

Smart Urban Mobility

: shifting into people-
oriented development
(Lessons learned from Indonesia)

CALD Smart Mobility Conference
Khon Kaen, 25th October 2024





07 **36** **'99**
COUNTRIES **YEARS** **IN INDONESIA**

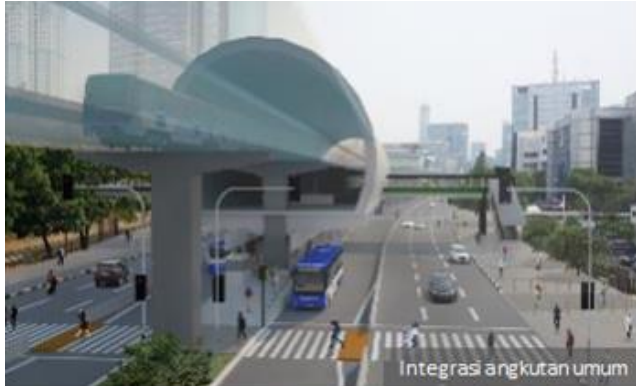
**BUS RAPID TRANSIT . NON-MOTORIZED TRANSPORT . TRANSIT-ORIENTED DEVELOPMENT
TRANSPORT DEMAND MANAGEMENT . SUSTAINABLE URBAN DESIGN**

itdp.org | itdp-indonesia.org | [@itdpindonesia](https://twitter.com/itdpindonesia)

Institute for Transportation and Development Policy (ITDP) is an NGO established in 1985 in New York to create **sustainable and equitable transportation** in cities all over the world.

ITDP assists a number of Indonesian cities to move forward, related to these following issues:

1. Public transportation
2. Walking and cycling
3. Inclusive accessibility
4. Electric vehicle
5. Transit-oriented development
6. Transport demand management
7. Sustainable urban design



Partners and Cities

Jakarta | Surabaya | Medan | Bandung | Semarang | Padang | Aceh | Makassar | Pekanbaru | Surakarta | Peshawar | Karachi | Baku | Langkawi | Penang | Krabi | Patong | Phuket | Ho Chi Minh

Why Should Cities Shift?

Understanding justice mobility and cities for all



Cities have land issues (e.g. land scarcity). Streets are considered as public goods and public spaces. However, in many cities, streets are allocated more for vehicles and leave **not enough room for people** to mobile and access their essential needs.

“All” means:

