



# Thriving with Transport & Urban Systems in Post Covid Era: Indonesia Perspectives

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**14<sup>TH</sup> ATRANS ANNUAL CONFERENCE**

**18<sup>TH</sup> DECEMBER 2021, BANKOK, THAILAND**



UNIVERSITAS  
INDONESIA

*Veritas, Probitas, Iustitia*

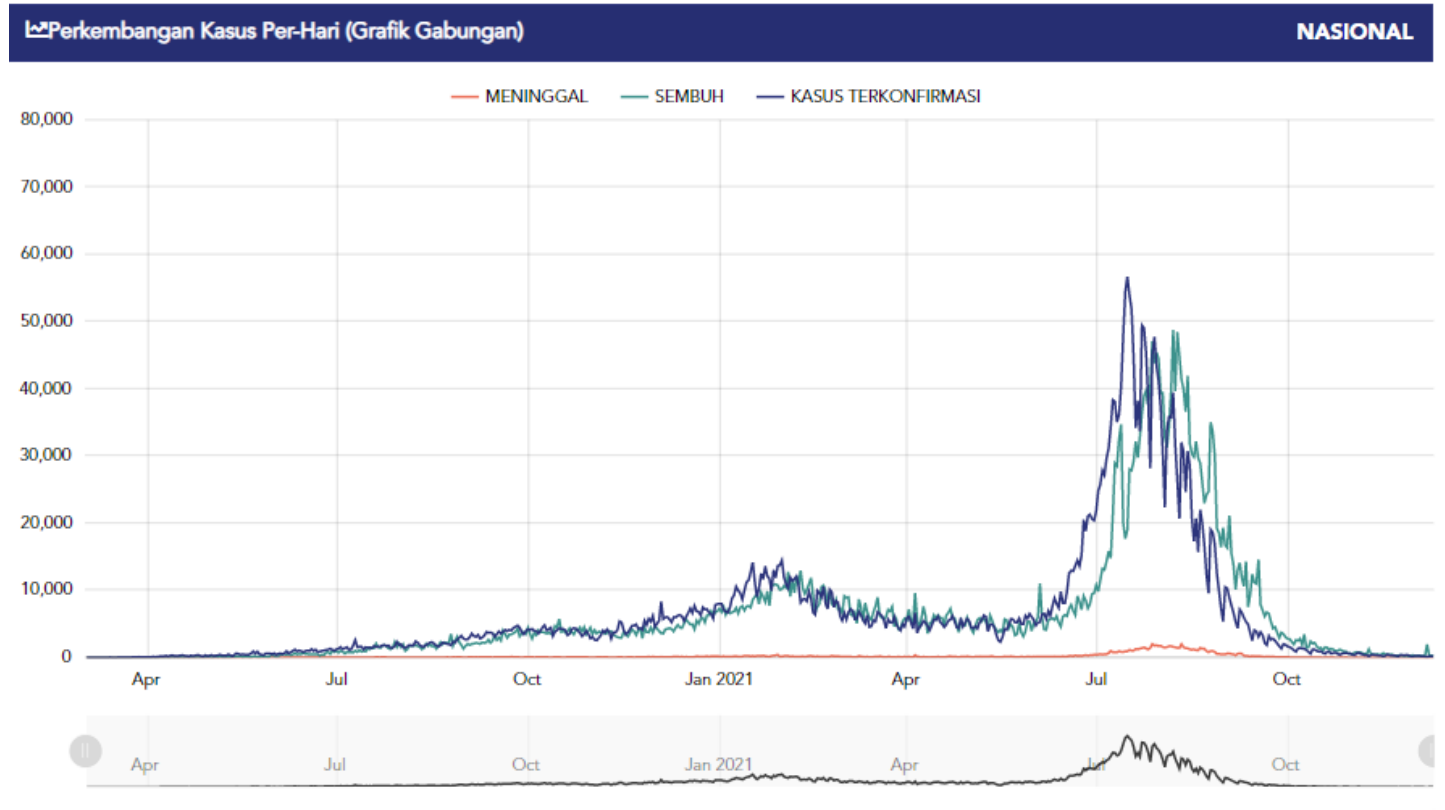
*How good do we learn from pandemic  
Covid-19 to change our transport  
behaviors...and thrive with it.*

*SUTANTO SOEHODHO*

*UNIVERSITAS INDONESIA*

*TASK FORCE T2 - G20*

# Pandemic Covid-19 Condition in Indonesia



**4,258,560**  
TERKONFIRMASI  
+220 Kasus

**5,278** 0.1%  
KASUS AKTIF  
-85 Kasus Aktif

**4,109,364** 96.5%  
SEMBUH  
+296 Kasus Sembuh

**143,918** 3.4%  
MENINGGAL  
+9 Kasus Meninggal

**57,266,941** +360,510  
TOTAL SPESIMEN DIPERIKSA  
PCR + TCM=30,559,346 (+51,176)  
ANTIGEN=26,707,595 (+309,334)

**38,466,588** +267,119  
TOTAL ORANG DIPERIKSA  
PCR + TCM=17,920,300 (+29,314)  
ANTIGEN=20,546,288 (+237,805)

**144,446,324**  
VAKSINASI KE-1  
+652,282

**101,149,509**  
VAKSINASI KE-2  
+690,237









# Future Urban Expediency



- Less urban face-to-face activities
- Less office space required
- More working space required
- New urban trip patterns
- Flexible working hours
- Optimal last miles of person trips and goods movements
- More urban amenities for better life designed with smart atmosphere

