



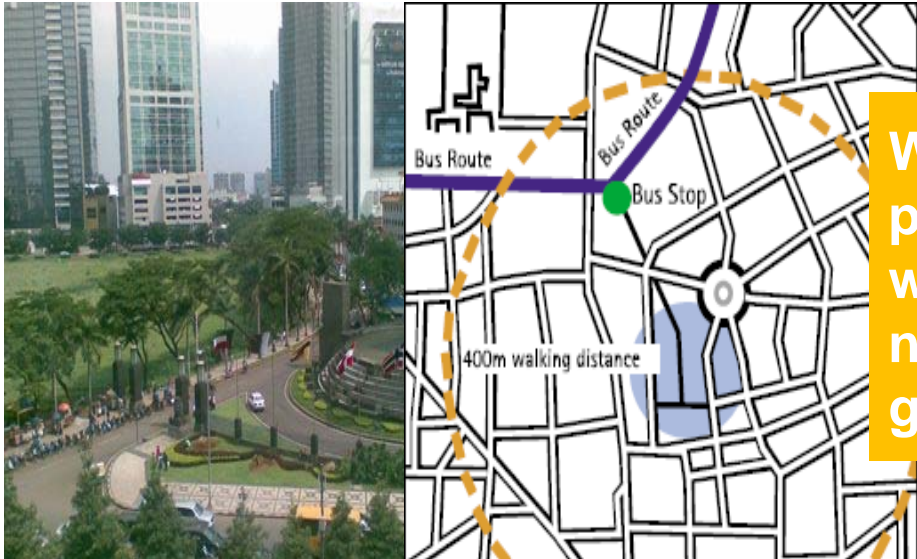
Pursuing Harmonious and Sustainable Development



***Deputy Governor of Jakarta
for Spatial Planning and Environment***

The 12th Plenary Meeting of the ANMC21

What Do We Think When We Plan A City?



We need to ensure that our present needs can be met without compromising the needs and choices of future generation



Sustainable planning creates a better environment for living, working and playing,
today and tomorrow