All **abilities**

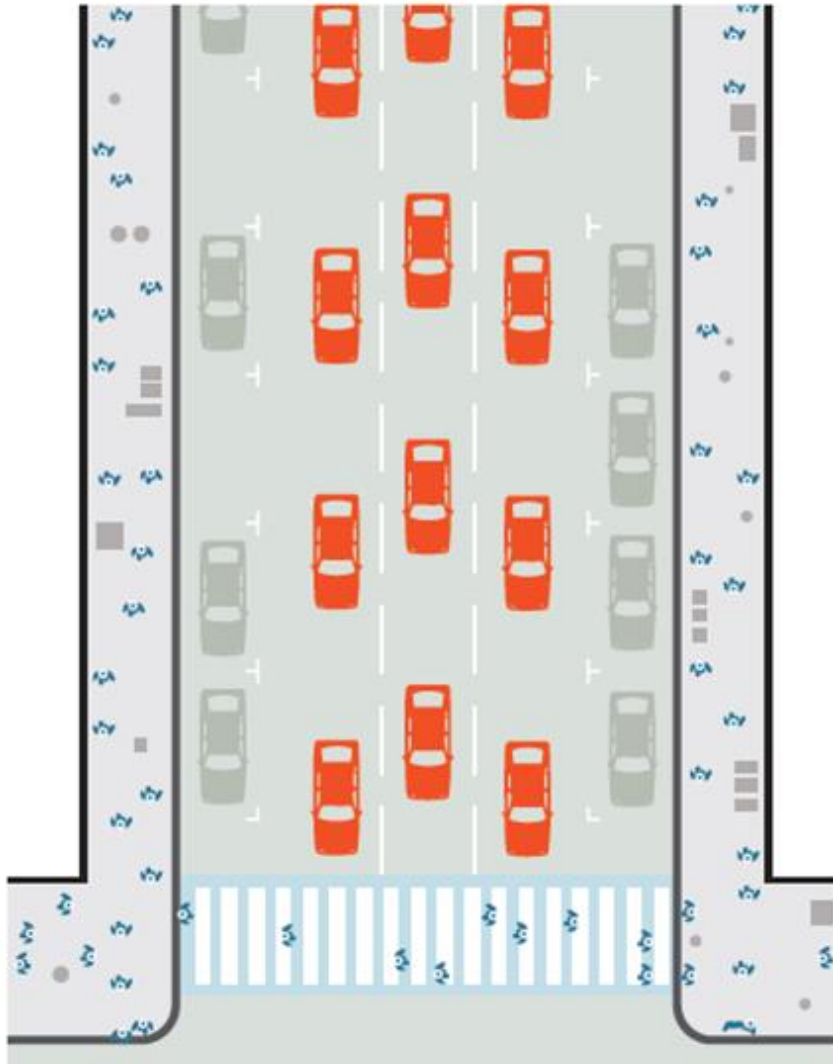
All **ages**

All **users**

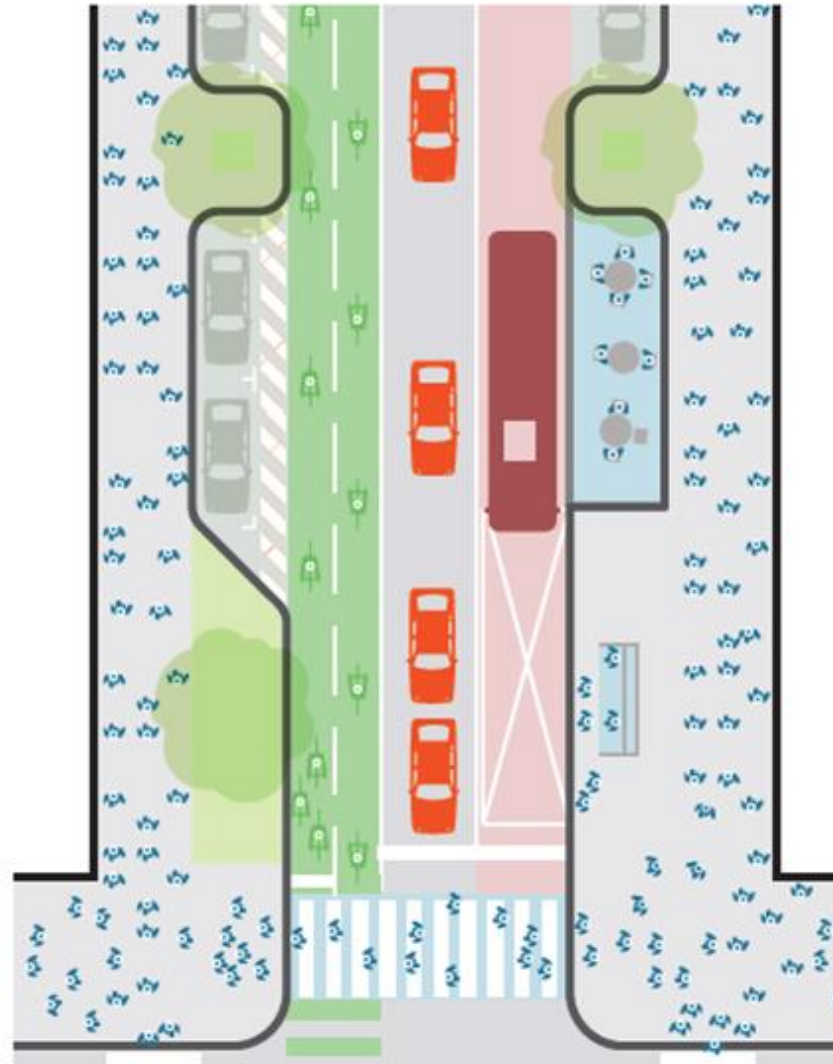
All **income classes**

Stop Moving Cars



Car-Oriented Street



Multimodal Street



Hourly Capacity of a Car-Oriented Street

	4,500/h	x2	9,000 people/h
	1,100/h	x3	3,300 people/h
	0	x2	0 people/h

Hourly Capacity of a Multimodal Street

	8,000/h	x2	16,000 people/h
	7,000/h	x1	7,000 people/h
	6,000/h	x1	6,000 people/h
	1,100/h	x1	1,100 people/h
	0	x1	0 people