# Transport Impacts on Economy



## Total Energy Consumption

Indonesia .....	43.11% (2020)
USA .....	26.13% (2020)
China .....	20.00% (2020)

## Total Emission

Indonesia .....	26% (2017)
USA .....	29% (2019)
China .....	10% (2020)

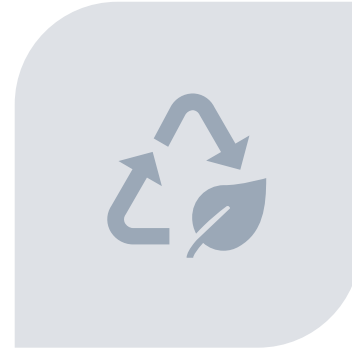
# ICT Replacing People Movement

- New Pattern of Office Based Works (hybrid online-offline, product-based rather than time-based system, productivity rather than production)
- Reducing Person Trips
- Improving Traffic Performance
- Energy Efficiency
- Improving Environmental Quality





# People Transport



## **PRIVATE-PUBLIC TRANSPORT;**

SEAMLESS, INTERMODE,  
INTERNETWORK,  
RENEWABLE AND  
ENVIRONMENTALLY  
FRIENDLY ENERGY,  
SMART ENFORCEMENT; E-  
ENFORCEMENT



## **SMART PUBLIC TRANSPORT;**

SMART PLANNING AND  
OPERATION, SMART  
FINANCING, INTEGRATED  
PRICING POLICY NOT  
ONLY TICKETING,  
AFFORDABLE AND  
COMFORTABLE



# Goods Movement /Physical Distribution /Logistics



**Smart Supply-Chain  
Management**



**No-Empty Backhaul**



**Integrated Transport-  
Warehouse  
Operation**



**Sound Last Mile  
Deliveries**



**Digital Logistics Data  
and Information  
Management**



**Real-time  
Optimization Process**

# Financing Transport Sector



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Public-Private-Partnership  
(BOT, BTO, BOO, VGF, AP,  
etc.)

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Strategic Financing for  
Infrastructures and Facilities

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Earmarking Scheme of  
Fundings

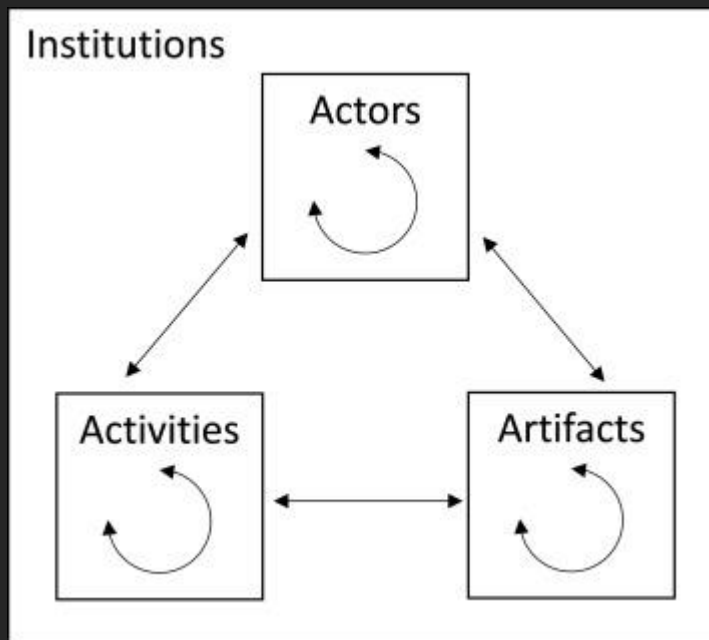
# Future Transport Perspectives



- Promoting more use of public transport and non-motorized transport (e.g., bicycle paths, more incentive for public transport users and more disincentives for private vehicles)
- Promoting more use of green and renewable energy
- Development of more seamless goods movements (e.g., sea-toll)
- Digitalization and electrification of vehicle operations (e.g., e-enforcement, electric buses, digital logistics system operation)



# Transport Innovation Ecosystem



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*An innovation ecosystem is the evolving set of actors, activities, and artifacts, and the institutions and relations, including complementary and substitute relations, that are important for the innovative performance of an actor or a population of actors. (Ove Granstand & Marcus Holgersson, 2020)*

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*How all related stakeholders work, in harmony, in the context of co-evolving, competition, and collaboration.*

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*Safety issues could be the peak of iceberg to comprehend appropriate actions and resources onto transport system (e.g., system, technology, financing, management, control, etc.). (Sutanto Soehodho, 2021)*