



# FROM VISION TO REALITY: HOW SARAWAK IS REVOLUTIONISING PUBLIC TRANSPORT

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# Content

1. Ministry of Transport Sarawak Background
2. Challenges in the Sarawak Transport Sector
3. Transforming - Sarawak Public Transport System
4. Way Forward





# 1. MINISTRY OF TRANSPORT, SARAWAK (MOTS)

Established 22<sup>nd</sup> August 2019

## VISION

A World Class Organization spearheading the development of an integrated, safe, affordable and efficient Public Transport System

## MISSION

To strengthen the Public Transport System connectivity which acts as the catalyst for economic development to achieve better quality of life



MINISTER FOR TRANSPORT SARAWAK

DEPUTY MINISTER FOR TRANSPORT I

DEPUTY MINISTER FOR TRANSPORT II

**PERMANENT SECRETARY, MINISTRY OF TRANSPORT SARAWAK**



**LAND TRANSPORT &  
LOGISTICS DIVISION**

Manage land transport and logistics including establishing land transport authority, public transport, road safety and traffic management.



**MARITIME & RIVERINE  
TRANSPORT DIVISION**

Development of all maritime and riverine transport with respect to safety, security and economic viability of the industry.



**AVIATION DIVISION**

Develop the aviation industry in Sarawak through policy formulation, economic development, technical development and civil aviation safety.



**POLICY FORMULATION &  
PROJECT MANAGEMENT  
DIVISION**

Plan, implement, monitor and coordinate transport projects in line with international standards while ensuring good governance, timely delivery and with use of technology and green mobility initiatives.



**CORPORATE  
MANAGEMENT  
DIVISION**

Corporate Management Services including Communication, Asset, Procurement and Financial Management.



**LEGAL DIVISION**

Support the growth of the transport sector through legal guidance and advice.

# SARAWAK



31,780 km road network (*Sarawak Land Use Masterplan 2020*)



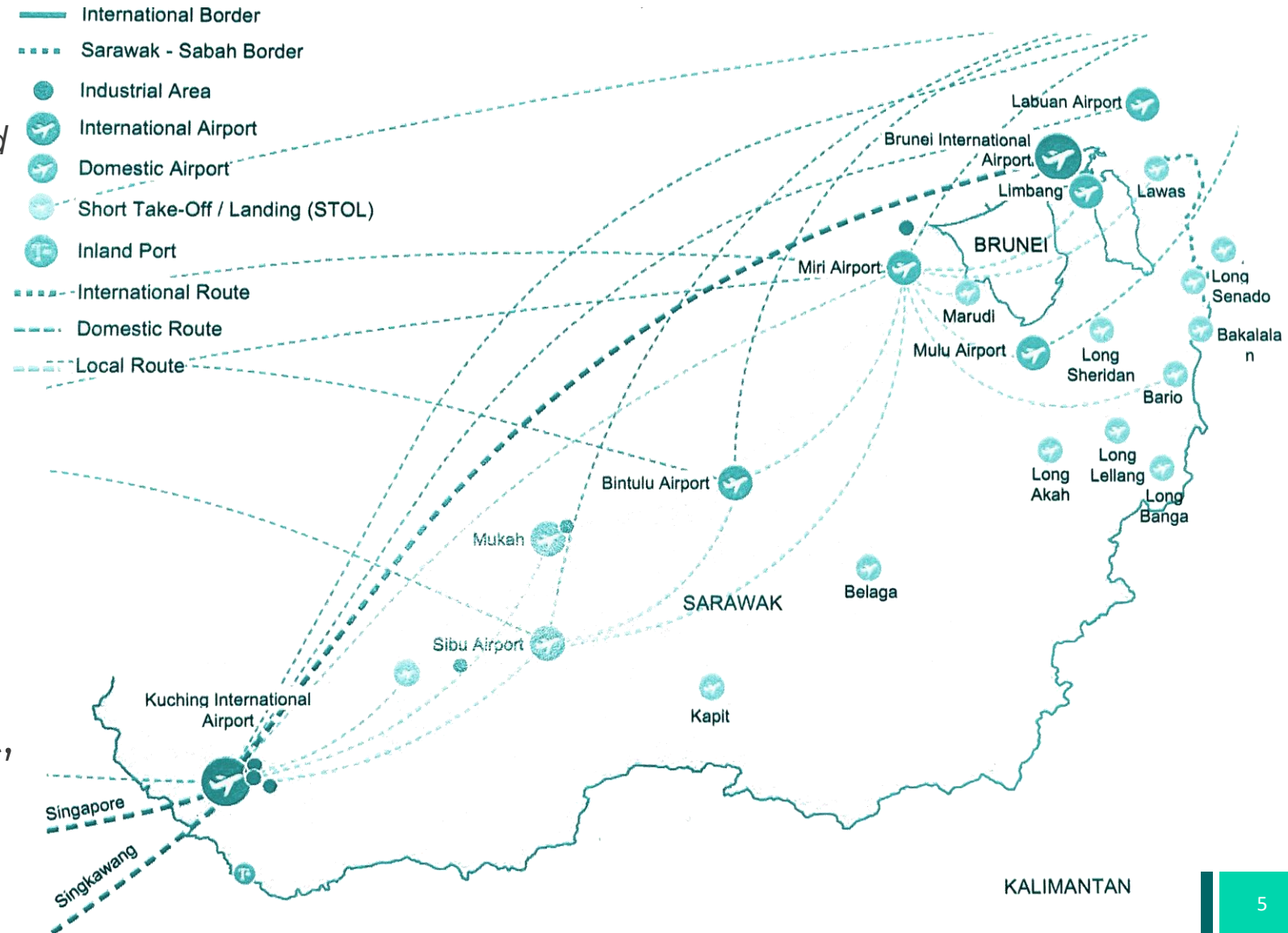
Population 2.47 mil (*DOSM, 2021*)



