



INDONESIA ROAD SECTOR DEVELOPMENT

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**DIRECTORATE GENERAL OF HIGHWAYS
MINISTRY OF PUBLIC WORKS AND HOUSING
REPUBLIC OF INDONESIA**



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1. INTRODUCTION

COUNTRY OUTLOOK



Indonesia is located between the Pacific Ocean and Indian Ocean thus bridging Asia with Europe, Middle East and Africa

15th largest country in the world

Total Land Area: 1,811,569 sq km

Distant from furthest points: 5.2 thousand Km

17,508 islands

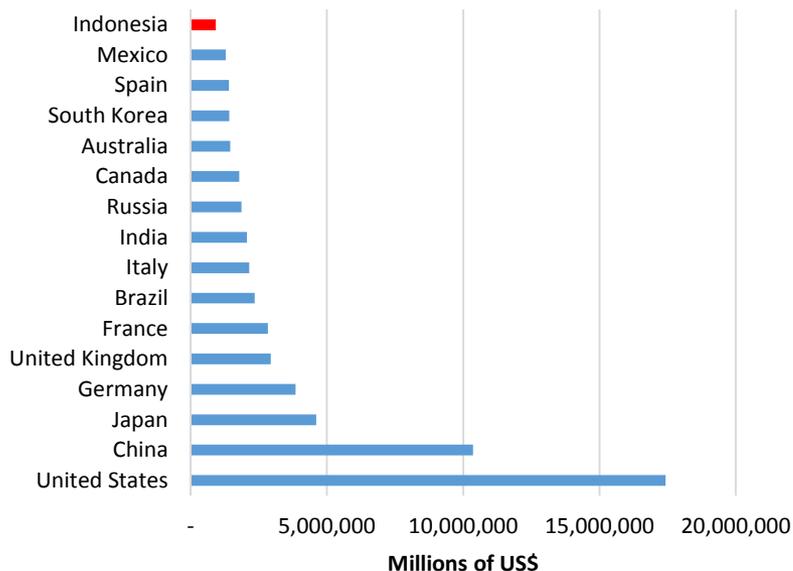
5th largest population in the world (Population: 248 millions)

1. INTRODUCTION

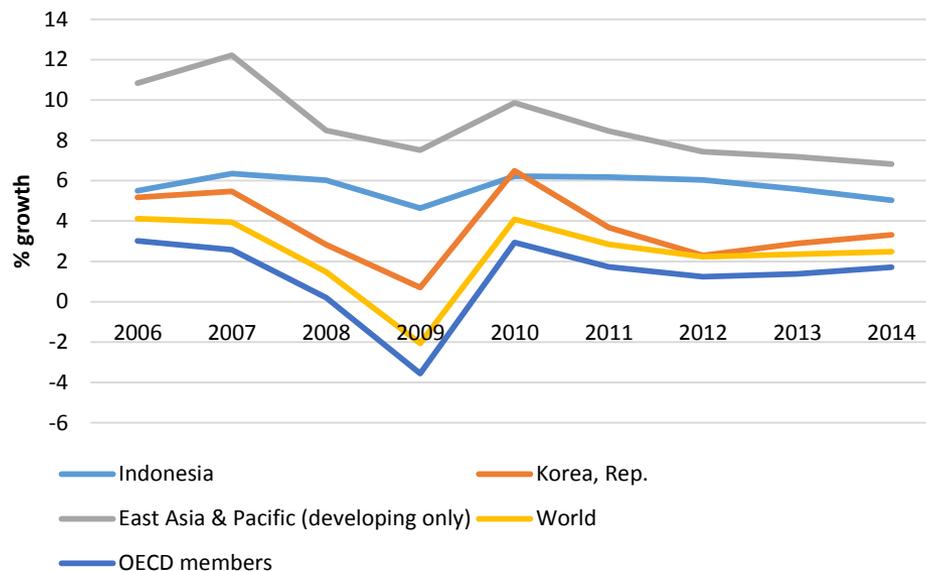
ECONOMIC STRENGTH



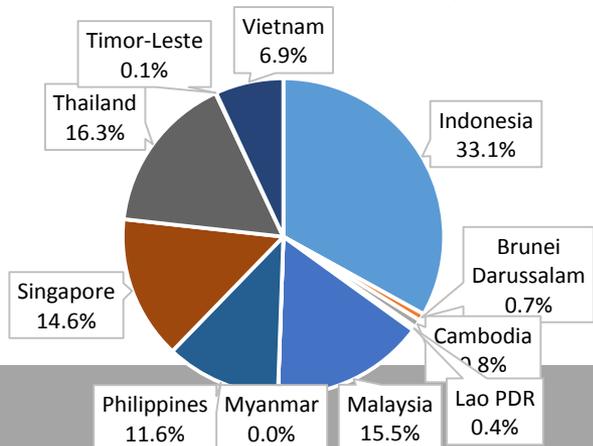
Top 16 Largest GDP



GDP Growth Rate



ASEAN GDP (2014)



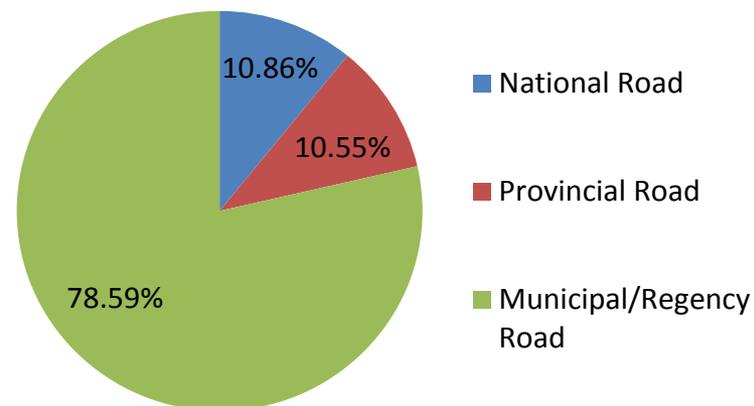
- Indonesia is the largest economy of ASEAN accounting for 33% of the total ASEAN GDP and is the 16th largest GDP in the world.
- Indonesia has maintain positive economic growth even with the financial crisis that took place in 2009.

