



ITS Driving for a Better Life  
智能交通赋能幸福美好生活

# Reforming Transport, Transforming Cities

William Sabandar  
ITS Indonesia



# ITS Indonesia Rises to the Challenge

ITS Indonesia is a platform for the development of smart mobility and the development of a digital transportation ecosystem, which supports economic growth and recovery, equitable mobility, and environmental sustainability.

**2022**  
**CHENGDU**

18TH ITS ASIA PACIFIC FORUM

## Action Plan ITS Indonesia



**Digital Transformation for Transport Development**



**Integrated Urban Transport System**



**Electric Transport**



**Smart Driving & Logistics**



**Safety & Healthy Mobility**

# Our Commitment is to advance Indonesian Transport System as the backbone of transforming cities

# ITS

## Focusing on Customers Needs

### ITS Themes 2020 - 2023

- 1 Smart Mobility Development
- 2 Digital Transportation Ecosystem Development
- 3 Supporting Economic Recovery and Growth
- 4 Supporting Social Justice in Mobility Sector
- 5 Supporting Environment Sustainability



### Urban Commuters

Users of Urban Public Transport as enabler of urban activities



### Business & Leisure Travelers

Users of Public Transport Service in Tourism



### New Normal Households

Users of Public Transportation Service for logistics

## 2022: ITS to expand its role...

- to be responsive to increasingly rapid technological developments
- to understand the transformation of the latest mobility models and behaviour
- to move from Jakarta metropolitan area-centric to other cities in Indonesia
- to take a more significant role both in the Asia-Pacific region and the world

