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# Global Future Cities Programme

Bandung Integrated Public Transport System

14 October 2021



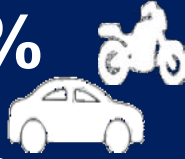
# BACKGROUND AND OBJECTIVES

## About Bandung

No **5<sup>th</sup>**   
Metropolitan  
City in  
Indonesia

**2.5**   
Million  
population, and  
counting

**19%**   
'Angkot'  
vehicles

**77%**   
Private  
Vehicles

## Local Strategic Planning (RTRW, RPJMD, RENSTRA)

RTRW 2021 -2041 Bandung City:  
Public transport development

RPJMD 2018-2023 Bandung City →  
“To improve the City’s liveability and  
sustainability through infrastructure  
development and land use control”

One of strategies in the target indicator for  
“traffic congestion” is:  
**Developing an integrated public  
transport network system and  
environmentally friendly transportation**

Renstra 2019 – 2023, City Transport  
Agency:  
97% Bus fleets and ‘angkot’ in decent  
condition;  
21% *public transport mode share*

Improving  
quality of  
public  
transport

Accessibility  
and promote  
'active  
mobility'



Financial and  
business plan

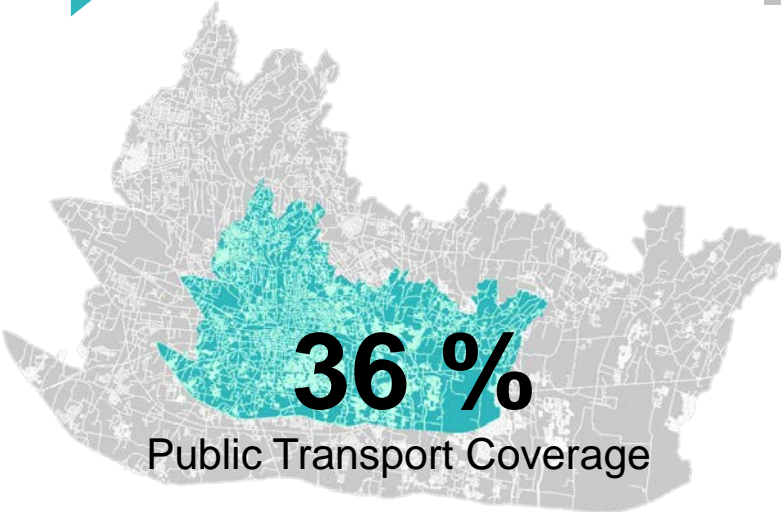
Capacity  
building

Regulatory  
framework  
and  
institutional  
establishment





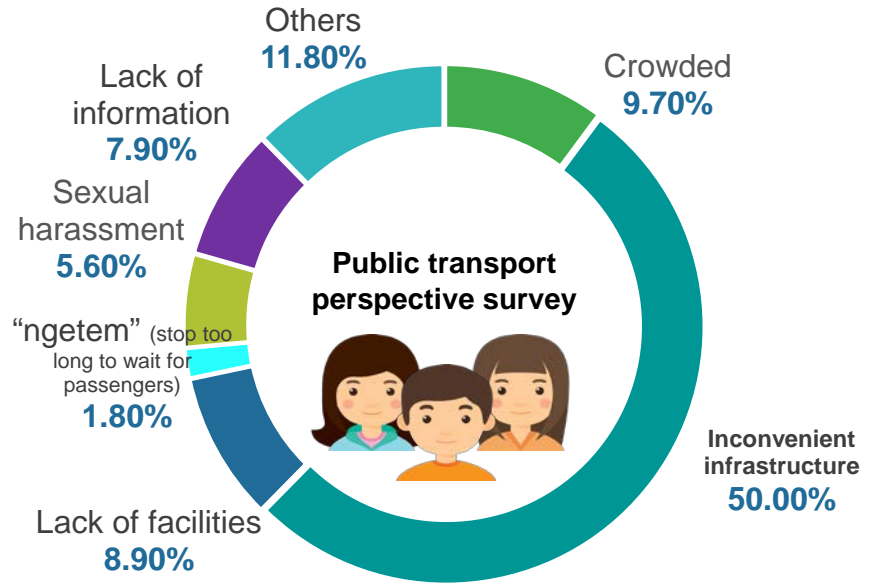
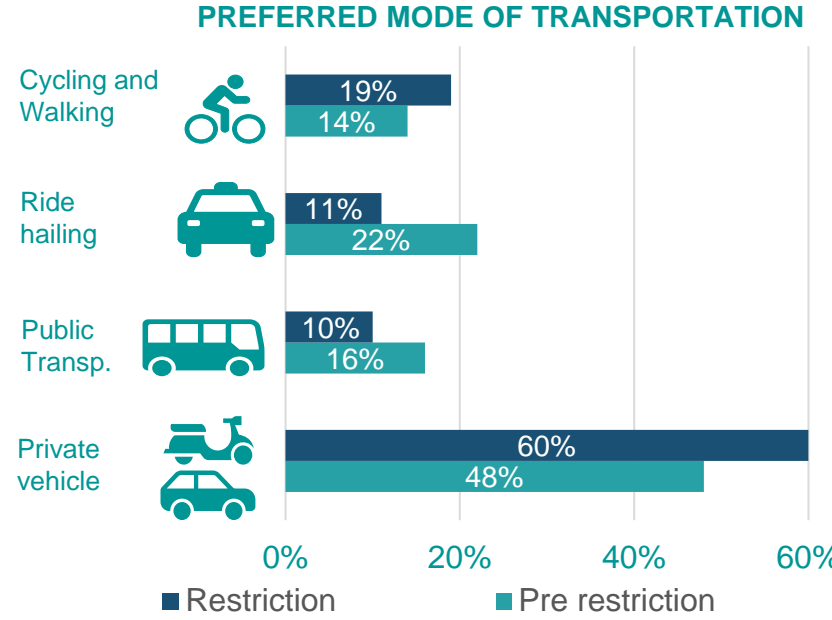
**Providing access to safe,  
affordable, accessible and  
sustainable transport  
systems for all.**

# CURRENT CONDITION




### Existing Public Transport Performance

	
<b>Operation hour:</b> 06:00 – 18:00	<b>Op. hour</b> : 05:00 – 23:00
<b>Route</b> : 5 route	<b>Route</b> : 36 routes
<b>Headway</b> : 20 min	<b>Headway</b> : 3 min
<b>Ridership</b> : 6.8 pax/bus	<b>Ridership</b> : 1.8 pax/fleet




