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# Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 01-Apr-2020 | Report No: PIDC28383

**BASIC INFORMATION****A. Basic Project Data**

Country Indonesia	Project ID P169548	Parent Project ID (if any)	Project Name Indonesian Mass Transit Program Support Project (P169548)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date Sep 28, 2021	Estimated Board Date Feb 10, 2022	Practice Area (Lead) Transport
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance, Republic of Indonesia	Implementing Agency Ministry of Transport	

**Proposed Development Objective(s)**

To improve urban mobility and accessibility on high priority corridors in selected cities of Indonesia and strengthen institutional capacity for mass transit development.

**PROJECT FINANCING DATA (US\$, Millions)****SUMMARY**

<b>Total Project Cost</b>	710.00
<b>Total Financing</b>	710.00
<b>of which IBRD/IDA</b>	500.00
<b>Financing Gap</b>	0.00

**DETAILS****World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	500.00
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**Non-World Bank Group Financing**

Counterpart Funding	210.00
Borrower/Recipient	210.00



Environmental and Social Risk Classification

High

Concept Review Decision

Track II-The review did authorize the preparation to continue

## B. Introduction and Context

### Country Context

- 1. Indonesia has made remarkable progress over the past decade in terms of economic growth and poverty reduction.** From 2008 to 2018, annual growth averaged 5.4 percent and poverty rate fell from 15.4 percent to a record low of 9.7 percent. After six years of adjusting to lower commodity prices, economic growth has strengthened in the last three years on the back of solid domestic demand. Private consumption edged up to a four-year high on the back of low inflation and strong labor market conditions with the unemployment rate falling to a 20-year low of 5.3 percent. Indonesia's economic growth is expected to pick up in the medium term, despite continuing global economic uncertainties, with domestic demand expected to gradually continue to drive growth in the near-term, offsetting a weaker external sector. With intensifying risks from external sector and the end of the commodity boom, the development of priority infrastructure projects is crucial for Indonesia to provide avenue for higher sustained growth as well as to emerge as a strong upper-middle-income economy in the coming decade.
- 2. Indonesia, the world's fourth most populous country, is becoming increasingly urban.** Today over half of the population lives in cities; by 2045, the centenary of Indonesia's independence, nearly three-quarters will. In 2016, Indonesia had 14 cities with a population greater than 1 million and 12 cities with a population between 500,000 and 1 million. Rapid urbanization is increasing the importance of cities as living space for people and economic hubs. The agglomeration effects generated by the proximity of people and activities in urban areas are a key factor for their success. However, while urbanization has helped to deliver prosperity, provide economic and social opportunity, and stimulate innovation in Indonesia, it has not done so to the same extent as in many of its neighboring countries. Indonesia's cities are also struggling with traffic congestion, pollution, and continued shortages in access to many basic services.
- 3. Congestion and poor transport services are among the main factors of low economic growth and inequality of Indonesian cities.** An analysis by the World Bank Transport team on traffic speeds of Indonesian cities<sup>1</sup> found that they are slow, not only in peak periods but throughout the day, and especially for public transport vehicles, with a daily average of between 23 and 28 km/h. Consequently, average commuting times in Indonesian cities, especially for the poor and those dependent on public transport, is high compared to peer cities. High traffic congestion in Indonesian cities costs at least US\$5.6 billion nationally per year (equivalent to 0.5 percent of national GDP) in terms of excess travel time, fuel consumption and Green House Gas (GHG) emissions. Congestion is most severe in the Greater Jakarta area where congestion costs exceed US\$4 billion per annum and amount to nearly 2 percent of GDP. Income inequality in urban areas, measured by the GINI coefficient, increased from 0.35 to 0.42 between 1995 and 2011. While Indonesia registered a 25 percent decline in rural poverty between 2004 and 2012 (albeit from a higher threshold), there was a far lower decline of 6.5 percent in urban poverty in the same period.<sup>2</sup>

<sup>1</sup> The analysis covered Greater Jakarta (Jabodetabek) and 28 other urban agglomerations including all cities with over 1 million population.

