Indonesia Smart Mobility Strategies: Opportunities and Realities

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The KIAT facility

- Kemitraan Indonesia Australia untuk Infrastruktur (Indonesia Australia Partnership for Infrastructure)
- The Government of Australia has a longstanding development cooperation with the Government of Indonesia
- **KIAT works with the Government of Indonesia to help address the infrastructure deficit and provide "better access to infrastructure for all people"**
- **Partnerships structured around three End of Facility Outcomes:**

    #1: Improving the policy and regulatory environment for infrastructure investments

    #2: Improving the design of infrastructure projects

    #3: Improving the delivery of infrastructure projects
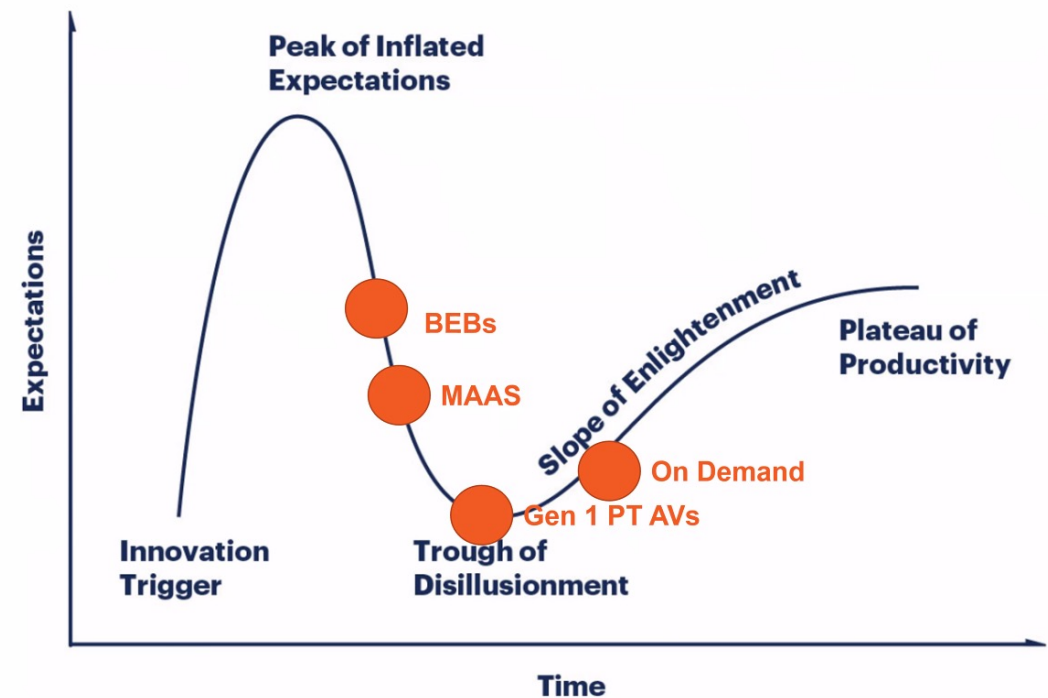
What is a smart city?

- Intelligent transport systems
- Automation and autonomation
  - Modal mix
  - Traffic congestion
  - Unintended consequences (?)
- How can we harness the greater good of technology and ensure digital disruption results in net benefits?

- *From techno-centric to people-centric*

HYPE CYCLE

The Indonesian context

- Indonesia has 20 cities with populations of over a million (4.1% growth per annum)
- Vast inequalities:
  - Access to opportunities and services
  - Public transport
  - Non-motorised transport
- Focus on big ticket items
- Cohesive and consistent policymaking
- Fragmentation and multimodal integration

# Sustainable Urban Mobility Plans (SUMP)

Why SUMPs?

