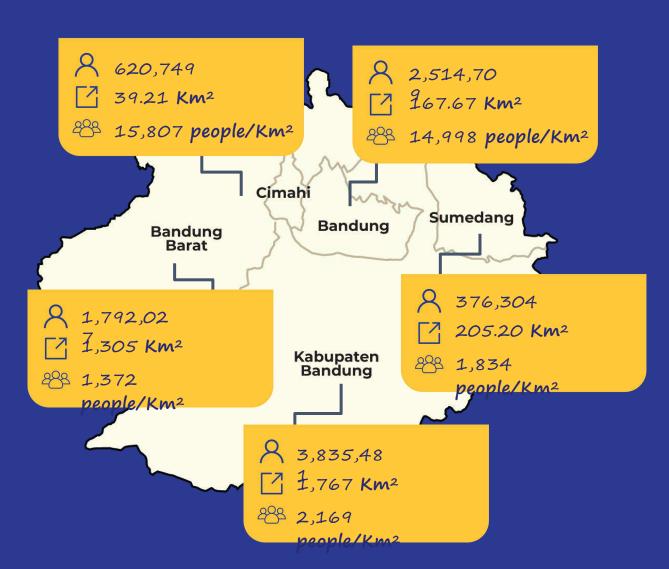


BANDUNG METROPOLITAN PROFILE



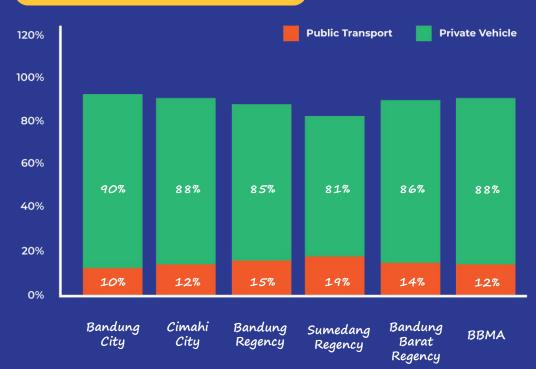




 It's expected that the population of the Bandung Metropolitan Area will grow quickly & exceed
 million by 2030

Public & Private Vehicle (Mode Share)





PROJECT BACKGROUND





National Medium Term Development Plan 2020-2024 West Java Medium Term Development Plan 2018-2023

Provincial Strategic Project

Bandung Metropolitan Urban Railway

The Feeder of Jakarta Bandung
High Speed Train

Become one of the main drivers of the regional economy

Urban Mobility Plan



5 Phases, 12 Steps & 2 Reports



SUSTAINABLE URBAN MOBILITY STRATEGY IN BANDUNG BASIN METROPOLITAN

Phase 1: Preparation

Phase 2: Long Term Vision Phase 3: Baseline Analysis SUSTAINABLE URBAN MOBILITY STRATEGY

BANDUNG BASIN

METROPOLITAN VOLUME 2

Phase 4 : Strategy Phase 5 : Action Plan

• BANDUNG METROPOLITAN URBAN MOBILITY STRATEGY





Multi - Criteria							
Analysis for Route Preference	Corridor 1	Corridor 2	Corridor 3	Corridor 4	Corridor 5	Corridor 6	Corridor 7
Accessibility of people to jobs	4	6	2	7	1	3	5
Ridership	1	7	2	5	5	3	4
Ridership per kilometer	1	7	2	6	3	4	5
Maximum passenger load	1	5	3	6	6	3	2
Private vehicle km to travel	7	4	2	1	2	5	6
Private vehicle hours to travel	6	1	1	1	1	7	5
Overall	3	7	1	5	2	4	6

The Result

Corridor 3: Leuwi Panjang - Soreang

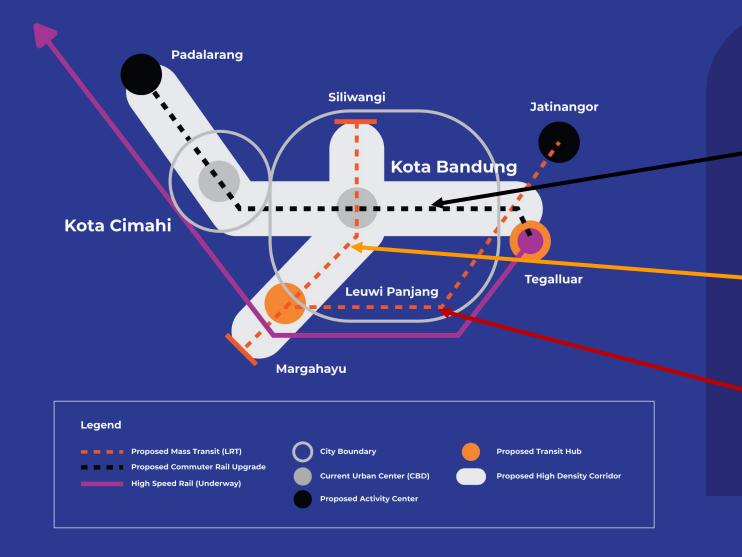
Corridor 5: Leuwi Panjang - Babakan Siliwang: Corridor 1: Jatinangor - Leuwi Panjang