**Women** travel longer distance with public transport more than **men**



**Peak hours:** 08.00 and 16.00-20.00



**Kids and students** Most likely to use transit because bus routes are limited

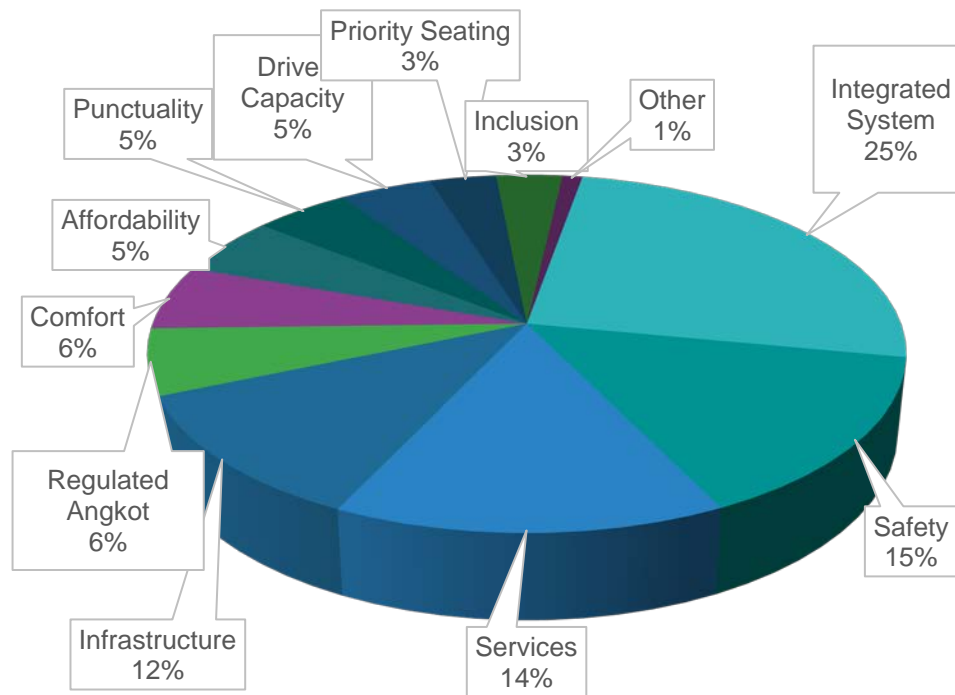
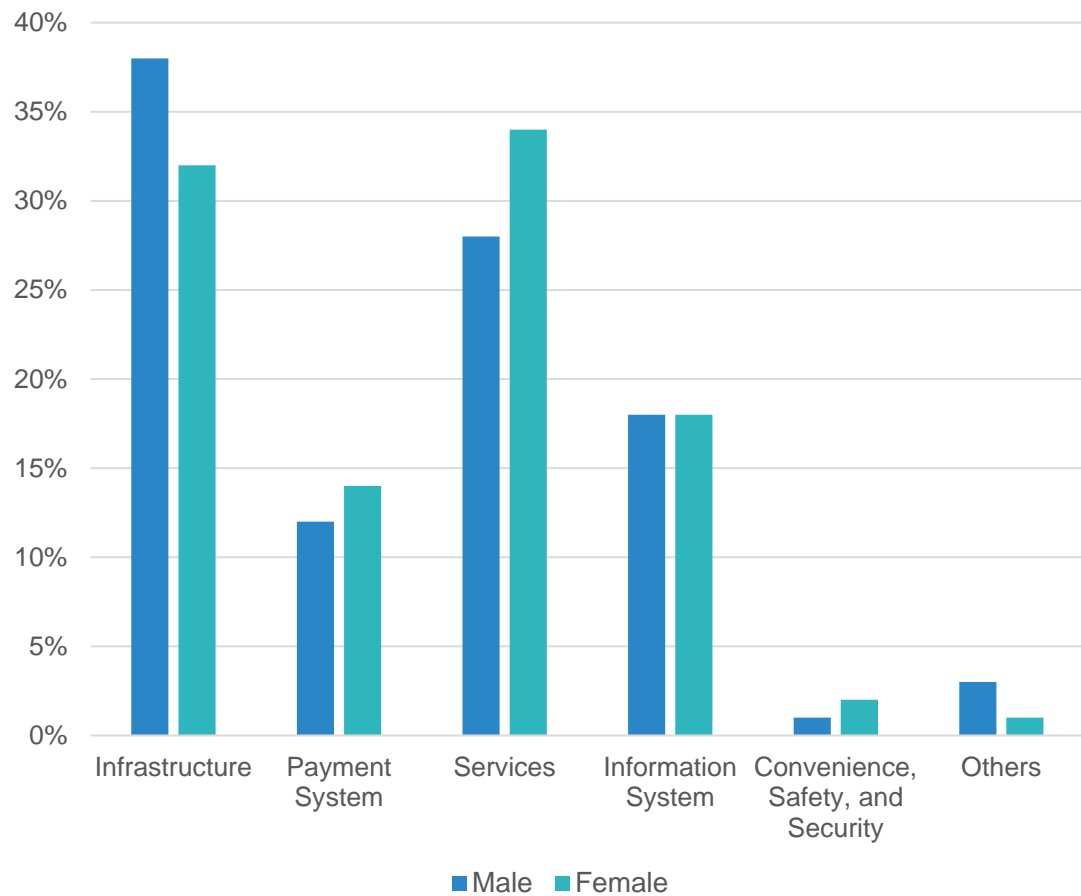