Jakarta = magnet for people from all over Indonesia

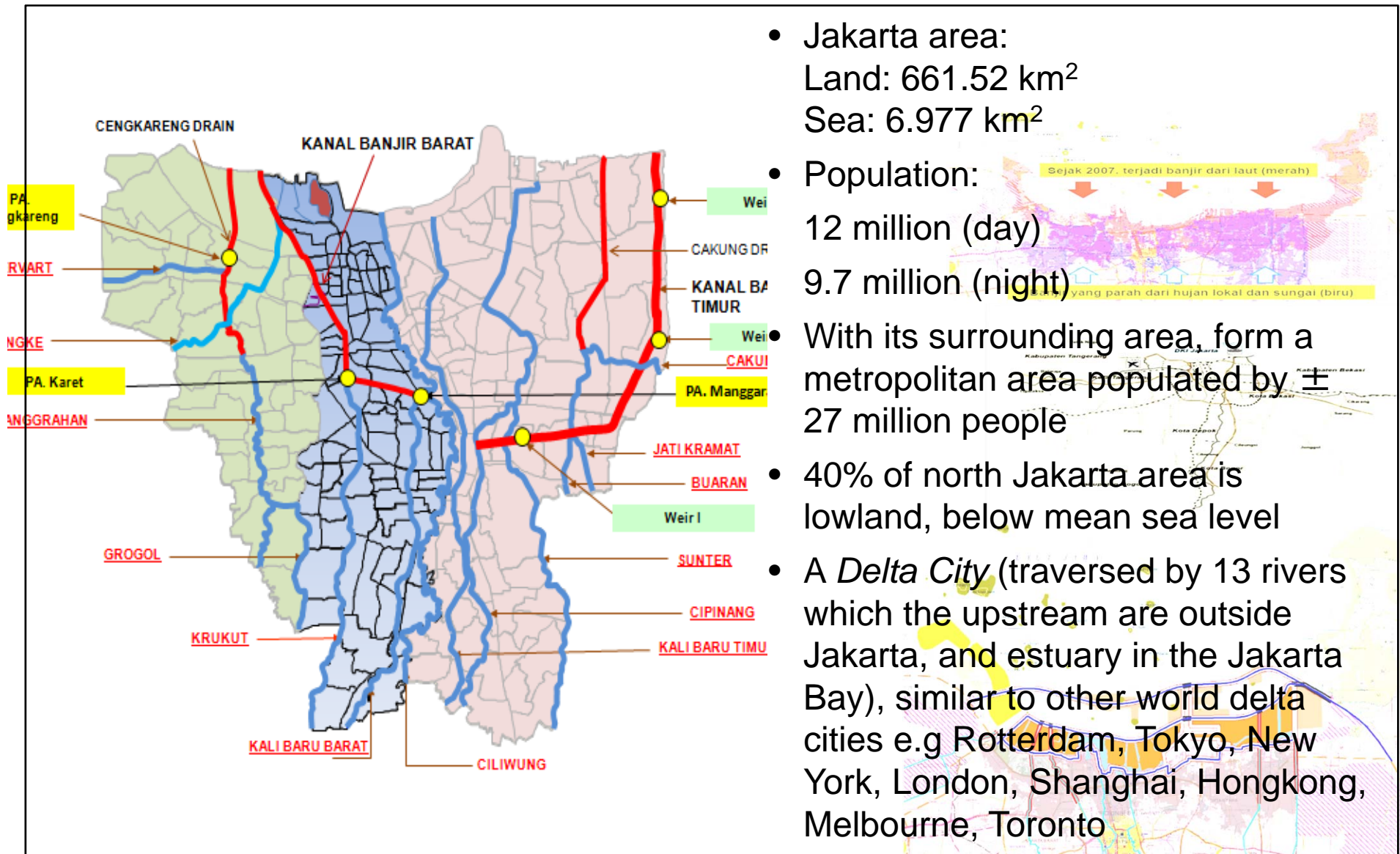


- Intense economic activity
- Rapid infrastructure development
- Modern technology and innovation are applied

Jakarta is continuously perceived as a promising land, a city of hope, for people from all over Indonesia to have a better life, thus, massive urbanization occurs

Imbalance of environmental & carrying capacity of Jakarta with its population growth

Description of Jakarta



- Jakarta area:
Land: 661.52 km²
Sea: 6.977 km²
- Population:
12 million (day)
9.7 million (night)
- With its surrounding area, form a metropolitan area populated by ± 27 million people
- 40% of north Jakarta area is lowland, below mean sea level
- A *Delta City* (traversed by 13 rivers which the upstream are outside Jakarta, and estuary in the Jakarta Bay), similar to other world delta cities e.g Rotterdam, Tokyo, New York, London, Shanghai, Hongkong, Melbourne, Toronto

Problems

Condition

Problems

3 big issues



- Density \pm 13.000 – 15.000 people per km²
- Population growth 1,39% per annum
- Commuter \pm 3 million people per day
- Land Subsidence 4-6 cm/year in the northern Jakarta

- Limitation of land
- Slum and Squatter area
- Heavy traffic jam
- Decreasing of Green Open Space area
- Pressure on water sources
- Waste management
- Degradation of environmental quality



Flood, Traffic Jam and lack of Green Open Space Area



Towards Livable Jakarta

In the complexity of Jakarta, many urban observers stated that to make Jakarta equals to world's big cities is nothing but a big dream.....



DREAM MUST COME TRUE!!



Vision



Prepare real action



Long Term Plan Document



Livable Jakarta

Our Target for the year 2030



Population number 12,5 million



Economic Growth 7-8% per year



Green Open Space 30% of the whole city



Water Body Ratio 5% of the whole city



Decreasing 30% Green House Gas Emmision



60% trip using public transport



Road Average speed of minimum 35 km/hour



Road ratio 10% of the whole city



Priority Programs

1. Transportation: MRT, BRT and Transit Oriented Development Area
2. Low Cost Housing
3. Solid Waste and Waste Water Management
4. Green Building
5. Flood Management
6. Developing North Jakarta