**2022**  
**CHENGDU**

18TH ITS ASIA PACIFIC FORUM

Autonomous transport

Artificial Intelligence 5G Network

Building Information System

Bio-Smart

Digital station

Tetra System

Super App

Modular Train

Digital Twin

Metaverse

IoT

Smart Maintenance

Automation & Robotic

**TECHNOLOGY**

Region

Jakarta

**TERRITORY**

Asia Pacific

World

National

**TRANSFORMATION**

Mode Integration

Buy the service

Shared Mobility

Road pricing

Account Base Ticketing

Touch-less economy

Mobility as a Service

Transit Oriented Development

Green transportation

Health Protocol

EV Charging station



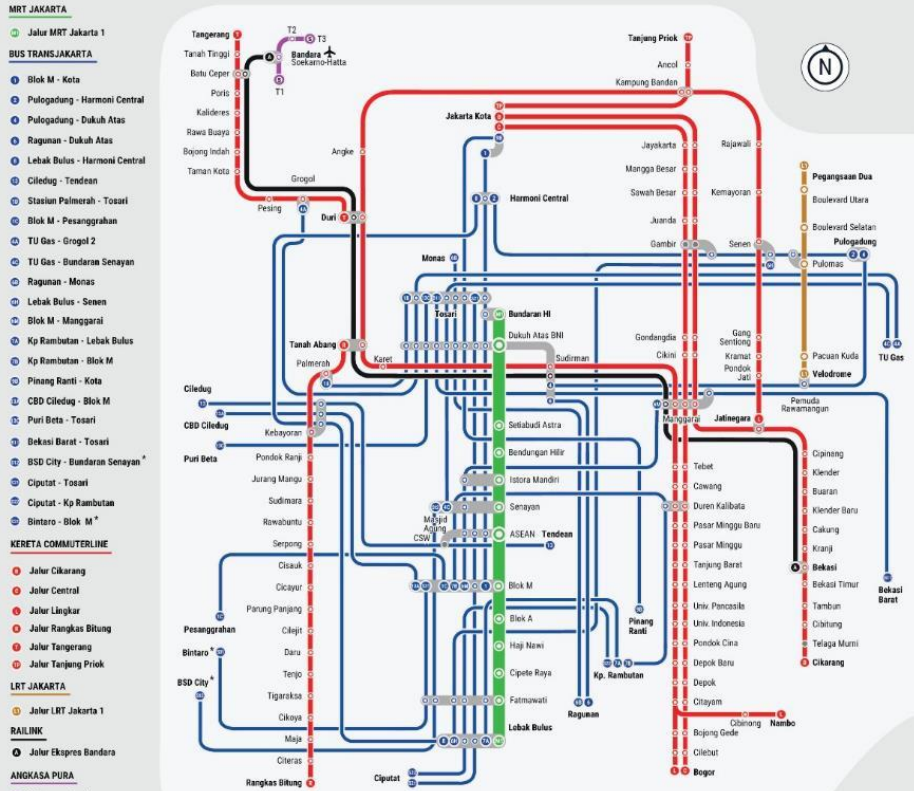
**Jakarta**

**2022**  
**CHENGDU**  
18TH ITS ASIA PACIFIC FORUM



# Integrated Public Transportation System

## Connection Map



**DUKUH ATAS BNI STATION**



**PARK N RIDE LEBAK BULUS**



**INTEGRATION OF BUNDARAN HI STATION WITH TRANSJAKARTA**



**TRANSIT PLAZA LEBAK BULUS**



**INTEGRATION WITH TRANSJAKARTA ASEAN STATION**



**INTEGRATED URBAN RAILWAY JV PT MRT JAKARTA AND PT KAI**



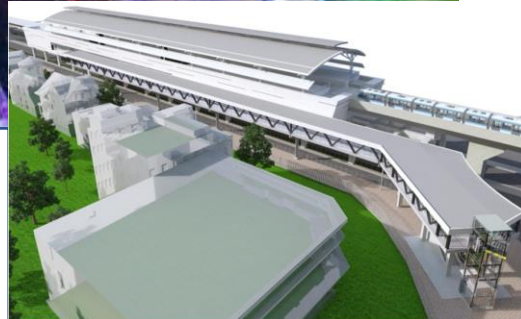
# Physical Integration between Modes of Transportation

## 1. The CSW

The Integration between TransJakarta bus stop and MRT Jakarta ASEAN Station



A skybridge which connects TransJakarta bus stop and MRT Jakarta Station

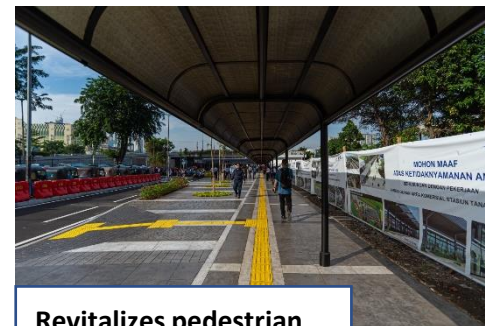


## 2. Tanah Abang Station

Revitalization and area planning of existing Tanah Abang Station



Regulates Bus Stop and Ride Hailing Drivers



Revitalizes pedestrian walk and signage

# Service Integration

Feeder



Transjakarta (BRT)



Ride-Hailing Vehicle

Trunk



Commuter Line



MRT



Railink



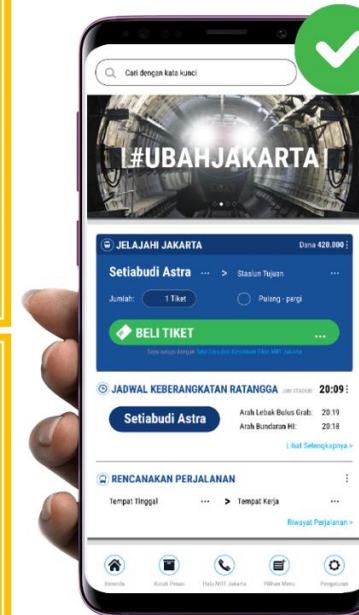
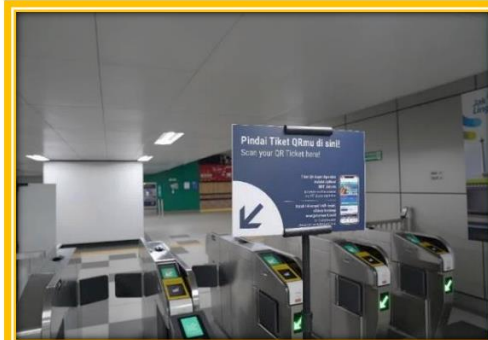
LRT

service integration makes it easier for people to travel from the first mile to the last mile



