

*JTTRI Seminar
Jakarta, 14 February 2020*

**PROBLEMS OF THE CONSTRUCTION PRIORITY OF URBAN RAILWAY NETWORK
PROJECT : JAKARTA**

Jak
Lingko

100J
mrt jakarta



OUTLINE

- DKI Jakarta Mobility Condition
- Motorization Scenarios
- Public Mass Transportation System Network in DKI Jakarta Existing Condition
- Public Mass Transportation System Network Indications for DKI Jakarta 2030
- Public Transportation System Implementation Hierarchy

DKI JAKARTA MOBILITY CONDITIONS

MOTORIZATION

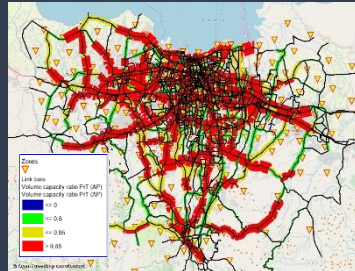
MOTORIZATION GROWTH IS NOT PARALLEL WITH THE PROVISION OF PUBLIC TRANSPORT

Congestion continues to increase with motorization and urbanization. District utilization change and economy growth also increases the movement needs that need to be facilitated by public transportation.

Congestion and Lack of Public Transportation Quality in Jabodetabek



External impacts such as wasted time, air pollution and the declining of public health



Congestion around Ragunan occurs with the nearby TB Simatupang business area which has a large generation and attraction.

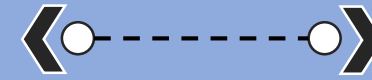
POLICY DIRECTION

ACCESSIBILITY-ORIENTED TRANSPORTATION DEVELOPMENT

LIVING PLACE



ACTIVITY PLACE



Proportion of Private Vehicle and Public Transportation Users

- | | | | |
|---|---|---|--|
| <ul style="list-style-type: none"> • Feeder Services • Pedestrian Facilities • Bicycle Paths | <ul style="list-style-type: none"> • Park and Ride • Taxi Stand | <ul style="list-style-type: none"> • Feeder Services • Pedestrian Facilities • Bicycle Paths | <ul style="list-style-type: none"> • Transfer Facilities • Park and Ride • Taxi Stand |
|---|---|---|--|

USE OF PRIVATE VEHICLE

CHEAPER AND FASTER
USE OF PUBLIC TRANSPORTATION

Motorization will continue to increase without network development ("Do-Nothing Scenario")



STRATEGY FOR IMPROVING PUBLIC TRANSPORTION MARKET SHARE



Network Development and Transportation Policy will reduce motorization ("Do-Something Scenario")



Capital Split Trend and Scenarios 2010 – 2050
(Do Something)

	2010	2019	2025	2030	2040	2050
Public Mode	27%	20%	22%	26%	30%	40%
Private Mode	73%	80%	78%	74%	70%	60%

MOTORIZATION SCENARIO

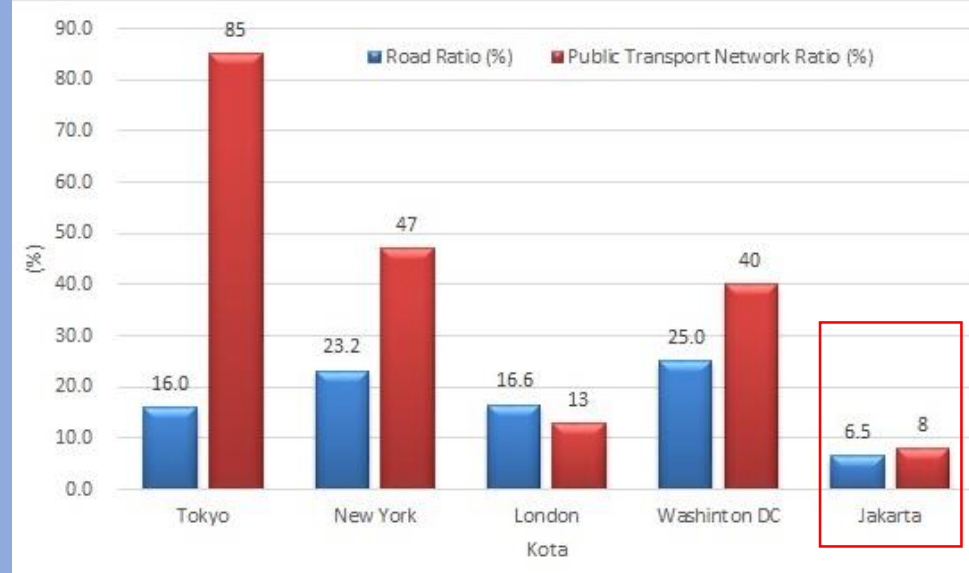
High Motorization Rate

- The increase of Road Ratio from 15% -20%
- Massive Road Development - High Infrastructure Investment -
- Inefficient Transportation System
- Road Capacity vs. Traffic Volume
- The increase of Air Pollution



