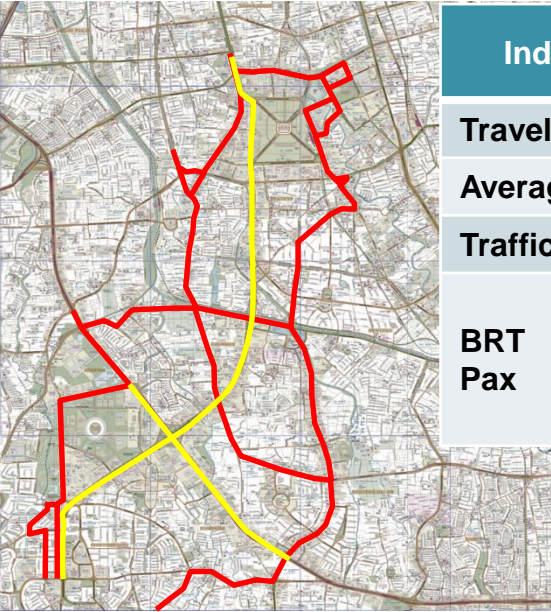
7-9 m

- Target 2016 : 48 locations
- Government Budget : 250 Billion rupiah ~ \$USD18.5 Million
- Some works are with joint funding scheme with private sectors



3. Trying out new Traffic Restriction Method

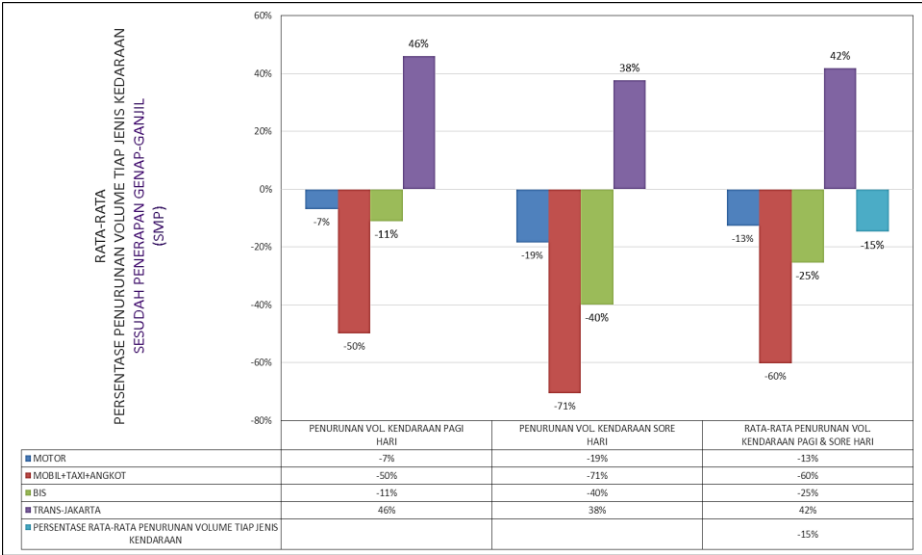
- Implementing Odd-Even Plate Policy



Indicators		During Odd-Even
Travel Time		-16%
Average Speed		17%
Traffic Volume		-15%
BRT Pax	TJ 1	32,57%
	TJ 6	27,17%
	TJ 9	30,55%

Corridor Length :
North - South : 9.3 km
East - West : 3.6 km

- Jakarta used to implement a 3 -in- 1Policy (HOV Lane) for 13 years, started in 2003. Limitation of this methods:
 - Violations are difficult to detect
 - High number of Car Jockey (Paid Extra Passengers)
 - The corridors are still highly congested
- Just recently since August 2016, the policy was changed into Odd-Even Plate, as a transition phase before the ERP will be applied.
→ So far good results
- Simultaneously we are now preparing **ERP** system, in the bidding phase for contractor and operator (private sector)