 Total capacity: 12,300 people/h

 Total capacity: 30,100 people/h*

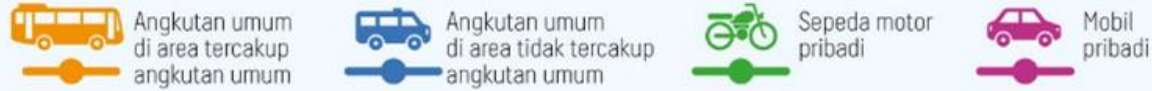
Start Moving People

Streets should let **people** to move and be able to **access** their needs. To be able shifting to moving people, the cities' decision makers should understand how people, their citizen, mobile in the city and how they **interact with the spaces**.

Allowing system in the cities to learn and understand the mobility patterns and address the needs of **vulnerable groups** is the key. It will include **walking, cycling, and public transportation**.



Biaya Perjalanan Berdasarkan Jenis Moda Angkutan

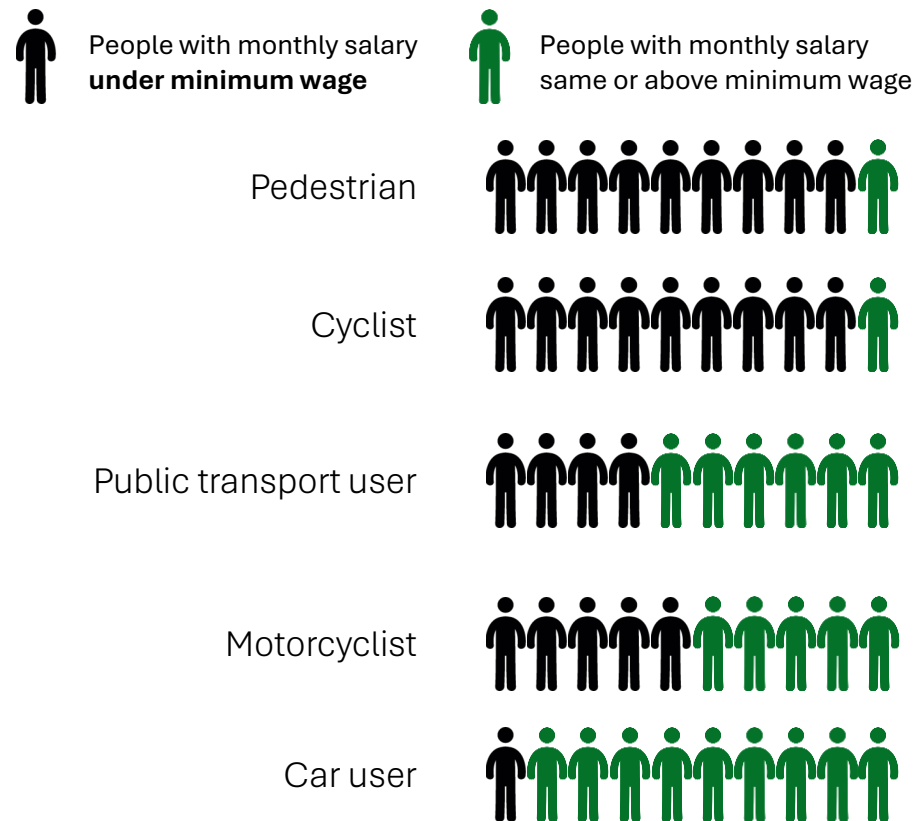
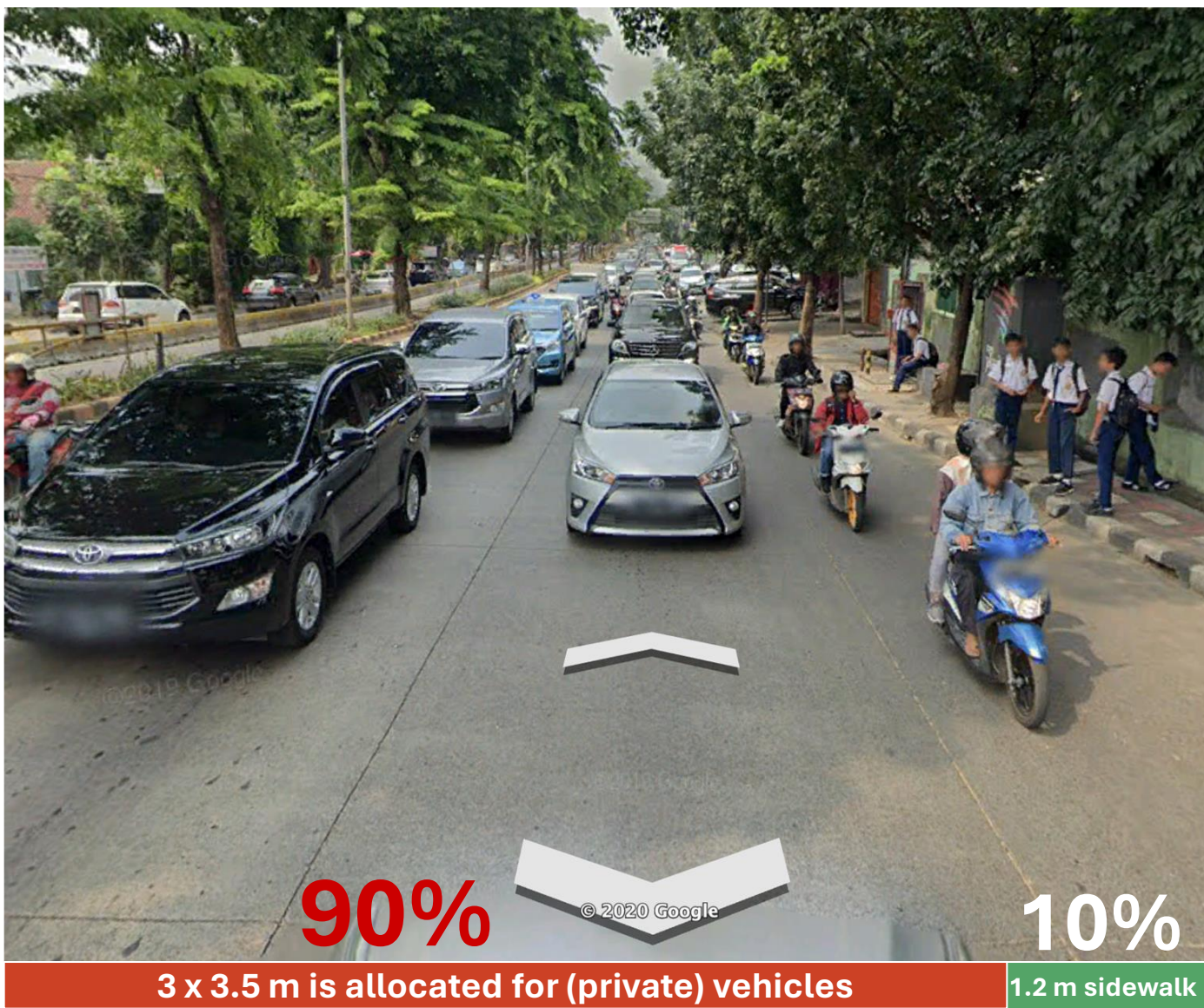


