1. HIGH SPEED TRAIN JAKARTA - SURABAYA
2. URBAN TRANSPORT (LRT & MRT)
3. BUS RAPID TRANSIT (BRT) DEVELOPMENT

MINISTRY OF TRANSPORTATION
Directorate General of Railways

THE JAVA NORTH LINE UPGRADING PROJECT

STAGE OF THE JAVA NORTHERN LINE UPGRADING PROJECT

PHASE 1

New Single Track 435,4 kms
Vmax 160 km/h
Travel Time 3h 21m

Existing Track 277,8 kms
Vmax 120 km/h
Travel Time 3 h 29 m

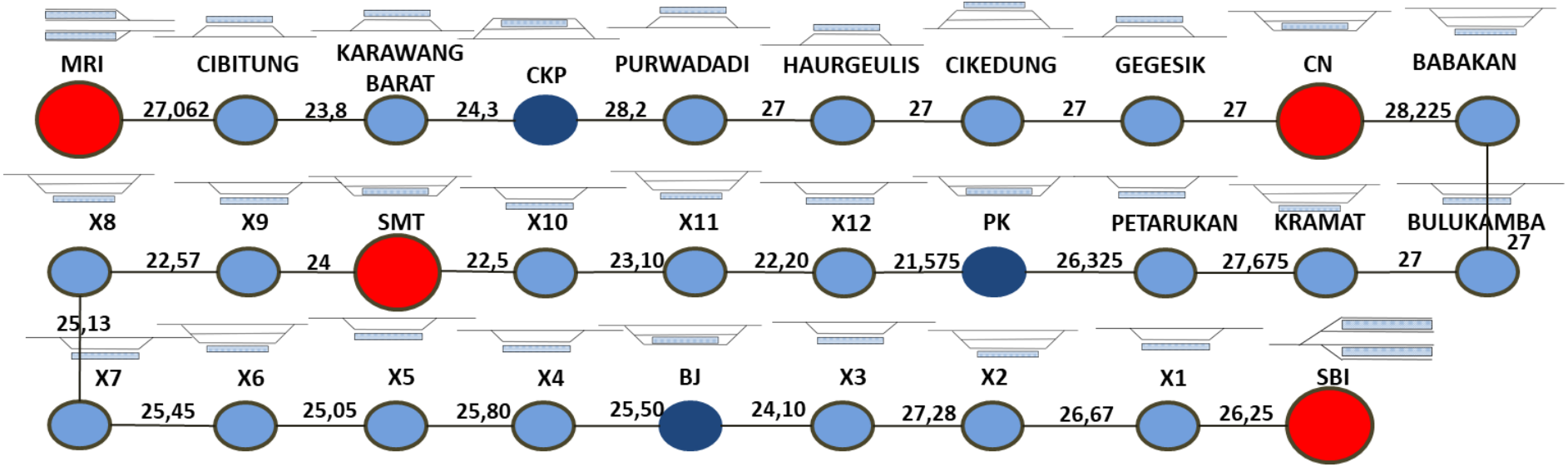
PHASE 2

New Single Track 713,2 kms
Vmax 160 km/h
Travel Time 5 h 30 m

STATION

Main Station : Manggarai, Cirebon, Semarang and Surabaya Pasarturi .

Operation Station (loops) : 25 stations - for Cikampek, Pekalongan, and Bojonegoro Station will be used for boarding and alighting passengers (option for JS60 and JS70).



INTEGRATIONS MODEL IN URBAN TRANSPORT DEVELOPMENT PROGRAM

No	Program	Integration		
		Institutional (arrangement between operators)	**Operational** (schedule, tarif, transfer of passenger)	**Physical** (Access facilities, locations, design)
1	LRT Jabodebek	√	√	√
2	LRT Jakarta	√	√	√
3	LRT Palembang	√	√	√
4	MRT Jakarta	√	√	√

Remarks:

a. Institutional integrations : Arrangement /contract between stakeholders in fulfilling commitments to transportation service provider

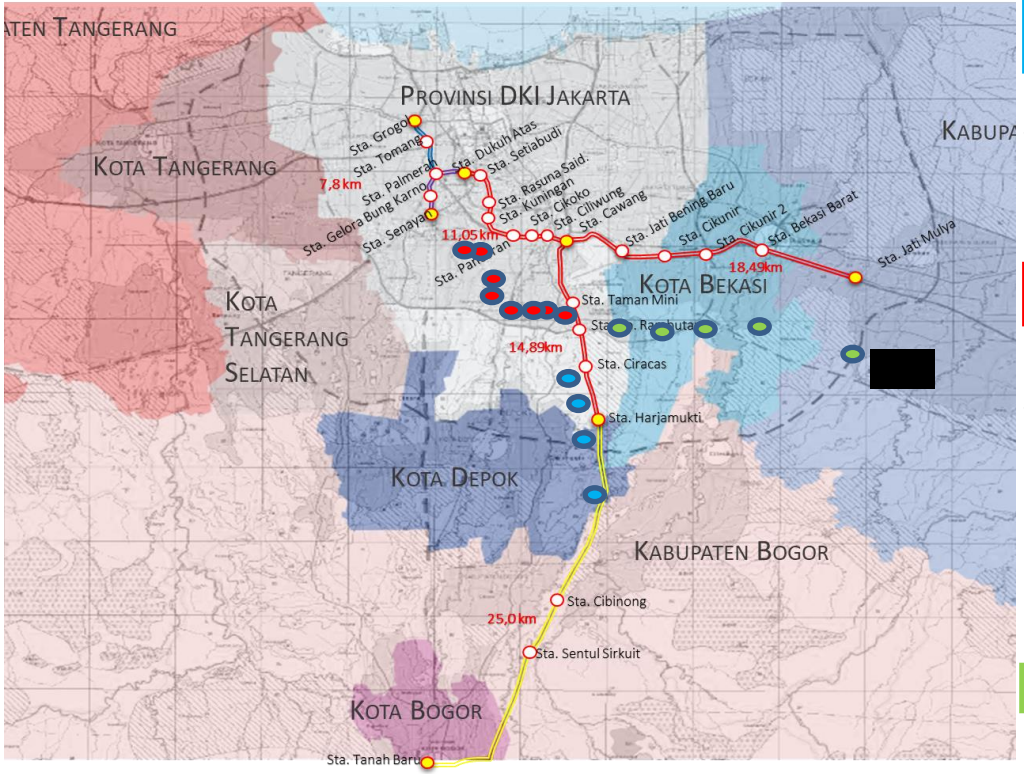
b. Operational integrations : Coordinationg dan planning of public transportations by minimizing distance and travel time for comfortable transportations.

c. Physical integrations : Physical changes to accommodate passenger transit between convenient transfer locations.