55 navigable rivers, length of 3,300 km



Kuching Int'l Airport, 7 domestic airports, 8 STOLports



# OUR GOAL



# A DEVELOPED SARAWAK BY 2030.

PCDS 2030

# MAIN FOCUS AREA

PCDS 2030 - SARAWAK'S VISION



## ECONOMIC GROWTH AND DEVELOPMENT

- Digital Economy
- Project Delivery
- Integrity



## SOCIAL INCLUSIVITY

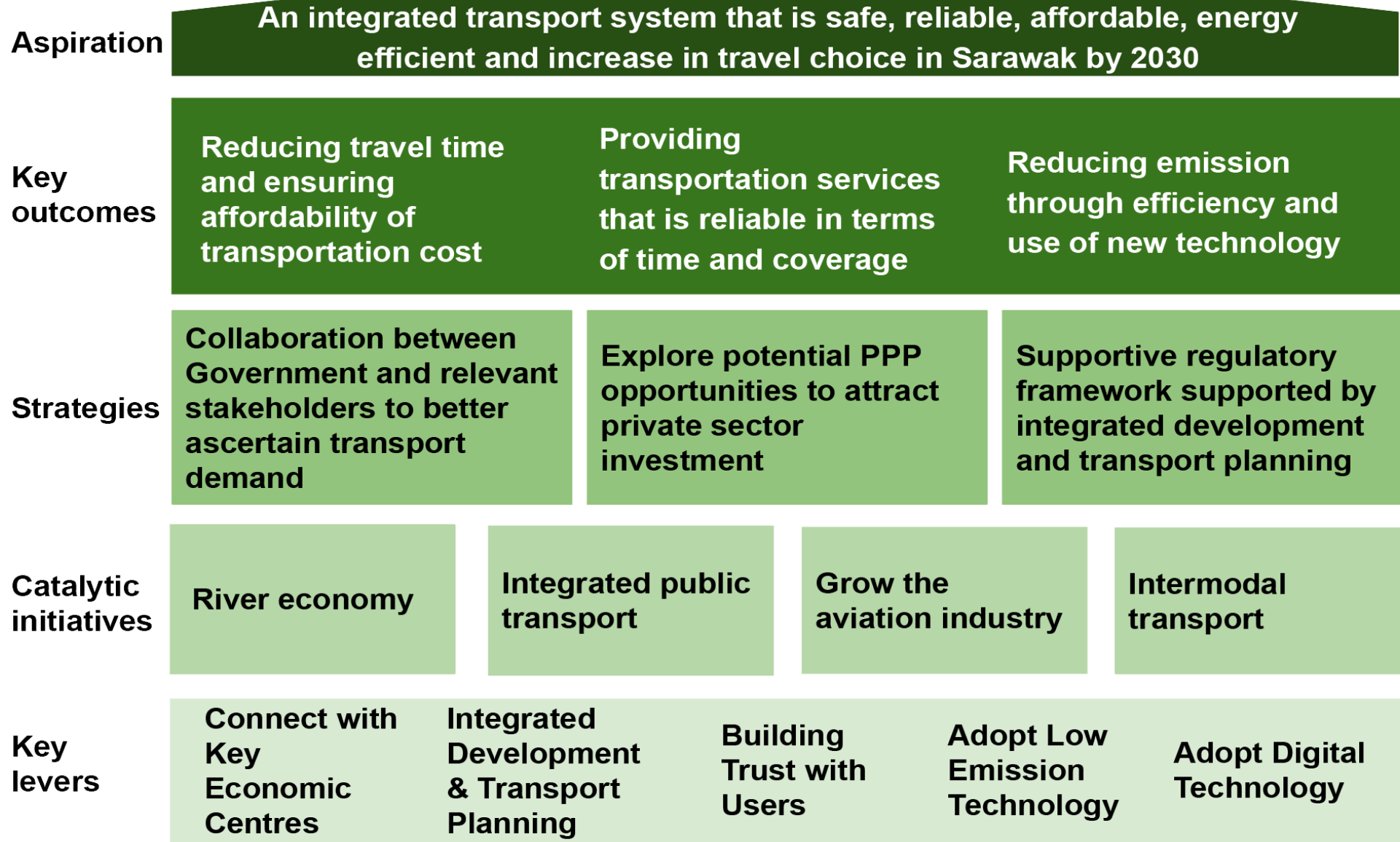
- Rural Development
- Poverty Eradication