Source: Kompas, 2022



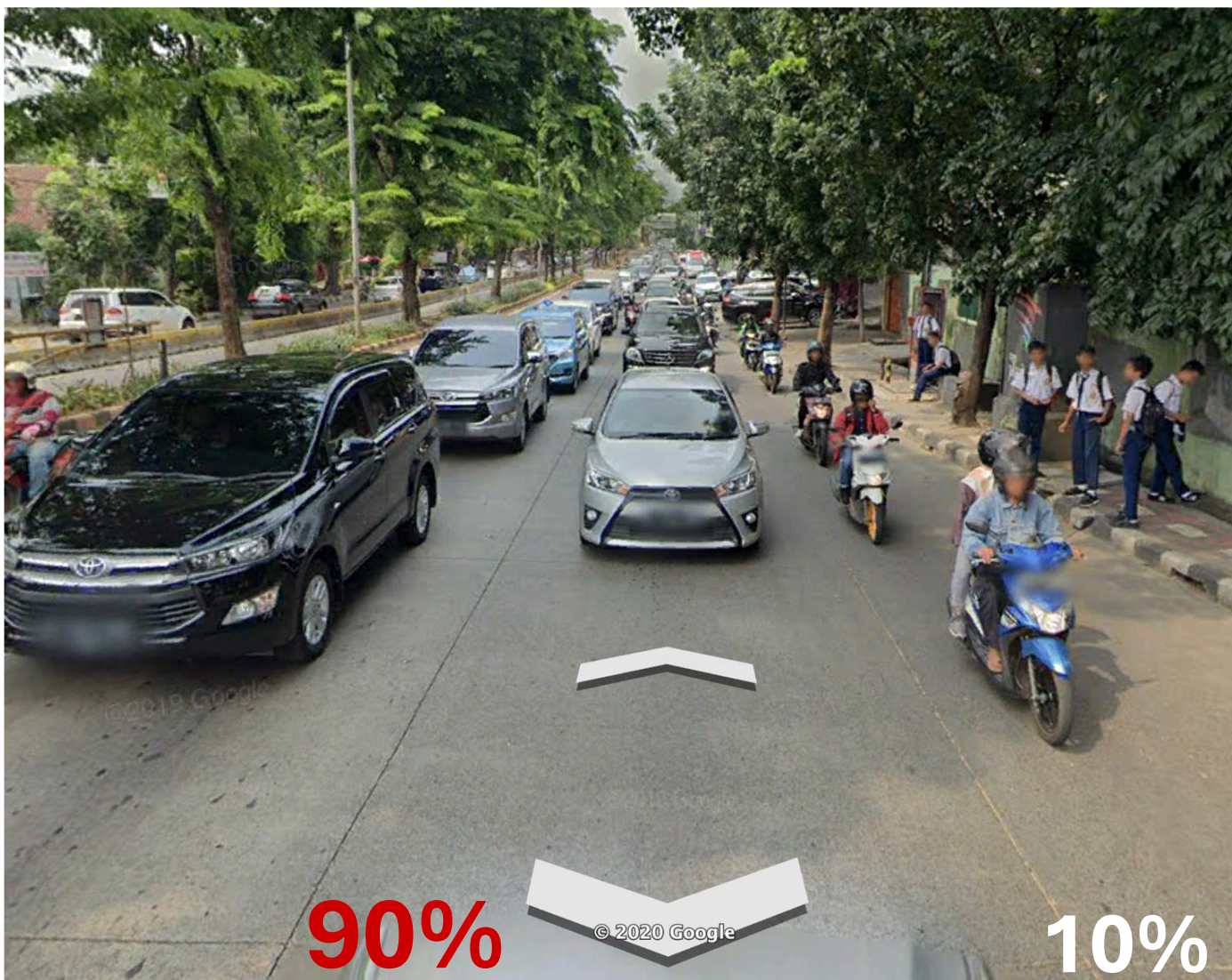
Based on surveys conducted by Kompas in 2022 in 4 cities in Indonesia, it is shown that a person with motorbike spends **3.5x higher** per month for transport cost and it is **15x higher** for a person with car compare to public transport user.

Injustice Street Allocation



9 of 10 pedestrians and cyclists in Greater Jakarta identified from low-income society. However, **the streets planning and allocation do not favor to these vulnerable groups.**