PANTURA JAKARTA

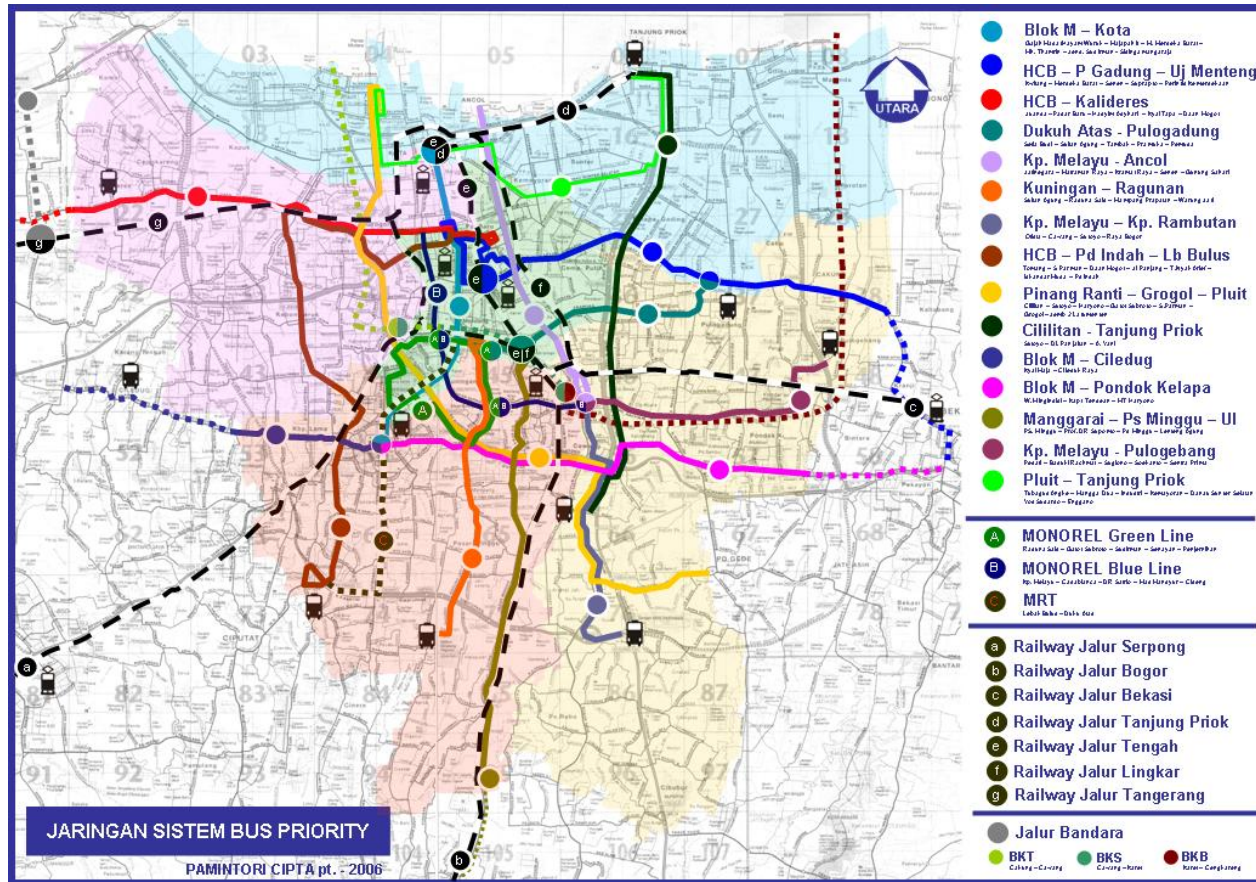
On going plan of the new reclaimed area of some 5000 Ha in the Jakarta Bay, to be developed by mutual cooperation between the Government, Private Sector and Community

Basic Principle for Pantura:

- Eco2 City
- Waterfront City
- Self-Sufficient City
- Resilient City
- Zero-Waste City
- Green Infrastructure
- Green Design
- Green Building



Jakarta Bus Rapid Transit



- Total BRT plan for year 2015: 15 corridors
- Currently 12 corridors are operated (134 km)
- Passenger demand for 2012 (11 corridors) : \pm 114 million pax
- Construction is carried out by DKI Jakarta Government, acting as the operator: DKI Jakarta Government through its Public Service Body TransJakarta
- Currently more than 95% buses using sustainable friendly energy (gas)

Jakarta Mass Rapid Transit

North – South Line Phase 1 (Lb. Bulus – Bund. HI)

Length : 15,7 km
(9,8 km elevated;
5,9 km underground)

Stations : 13
(7 elevated, 6 underground)

Travel Time : 30 minutes

Distance between stations : 0,8 – 2,0 Km

Headway : 5 minutes

North South Line Phase 2 (Bund. HI – Kamp. Bandan)