## ENVIRONMENT SUSTAINABILITY

- Circular Economy
- Green Technology & Climate Change

# PCDS2030 TRANSPORT SECTOR





## 2. KEY CHALLENGES

PUBLIC TRANSPORT IN SARAWAK

- Limited public transport infrastructure
- Poor connectivity
- Low ridership
- Regulatory framework
- Unique transport requirements





# **3. TRANSFORMING – SARAWAK PUBLIC TRANSPORT SYSTEM**

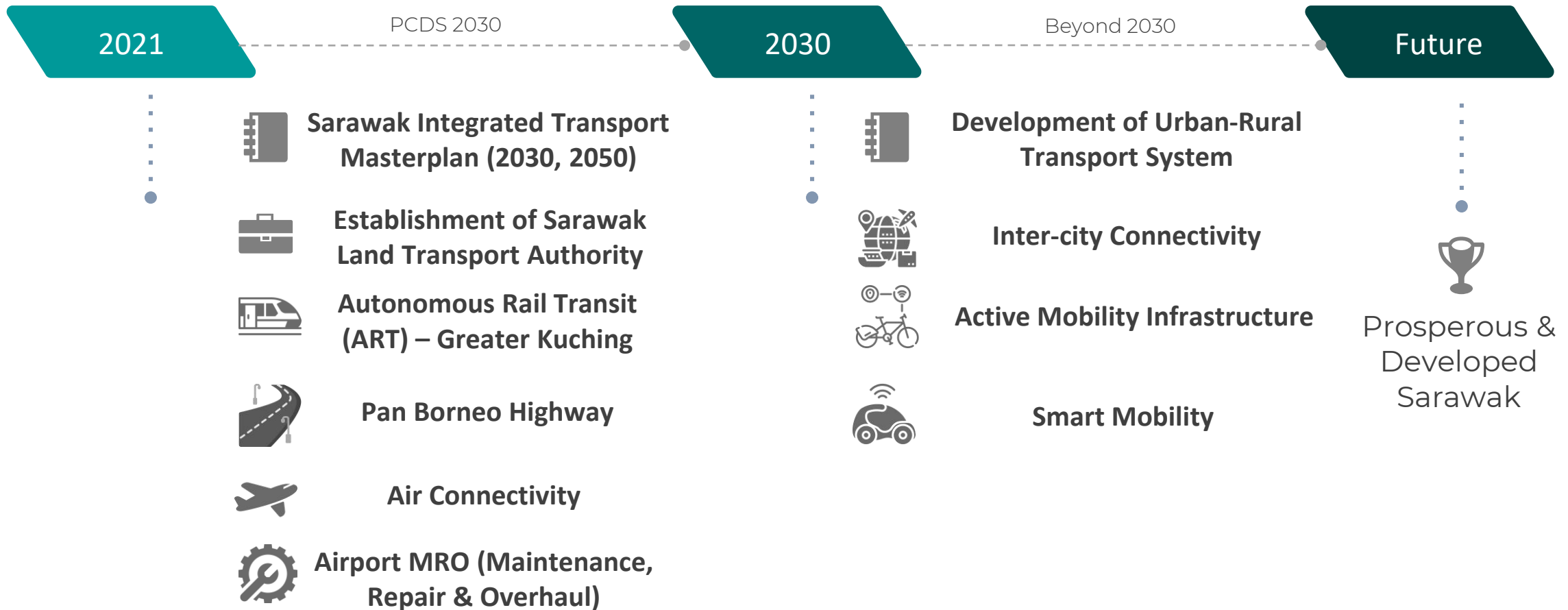