# Integrated Payment System

# ITS



Apps MRT



# 2022 CHENGDU

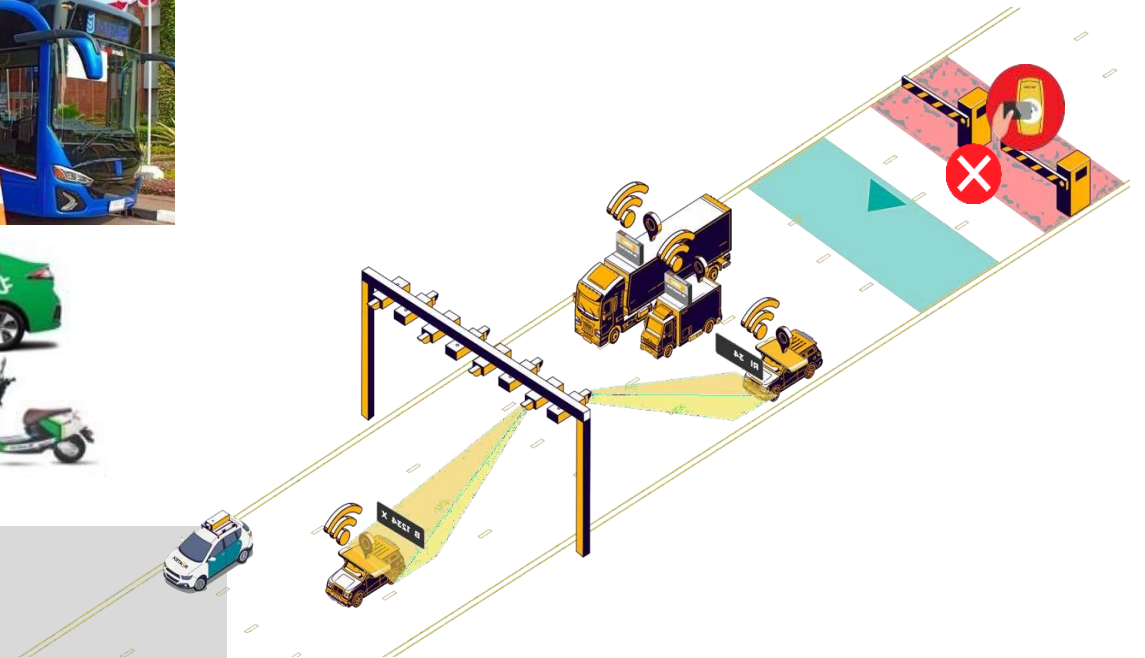
18TH ITS ASIA PACIFIC FORUM



# ITRS and Electric Vehicle Ecosystem



Multi Lane Free Flow (MLFF) based on a global navigation satellite system (GNSS) will be implemented from this year until 2023



President Joko Widodo conducts groundbreaking of electric vehicle industrial factory PT HKML Battery Indonesia

Collaboration between all stakeholders in EV ecosystem for the success of EV implementation in 2030



## Electric Bus in Jakarta



**100** electric buses launch  
in 2022

**2022  
CHENGDU**

18TH ITS ASIA PACIFIC FORUM



**Bali**

**2022**  
**CHENGDU**  
18TH ITS ASIA PACIFIC FORUM



## Bali Electric Vehicle Ecosystem in Support of G20

1. Collaboration between ITS Indonesia and EV partners supported by Minister of Transportation and Governor of Bali.
2. Electric Vehicle Showcase by Grab Indonesia, Hyundai Motors and Toyota Astra Motor
3. Pilot initiative in Bali







## Electric Vehicle Ecosystem in Bali

1. PT PLN encourages the electric vehicle ecosystem in Indonesia by building a number of public electric vehicle charging stations. The realization of the charging station that has been built has reached 190 units by 2021, while this year's target is to build 580 units
2. Toyota Astra Motor inaugurated the operation of the EV Smart Mobility project in Nusa Dua, Bali, March 2021. This car can be used by the public and tourists to support ecotourism in Bali.
3. As a concrete step to support the implementation of G20 Indonesia in Bali, Grab, handed over a unit of GrabCar Elektrik powered by Hyundai to the Provincial Government of Bali.



# New Capital Nusantara

**2022**  
**CHENGDU**  
18TH ITS ASIA PACIFIC FORUM



## ITS Application Plan in the New Capital

The transportation systems that will be developed at IKN are:

- Air transportation, airport development will be carried out carrying the Aerotropolis concept that is smart, integrated, and pays attention to environmental ethics.
- Sea transportation, the use of autonomous ships for passenger and goods ships will be developed, the smart port concept and the traffic separation scheme (TSS).
- Land transportation facilities will be developed for pedestrians, bicycles, battery-based electric vehicles, and autonomous vehicles for bus transportation.