**Disabled people** prefer to use ride hailing services





# EXPECTED IMPROVEMENTS

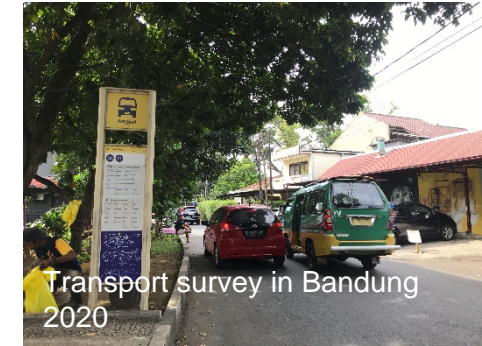


# Shift to integrated and sustainable transport

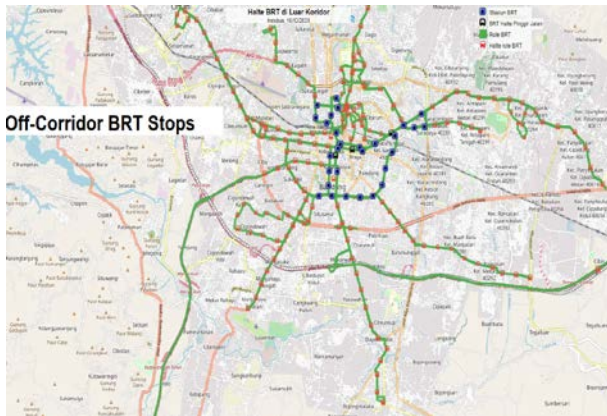
Gradual, ongoing, and structured approaches