## **SARAWAK TRANSPORT MASTERPLAN**

# Sarawak Transport Masterplan

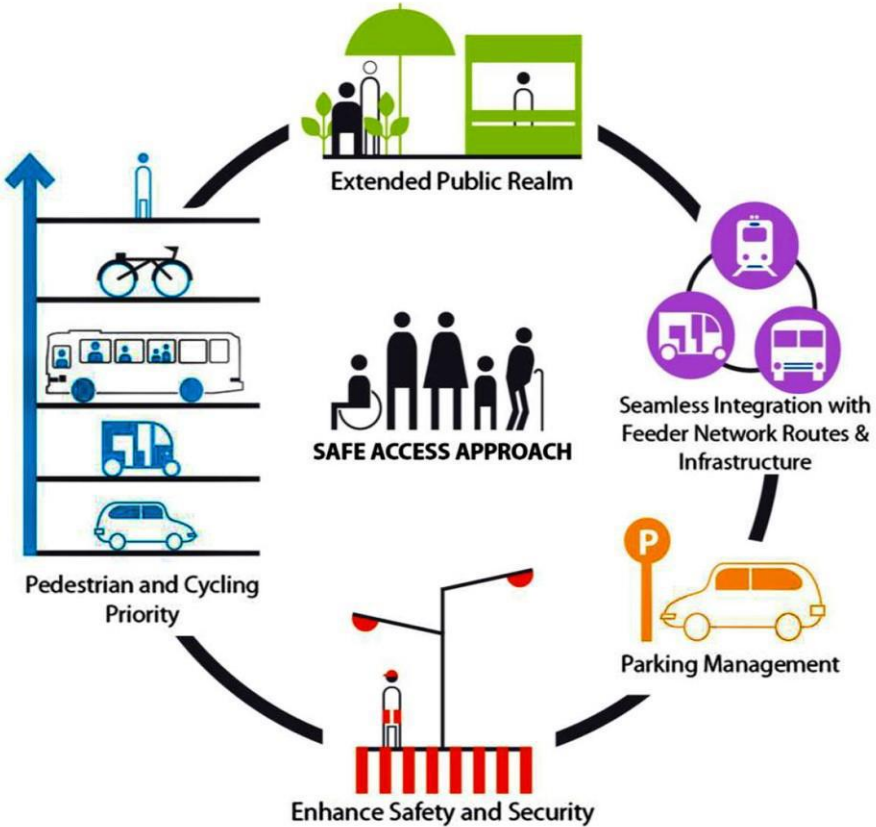
- Demand Management approach
- Planning for public transport
- Analyse and review legislation, acts, ordinances, rules, regulations, orders
- Identify and analyse Emerging Trends
- Integrated spatial and transport planning
- Strategy and detailed action plan
- Utilisation of Geographical Information System (GIS)
- Digitalisation and innovation