Progres of LRT Jabodebek

2.a

TRACK OF LRT JABODEBEK



Source : KP. 377/2018

Construction start : September 2015
Target Finish Construction : Mei 2021

Track & Stations

CAWANG – CIBUBUR line

Length of track 14,89 km

Stations 4Locations

1. TMII stations
2. KP. Rambutan stations
3. Ciracas stations
4. Harjamukti stations

CAWANG – DUKUH ATAS line

Length of track 11,05 km

Stations 8Locations

1. Cawang stations
2. Ciliwung stations
3. Cikoko stations
4. Pancoran stations
5. Kuningan stations
6. Rasuna Said stations
7. Setiabudi stations
8. Dukuh Atas stations

CAWANG – BEKASI TIMUR line

Length of track 18,49 km

Stasiun 5Lokasi

1. Jati Bening Baru stations
2. Cikunir 1 stations
3. Cikunir 2 stations
4. Bekasi Barat stations
5. Jatimulya stations

[redacted] Depo LRT Jatimulya

PROGRESS of 21 June 2019

Cawang – Dukuh Atas line

53,016

Cawang – Bekasi Timur line

57,897

TOTAL PROGRESS

63,992%

Cawang – Cibubur line

83,727

FINANCING SCHEME

PROJECT COST

- Infrastructure
- Facilities
- Infrastructure Maintanance

Rp 25,7 T

Depo + 17 Stations — **Rp 4,2 T**

PROJECT FUNDING

PMN

PT. KAI	Rp	7,6 T
PT. Adhi Karya	Rp	1,4 T
Total PMN	**Rp**	**9,0 T**

Bank Loan

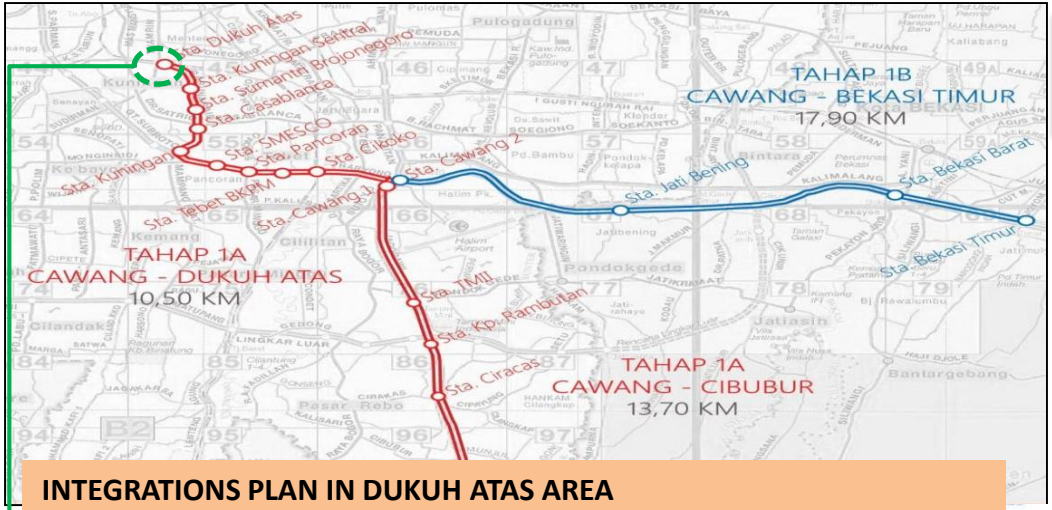
PT. KAI	Rp	18,1 T
PT. Adhi Karya	Rp	2,8 T
Total loan	**Rp**	**20,9 T**

Total Project Cost **Rp 29,9 T**

Total Funding **Rp 29,9 T**

Source : Agreement between DGR and PT. KAI concerning the Implementation of integrated LRT Infrastructure in the Jakarta, Bogor, Depok and Bekasi Areas No. HK.201 / A.566 / DJKA / 12/17 and No. KL.705 / XII / 10 / KA-2017

LRT JABODEBEK



LRT Jabodebek will also be integrated with a number of Transjakarta shelters in the DKI Jakarta area and plans for the High Speed Rail (HSR) Jakarta Bandung station in Cawang

INTEGRATIONS PLAN IN DUKUH ATAS AREA

TOD PLAN IN JABODEBEK LRT ROAD

1. Bekasi Timur
2. Bekasi Barat
3. Cikunir
4. Cikunir 2
5. Jaticempaka
6. Cibubur
7. Ciracas
8. Ciracas PPD
9. Taman Mini
10. Kampung Rambutan
11. Cawang
12. Cikoko
13. RNI Pancoran

Operational target : 2021

LRT Jakarta

2.b

ditjenperkeretaapian
ditjenperkeretaapian
djka.dephub.go.id
@perkeretaapian

LRT DKI JAKARTA

DESCRIPTIONS

- Jakarta LRT is one of the National Strategic Projects in accordance with Presidential Regulation No. 3/2016 which was last amended through Presidential Regulation No. 56/2018
- Phase 1 of the Jakarta LRT development of 5.8 Km with 5 elevated stations and 1 depot for the maintenance of LRVs (Light Rail Vehicles);
- In the initial stage, there will be 16 LRVs articulates or 8 train sets (1 train set = 2 LRVs), with 5-15 minute headways.
- Jakarta LRT, development program by the DKI Provincial Government, with the first priority operating 1 phase-1 corridor to support ASIAN Games 2018

PROJECT BEARER:

- Provincial Government of DKI Jakarta.
- PT. Jakarta Propetindo as an implementers project and PT. LRT Jakarta as an infrastructure and facilities operator.