Corridor 6: Elang – Gedebage Corridor 4: Gedebage - Majalaya Corridor 7: Martadinata – Banjaran Corridor 2: Leuwi Panjang - Ciburuy

• BANDUNG METROPOLITAN URBAN MOBILITY STRATEGY







PHASE 1 RECOMMENDATION

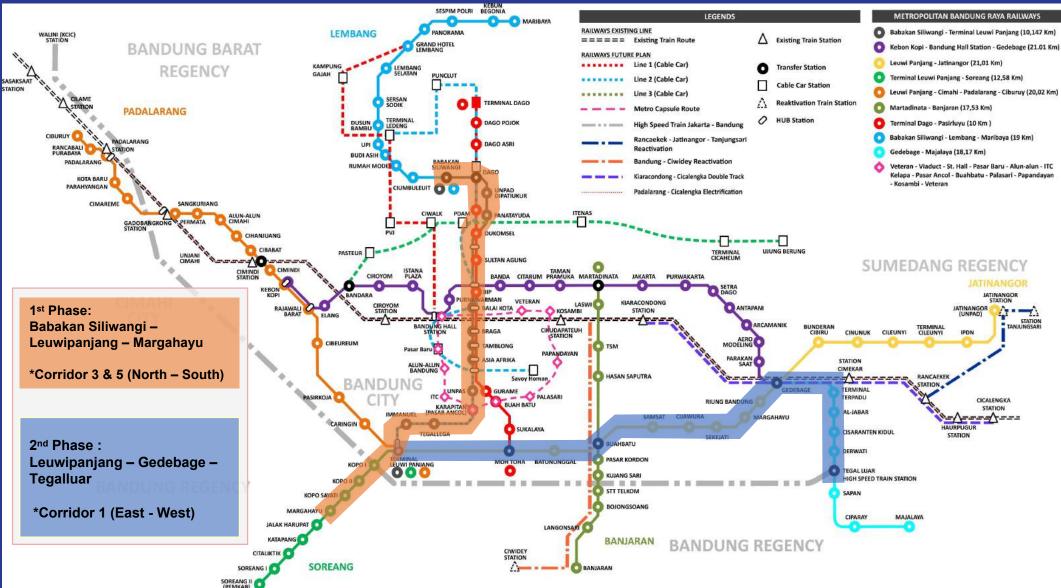


- > To improve the service of Padalarang — Cicalengka commuter railways & to build new connection from Tegalluar to Cimekar Station
- To build elevated North South Urban Railways from Babakan Siliwangi to Margahayu
- To build elevated West East Urban Raiways from Leuwipanjang to Jatinangor

• BANDUNG METROPOLITAN URBAN RAILWAYS







PROPOSED CORRIDORS









1st Phase (North – South Corridor) Babakan Siliwangi – Leuwipanjang

- Margahayu
- Corridor Length : 16.4 km
- > Number of station: 17 stations
- This corridor will connect northern part of Bandung with Southern part & will intersect with 2nd phase at Terminal Leuwipanjang