# JOURNEY TOWARDS A **DEVELOPED & PROSPEROUS SARAWAK**

## TRANSPORT SECTOR



# MOBILITY PLAN: FIRST AND LAST-MILE CONNECTIVITY



# MOBILITY PLAN: 20-MIN NEIGHBORHOODS AND 45-MINS METROPOLITAN

What are your indicators for 20-min neighbourhoods? Examples from Singapore (left) and Melbourne (right)



# CURRENT TRANSFORMATION



WHAT THE FUTURE PUBLIC TRANSPORT CAN BE



Land Transport Authority



Roads and Streets



Future Journeys



Rail System



Data Management

## Pan Borneo Highway

-  Four-lane, dual carriageway of JKR R5 standard
-  Safer road travel for 3.4 million people
-  Estimated to cost RM29bil
-  Create 400,000 jobs
-  Completion in 2023
-  Toll-free



Source: Star archive

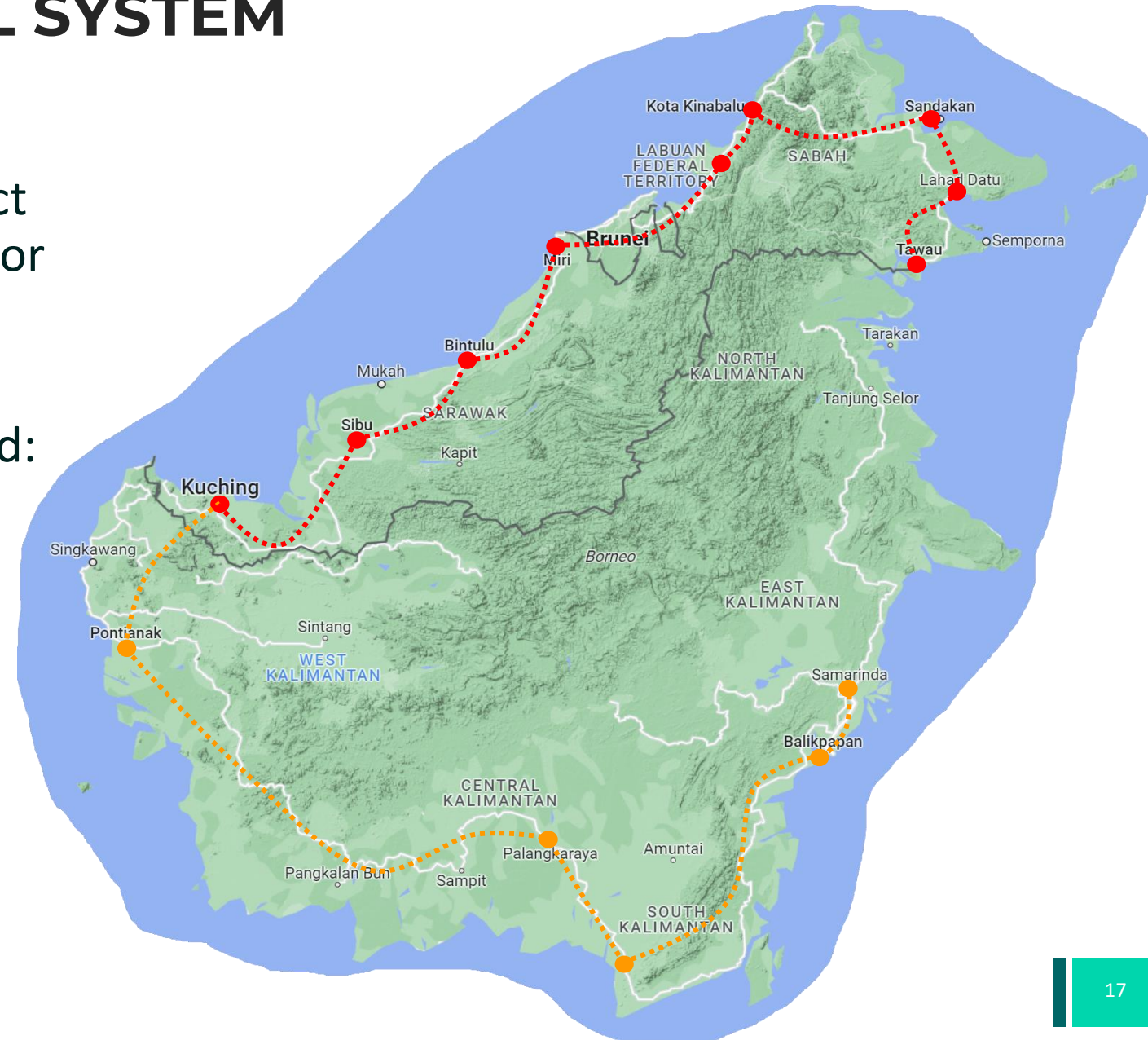
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# FEASIBILITY STUDY ON RAIL SYSTEM TRANS BORNEO RAILWAY