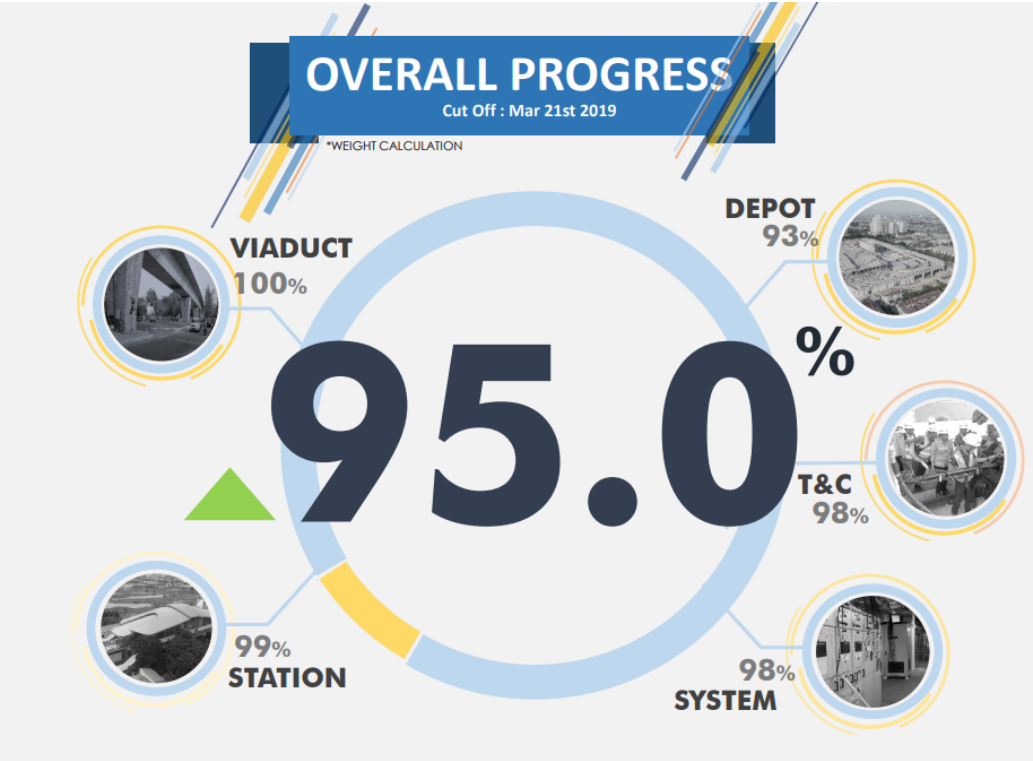
VALUE OF DEVELOPMENT BENEFITS

- Reducing road congestion in urban areas.
- As an alternative transportation to encourage shifting modes
- Provision of modern and environmentally friendly transportation.

STATUS:

- Infrastructure Progress per- 21 Maret 2019 is ± **95%** (including operating facilities and depots)
- Progress of the facility per- 21 Maret 2019 is **99%**

OPERATIONAL TARGET : End of 2019



LRT Jakarta Specifications :
Standard Gauge : 1435 mm
Electricity : PLN 750 VDC (Premium)
Traction distributions : 3rd rail
Maximum speed : 90 km/hours
Capacity of passengers : 270 / trainset
3 bogie / trainset

Operational Scheme

Length of track : 5.8 Km (Rawamangun to Kelapa Gading)

1 depo for Light Rail Vehicle (LRV)
(Including Bogie and General Warehouse, APSS, Stabilng Yard, Light and Heavy Maintanance

6 Elevated stations
- Pegangsaan Dua
- Boulevard Utara
- Boulevard Selatan
- Pulomas'Equestrian
- Veldrome

- Operational time:
  weekdays : 06.00 – 22.00 WIB
  weekend : 07.00 – 23.00 WIB
- *Headway* : 5 - 15 Menit on weekdays and holiday
- Travel time : 13 Menit

- 3 LRV in operational time
- With capacity up to 810 passengers
- 1 LRV in normal time
- With capacity up to 270 passengers

Trip and target ridership:
- 245 – 282 trip/day
- 14.225 passengers /day (2019)

Integration Plan :
LRT Jakarta (Station Velodrome) & Transjakarta (Koridor 4)

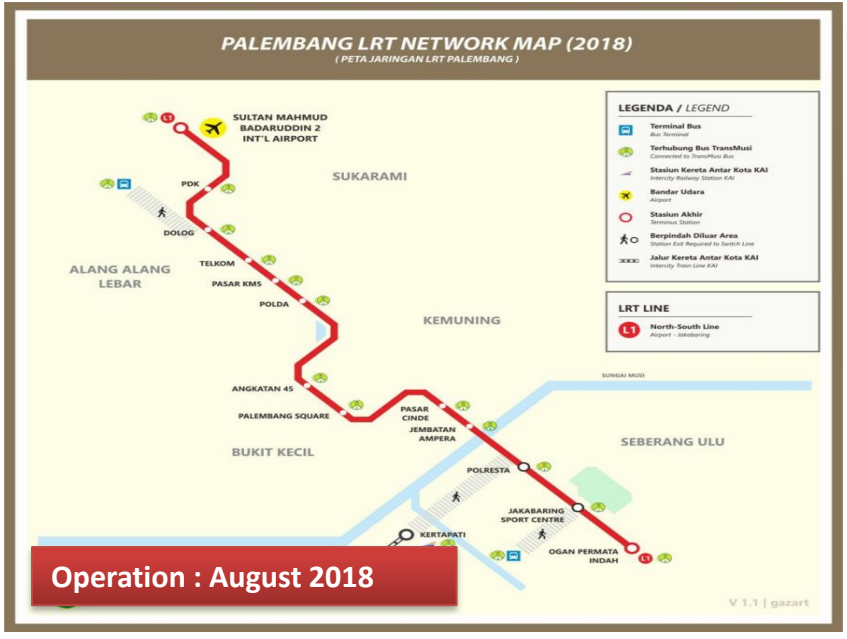
LRT
South Sumatera

2.C

ditjenperkeretaapian ditjenperkeretaapian

djka.dephub.go.id @perkeretaapian

LRT SUMATERA SELATAN



- 1 *Train Set* consist of 3 train (stamformations : MC - T - MC)
- Motor Car (MC) = 40 seat+ Max 102 standing
- Trailer Car (TC) = 50 seat+ Max 100 standing
- 1 Train Set capacity = 130 seat + Max 304 standing = Max 434 passengers