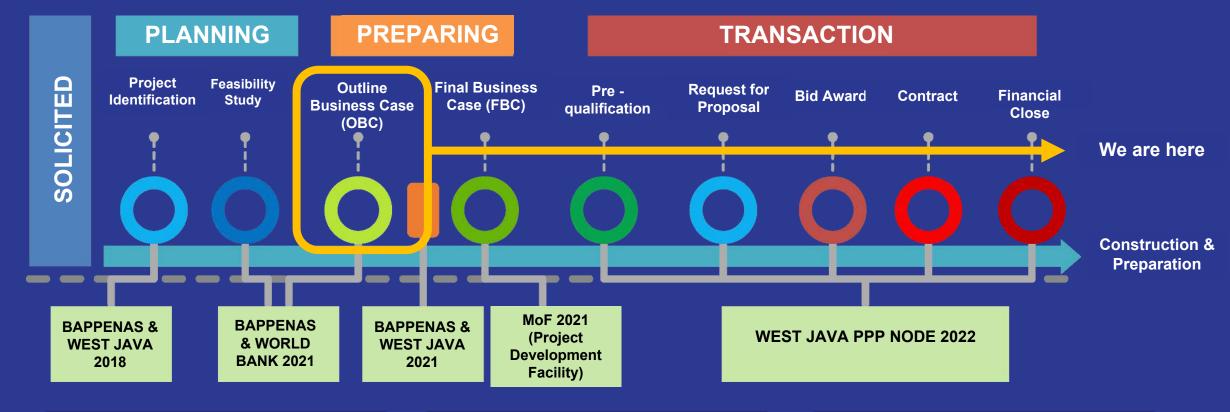
2nd Phase (East – West Corridor) Leuwipanjang – Gedebage – Tegalluar

- > Corridor Length : 16.55 km
- > Number of station: 16 stations
- > This corridor will connect the intercity bus terminal in Leuwipanjang & Hight Speed Train Station in Tegalluar

PPP PROCESS FOR THE PROJECT







Currently Finished Document:

- Due Diligence Assessment / Value Analysis (DDAVA)
- Early Business Case (EBC)
- Project Capability Review

Study conducted by:

- Ministry of National Development Planning
- West Java Province
- The World Bank

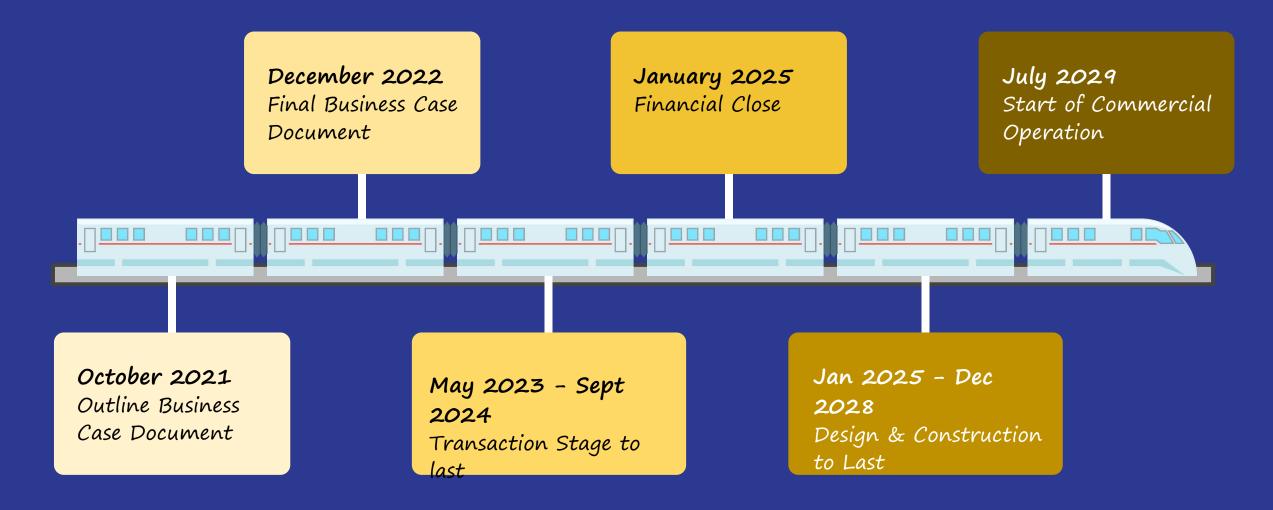
The World Bank's Consultans:

- PricewaterhouseCoopers Indonesia
- Crossrail International
- Systra MVA Singapore