2. THE ROAD STATISTICS



Road Status	Length (km)	Percentage of Total Road Length	Stable Road Condition	Authority
National Road	47,017 (non toll road)	11%	86 %	Central Gov't
	820 (toll road)			
Provincial Road	46,486	11%	70.99 %	Provincial Gov't
Municipal/Regency Road	346,294	78%	57.01 %	Municipal/Regency Gov't
TOTAL	440,617	100%		

Composition of Road Length by Status



- Indonesia has the longest road network in ASEAN
- National road serves as the main primary-arterial road network and in general is in good condition
- However, a lot of provincial and municipal/regency roads are in poor conditions. This situation hamper Indonesia road network connectivity

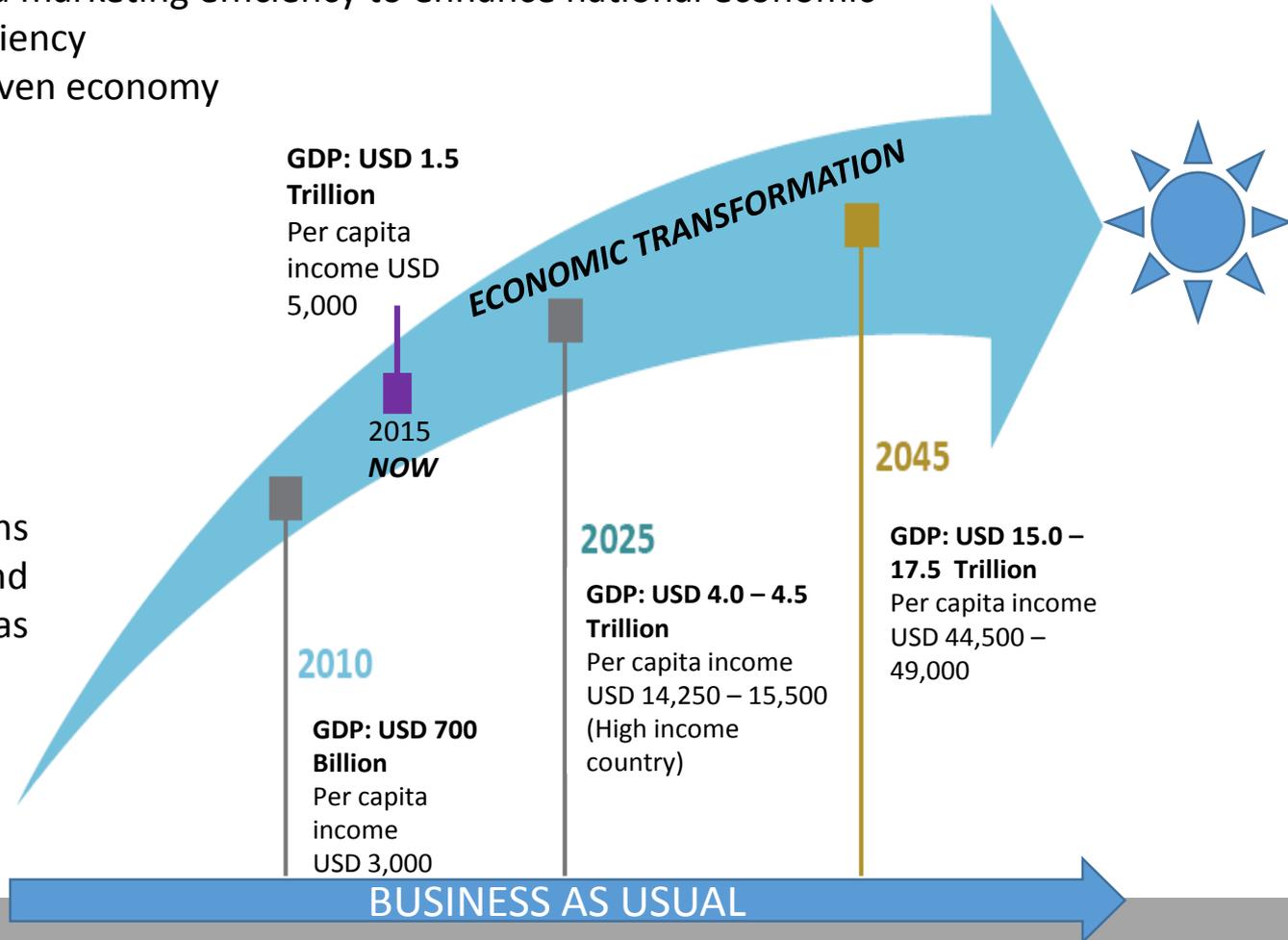


3. NATIONAL LONG TERM GOALS

Three Steps toward achieving long term goals:

- Creating new integrated economic activities by ***improving accessibility*** to natural resources, geographic and human resources potential.
- Improving production and marketing efficiency to enhance national economic competitiveness and resiliency
- Promoting innovation-driven economy

Improving Accessibility means the provision of decent and reliable infrastructure such as roads, toll roads and bridges.