# Framework of ITS in the New Capital City



VISION

Implementing ITS in the National Capital to realize safe and affordable, circular, low-carbon, comfortable and efficient transportation through technology and innovation

GOAL

Focus on results, make a real contribution to solving significant future transportation challenges at IKN

Consistent with the national transportation master plan and the national intelligent transportation management system

Build sustainable and integrated transportation infrastructure in the physical, functional, system and institutional integration

LEVEL

1. Target level: promote the application of ITS technology to build a transportation system in the new capital city effectively and efficiently  
 2. Strategy level: building transportation system institutions and governance and allocating budget for ITS implementation in IKN, developing human resources in ITS field, research and development in ITS field, IT pilot project planning, developing implementation, evaluation, standardization, ITS integration.

ITS GOAL

ITS-1  
Traffic Management Control

ITS-2  
Advanced Public Transportation System

ITS-3  
Incident Management System

ITS-4  
Electronic Payment System

ITS-5  
Traveller Information System

ITS-6  
Advanced Parking Management System

ITS-7  
Commercial Vehicle Operation System

ITS-8  
Autonomous Driving System

TARGET

Application of ITS in the nation's capital (2022 – 2026)

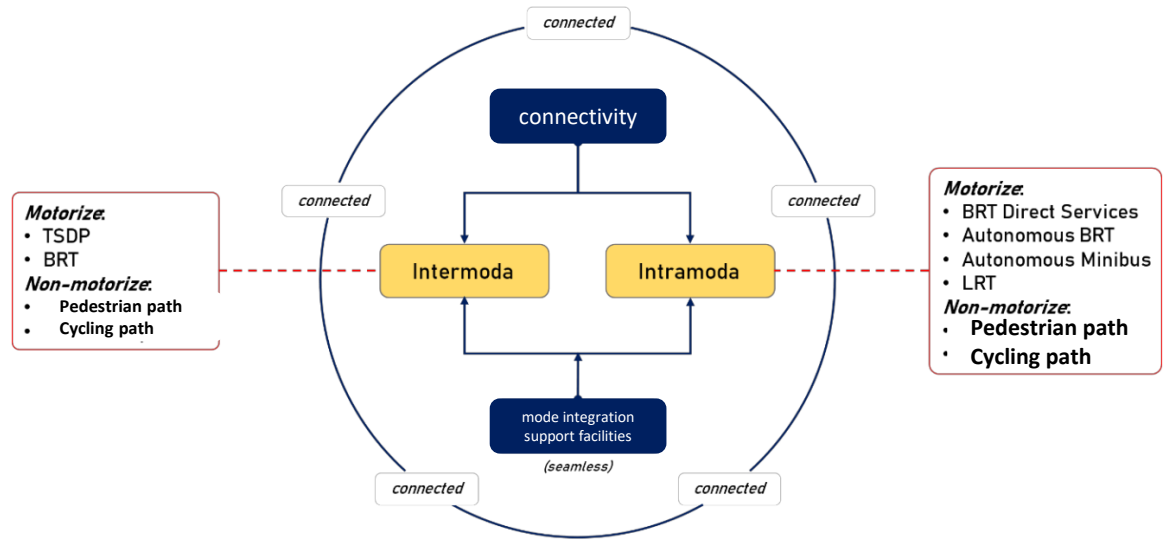
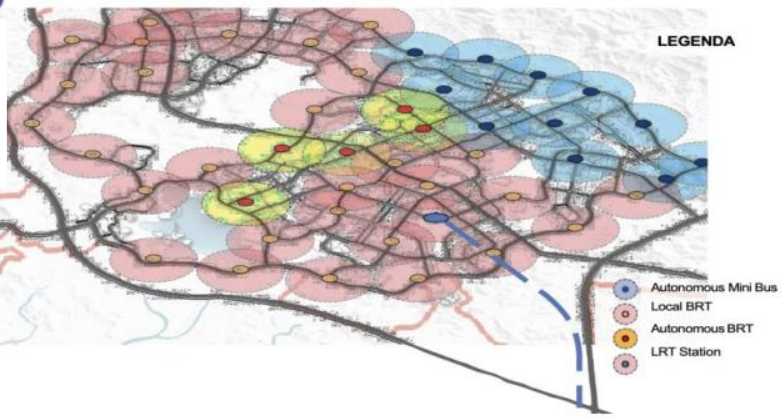
# Infrastructure Plan for Land Transportation of the New Capital City



**90%**  
Road infrastructure of new capital city will have bicycle path



**80%** of the new capital area is served by public transportation



The direction of land transportation development can be connected or can connect nodes of activities starting from the network and also existing transportation services