• KEY MILESTONE OF THE PROJECT







• SELECTION OF TECHNOLOGY





Criteria		North – South Corridor			East – West Corridor				
		BRT	Monorail	LRT	MRT	BRT	Monorail	LRT	MRT
	1. Decrease travel time	Low	High	High	High	Low	Medium	Medium	High
	2. Increase public transport ridership	Low	Medium	High	High	Low	Medium	Medium	Medium
	3. Increase comfort and attractiveness	Low	High	High	High	Low	High	High	High
Satisfaction	4. Increase safety and security	Low	Medium	High	High	Low	Medium	High	High
of needs	5. Decrease road congestion	Medium	High	High	High	Low	Medium	Medium	Medium
	6. Increase transport and city connectivity	Low	Medium	High	High	Low	Medium	Medium	Medium
	7. Increase overall environmental quality	Medium	High	High	High	Medium	High	High	High
	8. Increase social wellbeing	Medium	Medium	High	High	Medium	Medium	High	High
	9. Minimize right of way requirements	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
	10. Ensure economic feasibility	Low	High	High	Low	Low	Low	Low	Low
Ecolbility	11. Ensure financial feasibility	Medium	Medium	Medium	Low	High	Medium	Medium	Low
Feasibility	12. Safeguard future proofing	High	Low	Medium	Medium	Low	Low	Medium	Medium
	13. Reduce engineering complexity/constructability	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
	14. Minimize technological risk	High	Low	High	High	High	Low	High	High
Planning	15. Minimize Implementation period	High	Medium	Medium	Low	High	Medium	Medium	Low

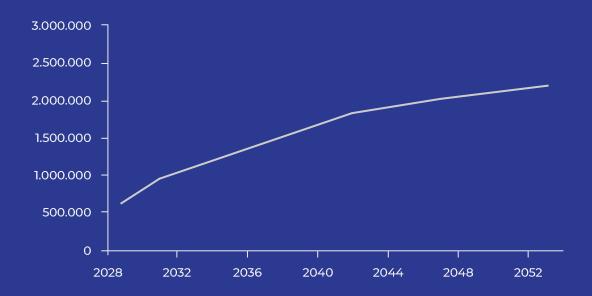
Based on Multi-Criteria Analysis, the technology recommendation for the two corridors is: Light Rail Transit (LRT)

• PROJECT COST ANALYSIS





Demand Projection Demand Projection for NS+EW Corridor, Pax per Day





Component	Amount
Ticket Revenue : Boarding Fee	IDR 3,000 per Passenger
Ticket Revenue : Distance – Based Fee	IDR 750 per Passenger Kilometre
Non – Ticket Revenue	5% of Ticket Revenue

Note: These tariff assumptions are applied across all technology alternatives. In addition, tariff is escalated every two years using inflation as well, which is the total inflation for the two years prior to escalation.

• PROJECT COST ANALYSIS

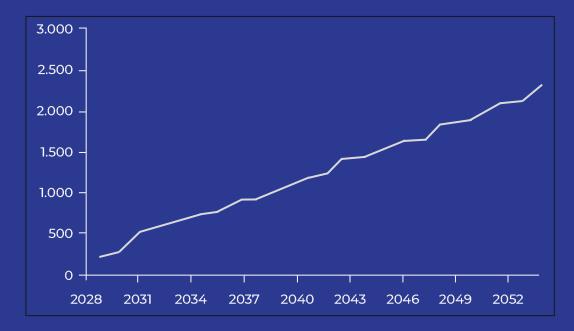




Tariff & Revenue



Revenue Projection for NS+EW Corridor in IDR Billion



Capital Cost (CAPEX) & Operating Cost (OPEX)

Cost Summary Breakdown	LRT
North – South Line	16.4 km
CAPEX	US\$ 764.2 M
OPEX	US\$ 182.9 M
East – West Line	16.5 km
CAPEX	US\$ 722.2 M
OPEX	US\$ 178.3 M

• PROJECT INDICATOR





Financial Parameters		
Discount Rate	10%	
Concession Period	30 years	
Financial IRR	12.5%	
Value for Money Indications	Project will be more suitable with PPP scheme (Positive VfM)	

Government Support / Guarantee Availability				
Government Support	 Fiscal Support (VGF) Land acquisition 			
Government Guarantee	 Infrastructure Risk Guarantee 			

Provincial Government Readiness			
Project status in RPJMN & RPJMD	Listed in RPJMN & RPJMD		
Fiscal Capacity Index	Very High		
Financial Report of Provincial Government	Unqualified Opinion (WTP*)		
Land Status	Owned by: • Provincial Government • National Government		

^{*}Wajar Tanpa Pengecualian

• SUPPORT NEEDS & FINANCING SCHEMES





Support for PPP Process



- Proposal for Project Development Facility (PDF) to the Ministry of Finance (target: November 2021)
- Listed in the PPP book of the National Development Planning Agency (after the OBC is completed)

Internal Discussion



- Discussion with the Project Owner (Governor)
- Discussion & approval from the legislature (DPRD)

Financial Scheme



- Infrastructure development using loans by the central government
- Rolling stock & operation/maintenance development using the PPP scheme