<sup>2</sup> World Bank Report. "Time to ACT - Realizing Indonesia's Urban Potential". 2019.



## Sectoral and Institutional Context

4. **Private transport dependence is increasing in Indonesian cities.** Much of the growth in Indonesia's urban population has been in urban areas remote from centers of employment and commerce. Residents need motorized transport to reach jobs, education and social activities and the coverage and quality of public transport provided does not offer a credible alternative to motorcycles and cars. This has resulted in unsustainable growth in car and motorcycle ownership (8.5 percent and 10.5 percent p.a. respectively, from 2007 to 2017) and consequently a high level of motorization (488 per 1,000 people in 2017; out of this, 430 were motorcycles).<sup>3</sup> Road transport, and predominantly private motor vehicles, is a major contributor to high levels of airborne particulate matter in Indonesian cities, and residents of Jakarta can expect to lose 2.3 years of life expectancy if 2016 pollution levels are sustained over their lifetime.<sup>4</sup> Share of public transport compared to private modes is very low. The cities that have invested most in mass transit, Jakarta and Bandung, achieve a public transport modal share of around 15-20 percent. Other large Indonesian cities achieve a public transport modal share of around 5 percent or lower.
5. **Outside of the Greater Jakarta region Kota Bandung and Kota Medan were found to be the cities with highest peak hour congestion.** Bandung City was ranked as the second most congested city (behind Jakarta Selatan), out of 38 cities in Indonesia in a recent big-data diagnostic undertaken by the World Bank. Peak hour traffic speed within Bandung City was the third slowest, at 17km/h. The average travel speed of buses in Bandung is 10 km/h, and the average travel speed of minibuses is even lower as they frequently stop to wait for passenger. Medan City was ranked as the third most congested city (behind Jakarta Selatan and Bandung), out of the 38 cities tested in the World Bank diagnostic referred to above. Peak hour traffic speed within Medan City was mid-range of the large Indonesian cities, at 20 km/h. The average travel speed of minibuses in Medan is 17 km/h.
6. **After Decentralization in 1999, responsibility for addressing urban transport in Indonesian cities has been shifted to sub-national governments.** However, cities continue to lack: a) the technical expertise to adequately plan, design, implement and operate urban transport systems; and b) the necessary fiscal capacity to implement mass transit systems.
7. **The institutional structures are not appropriate to manage transport demand from areas outside a city's administrative boundary.** A city may only plan and regulate services within its boundaries, and Provincial Transport Agencies are responsible for developing and operating inter-district transport services but have no authority over services with cities and kabupaten. At the national level, the Ministry of Transport (MoT) is responsible for transport coordination between provinces and setting guidelines and regulation but has no authority over services within subnational administrative areas. Ministries and national agencies have their own, ad-hoc and uncoordinated, programs to support cities that does not encourage good practice in transport planning. There is a lack of transparency about which cities are allocated resources, and lack of coordination among national ministries.
8. **Given limited fiscal and human resource capacities of most sub-national governments and sub-optimal institutional framework for urban transport, the establishment of a national program supporting mass transit development is considered necessary to meet increasing demand for urban mobility in Indonesia.** Other countries such as Mexico, Colombia, China, and India have national programs to support cities in developing mass transit systems. In Indonesia,

<sup>3</sup> World Bank analysis using Statistics Indonesia data ("Number of motor vehicles by types, Indonesia 1949-2017").

<sup>4</sup> Michael Greenstone and Qing (Claire) Fan, 2019. Air quality life index, Update March 2019. Indonesia's Worsening Air Quality and its Impact on Life Expectancy



the central government intends to create an Indonesian Mass Transit Program (IMTP) to increase financial, technical, and institutional capacities of sub-national governments to plan, implement and manage public transport.