Low Motorization Rate

- To manage the growth in the use of Private Vehicles
- Development Priorities of the Mass Public Transportation System
- Big investment - exploratory of KPBU (PPP) project
- More efficient Transportation System
- Better Environment



“Roads and Public Transportations Play Important Roles in Urban Mobility ”

The Road Ratio and Public Transportation Ratio in Jakarta are still low compared to other cities in the world



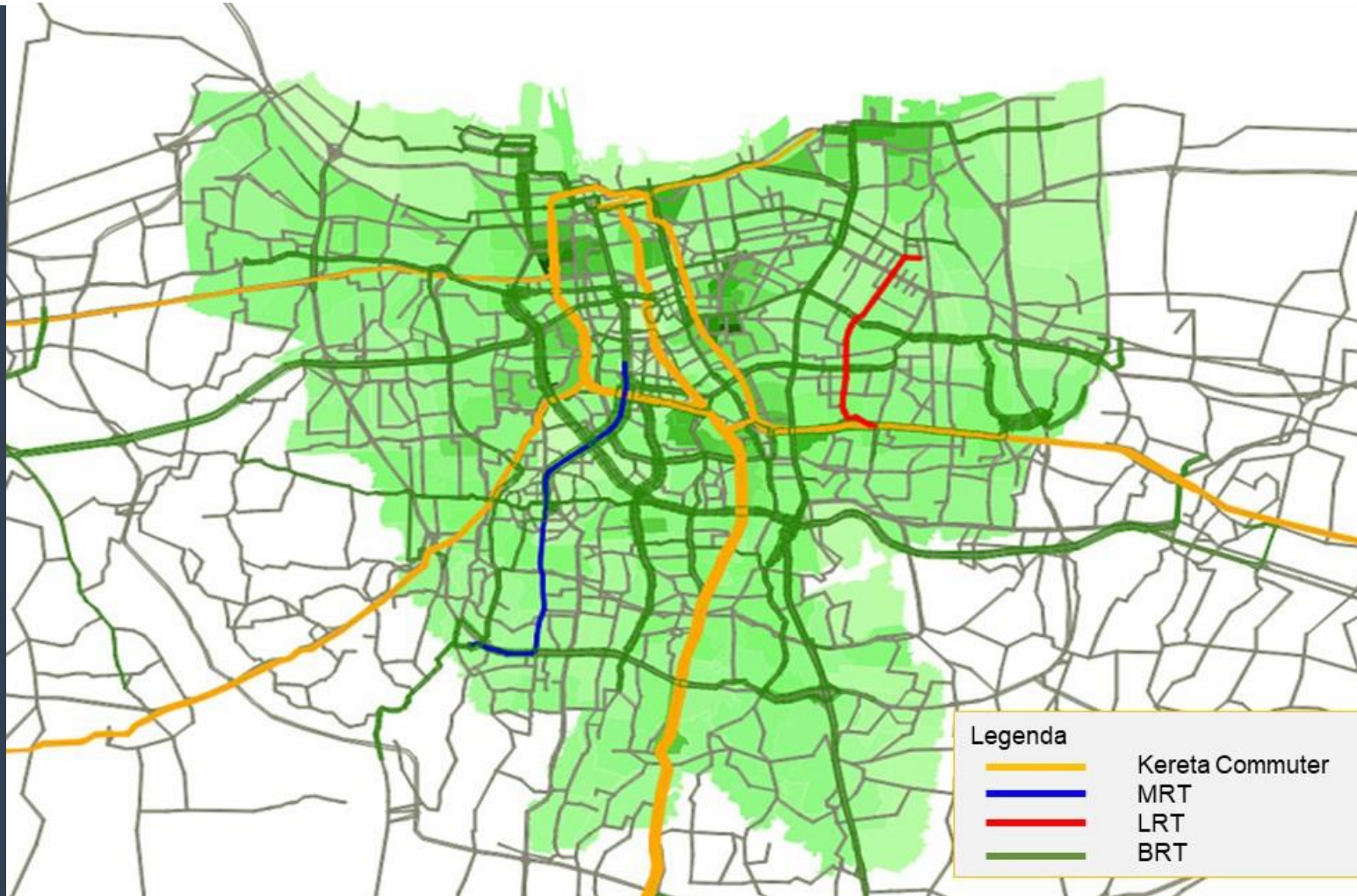
PARIS



TOKYO

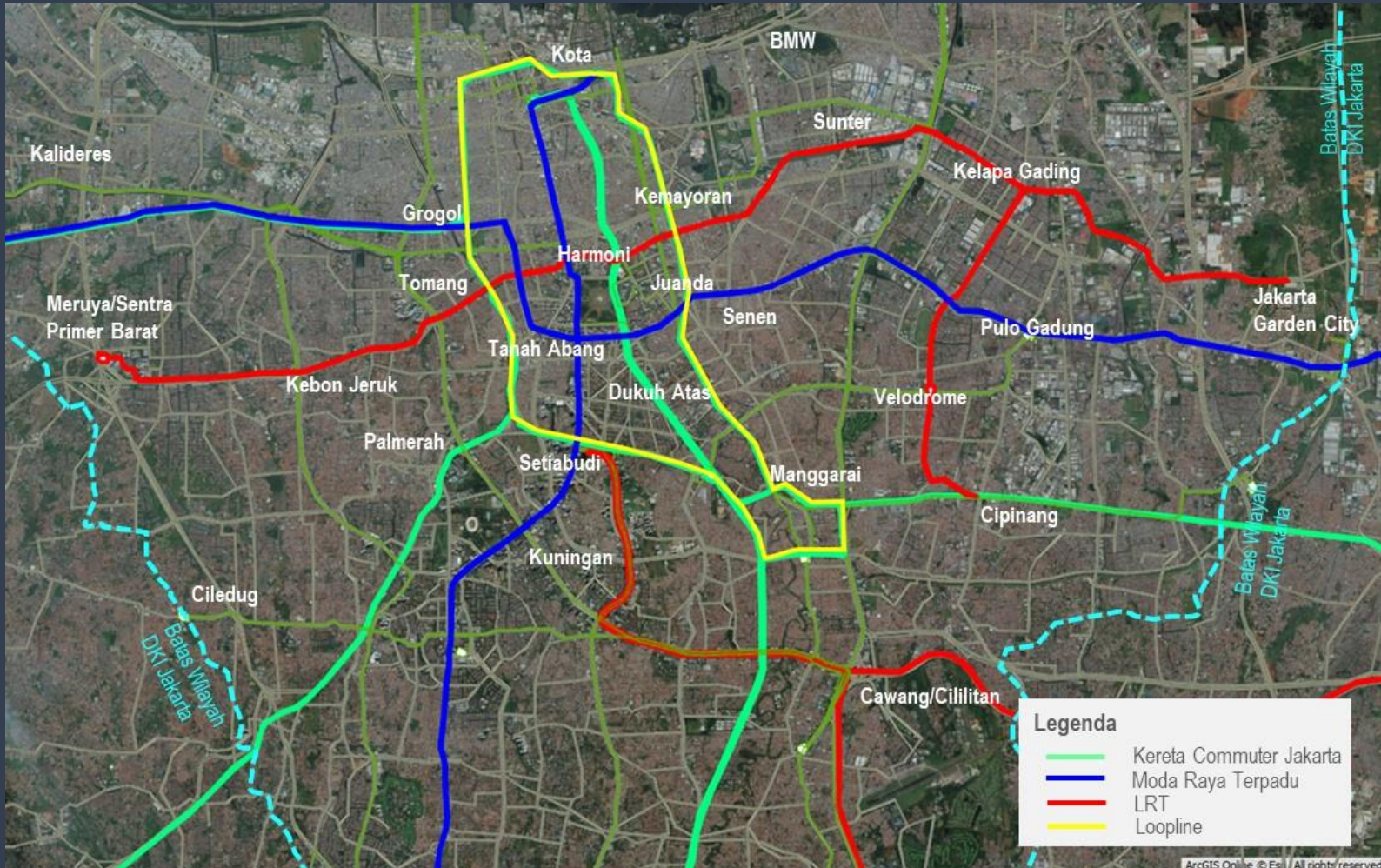
PUBLIC MASS TRANSPORTATION SYSTEM IN DKI JAKARTA

Existing Condition



- The condition of mass public transportation in DKI Jakarta is still not well developed.
- Based on the Macro Transportation Pattern (PTM) recommends four modes of public transportation that are needed to overcome the transportation problems comprehensively.
- In line with the development of existing modes, it is also necessary to take steps to limit the use of private vehicles by restricting the traffic.