Length : 8,1 km

Stations : 7 underground 1 at-grade

Travel Time : 22,5 minutes

Distance between stations : 0,8 – 2,0 Km

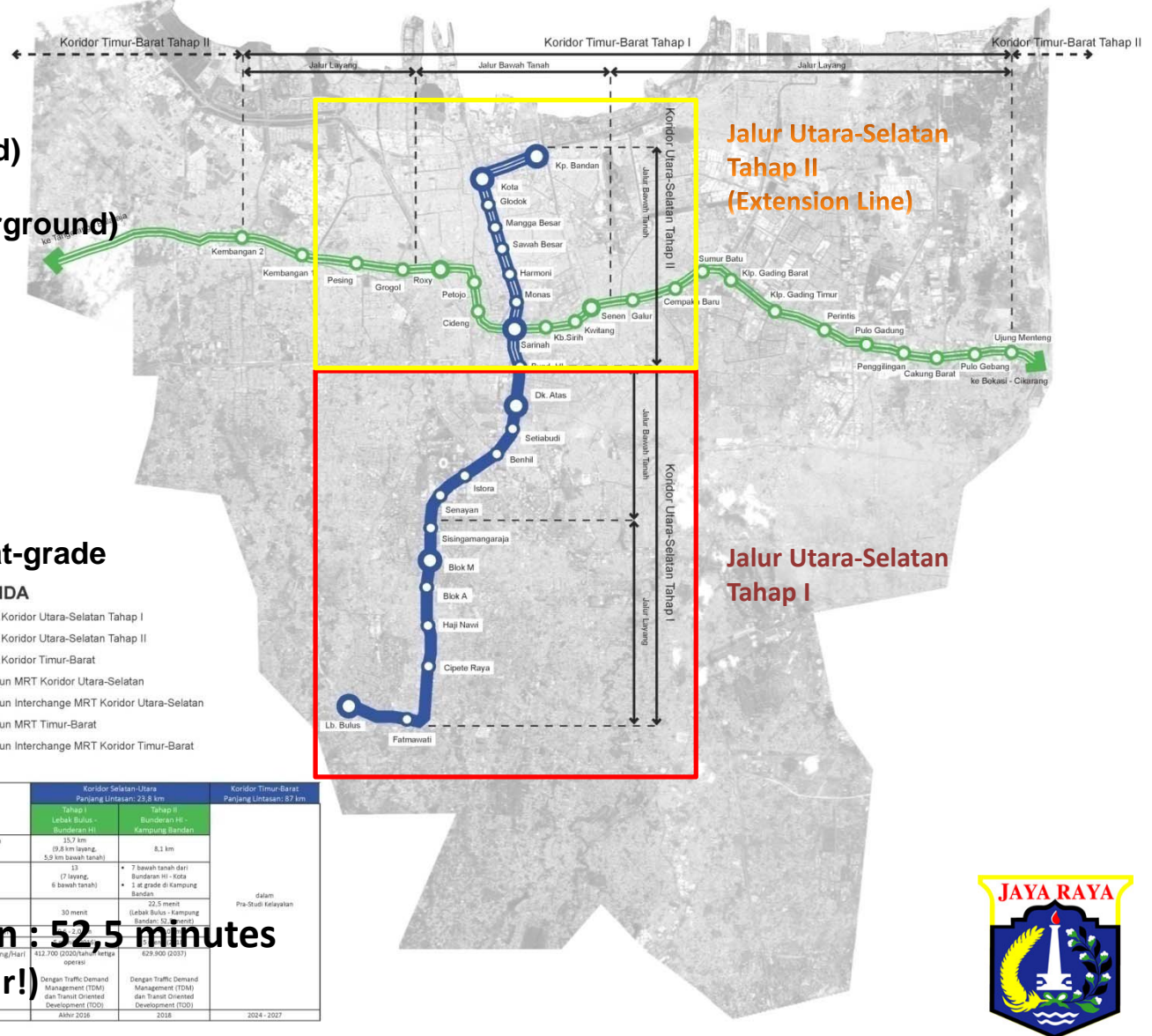
Headway : 5 minutes

LEGENDA

-  MRT Koridor Utara-Selatan Tahap I
-  MRT Koridor Utara-Selatan Tahap II
-  MRT Koridor Timur-Barat
-  Stasiun MRT Koridor Utara-Selatan
-  Stasiun MRT Koridor Timur-Barat
-  Stasiun Interchange MRT Koridor Utara-Selatan
-  Stasiun Interchange MRT Koridor Timur-Barat

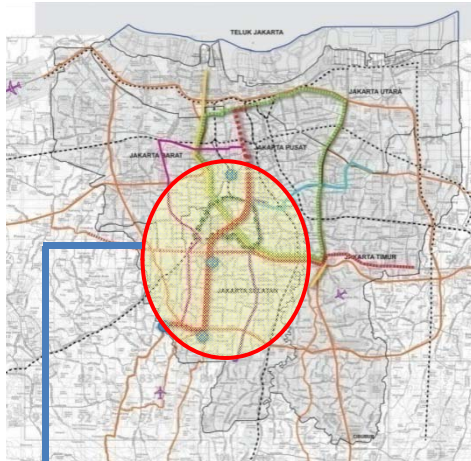
	Koridor Selatan-Utara Panjang Lintasan: 25,8 km		Koridor Timur-Barat Panjang Lintasan: 97 km
	Tahap I Lb. Bulus – Bundaran HI	Tahap II Bundaran HI – Kampung Bandan	
Panjang Lintasan	15,7 km (9,8 km layang, 5,9 km bawah tanah)	8,1 km	
Jumlah Stasiun	13 (7 layang, 6 bawah tanah)	7 (7 bawah tanah dari Bundaran HI - Kota • 1 at grade di kampung Bandan)	dalam Pra-Studi Kelayakan
Waktu Tempuh	30 menit	22,5 menit (Lb. Bulus - Kampung Bandan: 52,5 menit)	
Target Penumpang/Hari	412.700 (2020)target operasi	629.500 (2031)	
Target Operasi	Dengan Traffic Demand Management (TDM) dan Transit Oriented Development (TOD)	Dengan Traffic Demand Management (TDM) dan Transit Oriented Development (TOD)	2024 - 2027