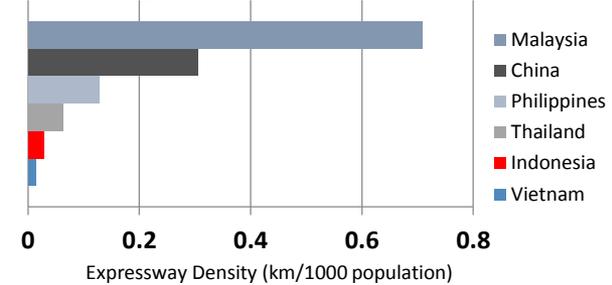
4. ISSUES AND CHALLENGES IN THE ROAD SECTOR



Network

- **Backlog and less competitive logistic infrastructure** caused by high logistic cost and high travel time on main corridors (2.7 hr/KM).
- **Unready and less spread of expressway development.**
- **Unbalance modal share;** too dominant on the road sector (85%); congestion in metropolitan area
- **Spatially unbalance road performance;** the conditions of sub national roads are less stable compare to national roads.

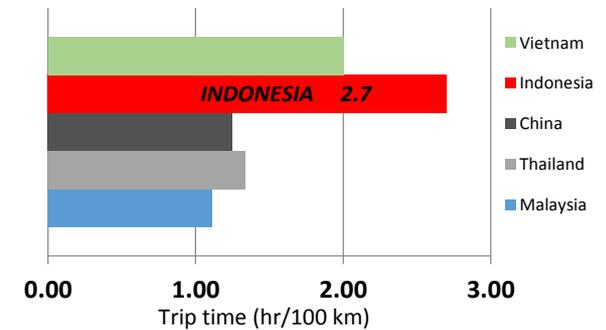
Backlog in Toll Road Network Development



Delivery

- **Less optimal delivery system** due to traditional procurement,
- Too many **small size contracts**
- **Government bear all the risks**

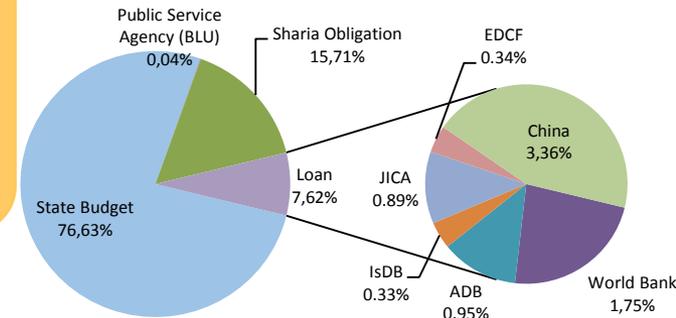
High Cost of Land Transport - Low Connectivity between Economic Activity Center



Financing

- **Limited alternative financing models** including less optimal Public Private Partnership (PPP) scheme; too dependant on the public resources

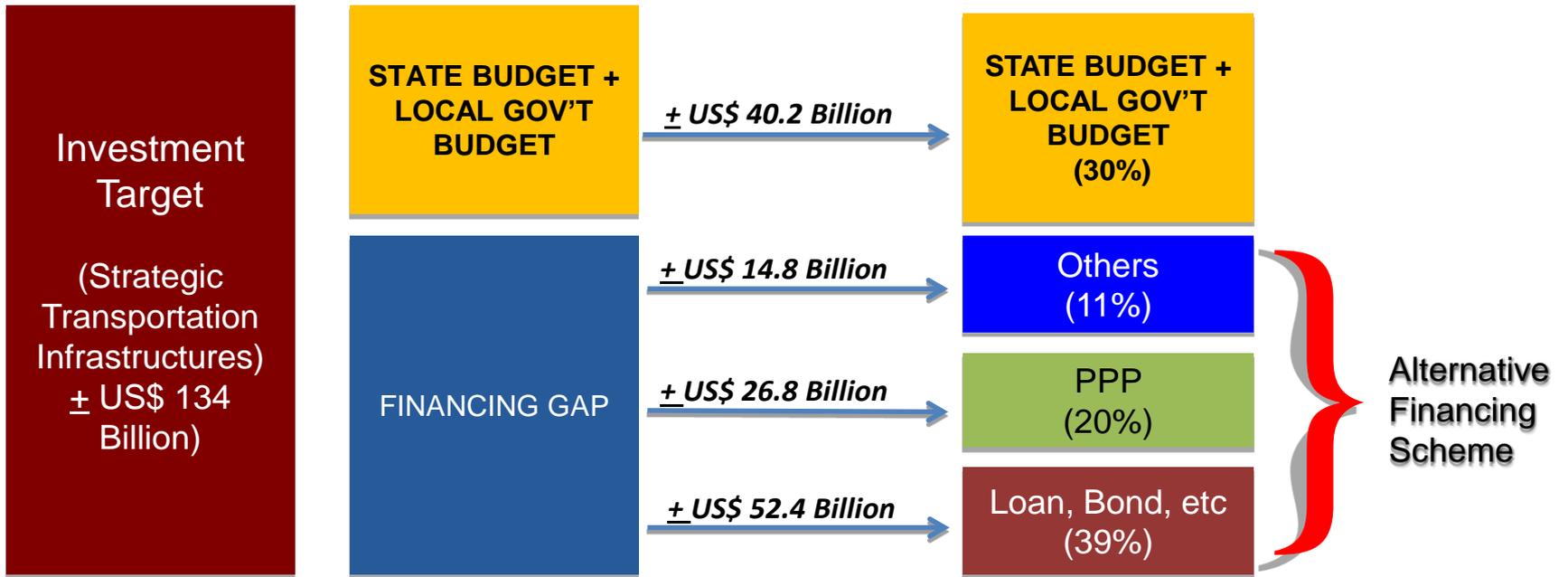
2016 Road Sector Budget Proportions & Loan Proportions By Donors





5. FINANCING GAP AS THE OPPORTUNITY

With a very big dream, comes a huge responsibility to provide abundant of financial source. As the government could only provide $\pm 30\%$ of the total needs, there should be another type of financial scheme. Instead of view the financial gap as a problem, it would be better to recognize this as an opportunity for private sectors to give a hand by investing their capital in the development of hard infrastructures.