- Scenarios' development with the priority of developing public transportation systems with various alternatives, including scenarios for implementing Transport Demand Management.

PUBLIC MASS TRANSPORTATION SYSTEM NETWORK INDICATIONS IN DKI JAKARTA 2030



- MRT I Lebak Bulus-Bundaran HI (2019)
- LRT Jakarta (2020)
- LRT Jabodebek (2022)
- LRT Jakarta Velodrom-Manggarai (2022)
- MRT Phase II Bundaran HI - Kota (2024)
- Jakarta Loopline (2024)
- MRT East-West (2028)

Constraints and obstacles to pursue infrastructure development targets

- The great need for funding/financing, inadequate government fiscal
- Limited number of competent human resources
- High demand for construction material and equipment sources
- Supporting policies that is still need to be formulated
- Institutional and regulatory support

PUBLIC TRANSPORTATION SYSTEM IMPLEMENTATION HIERARCHY

CENTRAL GOVERNMENT

JABODETABEK RAILWAY SYSTEM

- Tangerang Line
- Serpong Line
- Bogor –Depok Central Line
- Bekasi Line
- Loop Line
- Tanjung Priok Line

DKI JAKARTA PROVINCE LOCAL GOVERNMENT

FEEDER SYSTEM & RESTRUCTURED REGULER BUS SYSTEM

NON MOTORIZED TRANSPORT :

- Pedestrian
- Bicycle
- Taxi**
- Paratransit**

MASS TRANSIT SYSTEM BACKBONE (JAKARTA)

- Transjakarta Busway (15 corridors)
- MRT Lebak Bulus-Kota
- MRT East-West
- Proposed New LRT Lines

THE PURPOSE OF PUBLIC TRANSPORT SYSTEM DEVELOPMENT

- Efficiency to support economic growth
- Justice/equality in community mobility, including:
 - promoting the use of public transportation
 - reduction of traffic jams rate.






PUBLIC TRANSPORT SYSTEM DEVELOPMENT CONCEPT

- Transportation System Flexibility
- Ease of Developing Transportation Systems
- Inter-modes Integration
- Integration of Transportation Systems and Land Use
- Long-term Development Consistency
- Consistency between areas/regions in JABODETABEK

FUNDING OPTION FOR INFRASTRUCTURE

Cooperation between the Government and Business Entities (KPBU/PPP) in the provision of infrastructure for public interest refers to the specifications that have been predetermined by the Person in Charge of the Cooperation Project (PJPK), which partially or completely uses the resources of the business entity by having regard to the risk management between the parties.