#### Relationship to CPF

9. **The Indonesian Country Partnership Framework (CPF), 2016-2020**, encourages World Bank engagement to move from *ad-hoc* sectoral interventions to programs that have the potential for significant national impact. The CPF aims to develop urban infrastructure to help the country reap benefits of urbanization and reduce the congestion and other adverse impacts. Within the scope of the CPF, enhancing prosperity for the poor and vulnerable rests in large part on improving equality and opportunities through enhanced connectivity and better access to services and jobs. This requires a heavier emphasis on urban infrastructure and on an enabling environment for the private sector, which is captured in the following CPF engagement areas:

- **Engagement Area 1: Infrastructure Platforms at the National Level.** At the national level engagement, the World Bank will seek to work in those sectors where we can have impact through ‘platforms’ in partnership with government and development partners, and where relevant, the private sector, to reach scale. Consistent with the intent of the CPF Area 1, IMTP is a ‘platform’ that endeavors to overcome financial and technical constraints to the implementation of mass transit systems across major Indonesian cities.
- **Engagement Area 4: Delivery of Local Services and Infrastructure.** The CPF recognizes that inadequate investment in urban infrastructure has retarded the poverty reduction and shared prosperity gains that could have been achieved by the rapid urbanization of Indonesia. In fact, the number of poor people in cities has increased more rapidly than in rural areas. Insufficient government spending on public transport has resulted in generally poor-quality service and fleet. The pillar 3 of this engagement area supports sustainable urbanization through interventions on key urban infrastructure sectors including urban transport and prioritizes strengthening the decentralization framework to improve local service delivery by strengthening capacity of sub-national governments. The IMTP proposed by the GOI aims to support selected Indonesian cities to provide effective mass transit systems and improve subnational capacity.

### C. Proposed Development Objective(s)

To improve urban mobility and accessibility on high priority corridors in selected cities of Indonesia and strengthen institutional capacity for mass transit development.

#### Key Results (From PCN)

1. The proposed project is expected to have significant positive benefits for the inhabitants and workers in the area of influence of the improved public transport systems. Among the expected results, including possible outcomes and output indicators, are:
  - Mobility will be measured by changes in total travel times for public transport users, including in-vehicle, transfers, wait and access times from selected origins and destinations;
  - Accessibility will preferably be measured by the number of jobs or urban activity centers accessible by public transport within reasonable standards of time and expense for the selected cities. If these data do not exist, accessibility may be measured by the coverage of high-quality public transport services or facilities in the selected cities.
  - Institutional capacity is expected to be measured by:



- Establishment of institutional structures to manage the IMTP at the national level and in each of the selected cities to plan and manage mass transit;
- The number of mass transit projects meeting the criteria for IMTP support under national urban mobility guidelines and/or policies currently under review. These guidelines and policies are expected to include criteria for Urban Mobility Plans in the selected cities identifying high priority corridors, analysis of alternatives, technical and financial feasibility studies, and transit-oriented development plans for priority mass transit projects;
- Number of staff trained on public transport planning, management and operation.
- Net changes in transport emissions of GHG and local air pollutants in intervened corridors;
- Net changes in road safety measures (e.g., number of injuries or fatalities per unit of traffic) in the intervened corridors;
- Net changes in user satisfaction with public transport services, disaggregated by gender and income.