6. ROAD DEVELOPMENT PLAN

NATIONAL MEDIUM TERM DEVELOPMENT PLAN 2015-2019

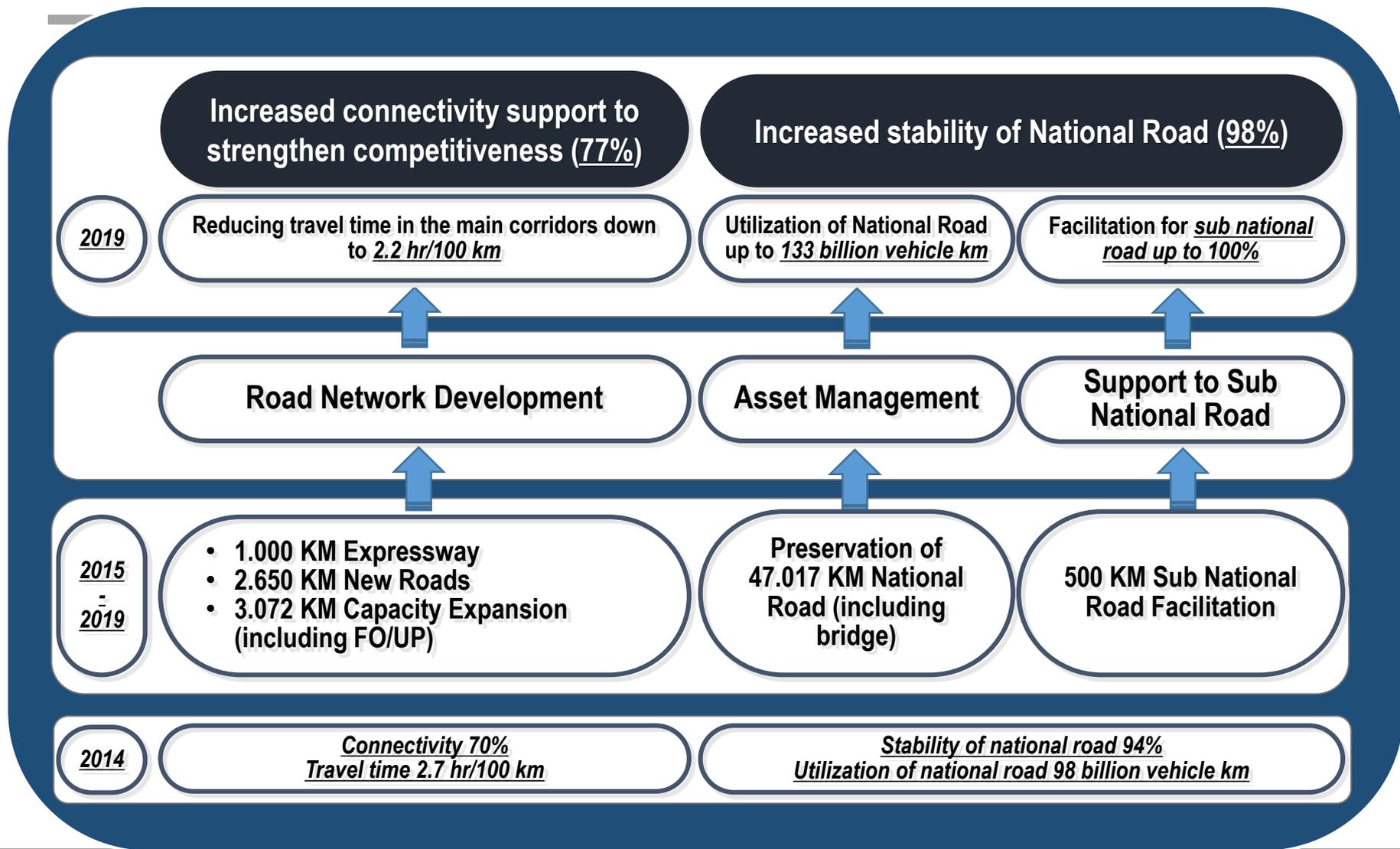


- Accelerating the development of **Multimodal Transportation System**
- Accelerating the development of **National Logistic System**
- Encourage the equilibrium of **national-oriented transportation** as well as **local and regional-oriented transportation**
- Building **integrated transportation network** in order to support investment on economic zones and outlets



6. ROAD DEVELOPMENT PLAN

DIRECTORATE GENERAL OF HIGHWAYS STRATEGIC PLAN 2015-2019



6. ROAD DEVELOPMENT PLAN

DIRECTORATE GENERAL OF HIGHWAYS STRATEGIC PLAN 2015-2019



- ▶ Support on Development of **24 New Seaports**



- ▶ Support on Harbour in **60 locations**



- ▶ Support on **urban areas** and **rail crossings**



- ▶ Support on **15 Priority industrial Areas**



- ▶ Support on Development of **15 New Airports**



- ▶ Support on **Railways**



- ▶ Support on **25 Priority National Tourism Strategic Zones (KSPN)**



Expressway Construction
(1.000 km)