KPBU/PPP PRINCIPLES

KEY OF UNDERSTANDING				
				
COOPERATION	PUBLIC INTEREST	PREDETERMINED SPECIFICATION	PARTIAL OR COMPLETE BUSINESS ENTITY'S RESOURCES	RISK MANAGEMENT

PARTNERSHIP

COMPETITIVE

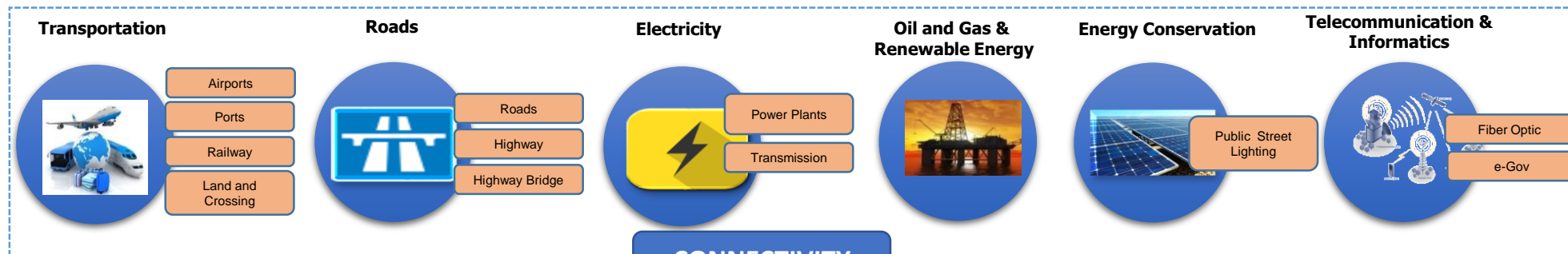
EFFECTIVE

BENEFITS

RISKS CONTROL AND MANAGEMENT

EFFICIENT

19 TYPES OF KBPU (PPP) INFRASTRUCTURE SECTORS



CONNECTIVITY

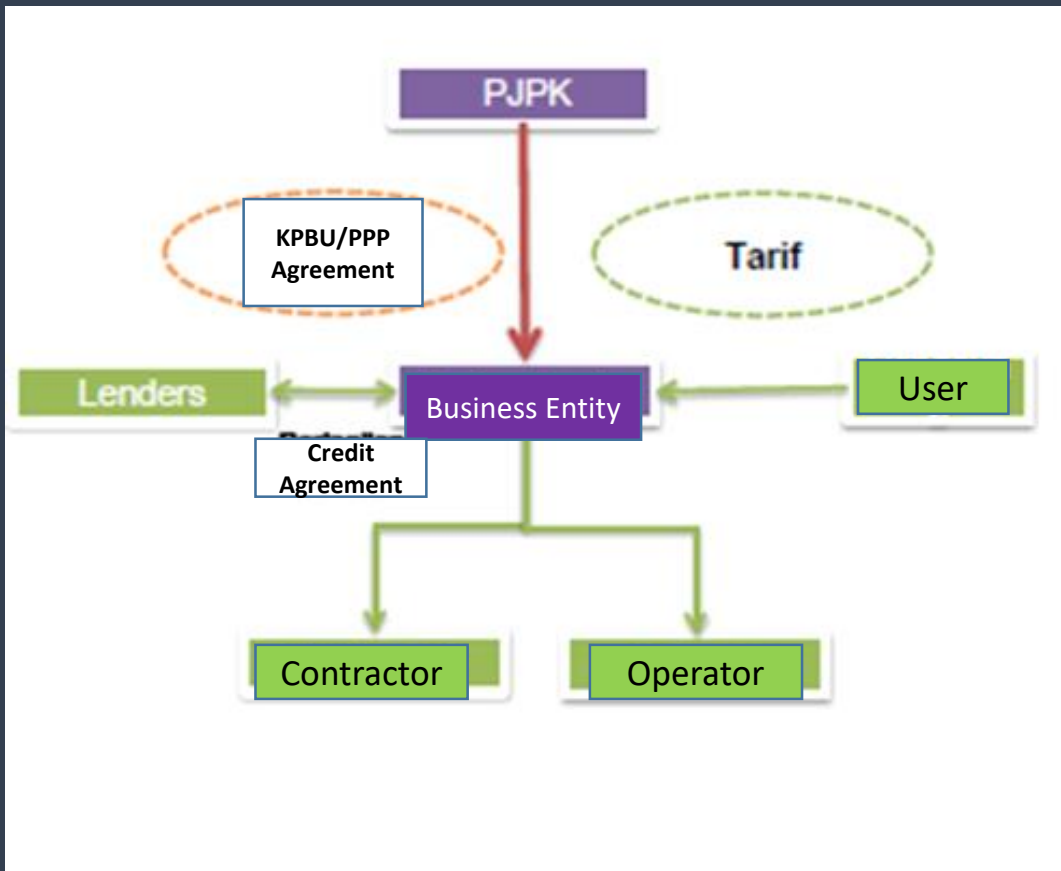