- Cities receive market-led proposals
- SUMPs are a precondition for cities to obtain national-level funding
- KIAT supporting in 3 metropolitan areas
- Outcomes:
  - Accessibility improvements (c.f., baseline)
  - Strategic context (big picture) to support project appraisal
  - Readily implementable action plans

SUMP process

- Establish Working Groups
- Develop long term vision
- Conduct baseline analysis
- Develop and compare scenarios
- Select scenario and prepare strategy
- Produce action plans and implementation programs

The strategies: Charting a future context
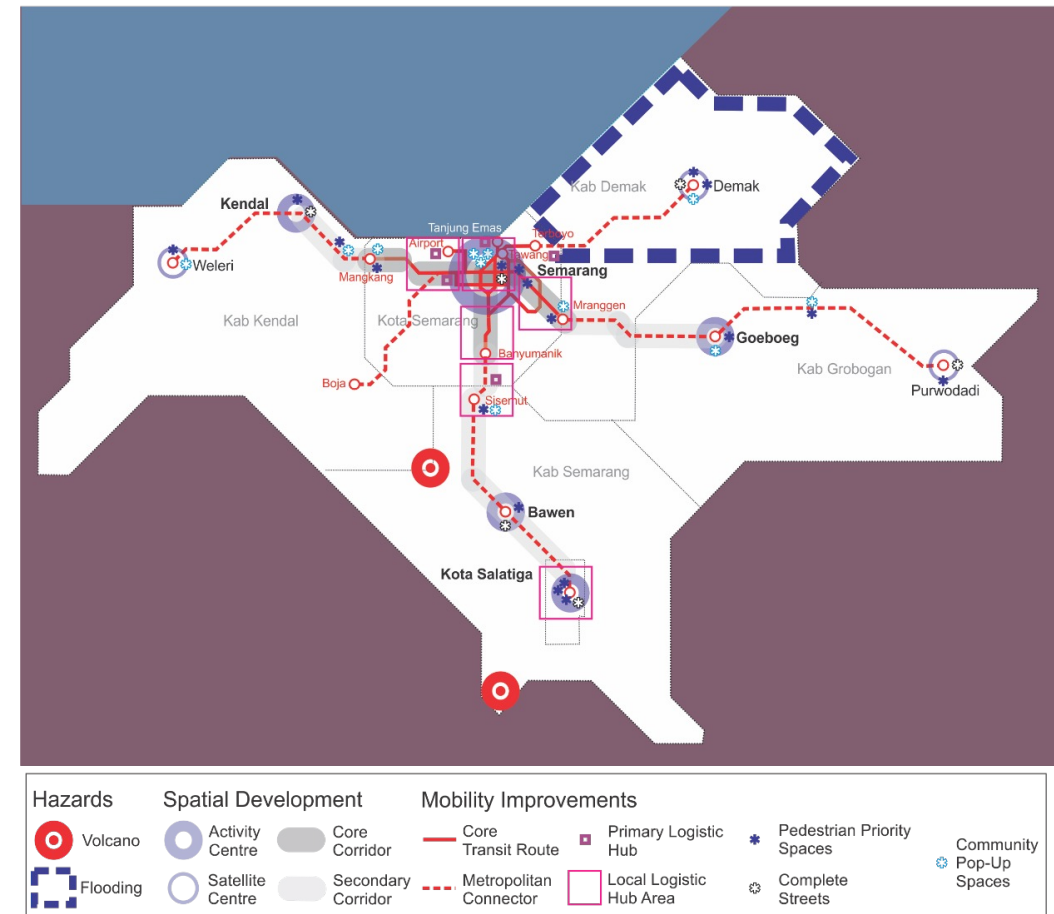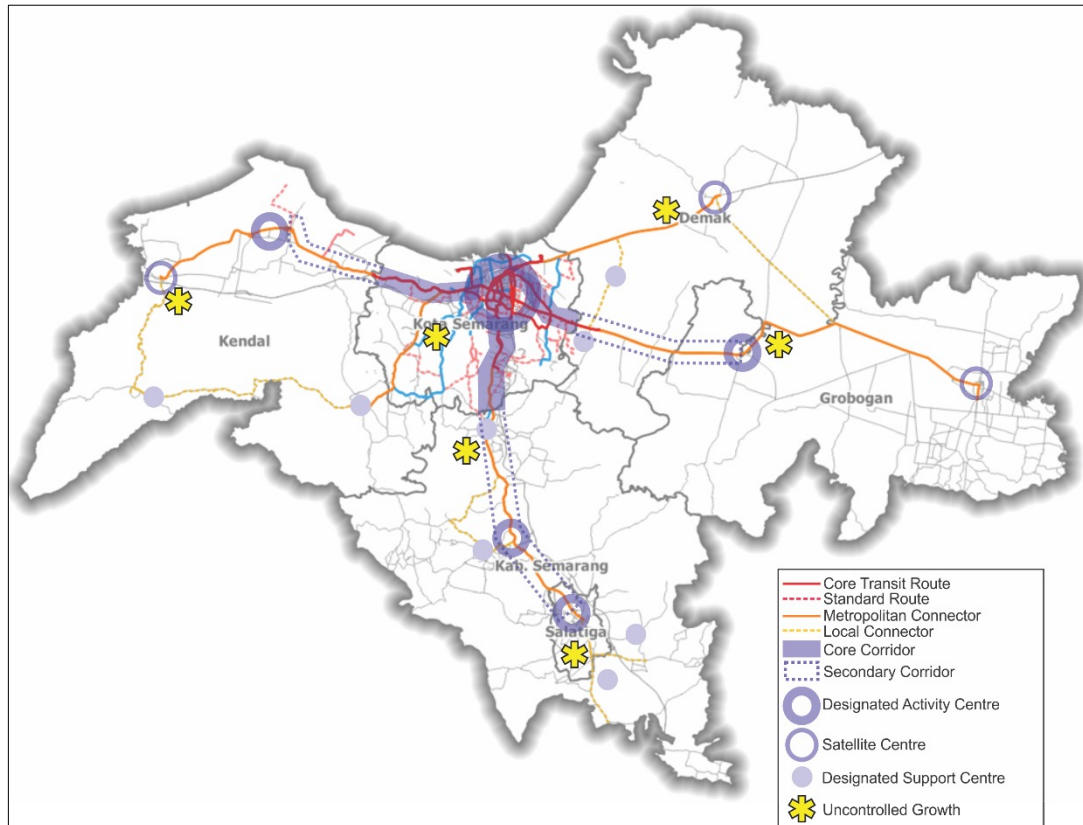
Methodologies, data and knowledge sharing