#### D. Concept Description

2. The proposed project will provide technical assistance and financing support for the first phase implementation of IMTP in selected cities. The project will focus on two priority metropolitan areas, namely Bandung metropolitan area and Medan metropolitan area. The total cost of the project is estimated up to US\$710 million, with US\$500 million loan from the IBRD, and the remaining GOI co-financing. It is proposed that the project would have two main components, namely: institutional development and capacity building; and support for implementation of safe, resilient, green, and integrated mass transit in selected cities.
3. **Component 1: Institutional Development and Capacity Building (US\$70 million).** This component will provide support for roll out and implementation of the ITMP and will include project management, together with institutional support and capacity at national and subnational levels.
4. **Sub-component 1A: Project Management (US\$10 million).** The project will support project management for:
  - A national Project Management Unit (PMU) to manage the implementation of the first phase of the national program; and
  - The Establishment and operation of sub-national Project Implementation Units (PIUs) in each of the first phase cities to manage the planning, procurement (including PPP and Transaction Advisory services) and implementation of mass transit systems in each city.
5. **Sub-component 1B: National-level institutional support and capacity building (US\$30 million).** At the national level the project will support:
  - Relevant assessments and studies to assist MoT and Bappenas to develop a pipeline of cities for subsequent implementation of mass transit systems in accordance with RPJMN priority;
  - Development of guidelines, procedures and systems required to implement and manage the IMTP;
  - Institutional development and capacity building of a Technical Secretariat to take over the functions of the PMU for long-term management of the IMTP to ensure sustainability of the program.
6. **Sub-component 1C: Subnational-level institutional support and capacity building (US\$30 million).** At the sub-national/ metropolitan level the project will support:
  - Establishment of sub-national institutional structures with representation from Provincial, Kota and Kabupatens in each of the first phase cities, with appropriately trained and skilled manpower, to manage the integration, operations, revenue collection, and operator payment of mass transit systems in each city



(taking over from the PIUs). Such sub-national structures may include metropolitan area coordination authorities, such as the one considered by the West Java provincial government;

- Technical assistance, institutional development and capacity building of sub-national structures for the development of plans for integrated urban development, mobility plans, transit-oriented development, corridor and mode selection studies, and technical support for preparation, implementation and operation in each metropolitan.

7. **Component 2: Support implementation of safe, resilient, green, and integrated mass transit in selected cities (US\$640 million).** The project will fund infrastructure, equipment, and necessary preparatory studies and designs of mass transit systems in selected cities.

8. **Sub-component 2A: LRT and Commuter Rail in Bandung (US\$570 million).** Development of a North-South LRT corridor and improving performance of commuter rail line (estimated cost about US\$ 570 million). Based on review by the World Bank team of pre-feasibility studies by the Bandung City and PT. Kereta Api (Indonesia Railway Company), high level and technical discussions, and a field inspection mission by the team, the development of North-South corridor from Leuwi Panjang Bus Station to Babakan Silliwangi, improving performance of commuter rail line, and construction of a new double track branch line to the high-speed rail station at Tegal Luar are considered as priorities and would serve North-South and East-West movement of people in Greater Bandung (see Annex 2). The project will support development of the two priorities, but not the construction of a new double track branch line to the high-speed rail station at Tegal Luar, as it is considered by the MoT as a private initiative.<sup>5</sup> Estimated cost of development of the 12 km North-South LRT corridor is \$450 million. The estimated cost of improving performance of commuter line (double tracking 25 km of existing rail line, upgrade signaling and telecommunication systems, procuring new trains, and grade separating roads at 10 locations) is \$120 million. An Urban Mobility Plan for Bandung City was prepared and will be updated to cover the Greater Bandung Area. The output of the mobility plan will be used to confirm the prioritization.

9. **Sub-component 2B: Development of a BRT corridor in Medan (US\$70 million).** Feasibility studies for one LRT corridor and one BRT corridor in Medan were completed in early 2019 with the support from PT SMI (see Annex 2). The estimated investment cost of the LRT and the BRT are \$880 million and \$70 million, respectively. However, the progress has been stalled due to high costs of the proposed solution and inability of the city to allocate the necessary fiscal resources. It has been agreed that the French development agency, Agence Francaise de Developpement (AFD), will support development of the Urban Mobility Plan for Greater Medan, which will assist to confirm the most cost-effective and appropriate mode/technology. The LRT proposal needs a substantial refinement and an update of the feasibility assessment to validate the inclusion of the Medan LRT line in the first phase of the implementation. This will be reviewed during project preparation.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No
Summary of Screening of Environmental and Social Risks and Impacts	

<sup>5</sup> Construction of 4.2 km of a new double track branch line to the high-speed rail station at Tegal Luar (including rolling stock and signaling) is estimated to cost \$150 million.



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**APPROVAL**

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