LRT PALEMBANG INTEGRATIONS

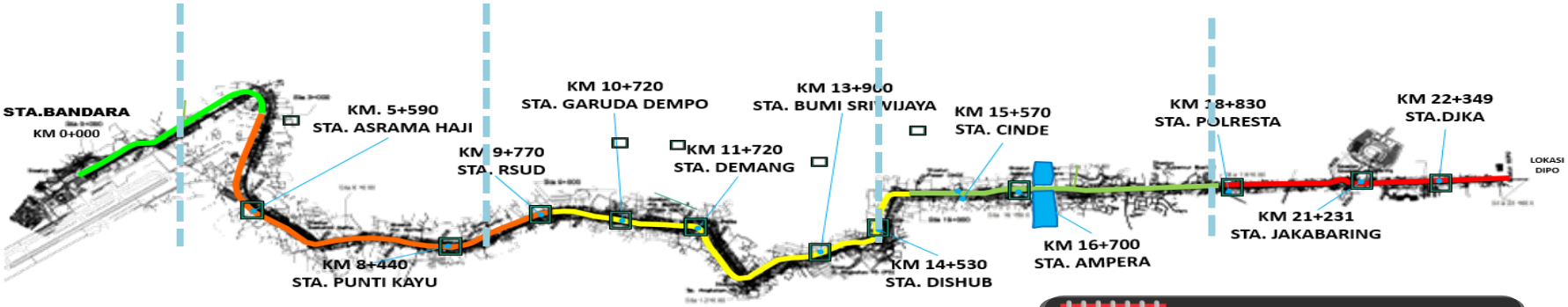
1. SkyBridge Constructions (Sultan Mahmud Badaruddin 2 airport)
2. LRT stations integrated with Trans Musi shelter
3. LRT stations integrated with river transport

Skybridge Bandara Sultan Mahmud Badaruddin 2)

Integrations LRT & River Transport

Integrations LRT & Trans Musi shelter

INFRASTRUCTURE LRT SUMATERA SELATAN



Start Construction on Oktober 2015

Length of track	:	23,4 Km (Lebar Jalur 1067) , (Electricyty : Third rail 750 VDC)
Route	:	Bandara Sultan Mahmud Badaruddin II – Stadion Jakabaring – Depo Jakabaring
Stations & Depot	:	13 unit stations, 9 unit substation & 1 unit depo
Constructions	:	Elevated / Layang (Konstruksi Beton, Slab Track)
Facilities	:	8 Trainset (6 operations 2 Alternative)
Operational Scheme	:	18 hours
Signaling	:	Fixed Block (ETCS – Level 1)
Financing	:	Rp. 10,9 T (APBN 2017 – 2020)

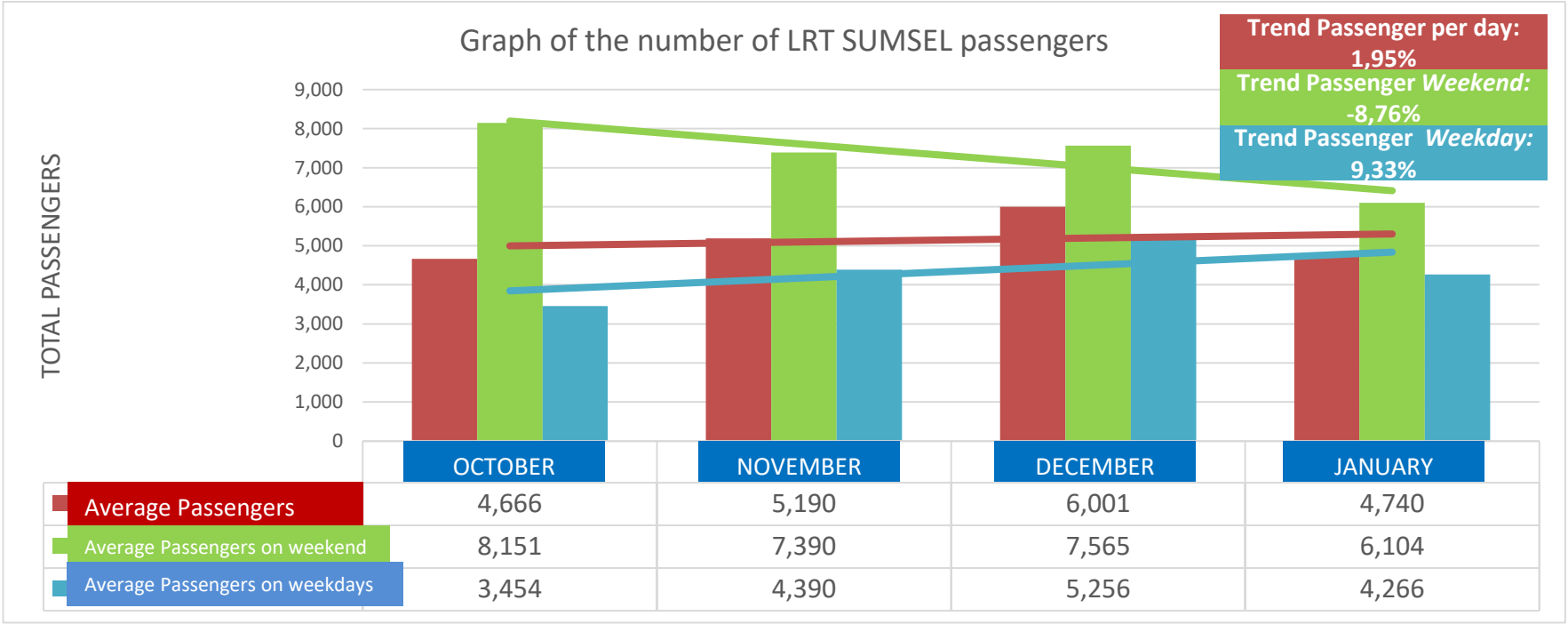
OPERATIONS OF LRT SUMSEL MAY 2019

Length of track from Bandara station – DJKA stations
23,4 Km (13 Stations)