- Challenges with data availability
- Need for proxy measures—e.g., light intensity to identify commerce
- Sketch mapping in absence of full demand model
- Data repository: Knowledge sharing and management
- Capacity building for the next generation

Mobility improvements: The low hanging fruit

- Tactical urbanism: The *3Ds*

- Pedestrian-oriented design
  - Metropolitan and community pathways
  - 20-minute neighbourhoods
  - Pedestrian priority spaces
  - Pop-up community spaces

- Unify, consolidate and extend to the whole metropolitan area the current Area Traffic Control systems

- Examine potential for incorporating Advanced Traffic Management Systems (ATMS) and Urban Traffic Management Control (UTMC) systems

- Monitor traffic, control traffic signals, enable transit priority and manage mobility flows (including pedestrians and freight) using wireless communication and fiber optic technology
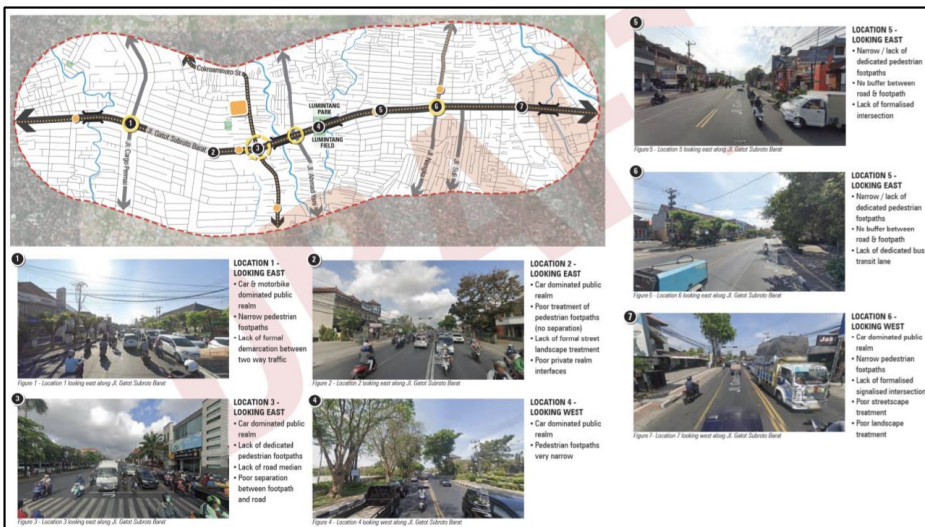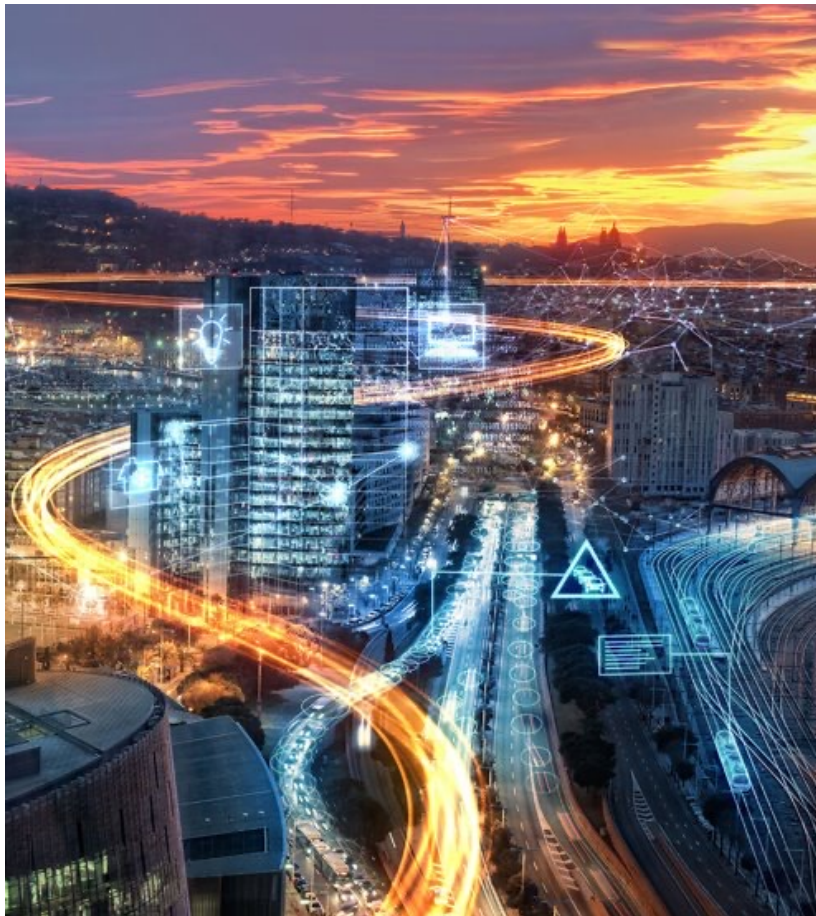
#Integrasi

- Digital payments and digitalisation infrastructure widespread—GoPay, OVO, e-money, Flazz, etc.

- Opportunities to leapfrog

- Pillars of integration:
  - Information
  - Booking/payments
  - Service offer
  - Societal goals

- Travel demand management and behavioural nudge mechanism: mobility as a service (MaaS)

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Smart principles for a smarter future

- Who and what benefits?
  - Large but limited (e.g., rail)
  - Small but extensive (e.g., bus improvements)
- Government's role in project appraisal
  - Independent evaluation
  - Travel time relativity
  - Infrastructure vs. services
- Integration opportunities
  - Motorised and active
  - Public and private
  - Formal and informal
  - Transport and land use

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