**Estimated total travel time
from Lb. Bulus – Kp. Bandan : 52,5 minutes
(currently on peak hour: 3 hour!)**

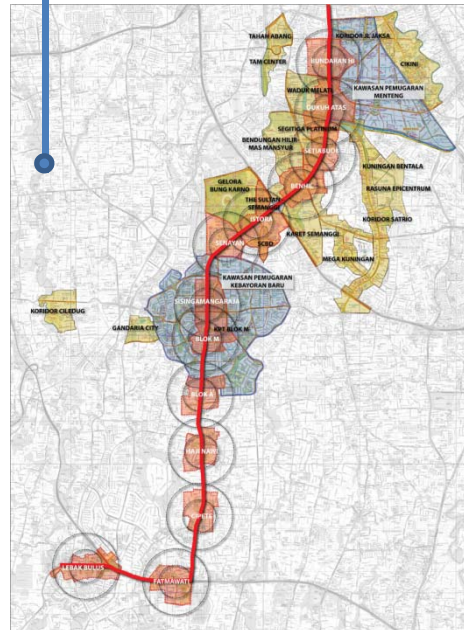


Example of TOD (Transit Oriented Development) Concept: Benhil Station

Jakarta MRT Corridor



Potential TOD area



TOD Benhil Station

1

High Intensity with the MRT Station as the Area Center



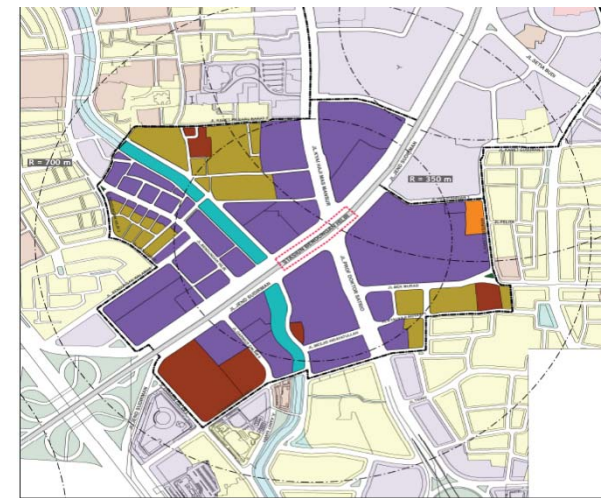
2

Pedestrian Way and Bicycle Path Circulation



3

Mixed Land Use within Walking Distance



Low Cost Housing

± 120.000 USD is allocated in the FY 2013 for turning the slum area into a - well designed, convenient, integrated with amenities – low cost housing area in total 59 locations



On-going Plan of combining Subsidized Apartment and Traditional Market:

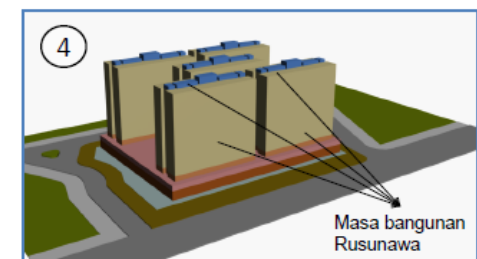
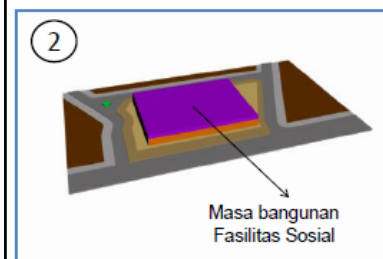
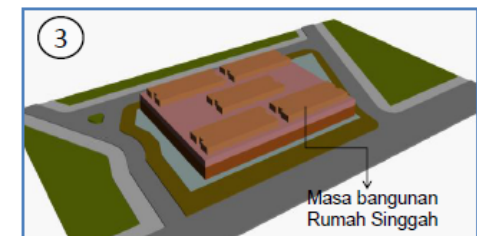
It adopts the efficiency of land usage by placing mixed facilities in one building

Reduce unnecessary trip by automobile!