URBAN FACILITIES

SOCIAL FACILITIES

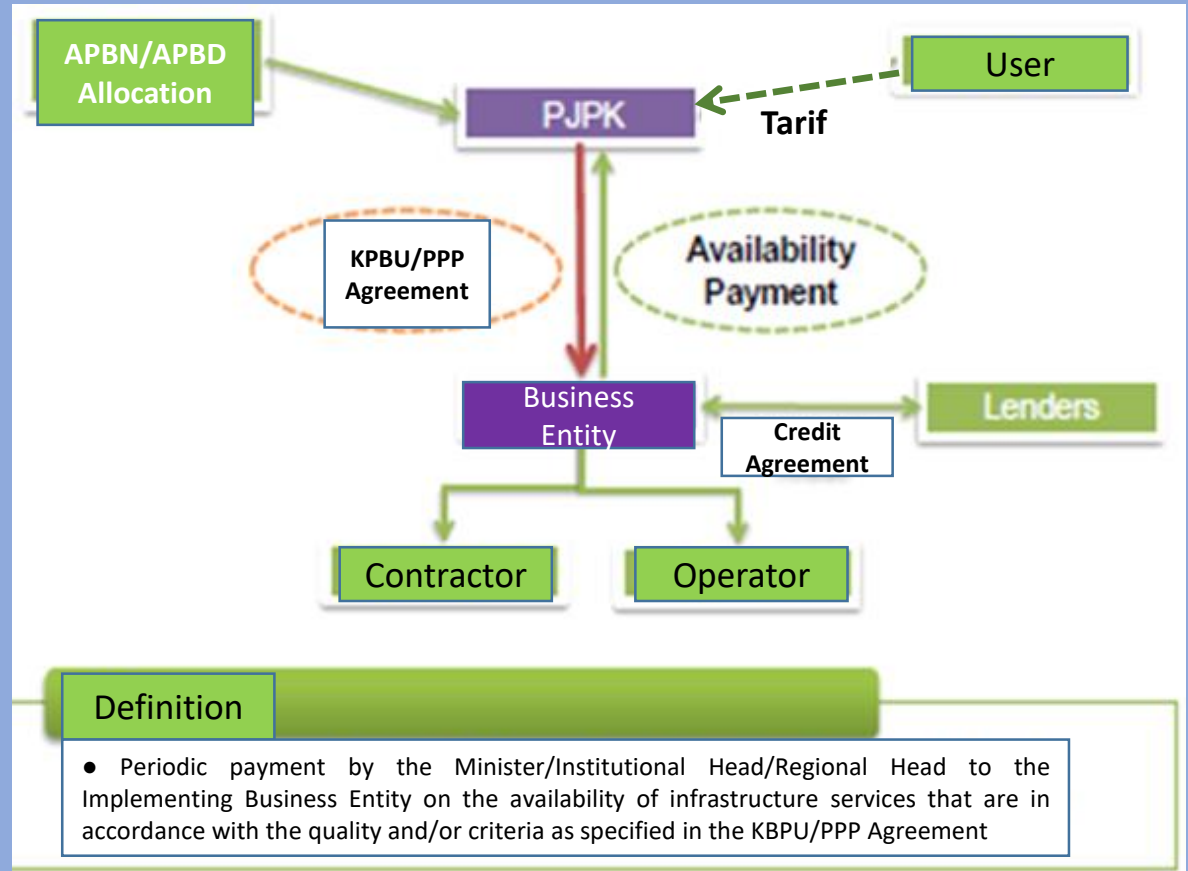


INVESTMENT RETURN PATTERN

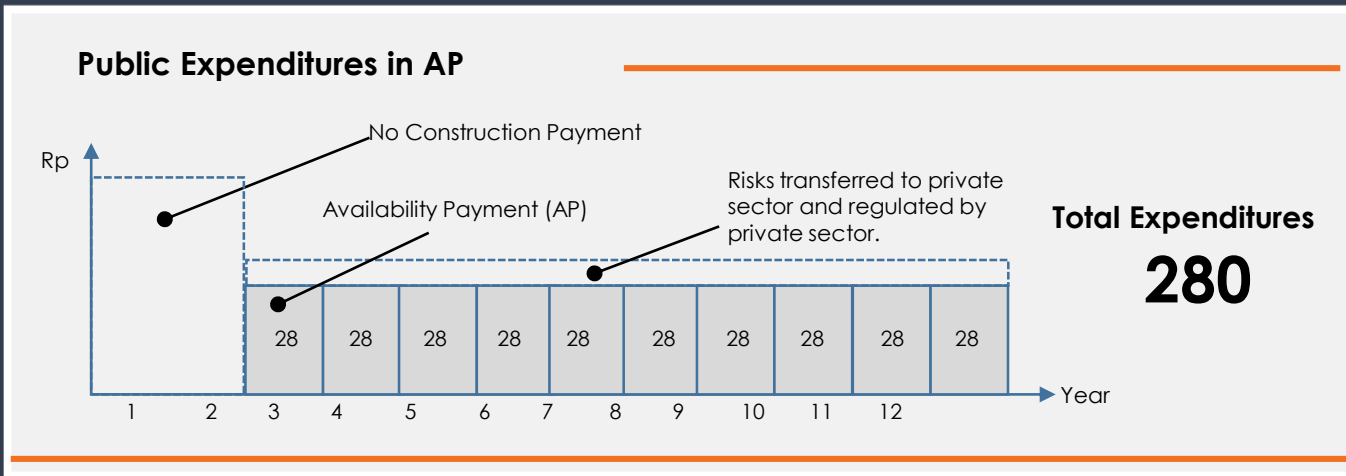
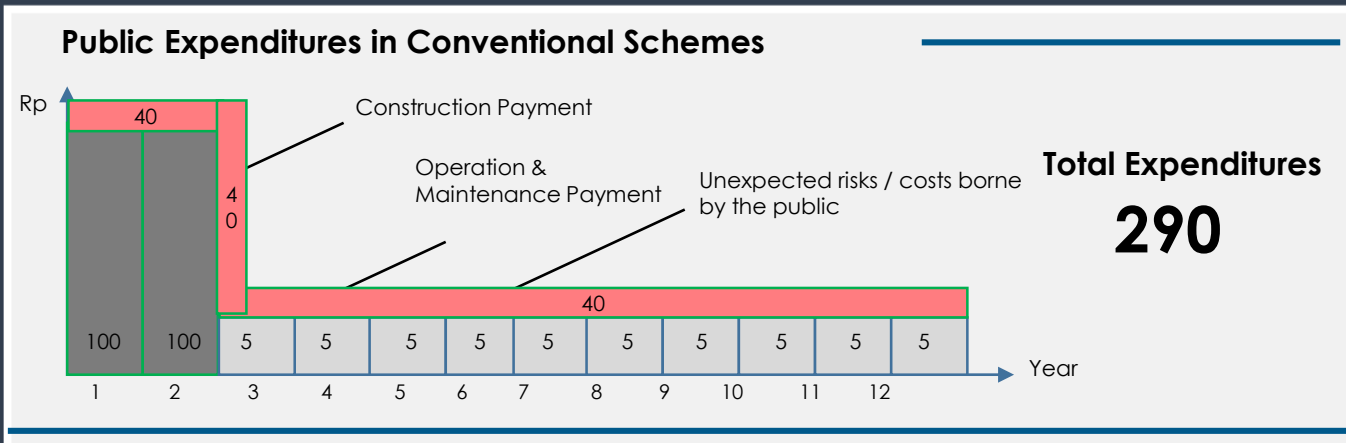
USER FEE



AVAILABILITY PAYMENT



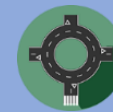
KPBU/PPP SCHEME WITH RETURNS FROM AVAILABILITY PAYMENT (AP) AP Payment Towards Service Standards (SLA)