Baseline	Shift to integrated transport planning
Focus on traffic	Focus on <b>people</b>
Main target: traffic flow and capacity	Main target: <b>accessibility and livability</b> , including social justice, environmental protection, and economic growth
Focus on types of modes	<b>Focus on integrating available modes</b> and planning toward sustainable mobility
Main topic: infrastructure	<b>Combining</b> infrastructure, market interest, regulation, and promotion
Sectoral planning	<b>Consistent planning</b> at regional level and <b>multidisciplinary planning</b>
Short and medium term	Short term and medium-term plan reflected in <b>the long-term vision and strategy</b>
Done by sector experts	<b>Collaborative, participatory and transparent planning</b>



# MAJOR PUBLIC TRANSPORT PROGRAM IN BBMA



## Bus Rapid Transit Corridor

- 169 km
- 12 BRT Routes
- 31 stations
- On & Off Corridor Service Plan with dedicated lanes and mixed lanes

## High Speed Railway Jakarta - Bandung

- 142.3 Km
- 4 stations with 2 within the BBMA
- 2023-2025 operational plan

## Buy the Service Corridor

- Bus operation assistance programme by the Ministry of Transport
- 5 routes in BBMA
- 240 stations
- Bandung City Centre as the main hub

## BBMA Urban Railway (LRT/Monorail)

- 8 routes in BBMA
- Mostly service Bandung City – feasibility study completed
- 64,000 pax/day for Stage 1 operation

**“Improving public transport system in Bandung City is imminent and contributes to the success of major public transport services in the Metropolitan Area”**





# FOCUS

During mobility restriction, there still be a core public transport passenger – reliance on public transport



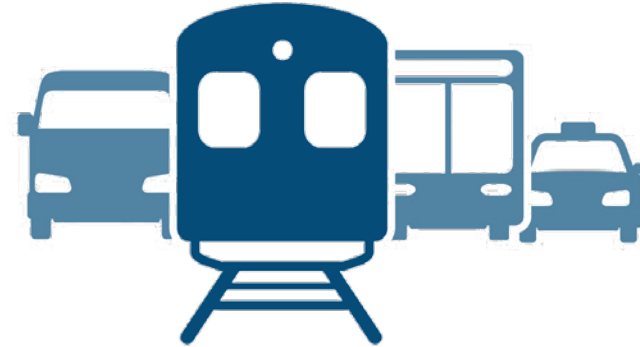
Occupancy drop 40 - 70%

Slight preference reduction between pre and post restriction: 16% - 13%



Key expectations:  
**improved service,**  
**good infrastructure,**  
and **reliable**  
**information system**

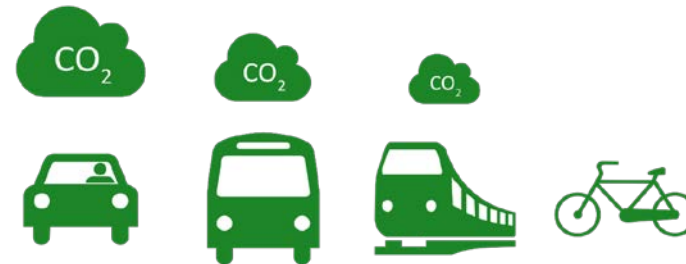
Investing in public transport is vital for Bandung City development



To address congestion problems

To contribute to regional development success

Bandung is at the centre of an important public transport reform delivered through major mass transport development in Bandung Basin Metropolitan Area for 2023-2025



GFCP Bandung intervention could also deliver assistance in the development of low carbon public transport strategy.