- A railway network proposed to connect economic centres, ports and airports for the transport of people and goods in Sarawak and Sabah.
- For Phase 1, major cities to be included:
  - Kuching
  - Sibü
  - Bintulu
  - Miri
- Prospect of connectivity to the Kalimantan Railway Network through Pontianak to other areas in Nusantara Region.



# KUCHING URBAN TRANSPORTATION SYSTEM (KUTS)



Autonomous Rapid Transit (ART) - Hydrogen Vehicle

Artist's Impression of ART for proof-of-concept vehicle

# KUTS - TRANSIT MAP



Phase 1

## Blue Line

- REMBUS TO HIKMAH EXCHANGE
- 15 STATIONS (INCLUDE 1 INTERCHANGE STATION) (1 PROV.)
- 27.6KM

## Red Line

- KUCHING SENTRAL TO PENDING
- 7 STATIONS
- 12.3KM

## Green Line

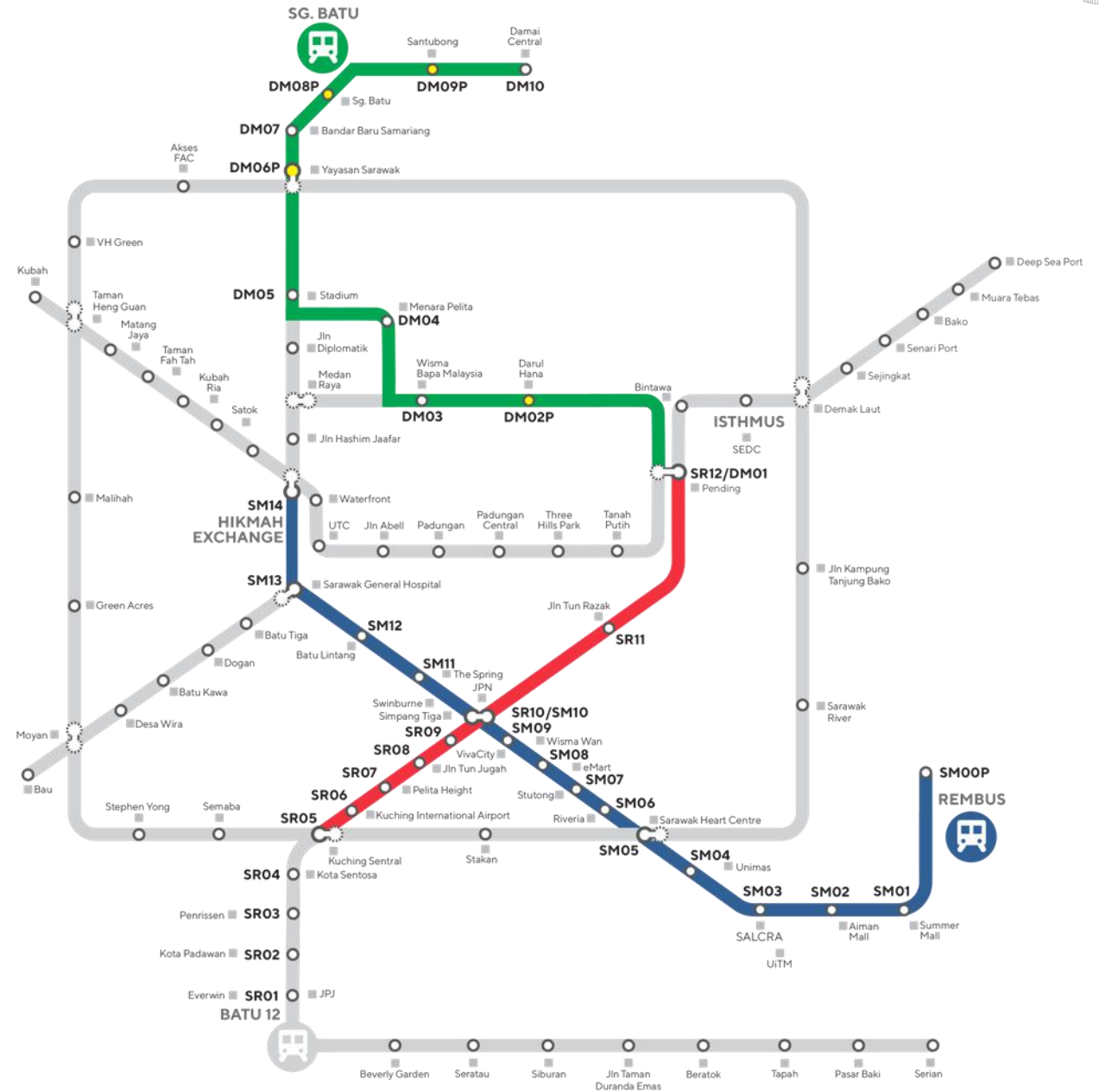
- PENDING TO DAMAI CENTRAL
- 9 STATIONS (4 PROV.)
- 30KM

Total Length : 69.9km

Total Station : 31 (5 Prov.)

The alignment is mostly at-grade

- BLUE LINE
- BLUE LINE (PROV. STATION)
- RED LINE
- GREEN LINE
- GREEN LINE (PROV. STATION)
- FUTURE LINE
- INTERCHANGE STATION
- FUTURE INTERCHANGE STATION
- DEPOT
- LANDMARK











# KUTS ART OPERATION

## Autonomous Rapid Transit (ART)

Artist's Impression of ART for proof-of-concept exercise