- Operational Hours :
  04.00 – 22.20 WIB
- *Headway* : 24 Minutes
- Travel Time : 42 Minutes

- Trip per day : 108 Trips
- 6 *trainset* /day, 2 *trainset* alternative

- Bandara SMB II stations – DJKA stations Rp. 10.000,-
- Asrama Haji stations –DJKA stations Rp. 5.000,-
- Asrama Haji stations – DJKA stations Rp. 2.000,-
  (Integrasi antar moda Trans Musi dan DAMRI)

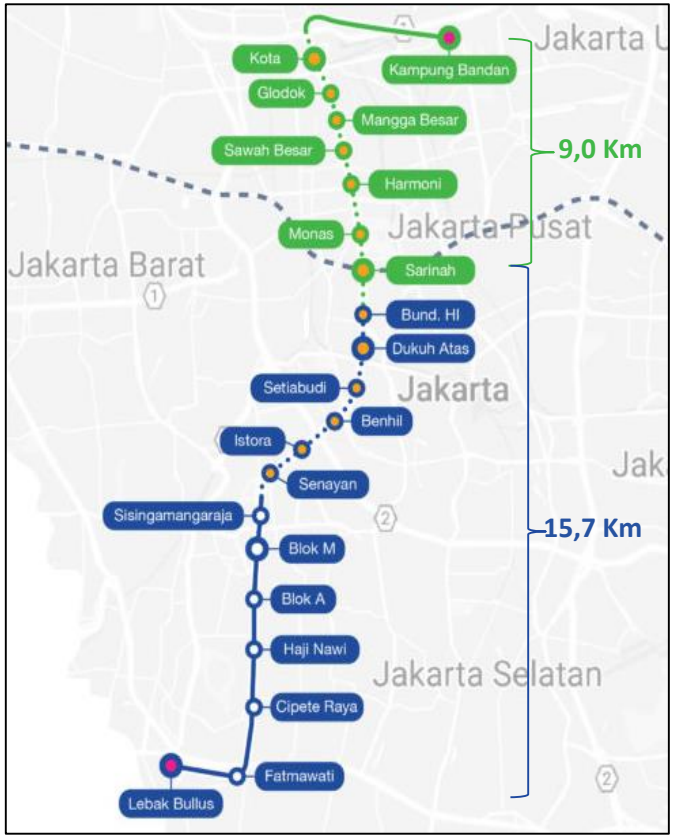


DESCRIPTION	PERCENTAGE	Oct-18	Nov-18	Dec-18	Jan-19
DEPARTURE ACCURACY	%	88	86	94	96
ARRIVAL ACCURACY	%	70	84	94	96

2.d

MRT Jakarta

DEVELOPMENT OF MRT JAKARTA NORTH – SOUTH CORRIDOR



Phase 1 (Lb. Bulus – Bundaran HI)

Phase 2 (Bundaran HI - Kp. Bandan)

DESCRIPTIONS:

- MRT Jakarta is one of the National Strategic Projects in accordance with Presidential Regulation No. 3/2016 which was last amended through Presidential Regulation No. 56/2018.
- MRT Jakarta North – South Corridor ±24,7 km consists of Phase I Lebak Bulus - Bundaran HI (15.7 km) and Phase II Bundaran HI - Jakarta Kota - Kampung Bandan (9 km).
- The Jakarta North - South MRT Phase I that has been operating consists of a 9.8 Km elevated construction and 5.9 Km underground.

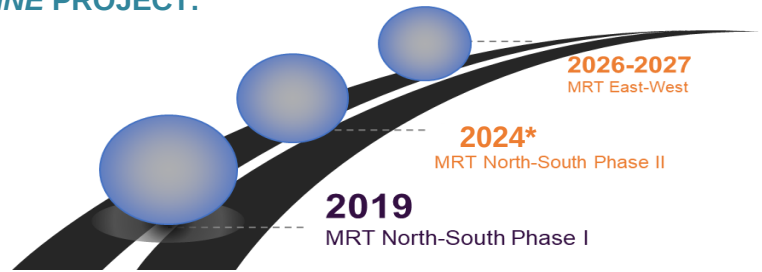
VALUE BENEFITS OF DEVELOPMENT

- Reducing traffic density through mode transfers;
- City economic growth;
- Realizing a modern and environmentally friendly transportation alternative

PROJECT BEARER:

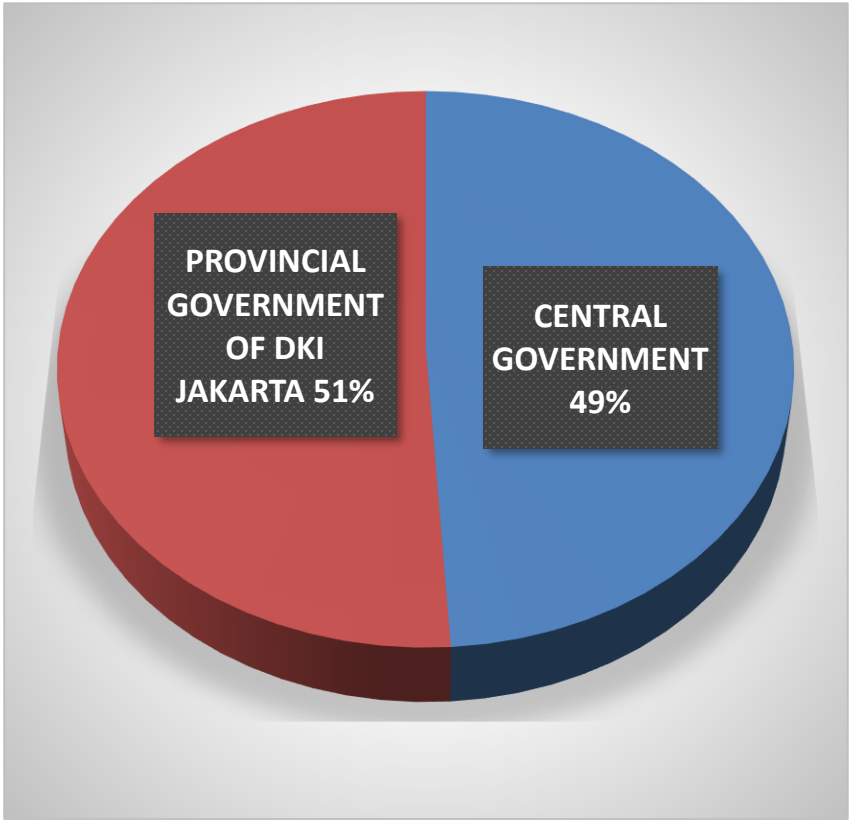
- DJKA Kemenhub (*Executing Agency*), Pemprov DKI Jakarta (*Implementing Agency*), PT. MRT Jakarta (*Sub-Implementing Agency*).

TIMELINE PROJECT:



*)Groundbreaking on 24 March 2019 by President

FINANCING MRT JAKARTA NORTH – SOUTH CORRIDOR (PHASE 1)



- **Financing** : LOAN JICA
- **Total Cost*** : ¥125.237.000.000
  (Eq.= Rp13.776.070.000.000)
- **Financing Scheme:**
  - Central Government : ¥61.366.000.000 (49%)
    (Eq.= Rp6.750.260.000.000)
  - Provincial Government: ¥63.871.000.000 (51%)
    (Eq.= Rp7.025.810.000.000)
- **STATUS** : *On Granting* dan *On Lending*
- **Scope of Work** :
  - Study of project planning and FS;
  - Construction of basic infrastructure /railway
  - Provision of *rolling stock*;
  - Signaling system;
  - Other Facilities;
  - Project Supervision.

Notes:

- Not included *Variation Order* and *Price Adjusment* ¥ 21.544.000.000
- ¥ 1 = Rp. 110

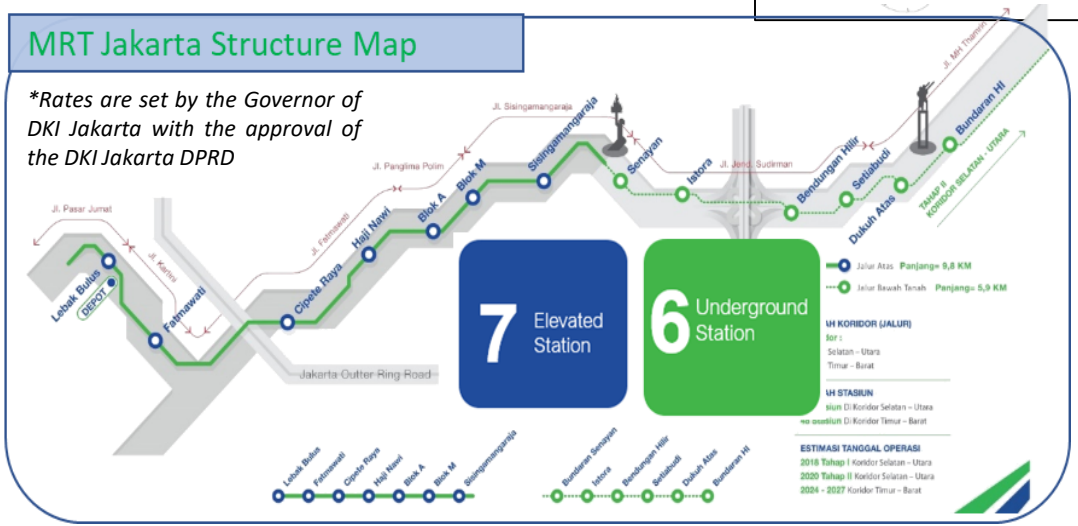
OPERATIONAL SCHEME OF MRT JAKARTA

Phase 1

Headway	: 10 mnt
Total Trainset	: 7 operation+ 1 Alternative
Total trip	: 191 trip/day
Operational hour	: 05.30 - 22.30
Travl time	: ±30 mnt

Phase 2

Headway	: 5-10 mnt
(5 mnt at *peak hour 07.00 - 09.00 & 17.00 - 19.00*)	
Total Trainset	: 14 Operation + 2 Alternative
Total trip	: 285 trip/day (*weekday*), 219 trip/day (*weekend*)
Operational hour	: 05.00 - 24.00
Travel time	: ±30 minute



Passengers target 130.000 /day

BUS RAPID TRANSIT DEVELOPMENT IN INDONESIA

REPUBLIK INDONESIA

City Profile

:: Legend ::

: Existing Metropolitan Area

: New Metropolitan Area

: Medium City

: New City (RPJMN)

Source:
Peta : www.freevectormaps.com
MP3EI 2011-2015
Kepmen KP.725/2014 dan KP.414/2013