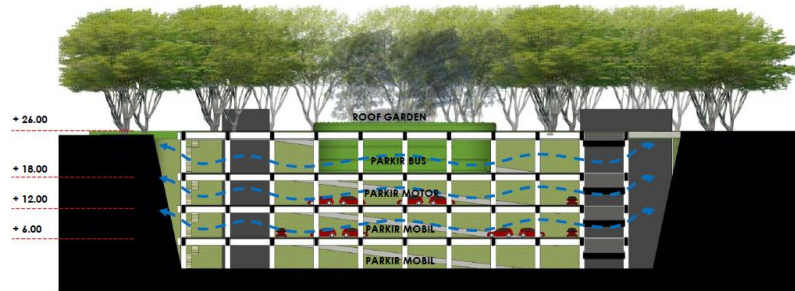


4. Due to limited land, Parking Buildings are to be built in a more creative design

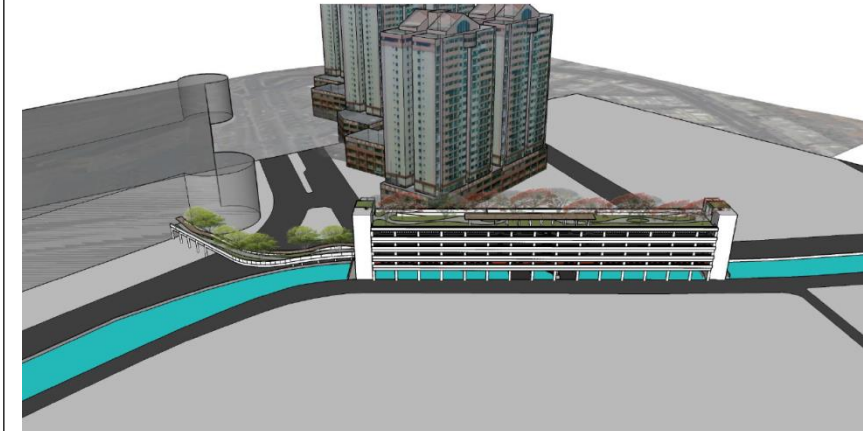


Proposed Underground Parking Building of Existing Lapangan Banteng Park

(design are copyright of Budy Lim)

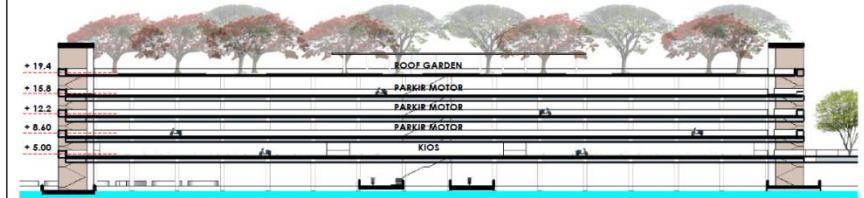


- Uncontrolled On-street Parking has been a long time problem. It makes an area looks unpleasant and at the same time generate congestion due to movement of in-out car and also occupied width of road.
- However, Jakarta is struggling with developing parking buildings due to the availability of land.
- We are currently thinking innovative alternatives of using the **underground of city parks** and **elevated space above the river** in the city center to be built as parking buildings
- The property right are owned by Government, thus, no land acquisition would be necessary.
- Lapangan Banteng parking can hold more than 1500 cars and 5800 motorcycle
- Cempaka Putih parking can hold more than 1300 motorcycle



Proposed Above-River Parking Building in Cempaka Mas Area

(design are copyright of Budy Lim)



5. Private Sectors MUST Contribute in Improving Transport sector



Double Decker busses - CSR from PT. Coca Cola Indonesia



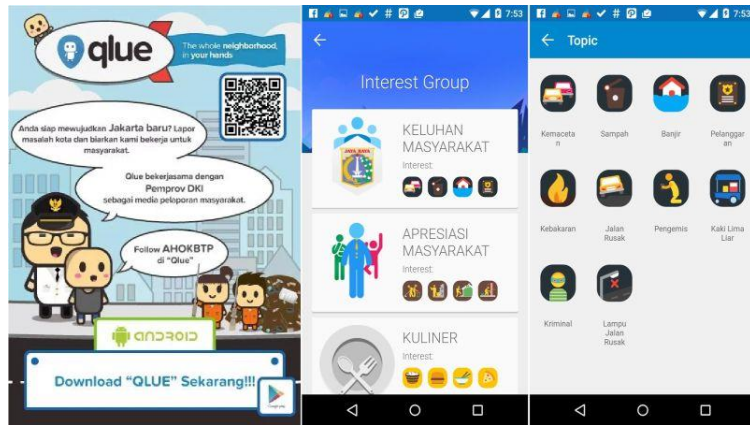
Construction of Circular Semanggi Bridge, an obligation paid from Private Sector in return of building permit issued

