



REPUBLIC OF INDONESIA
MINISTRY OF NATIONAL DEVELOPMENT PLANNING/
NATIONAL DEVELOPMENT PLANNING AGENCY

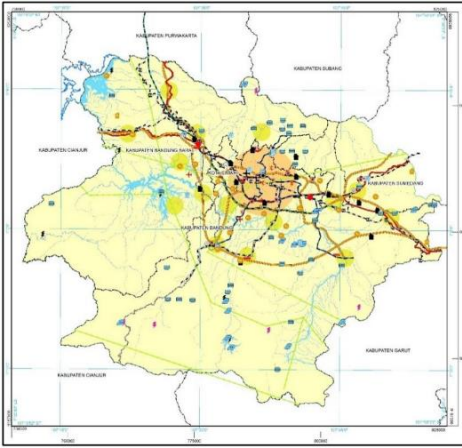
PUBLIC PRIVATE PARTNERSHIP

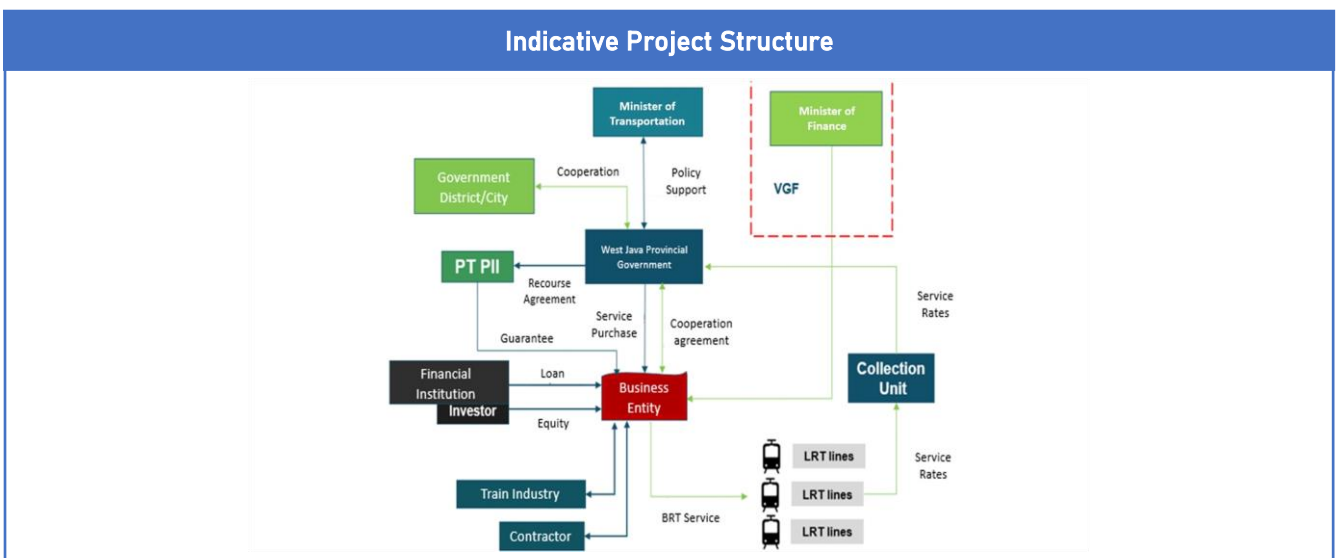
INFRASTRUCTURE PROJECTS PLAN IN INDONESIA

2022

Bandung Metropolitan Urban Railway

Location : Greater Bandung, West Java Province

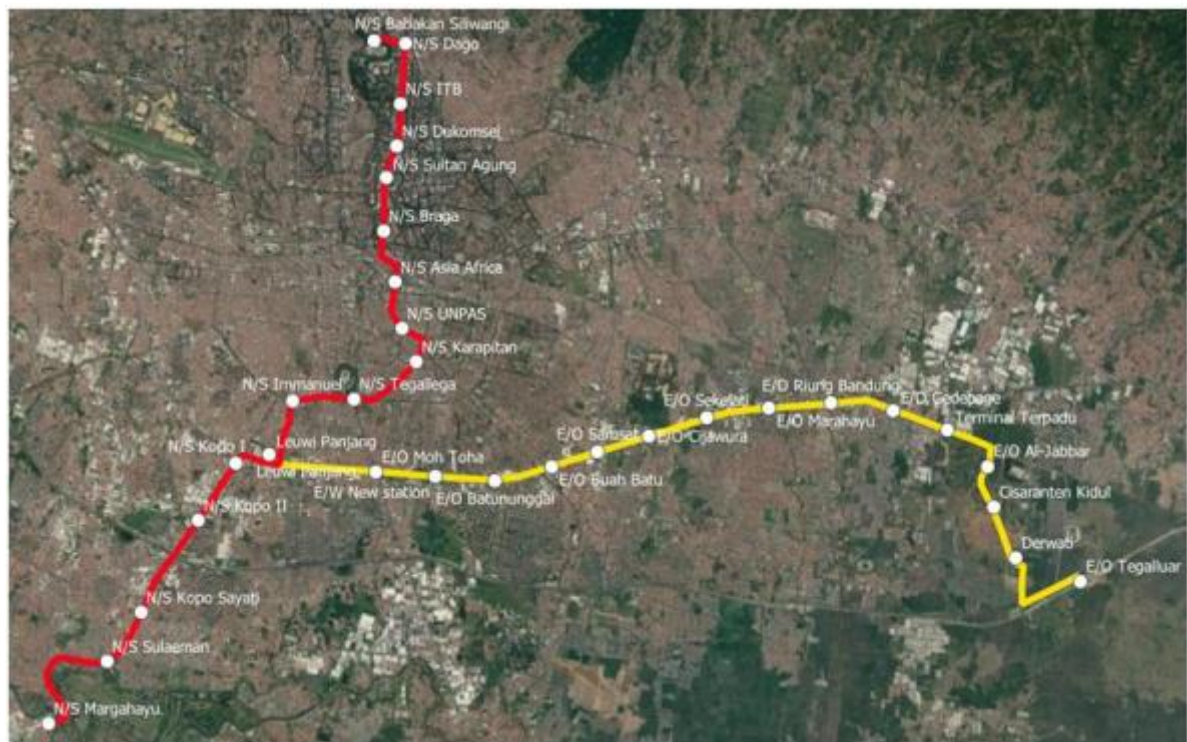
Sector : Transportation	Sub-Sector : Light Rapid Transit
	<p>Description: In 2019 around 12.3 million trips per day were made in Greater Bandung, only 12% of them were made by public transport. It is estimated that about one third (36%) of the road network will be saturated by 2023 and this will increase to about two thirds (70.5%) by 2030. The proposed mass transit project will therefore make better use of limited urban space by moving people faster and more reliably.</p> <p>Estimated Project Cost: USD 810.38 Million</p> <p>Financial Feasibility: IRR : 13.3% NPV : USD 340.35 Million</p> <p>Estimated Concession Period: 34 years (4 years construction and 30 years operation).</p>
<p>Government Contracting Agency: Governor of West Java Province</p> <p>Type of PPP: Solicited</p> <p>Return of Investment: Availability Payment (AP)</p>	