National Road Construction
(2.650 km)

Construction of FO/UP on the rail intersection and metropolitan area
(15.000 m)

Preservation of National Road
(47.017 km)

Support on local/provincial road
(500 km)

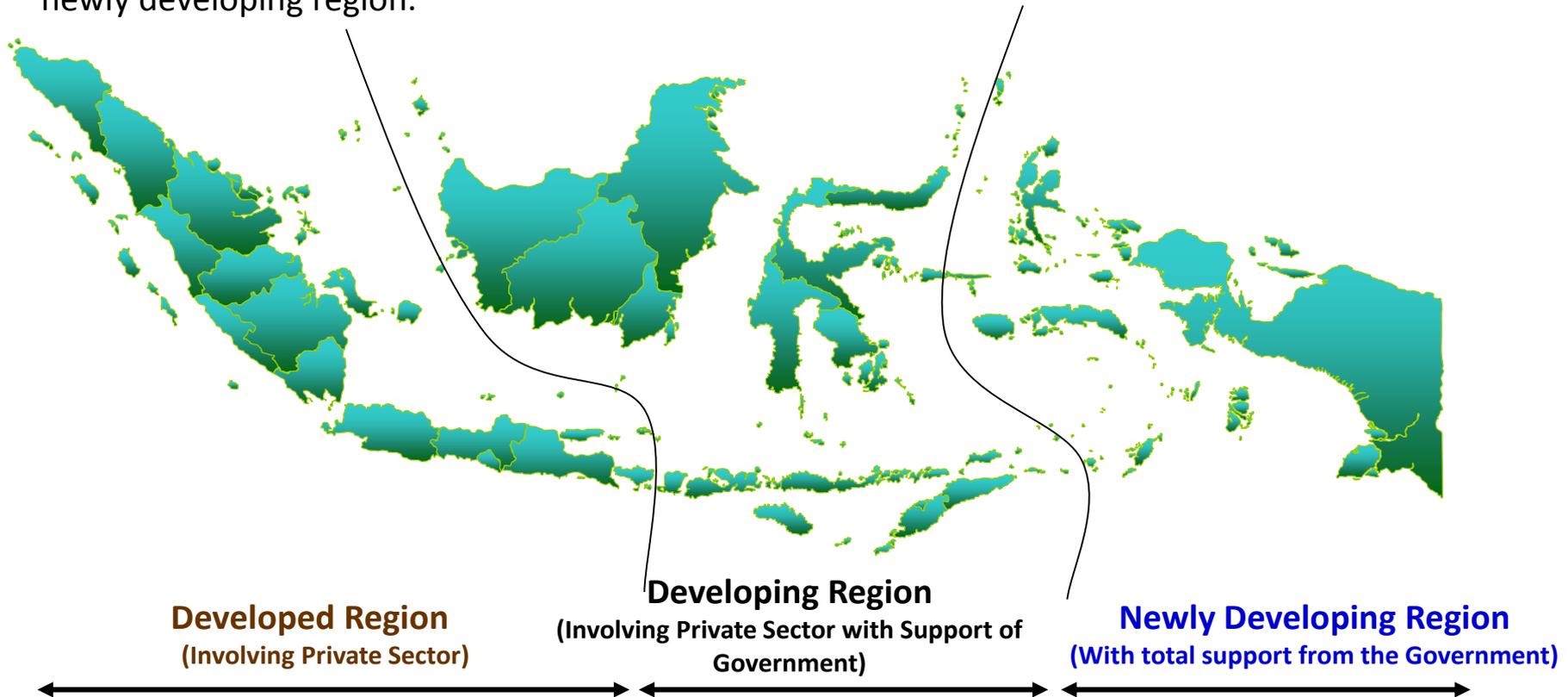
Development of Strategic Road to support Tourism and border area
Construction on missing link (to seaport and airport)
Construction of Ring Road