Floor 1 - 2 : Traditional Market

Floor 3 – 4 : Public Facilities

Floor 5 – 19 : Subsidized Apartment



Solid Waste and Waste Water Management

SOLID WASTE MANAGEMENT

- Encourage Environmental Friendly Solid Waste Management using high and efficient technology
- Currently around 6000 tonnes waste per day is delivered to Bantar Gebang Final Disposal Site (Outside Jakarta)
- On going plan: to build 3 Intermediate Treatment Facility (ITF) in the City (Sunter, Marunda, Cakung)
- Encourage waste segregation to reduce waste in the Final Disposal Site



WASTE WATER MANAGEMENT

- Currently only 4% of Jakarta served by sewerage system, and the rest by desludging septic tank
- Gradually expanding sewerage system for waste water for all Jakarta and separate them from the drainage system
- Utilize waste water into an alternative clean water resource



Green Building

- Governor decree about Green Building has been issued to encourage all the building in Jakarta to incorporate the Green Building Concept
- As a first step, the Government has finished renovating the City Hall and promoted it as a green building pilot project

Jakarta City Hall Renovation



Using the central cooled air chiller with R134a cooler (efficient electricity usage) and sequencing control will improve energy saving until 30 % and reduce the carbon waste until 35%

Using of special electronic appliances and lamps like TL5 M6, Ballast electronic and LED will also improve energy and electricity saving until 30%

Separation between grey water and black water. Grey water will be used again to spray the garden.

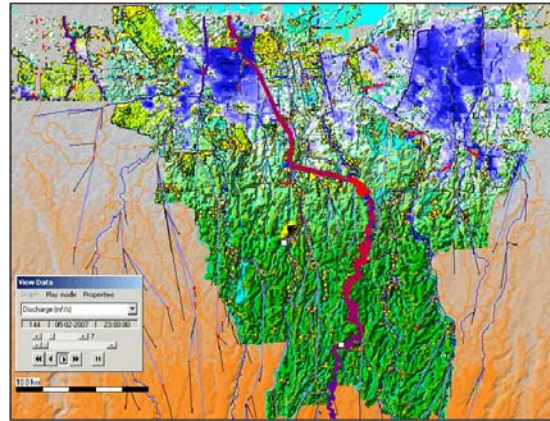
Estimated Total Saving
30-35%
Monthly Spending

Flood Management

River Dredging and Normalization

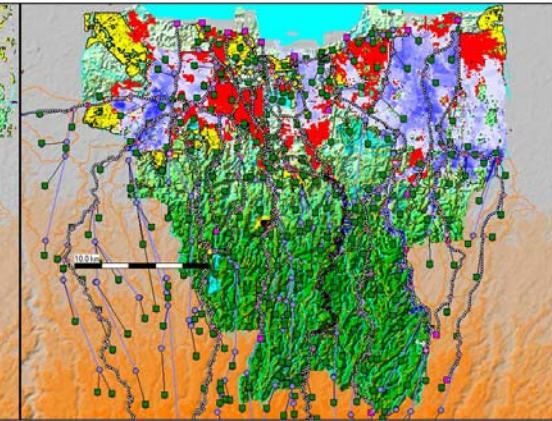
Reducing Flooded Area by 30%

FLOOD 2007



Flood area 203 Km2

AFTER DREDGING



Flood area 144 Km2

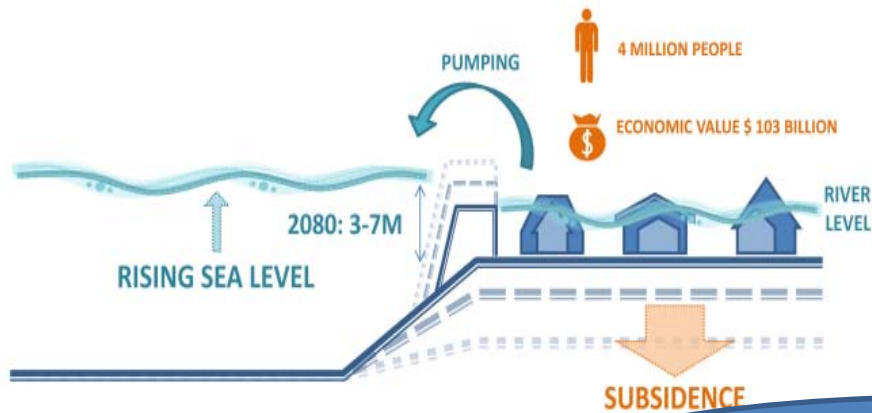
Constructing Infiltration Well

New Governor Decree enforces all buildings in Jakarta to build infiltration well and puts it as a requirement for issuing building permit