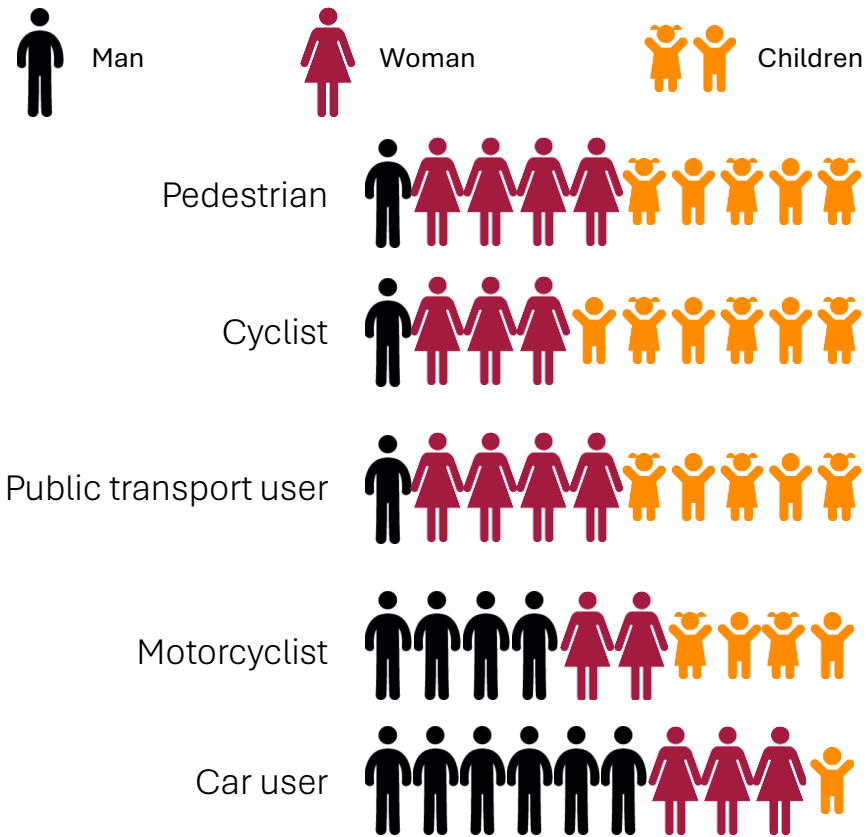
Injustice Opportunity



3 x 3.5 m is allocated for (private) vehicles

1.2 m sidewalk

Source: ITDP's survey in 24 Kampung Kota Jakarta, 2020



Majority of **active mobility actors** and **public transport users** in Jakarta are **women and children**.

The condition of injustice street allocation will result to **unsafe mobility** environment and it will lead to **inaccessible public facilities and opportunities**.

How Do Cities Shift?

Redefining “SMART” in the implementation of smart city development



Disaggregated Data

Pedestrian Counting

Cyclist Counting

Tap In – Tap Out

Route Preference

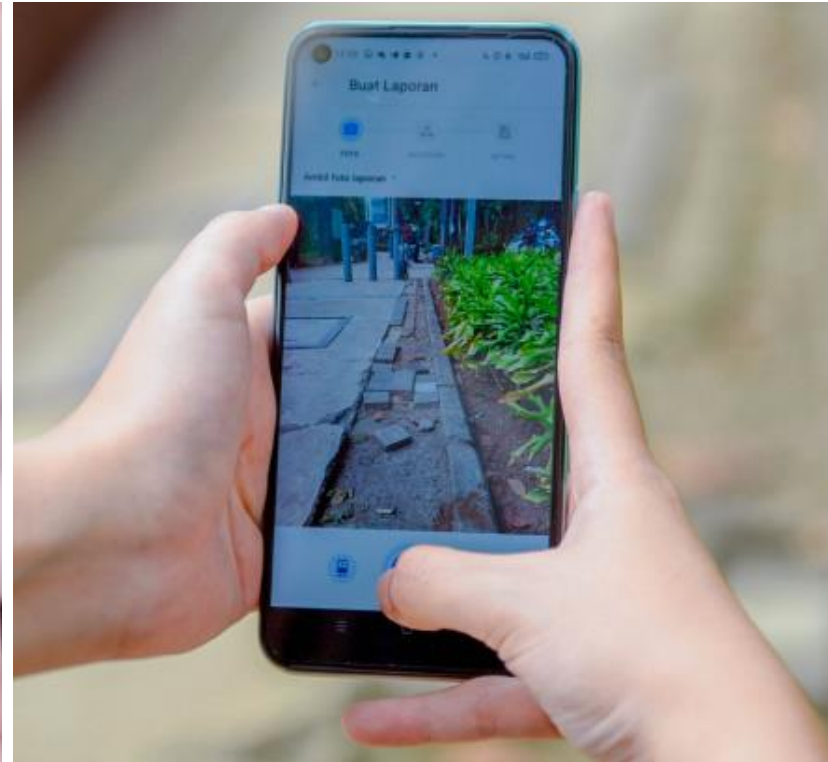
Land Use

Road Safety

Public Transport
Performance



Co-planning & Co-design



Citizen Report



Co-audit

Expected Results



Claim back space for people

Ensure accessibility

Ensure inclusivity

Increase public transport reliability

Increase safety

Support the mode shift

What Are Next?

Identifying opportunities and follow-ups



Strong commitment & political will is needed

It is long, continuous, and iterative process

There is a need for adoption to regulation and/or policies

Do not forget to scale-up pilot or tactical urbanism projects



ITDP

Institute for Transportation
& Development Policy



www.itdp-indonesia.org



[itdpindonesia](https://www.instagram.com/itdpindonesia)



[ITDP indonesia](https://www.facebook.com/ITDPindonesia)



[@itdpindonesia](https://twitter.com/itdpindonesia)