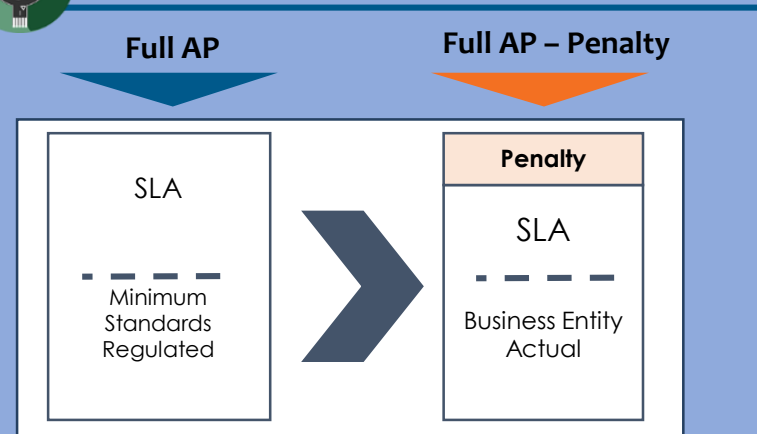
Sumber: LKPP

The Benefits of AP :

- **Sustainability:** Planning-construction-operation-maintenance stages
- **On schedule, on budget, on service**



Payment towards SLA:



- Minimum Service Standards for the availability of:**
1. Rail-based Mass Transportation Capacity
 2. Headway, Waiting time and Travel time according to the operating plan