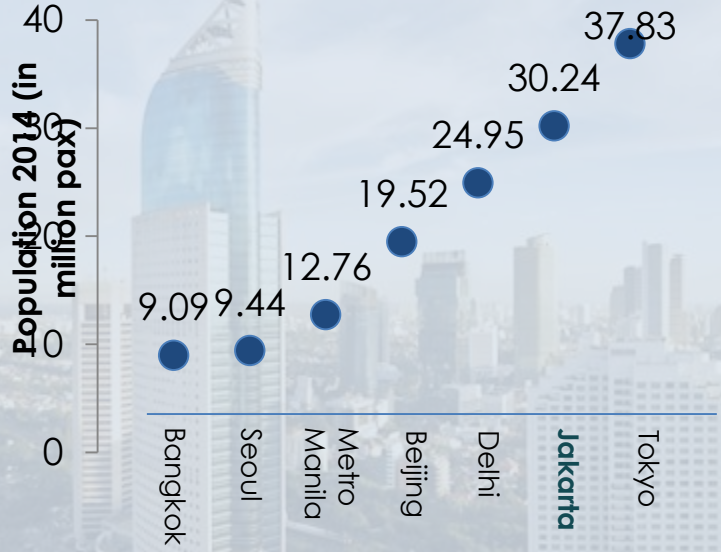
Indonesia Urban Potential

Potential of Urban Area

Population	**4th** largest in the world *Significantly increase since 1980*
Market Economy	2012: **16th** 2030: **7th** *Potential consumption contribution for economy growth*
Urban Population Ratio	2012: **52%** national pop. (244.3 mio.) 2045: **69%** national pop. (318.9 mio.) *Increasing urban attractiveness*
National GDP Contribution	2012: **74%** National GDP 2030: **86%** National GDP *The urban economy substantial contribution for national economy*

Comparison of World Urban Population

Jakarta One of the Largest Metropolitan in the World



- The population of Jakarta Metropolitan (Jabodetabek) 2nd after Tokyo Metropolitan

Source: Indonesia Urban Story, World Bank, 2015; Bappenas, Vision of Indonesia 2045

THE CITY WITH INADEQUATE TRANSPORTATION SYSTEMS WILL BE REDUCING THE QUALITY OF LIFE OF THE COMMUNITY AND ECONOMIC ACTIVITIES IN THE CITY BECOME INEFFECTIVE AND NOT EFFICIENT

Guardian Jakarta live
Cities

Cities is supported by
The ROCKEFELLER FOUNDATION
About this content

Nick Van Mead in Jakarta
@nickvanmead Email
Wed 23 Nov 2016 11.24 GMT
1,849 137

The world's worst traffic: can Jakarta find an alternative to the car?

THE STOP-START INDEX

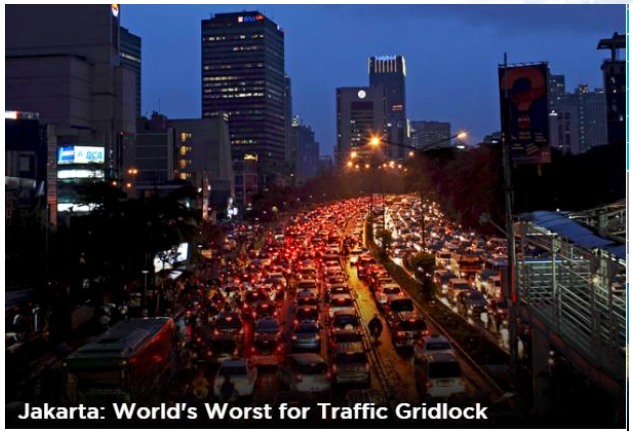
RESEARCH ON IDLING TIME REVEALED THAT CITY^ DRIVERS AROUND THE WORLD ARE SPENDING ON AVERAGE UP TO A THIRD OF THEIR JOURNEY IDLING^^.

Cities with the worst stop-start traffic:

1. Jakarta, Indonesia (33,240)
2. Istanbul, Turkey (32, 520)
3. Mexico City, Mexico (30,840)
4. Surabaya, Indonesia (29,880)
5. St. Petersburg, Russia (29,040)
6. Moscow, Russia (28,680)
7. Rome, Italy (28,680)
8. Bangkok, Thailand (27,480)
9. Guadalajara, Mexico (24,840)

Source: The Castrol-Magnatec Stop-Start Index

JakartaGlobe
Your City. Your World. Your Indonesia.



Congestion (Economic Losses>5 Billion$/year)

- Economic losses due to Jakarta congestion reach $ 2.6 billion per year (2017).
- In DKI Jakarta Urban air quality indicators such as PM10 increased by 20%, CO increased by 70%, and NO2 increased almost four TIMES in 2008-2013

Kemacetan di Tol Gatot Subroto, Jakarta. Foto oleh M. Agung Rajasa/Antara

JAKARTA, Indonesia — Kepala Badan Pengelola Transportasi Jabodetabek (BPTJ) Bambang Prihartono mengatakan kerugian akibat kemacetan lalu lintas sepanjang 2017 di Jabodetabek mencapai Rp 100 triliun. Sebanyak Rp 67,5 triliun di antaranya adalah kerugian yang dialami DKI Jakarta.

Kerugian Akibat Macet di Jakarta Capai Rp 65 Triliun per Tahun

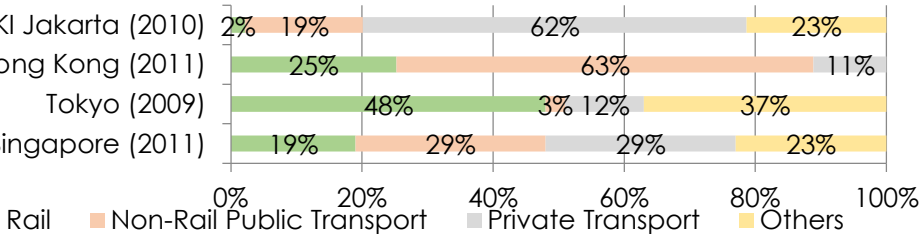
Jumat 22 Mei 2015 14:43 WIB

Red: Taufik Rachman

Ratusan kendaraan terjebak kemacetan di jalan Gatot Subroto, Jakarta Selatan, Rabu (6/4). Foto: Republika/Raisan Al Farisi

REPUBLIKA.CO.ID,JAKARTA--Kerugian yang ditimbulkan akibat kemacetan di jalan raya DKI Jakarta dapat mencapai hingga Rp65 triliun per tahun yang tidak hanya dari segi ekonomis tetapi juga terkait terganggunya psikologis masyarakat ibu kota.