## Green mobility policy and green infrastructure for the new capital

1. Pedestrian & bicycle path and public transportation connectivity.
2. Design a road network with priority for pedestrians and cyclists
3. Applying the principles of sustainable and green mobility
4. Transit-Oriented Development (TOD) on the transport node with a radius 400-800m reach.
5. Sustainable Infrastructure

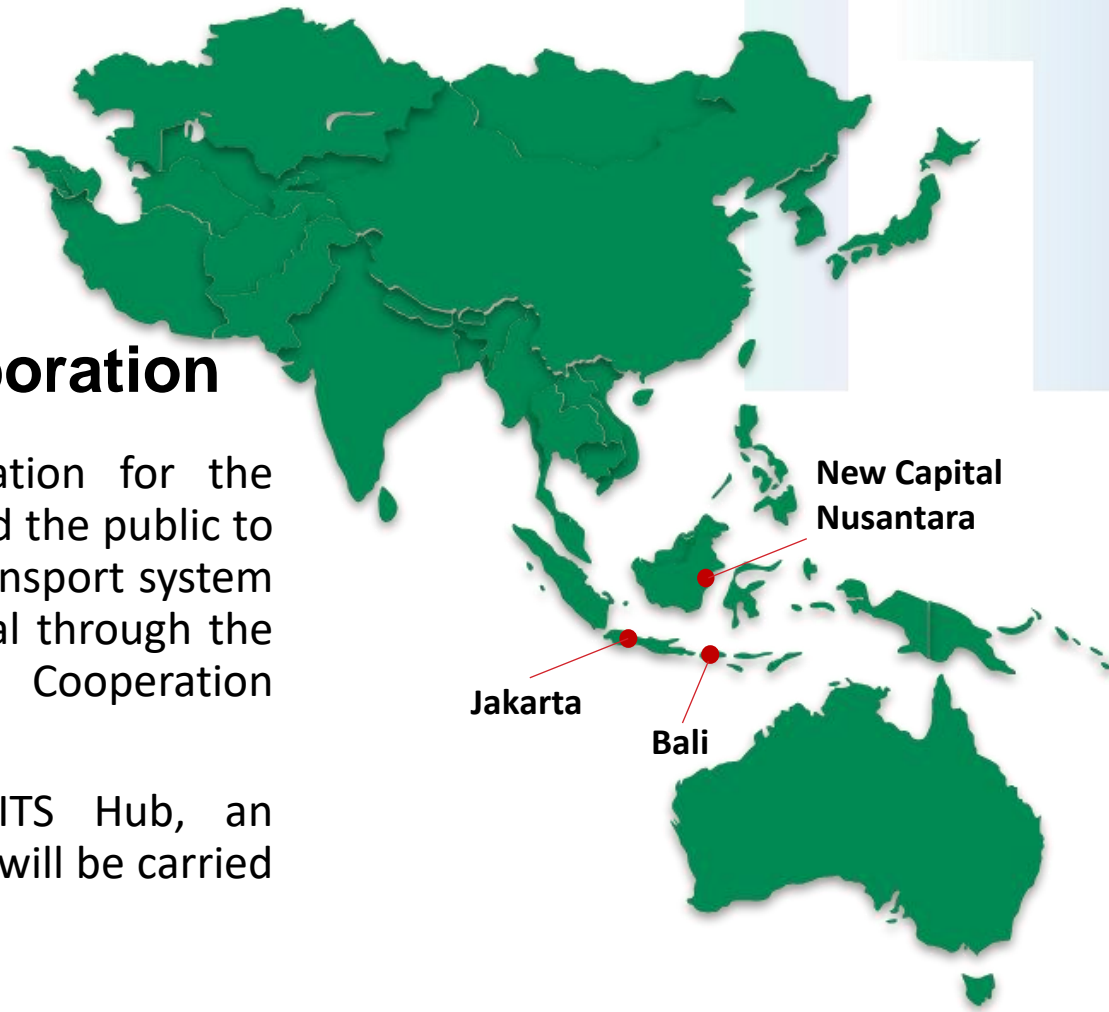


# Further Collaboration

**2022**  
**CHENGDU**  
18TH ITS ASIA PACIFIC FORUM

## Opportunity for Collaboration

- ITS Indonesia facilitate collaboration for the private sector/business entities and the public to play a role in developing smart transport system in Jakarta, Bali and the new capital through the Government-Business Entity Cooperation Financing scheme.
- ITS Indonesia will create an ITS Hub, an incubator for various projects that will be carried out in the new National Capital.







# THANKS



2022年4月27-29日 中国·成都

Chengdu, China 27-29 April 2022