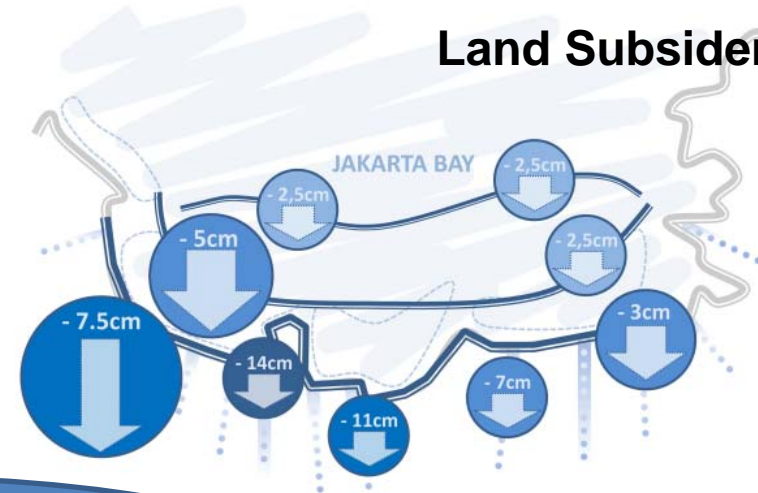


Challenges that inspires the Development of North Coast Jakarta

Rise of Sea Level



Land Subsidence

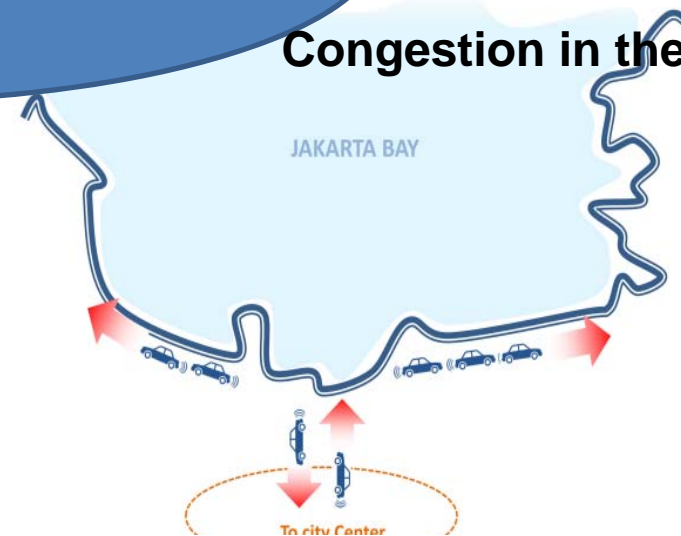


Jakarta needs A Coastal Protection at Jakarta Bay

Bad Water Quality



Congestion in the City

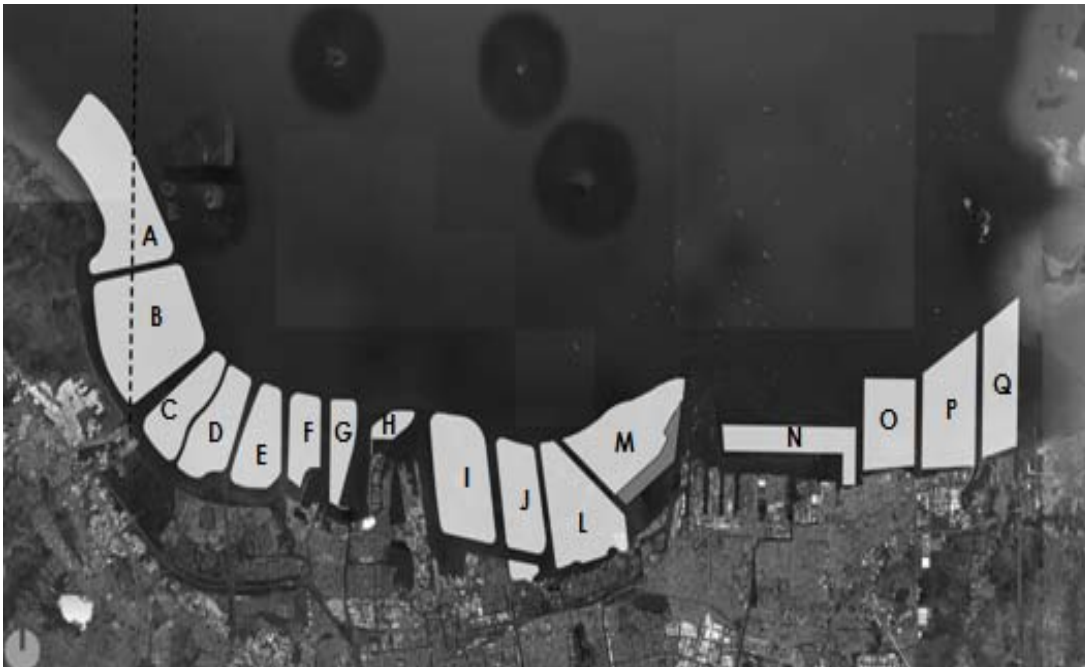


Development of North Coast Jakarta

- 1. New reclaimed land of some 5000 Ha in the Jakarta Bay*
- 2. National Capital Integrated Coastal Defence (NCICD)*

to be developed by mutual cooperation between the Government, Private Sector and Community