6. ROAD DEVELOPMENT PLAN

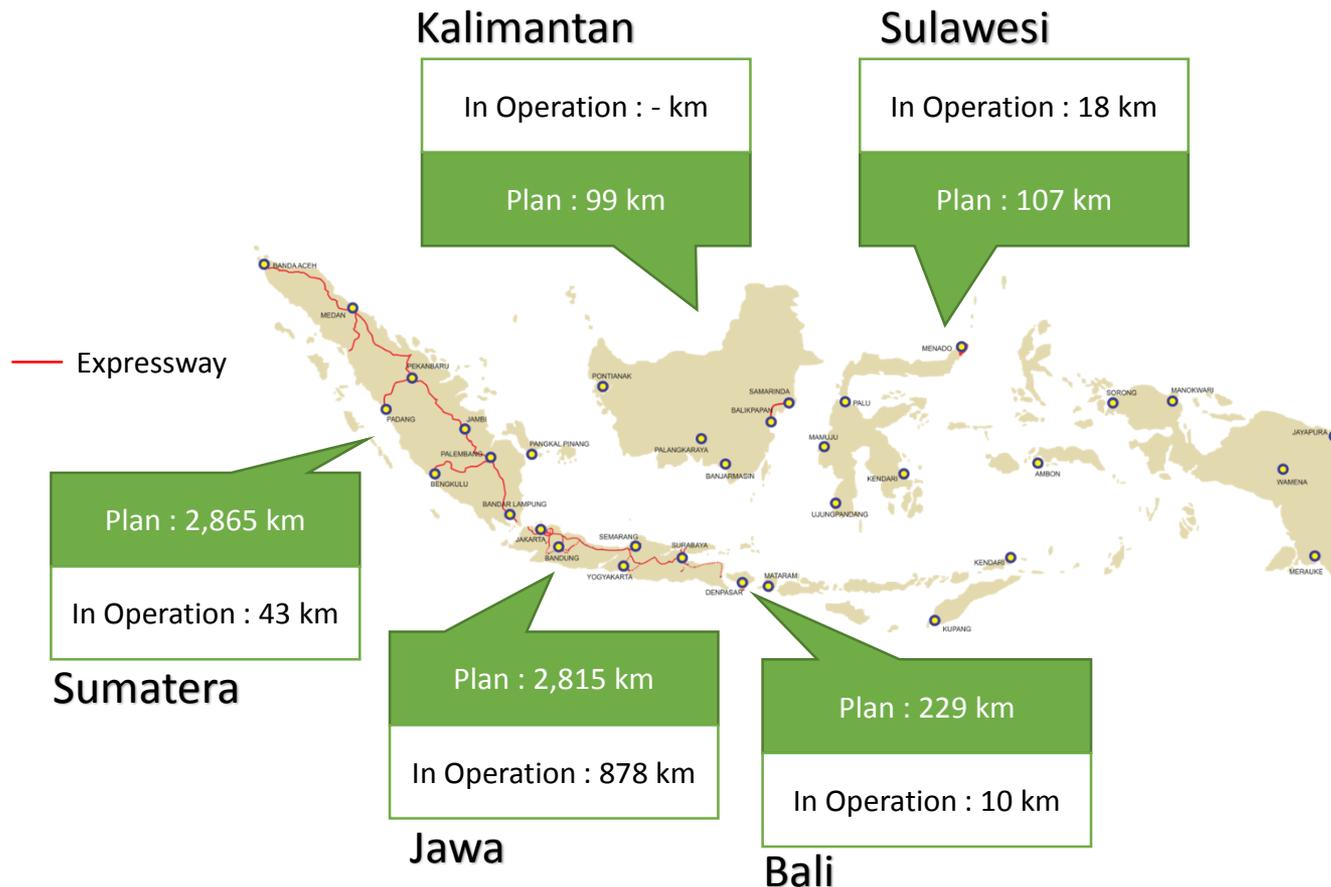
REGIONAL APPROACH ON INFRASTRUCTURE DEVELOPMENT



1. Regional approach to achieve “infrastructure for all” and “sustainable development”.
2. Toll Road provision, operation, and maintenance in the developed region involving private sector.
3. Government budget can be allocated to provide and improve road network in the developing and newly developing region.

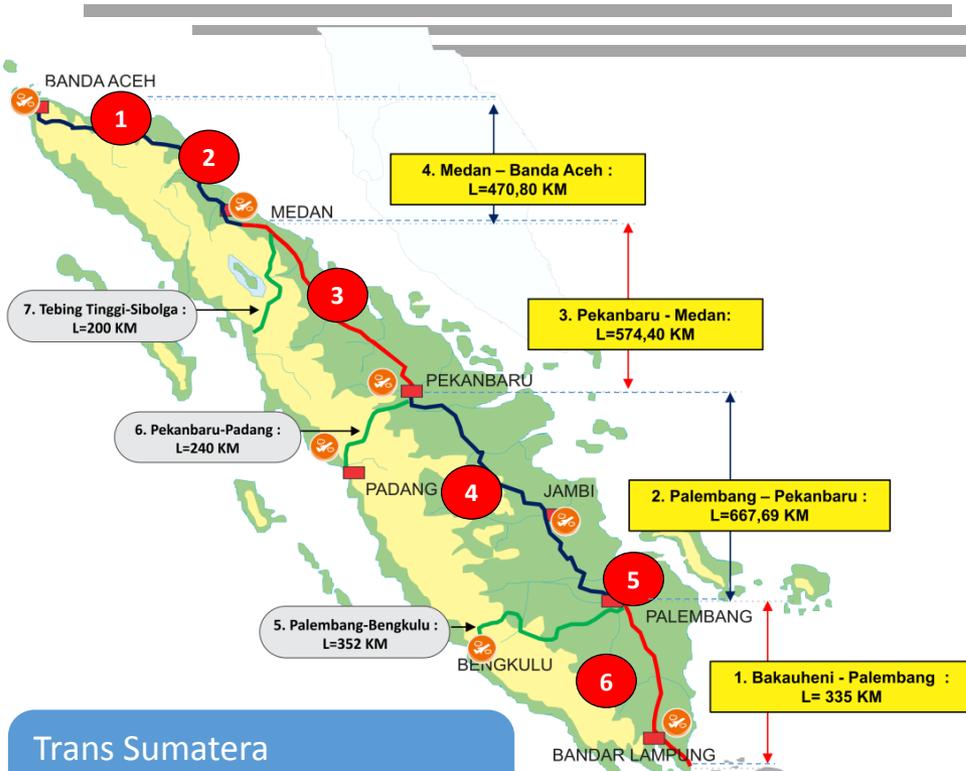


Expressway Development



- Since the first toll road opened in 1978, Indonesia can only expand its toll road network up to 948 km (recent data).
- Toll Roads (Expressways) is important as the land transport backbone especially to support National Logistic System
- In the long run, Indonesia plan to expand its Toll Road network up to 6,115 km, mostly located in Sumatera and Jawa.