- Jakarta Government is exploring ways to cooperate with Private Sectors and utilize it as source of infrastructure funding.
- Cooperation can be in the form of:
 - Corporate Social Responsibility (CSR)
 - Obligation from permits issued to the private sectors
 - Public Private Partnership scheme
- This is to support speeding up of infrastructure provision which sometimes meet obstacles in land acquisition, government budget, or time consuming bureaucracy.

6. Smart Tech enables public to monitor, evaluate, and involve more in Government's activities

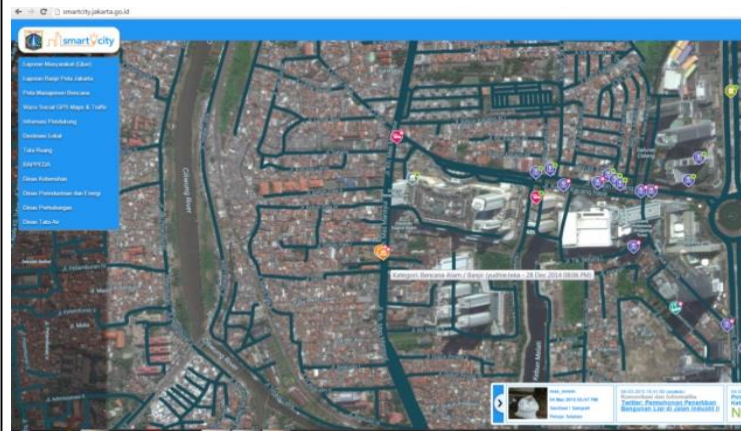


Android apps: QLUE



- **QLUE apps** enables Jakarta citizen to submit report, complains, appreciation in real time to the Governor for various topics: transportation, flood, spatial planning, sanitation, road, etc.
- Government will respond in a certain time and follow up the reports/complains
- The apps will change color indicating if a reports/complains have been solved
- Citizen satisfaction over a complain also determines a job performance appraisal of employee in Jakarta Government

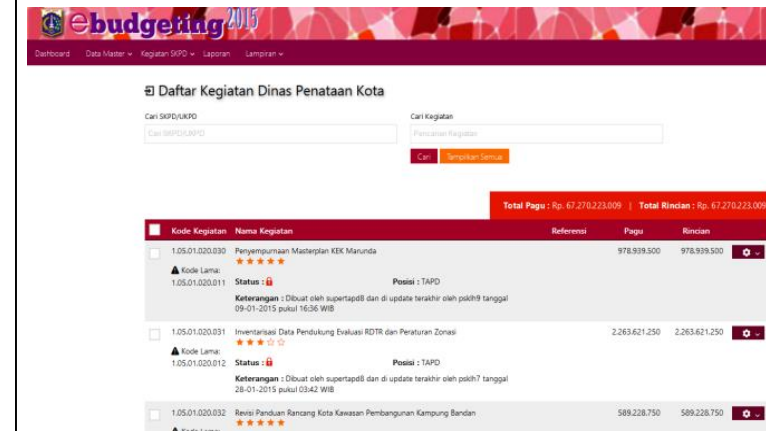
smartcity.jakarta.go.id



Source of integrated and interactive website for various service:

- Transportation
- Land Use
- Route detouring due to disaster
- Flood Information
- Citizen report/complain
- Disaster management information
- Permits

e-planning and e-budgeting



- e-planning and e- budgeting ensure all the process for developing Government Budget recorded digitally
- Protect the security of process
- Maintain transparency to the citizen
- Public can monitor the whole process

THANK YOU