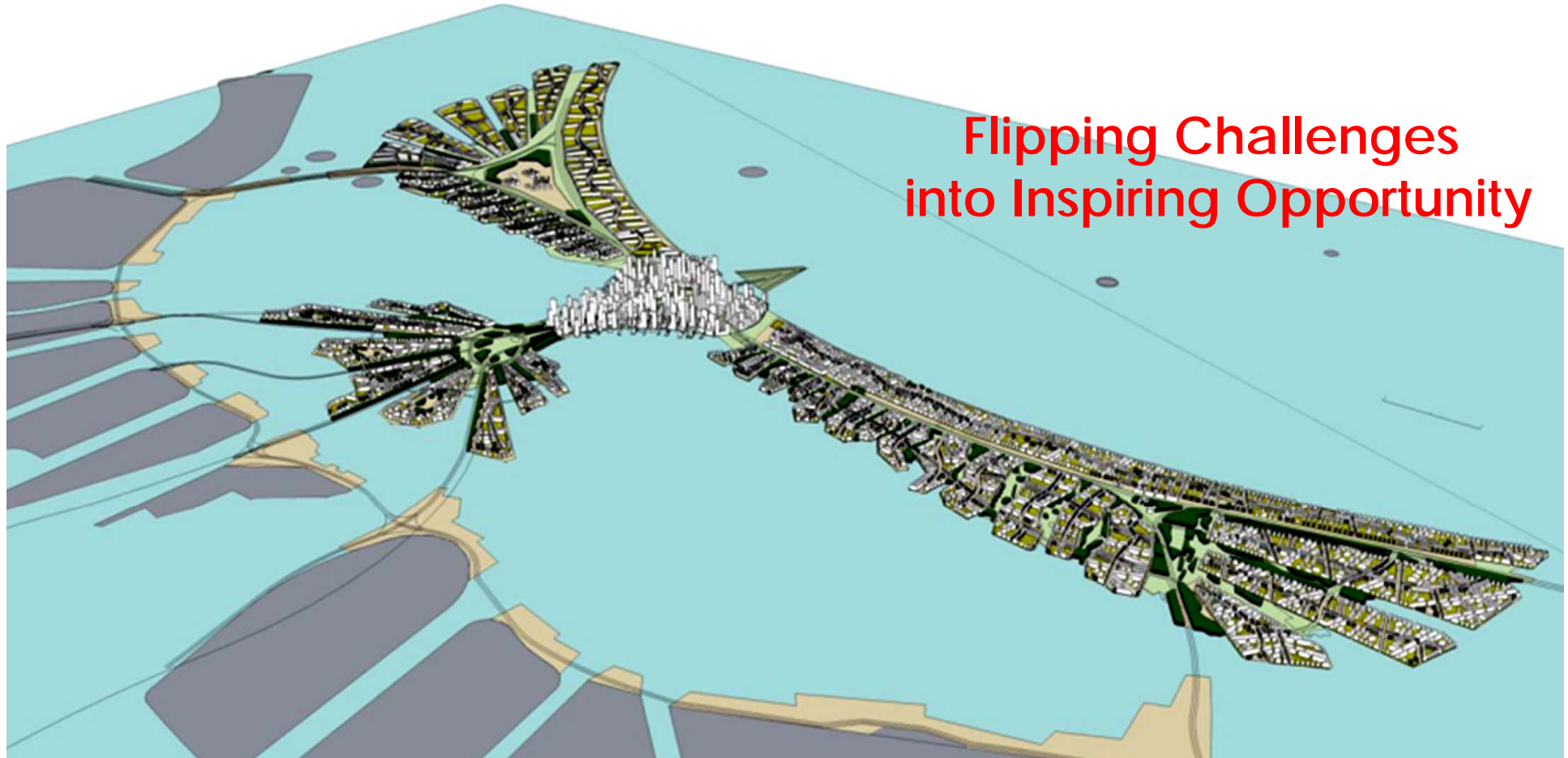
New Reclamation Area



Basic Principle:

- Eco2 City
- Waterfront City
- Self-Sufficient City
- Resilient City
- Zero-Waste City
- Green Infrastructure
- Green Design
- Green Building

Building Giant Sea Wall In Conjunction with the Reclamation area



Flipping Challenges
into Inspiring Opportunity

Land reclamation: **3.150 ha**
Residents : **1.800.000**
Daily working : **2.650.000**
Buildable : **45%**

Real estate : **14.170.000 m2**
footprint
FS : +/- **3,9**
Total sqm : +/- **55.000.000 m2**



Thank You