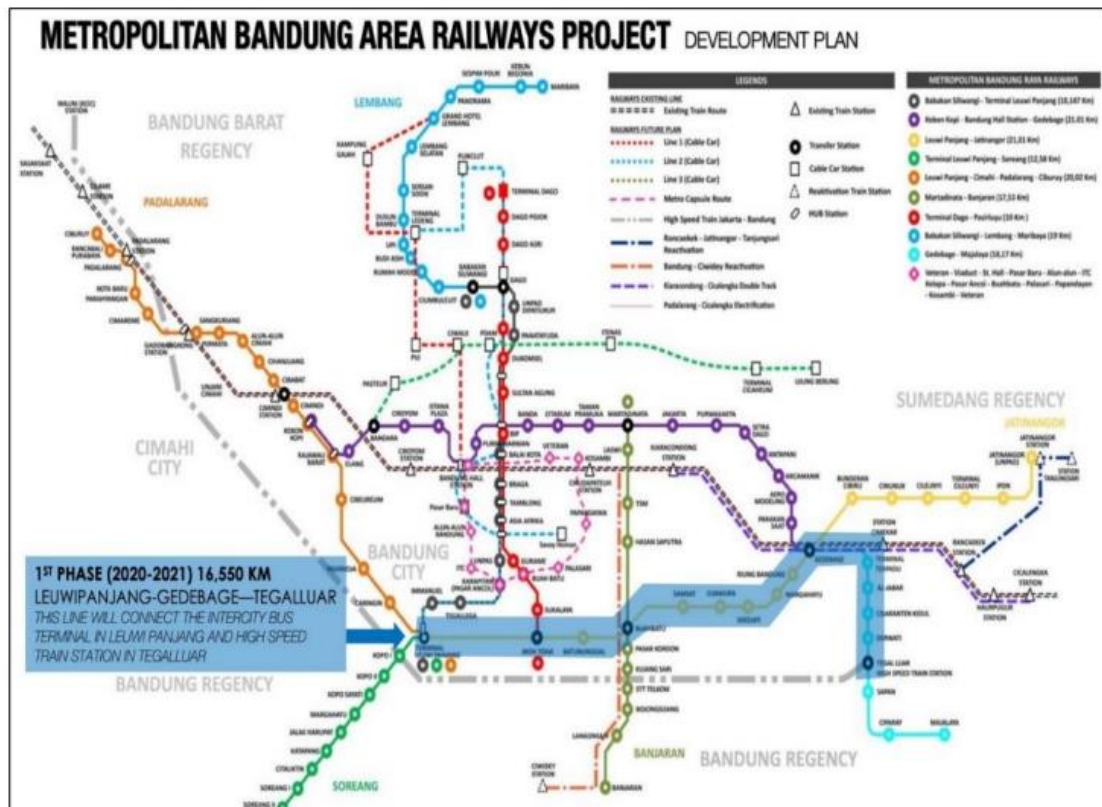


Project Digest

Project Title	Construction of Mass Transportation System in Greater Bandung City
Government Contracting Agency	Governor of West Java Province
Implementing Agency	Transportation Agency of West Java Province
Preparation Agency	Government of West Java Province
Project Cost	USD 810.38 Million
Estimated Concession Period	34 years (4 years construction and 30 years operation)
Location	Greater Bandung, West Java Province

1. Project Picture (Map and/or Illustration of Project)





Picture 1 – BBMA Mass Transportation Master Plan

2. The Opportunity

2.1. Project Background

The development of mass transit transportation in Bandung is aimed to provide more efficient and effective transportation system. In addition, the provision of this transportation infrastructure will be carried out through a Public Private Partnership scheme. This project will support the strategy implementation of an integrated transportation system stated under West Java Regional Medium-Term Development Plan (RPJMD) 2018-2023.

2.2. Project Description

The Mass Transit Transportation project in greater Bandung is located in West Java Province that consists of five regencies/cities, namely Bandung City, Cimahi City, Bandung Regency, West Bandung Regency, and five sub-districts in Sumedang Regency. The first line to be developed from the Mass Transportation System in the Greater Bandung Urban Area is the Babakan Siliwangi Corridor (Bandung City)-Margahayu (Bandung Regency). The estimated total project cost is USD 810,38 Million and LRT depot land area of 72,000 Sqm. The project concession will last for 34 years which divided into 4 years construction and 30 years operation.

2.3. Project Objectives

The project objective is to provide Greater Bandung with an affordable, efficient, effective, integrated, environmentally friendly, and secure public transportation system to serve the

mobility needs of the population, reduce congestion, accelerate growth, and support economic, social and cultural development.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

Business entity shall be responsible to perform the Bandung Metropolitan Urban Railway project, including financing, construction, operating, and maintenance.

4. Technical Specification

The technical specifications for Mass Transit Transportation project in greater Bandung are as follows:

No	Facilities	Capacity
1	Track Gauge	1,435mm
2	Axle load	12 ton
3	Min. curve radius	
	a) Main line	80 m
	b) Depot	60 m
4	Max. gradient	
	a) Main Line	40
	b) Access Depot	60
5	Relative humidity	40 - 98%
	Temperature	18 - 40Hai C
	Rolling stock indicative dimensions	
1	Car set length	110,000 mm
2	Car length	will be decided, based on the estimated demand
3	carriage width	2,700 mm
4	The height of the train from the top of the rail	3,700 mm
5	Max. train floor from above the rail	1,000 mm
	Rolling stock performance	
1	Max. fast operation	80 km/jam
2	Design speed	90 kpj
3	Acceleration rate	1 m/s ²
4	Braking rate (emergency)	1 m/s ² (1,3 m/s ²)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

This project is categorized as business activities that are required to have an EIA/AMDAL. The GCA will prepare an EIA/AMDAL document for this project. Some inputs are required such as baseline data, complementary plans and studies, such as baseline (business as usual) for noise vibration emission and noise vibration impact monitoring system, noise vibration impact assessment and modeling, construction management plan, COVID-19 response plan and traffic impact analysis.

6. Land Acquisition and Resettlement Action Plan

Land Requirements Based on design items:

Description	Square meter
Land acquisition for main corridor (new acquisition due to realignment)	15,300
Tentative land acquisition for station access	3,400
Tentative land acquisition for station site	19,199
Tentative land acquisition for placement of piers/tracks on existing roads	33,050
Depot	72,000
TOTAL	142,949

The land area that needs to be expanded including underground will be assessed in the subsequent studies.

7. Project Cost Structure

Estimated Project Cost	USD 810.38 Million
Indicative Debt to Equity Ratio	
- Debt Level	75%
- Equity Level	25%
IRR	13.3%
NPV	USD 340.35 Million

8. Government Support and Guarantee

It is indicated that this project will require government support, such as Viability gap fund (VGF) and government support for infrastructure components (including viaducts, stations and depots).

9. Contact Information

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