 <p><b>Operation Speed</b></p> <p>Max <b>70</b> Km/h</p> <p>Average <b>35</b> Km/h</p>	 <p><b>Journey Time</b></p> <p>Rembus –Hikmah (56min)</p> <p>Kuching Sentral –Pending (32min)</p> <p>Pending –Damai (51min)</p>	 <p><b>Frequency</b></p> <p><b>8</b> Minutes</p>	 <p><b>Passenger Capacity</b></p> <p><b>300</b> Per ART</p>
 <p><b>Operation Hours</b></p> <p><b>0600</b> to <b>2300</b></p>	 <p><b>Fare</b></p> <p>Affordable &amp; Competitive with other Transit System</p>	 <p><b>Station Amenities</b></p> <p>Washroom at Station &amp; OKU friendly</p>	 <p><b>1<sup>st</sup> Mile &amp; Last Mile</b></p> <p><b>55</b> Feeder Busses Collaboration with E-Hailing</p>

# H2 FEEDER BUS



**Hydrogen  
Fuel Cell  
System**



**H2 Bus Apps  
With Live GPS**



**High Speed  
Public WIFI**



# HYDROGEN REFUELING STATIONS

SARAWAK GREEN HYDROGEN AGENDA



The First Integrated Hydrogen Production Plant and Refuelling Station in Southeast Asia under Sarawak Energy

PETROS Multi-Fuel Refuelling Station Darul Hana, Kuching

# THE PROOF-OF-CONCEPT HYDROGEN-POWERED ART STAGE 1 EXERCISE IN ZHUZHOU, CHINA



# 4. WAY FORWARD

TRANSPORT SECTOR

INTEGRATED TRANSPORT SYSTEM THAT IS  
ACCESSIBLE, INCLUSIVE, SUSTAINABLE AND  
A CATALYST FOR ECONOMIC GROWTH FOR  
BETTER QUALITY OF LIFE.

TRANSPORT MASTERPLAN





# THANK YOU

MINISTRY OF TRANSPORT, SARAWAK

<http://mot.sarawak.gov.my>