Trans Sumatera and Trans Jawa Expressways



Trans Sumatera
 Total length: 2,840 km
 Currently Operational: 43 km

- Trans Sumatera and Trans Jawa Expressways serves as the land transport backbone for those two already developed islands and is important for logistical activities by reducing traffic loads on the existing non-toll roads.
- The Government plan to complete and operate additional 203 km Trans Sumatera expressway and 575.73 km Trans Jawa expressway by 2019

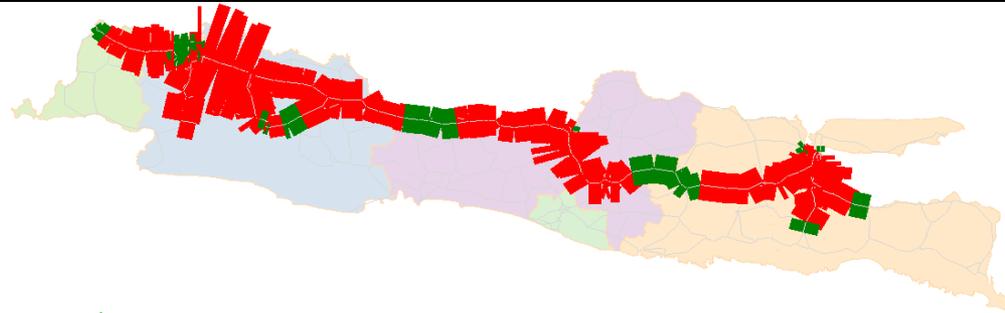
Trans Jawa
 Total length: 1,187 km
 Currently Operational: 479 km



Traffic Conditions on Java in 2030 with Current (Trans-Java) Tollroad Plans



Traffic conditions on tollroads



Traffic conditions on other arterial roads

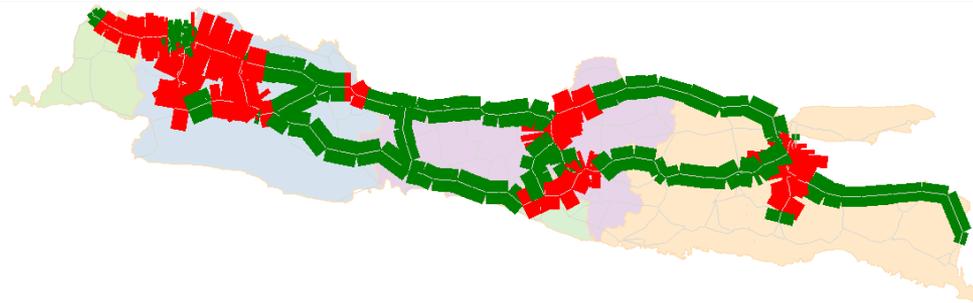


Red indicates heavy congestion

Required Additional Road Network to Achieve Acceptable Traffic Conditions on Java in 2030