# How Bandung GFCEP Intervention assists (5 mins video)



# Challenges and Opportunities

## Challenges

- Mobility and direct engagement restriction undermines *angkot* operators engagement and substantive community participation
- Public transport system is not prepared to be pandemic resilient
- Local budget is prioritised for economic recovery
- Current financial institutions cannot be accessed by *angkot* industry to fund their fleet improvements
- Digital system vs access to smart mobility
- Transport GHG emission data has not yet informed in Bandung transport strategic plan

## Opportunities

- Bandung is at the centre of an important public transport reform delivered through major mass transport development in Bandung Basin Metropolitan Area for 2023-2025
- Opportunities to introduce carbon baselining to access green financing for sustainable transport
- Development green transportation modes in Bandung

# LOW CARBON TRANSPORT STRATEGY

This year, Indonesia will play an important role as a co-chair along with the UK in the COP26 Conference which will be held in Glasgow, next November. COP26 is the United Nations (UN) Summit focusing on climate change. This is in line with the vision of the City of Bandung, as stated in the RPJMD the city of Bandung, which is committed to reducing emissions and being pro-environment.



## Low carbon transportation strategy - Activities

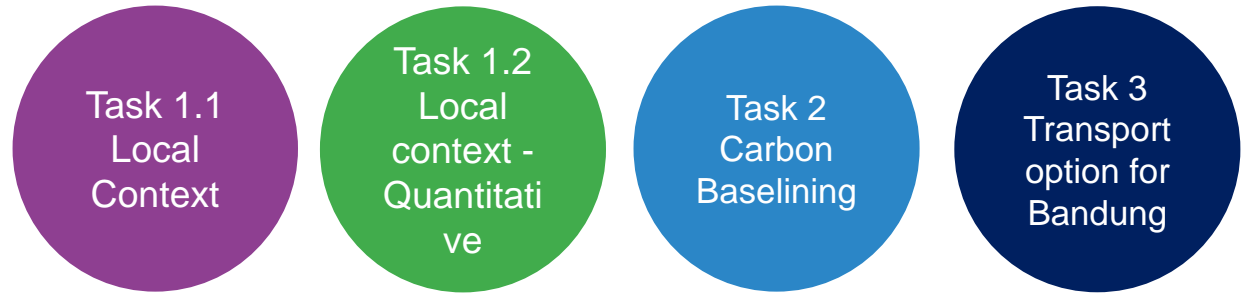
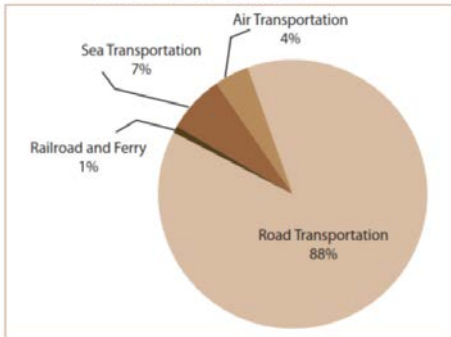


Figure 1 Share of primary energy use within the Indonesian transportation sector (2005).



**In developing countries, transportation is the largest and fastest source of greenhouse emissions**

Source: Indonesia Technology Needs Assessment (BPPT and KLH, 2009)

## What does Low carbon transportation strategy mean?

- Providing reliable infrastructure and services
- Safety and accessible for all
- Reducing short and long term negative impacts on local and global environment

*“This study will assist Bandung City to explore various options for Low carbon transportation strategies that are most suitable for Bandung, as well as increase awareness of the challenges of climate change in the future”*

## Findings – SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>Good digital connectivity</li> <li>Traffic Control System</li> <li>Emission testing</li> <li>Tourism/Culture/Education</li> <li>Existing campaigns (including climate change programme)</li> <li>Existing sustainable transport infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Integration between modes</li> <li>Limited public transport services</li> <li>Lack of policy alignment</li> <li>Quality and accessibility of transport network</li> <li>Topography</li> <li>Limited public transport services</li> <li>Lack of policy alignment</li> <li>Congestion</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>Cycling behavior</li> <li>Improvement of Public Transport</li> <li>Pedestrian Improvements</li> <li>Travel Demand Management</li> <li>Incentives and disincentives (changes in policy)</li> <li>Advanced technology and new modes</li> </ul>	<ul style="list-style-type: none"> <li>Financial capacity and budgets</li> <li>Strategy not integrated</li> <li>Climate resilience</li> <li>Recovery from Covid-19</li> <li>Changing Behaviour</li> <li>Decarbonizing power sector</li> </ul>





Thank you