Modal share of public transport(Case: Jakarta is very low<20%)



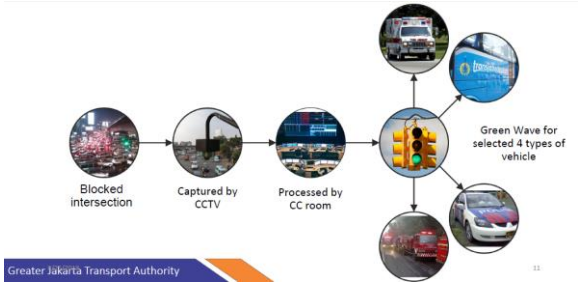
Source: BPS 2016, MoT 2016, JICA 2014, World Bank Urbanization Flagship Report, 2018

REPUBLIK INDONESIA

Strategy for Urban Transport Development

National target: increase modal share of public transport by 32% in 2019 contributes to GHG emission reduction target of 29% + 11% in 2030

"The development of urban transport needs to be integrated with mass transit support and Transit Oriented Development infrastructure facilities as well as utilization of technological developments."



Avoid

Reducing the need to travel and avoid unnecessary trip

- Travel management with urban planning with mixed use concept
- Infrastructure Development Transit Oriented Development (TOD) - A source of urban transport finance

Shift

Promote Shifting to Public Transport with Inclusive Design

- Increase the use of Public Transport, Pedestrian, and Bicycles
- Develop and improve Public Transport and non-motorized level of service

Improve

Increasing the energy efficiency of vehicles, fuels and transport operations

- Energy-saving technologies (fuel)
- Development and application of Intelligent Transportation Systems (ITS) Development

REPUBLIK INDONESIA

National Intervention for Urban Transport Development

Mass Transit Improvement

- ✓ Rail Based Mass Transit
  - MRT Jakarta Phase I (operation in 2019):
    - ➢ Project investment: 1.1 billion USD
  - South Sumatera LRT (operation in 2018):
    - ➢ Project investment: 750 million USD
  - Jabodebek LRT (operation in 2020):
    - ➢ Project investment: 2 billion USD
- ✓ Road Based Mass Transit
  - Transit system in 25 cities
  - BRT international standard in Jakarta with total pass/day = 450,000
  - Pilot BRT international standard in 5 cities
- ✓ LRT and BRT Medan: PPP Project
  - ➢ Project investment: 15 billion USD

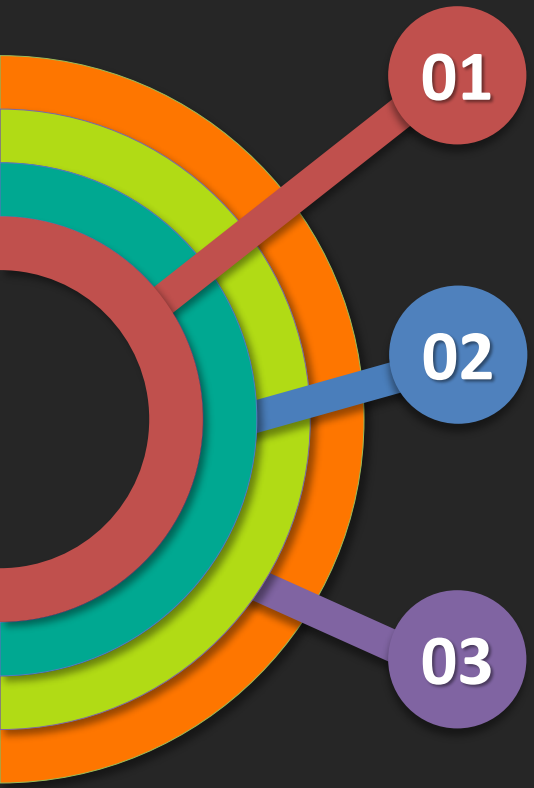
Digitalization of Public Transport

- ✓ Public Transport
  - Integrated ticketing system with electronic payment
  - Real time timetable
- ✓ Ride-hailing
  - Private operator ride-hailing:
    - 2 biggest operator
    - Driver > 1 Mio.
  - Public owned apps (under preparation)
- ✓ Regulation for ride-hailing (Minister Regulation #108/2017):
  - Fare
  - Quota
  - Operational area
  - Safety and security
  - Database

Financial Support

- ✓ Framework for urban public transport:
  - National Policy: Medium-term-plan, presidential regulation (on-going)
  - Principle:
    - Increase city ownership
    - Cost-sharing
  - Selection criteria:
    - Eligibility, readiness, and viability
- ✓ Financing
  - National government support: infrastructure max. 100%
  - Cities responsibilities: Operation and maintenance

MASS TRANSIT IMPROVEMENT



ALLOCATED BUSES TO STIMULATE LOCAL GOVERNMENTS IN THE DEVELOPMENT OF BRT-BASED URBAN MASS TRANSPORT

ALLOCATED SCHOOL BUSES TO PROVIDE SAFE AND COMFORTABLE TRANSPORTATION FOR STUDENTS

ROAD-BASED MASS TRANSPORT DEVELOPMENT PLAN IN URBAN AREA THROUGH BUY THE SERVICE SCHEME

REPUBLIK INDONESIA

Example

- Private vehicle and freight transport restriction (odd-even license plate) in Greater Jakarta (Jabodetabek) Area - Pilot during ASIAN Games
  - Applied in the major road network including toll gate from Greater Jakarta
  - Extensive timeframe (Mo-Su - 06-19)
  - Result:
    - ✓ Increase in traffic flow 44.08% in main road but 2.17% less in alternative road
    - ✓ Reduce in VC Ratio 20.37% in main road but increase VC Ratio 6.48% in alternative road
    - ✓ CO2 emission reduction 20.3% in main road but CO2 emission increase 6.95% in alternative road
    - ✓ Increase Transjabodetabek ridership 46.8%
    - ✓ Increase Transjakarta ridership 40.21%
    - ✓ Increase commuter train ridership 6.13%
  - Replicated to additional cities applying odd-even licence plate restriction (Medan, Bandung, Surabaya, Makassar)
- Pilot bike-sharing in Bandung and Central Jakarta

THANK YOU

MINISTRY OF TRANSPORTATION OF INDONESIA