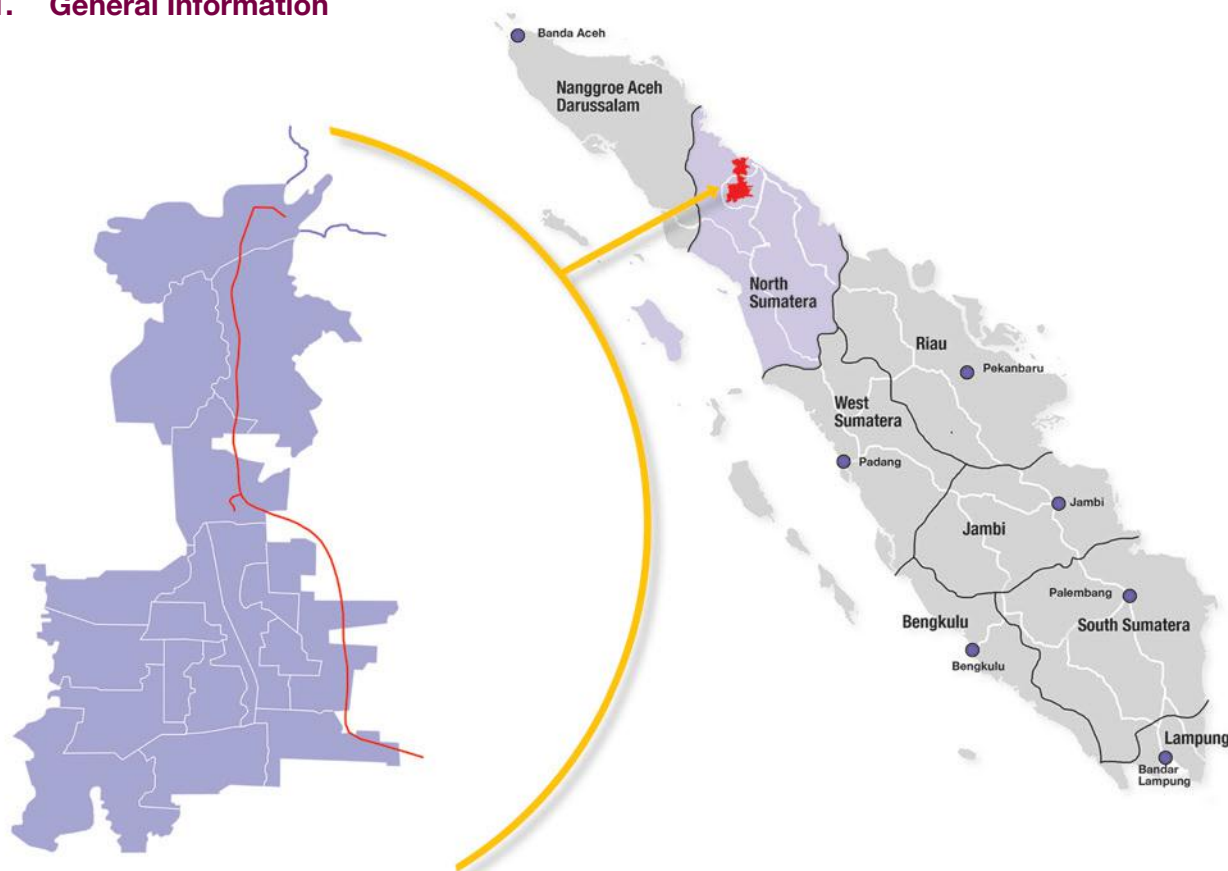


URBAN RAILWAY CITY OF MEDAN, NORTH SUMATERA

1. General Information



Government Contracting Agency	: Mayor of Medan
Implementing Unit	: Local Development Planning Agency, City of Medan
Preparation Agency	: 1. Local Development Planning Agency, City of Medan 2. Ministry of National Development Planning
Estimated Project Cost	: USD 477.40 million
Estimated Concession Period	: 35 years
Location	: Medan, North Sumatera

2. The Opportunity

2.1. Project Background

Medan is the capital city of North Sumatera Province – a growing city in term of population and economic development. It has 265.10 km² area with density about 8,008 inhabitants/km² which ranked 15th for the highest dense city in Indonesia. The people of this city still rely on their mobility through private vehicles and road sector. From the total of existing

vehicles in Medan, 408,877 units are private vehicles, 4,523,956 units of motorbike and 26,960 units of becak motor. Only 1% allocated for public transportation such as mini vans and buses.

In order to reduce congestion and improve connectivity in the urban area, the government of Medan city proposes the development of rail transportation. Currently, the city of Medan has existing railway network that connects Medan to others cities and districts in North Sumatera province but urban railway still unavailable. The urban railway will use a light rail system for its technology selection considering its technical – wise and investment cost.

2.2. Project Description

The urban railway will stretch from Southwestern part to Northeastern part of Medan City which accomodate integration between LRT and BRT as shown in the picture below.



2.3. Project Objectives

The project aims to improve accessibility and connectivity in Medan by considering related aspects such as technical, financial, economic and environment.

3. Business Entity’s Opportunity

The project still in progress to select a suitable scheme to attract investment, however, an Availability Payment (AP) is proposed for project investment in 10-15 years with end user tariff scheme afterward. Potential revenue generated from farebox and non – farebox revenue such as transit oriented development in the station.

4. Project Technical Specification

The technical specifications for Urban Railway in Medan are as follows:

Width		1067 mm
Maximum design speed		80 km/h
Horizontal Radius		60 m
Minimum curve		15 m
Maximum elevation	lane	110 mm
	platform	70 mm
Minimum vertical radius		1000 m
Maximum slope	lane	40‰
	station	1.5‰
	depo	60‰
Wesel Angle		#10
Track type		Direct Fixation Track

5. Environmental Impact Assessment (AMDAL) Findings

The information related to environmental assessment is not yet decided and will be provided in the subsequent studies.

6. Land Acquisition and Resettlement Action Plan

Pre – feasibility study indicates most of the trace will use Right of Way (RoW) from existing arterial road. The land requirement is about 32 Ha with land acquisition estimated for about 1.20 Ha along the route.

7. Project Structure

No		LRT	BRT	LRT+BRT
1	Interest rate	12,0% p.a	12,0% p.a	12,0% p.a
2	Financial fees	1,1%	1,1%	1,1%
3	Loan Term	20 years	20 years	20 year
4	Grace Period (2)	5 year	3 years	5 year
5	Length	22,74 km	13,40 km	36,10 km
6	Investation/km	USD 15.58 million	USD 2.00 million	USD 17.60 million
7	Total investment	USD 354.30 million	USD 27.67 million	USD 381.00 million
8	IDC	USD 88.00 million	USD 4.60 million	USD 92.60 million
9	Finc Fee	USD 3.50 million	USD 0.30 million	USD 3.80 million
10	Total investment + IDC	USD 445.80 million	USD 31.57 million	USD 477.40 million
11	FIRR			12.5%

8. Government Support and Government Guarantee

The government support and guarantee for this project may be required. More detailed about this matter will be provided in subsequent studies.

9. Project Implementation Schedule



10. Contact Information

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