Traffic conditions on tollroads

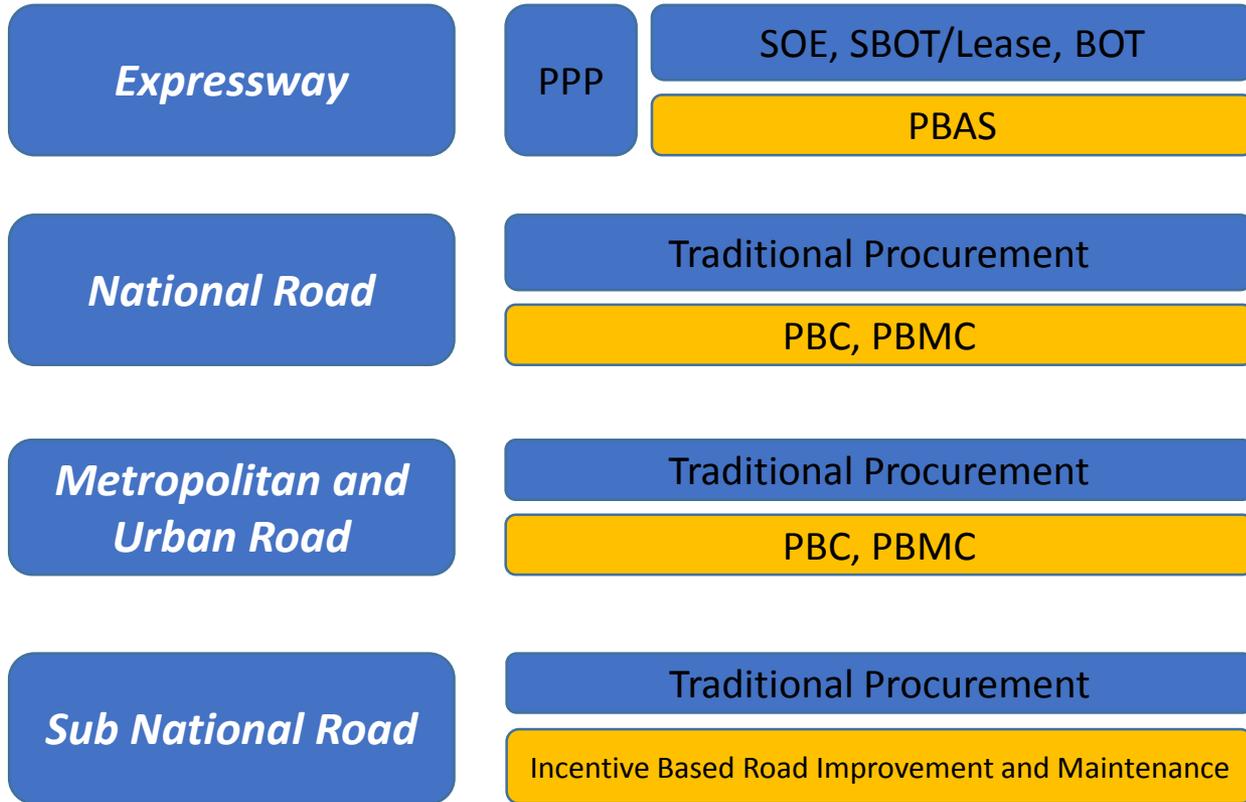


Traffic conditions on other arterial roads



Red indicates heavy congestion

7. DELIVERY METHODS FOR ROAD SECTOR DEVELOPMENT



8. ON-GOING ROAD PROJECTS COOPERATION BETWEEN INDONESIA – JAPAN



No.	Project	Type	Amount (JPY)	Scope of Work
1	The Project for Construction of Bridges in the Province of Nusa Tenggara Barat Phase 3	Grand Aid	961,000,000	<ul style="list-style-type: none"> • Construction of 10 bridges (with various length between 20-50 m) • Construction of approach roads • Construction of river bank protections
2	Expert on Road Policy	Grand Aid	22,073,000	Provide advice and/or guidance in the road sector and assisting the formulation of road and project policies
3	Aceh Reconstruction Project IP – 545	Project Assistance -Loan	11,593,000,000	<ul style="list-style-type: none"> • Civil works: Reconstruction of 141 KM roads • Consulting services and construction supervision of the civil works
4	Tanjung Priok Access Road Construction Project Phase 1 IP – 529	Project Assistance -Loan	26,306,000,000	<ul style="list-style-type: none"> • Civil works: Construction of 8,3 KM flyovers as access roads for Tanjung Priok Port • Consulting services and construction supervision of the civil works
5	Tanjung Priok Access Road Construction Project Phase 2 IP – 531	Project Assistance -Loan	26,620,000,000	<ul style="list-style-type: none"> • Civil works: Construction of 4 KM flyovers as access roads for Tanjung Priok Port • Consulting services and construction supervision of the civil works

9. BUSINESS OPPORTUNITIES ON THE TOLL ROAD DEVELOPMENT : PPP SCHEME



*) IN TENDER PROCESS
**) UNSOLICITED PROCESS

No.	1	2	3	4	5	6	7
Segment Name	Serpong-Balaraja *) **)	Manado-Bitung *)	Balikpapan-Samarinda *)	Pandaan-Malang *)	Cileunyi-Sumedang-Dawuan	Panimbang-Serang	Batu Ampar-Muka Kuning-Bandara Hang Nadim
Length (km)/ No of Sections	30,00/ 3	39,00/ 2	99,02/ 5	37,62/ 3	58,50/ 6	83,90/ -	25,00/ -
Investment Cost (Rp. Milyar)	5.177	8.745	13.086	2.968	10.033	6.738	2.200
Land Cost (Rp. Milyar)/ Progress	1.751/ 0%	1.200/ Seksi I 88,92%	1.200/ 85%	294 22,35%	1.295/ 31,28%	1.006/0%	- / -
Status	Tender Preparation (Finished)	Praqualification	Praqualification	Tender Announcement on 17th of September	Tender Preparation (Tender Starting)	Tender Preparation (Tender Starting)	Tender Preparation (Tender Starting)



10. POTENTIAL FUTURE COOPERATION BETWEEN INDONESIA-JAPAN

In addition to what Government of Indonesia and Government of Japan have done, the GoI feels the urge for more assistance/learning from the GoJ in terms of:

Project	Location	Objective
Intelligence Transportation System	Pilot project in main island for National Road (Toll and Non-Toll)	<ul style="list-style-type: none"> • Improve Incident Response Actions • Improve Traffic Response Actions • Synchronize data from Toll Road and Non-Toll Road authority • Synchronize data from Public Transport and Police authority
Urban Arterial Road Improvement Project	Big cities/ metropolitan areas	Improve connectivity and mobility, as well as alleviate traffic congestion in big cities/metropolitan areas (Palembang, Medan, Bandung, Semarang, Denpasar and Banjarmasin) by construction of bypasses/ring roads
Project Delivery Scheme	National Road (Non-Toll)	<ul style="list-style-type: none"> • Lesson learnt from Japan experiences on national road delivery system • Improve the national road delivery system (effective and efficient)
Construction of Flyovers and Underpasses	National Roads in Big Cities and Railway Crossings	<ul style="list-style-type: none"> • Improve mobility in big cities • Improve safety for road users in railway crossings • Usage of barriers in flyovers to reduce noise pollution for surrounding area and wind impacts on vehicles
Construction of Tunnel	West Sumatera	Improve connectivity and reduce travel time
Long Span Bridge	Subject TBD	Improve connectivity and reduce travel time
Road Safety Audit & Road Safety Inspection	Main corridors of Primary Roads	<ul style="list-style-type: none"> • Reducing traffic accidents numbers by taking ex ante evaluation and ex post evaluation

Intelligent Transport System



Fly Over



Median Barrier



Tunnel





VIDEO OF INDONESIA ROAD PROJECT

11. CONCLUSION

- ❑ Ministry of Public Works and Housing **supports infrastructure connectivity and logistic movement** as one of crucial aspects in reducing and eliminating non-tariff barriers to trade and investment.
- ❑ Future road development plan of DGH is focusing on **road network development, road network management, and support to sub-national road**.
- ❑ In realizing such program especially road network development (capacity expansion), the main issues faced today are related to the land acquisition process and low feasibility of the projects (**the need for Government support and guarantee to increase the project's attractiveness to the private sector**).
- ❑ **Innovative delivery** is needed in infrastructure funding and financing to support Public Private Partnership in infrastructure provision especially on the road sector.
- ❑ **Indonesia welcome to all participation** which will be beneficiary to the acceleration of road sector improvement and development.



THANK YOU



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