Report and Recommendation of the President to the Board of Directors

Project Number: 51117-003
November 2020

Proposed Loans
Republic of the Philippines: Epifanio de los Santos Avenue Greenways Project

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Asian Development Bank
CURRENCY EQUIVALENTS
(as of 1 November 2020)

Currency unit – peso/s (₱)

₱1.00 = $0.02059
$1.00 = ₱48.54

ABBREVIATIONS

ADB – Asian Development Bank
AIF – ASEAN Infrastructure Fund
ASEAN – Association of Southeast Asian Nations
BBB – Build, Build, Build
DOTr – Department of Transportation
EDSA – Epifanio de los Santos Avenue
EMP – environmental management plan
GAP – gender action plan
IPIF – Infrastructure Preparation and Innovation Facility
LIBOR – London interbank offered rate
LRT – Light Rail Transit
MRT – Metro Rail Transit
O&M – operation and maintenance
PAM – project administration manual
PMO – project management office
PWD – person with disability

NOTE

In this report, “$” refers to United States dollars.
**Vice-President**
Ahmed M. Saeed, Operations 2

**Director General**
Ramesh Subramaniam, Southeast Asia Department (SERD)

**Directors**
Hiroaki Yamaguchi, Transport and Communications Division (SETC), SERD
Kelly Bird, Country Director, Philippine Country Office (PhCO), SERD

**Team leader**
Shuji Kimura, Senior Transport Specialist, SETC, SERD

**Team members**
Elah Marie Abangan, Project Analyst, SETC, SERD
Ruby Alvarez, Senior Project Officer (Infrastructure), PhCO, SERD
Cielo Añon, Senior Operations Assistant, SETC, SERD
Elizabeth A.C. Burges-Sims, Senior Social Development Specialist (Gender and Development), Human and Social Development Division, SERD
Mohammad Nazrul Islam, Transport Specialist, SETC, SERD
Edwin Lara, Safeguards Officer (Environment), PhCO, SERD
Yidan Luo, Young Professional, SETC, SERD
Lila Mallory, Senior Procurement Specialist, Procurement Division 2, Procurement, Portfolio and Financial Management Department
Anouj Metha, Principal Infrastructure Specialist, Office of the Director General, SERD
Alain X. Morel, Principal Country Specialist, PhCO, SERD
Takako Morita, Senior Counsel, Office of General Counsel
Michiko Suga, Senior Social Development Specialist, SETC, SERD
Gengwen Zhao, Transport Specialist, SETC, SERD

**Peer reviewer**
Andri Heriawan, Transport Specialist, Transport and Communications Division, South Asia Department

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# PROJECT AT A GLANCE

### 1. Basic Data

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<thead>
<tr>
<th>Project Number</th>
<th>Project Name</th>
<th>Department/Division</th>
<th>Executing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>51117-003</td>
<td>Epifanio de los Santos Avenue Greenways</td>
<td>SERD/SETC</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
<td></td>
<td></td>
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</table>

**Country Economic Indicators and Portfolio at a Glance**

- [https://www.adb.org/Documents/LinkedDocs/?id=51117-003-CEI](https://www.adb.org/Documents/LinkedDocs/?id=51117-003-CEI)
- [https://www.adb.org/Documents/LinkedDocs/?id=51117-003-PortAtaGlance](https://www.adb.org/Documents/LinkedDocs/?id=51117-003-PortAtaGlance)

### 2. Sector

<table>
<thead>
<tr>
<th>Subsector(s)</th>
<th>ADB Financing ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>123.00</td>
</tr>
</tbody>
</table>

### 3. Operational Priorities

- ✔ Accelerating progress in gender equality
- ✔ Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability
- ✔ Making cities more livable
- ✔ Strengthening governance and institutional capacity

### 4. Risk Categorization:

**Low**

### 5. Safeguard Categorization

- **Environment**: B
- **Involuntary Resettlement**: B
- **Indigenous Peoples**: C

### 6. Financing

<table>
<thead>
<tr>
<th>Modality and Sources</th>
<th>Amount ($ million)</th>
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</thead>
<tbody>
<tr>
<td>ADB</td>
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<tr>
<td>Sovereign Project (Regular Loan): Ordinary capital resources</td>
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<td>Cofinancing</td>
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<tr>
<td>ASEAN Infrastructure Fund - Project loan (Full ADB Administration)</td>
<td>15.00</td>
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<tr>
<td>Counterpart</td>
<td>41.30</td>
</tr>
<tr>
<td>Government</td>
<td>41.30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>179.30</strong></td>
</tr>
</tbody>
</table>

**Currency of ADB Financing**: US Dollar
General Mariano Alvarez
San Jose del Monte City
Trece Martires City
Meycauayan City
Santa Rosa City
Caloocan
Mandaluyong
Antipolo City
Quezon City
Malolos City
Binangonan
Santa Maria
Muntinlupa
Dasmariñas
Norzagaray
Makati
Cavite City
Valenzuela
Parañaque
San Mateo
Rodriguez
Pasay City
San Pedro
Bacoor
Manila
Taytay
Taguig
Cainta
Tanay
Malabon
Marikina
Antipolo City
Bula
Binangonan
Angono
Morong
Cardona
Navotas
Obando
Bulacan
Angono
Morong
Cardona
Navotas
Obando
Bulacan

Project Location
Stations
Light Rail Transit Line 1
Light Rail Transit Line 2
Metro Rail Transit Line 3
Boundaries are not necessarily authoritative.

This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.
I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan from the ordinary capital resources of the Asian Development Bank (ADB) (A loan), and (ii) a proposed loan funded through the participation of the Association of Southeast Asian Nations (ASEAN) Infrastructure Fund (B loan) under the ASEAN Catalytic Green Finance Facility, both to the Republic of the Philippines for the Epifanio de los Santos Avenue Greenways Project.

2. The project aims to improve the pedestrian environment in four areas (the Balintawak, Cubao, Guadalupe, and Taft mass transit stations) along Epifanio de los Santos Avenue (EDSA), a major artery in Metro Manila. Existing pedestrian facilities on EDSA are poorly designed, uncomfortable, and unsafe. The project will build or improve a total of 5 kilometers of covered elevated walkways around the four stations. Elevators will be attached to the elevated walkways to address the needs of the elderly, pregnant women, persons with disabilities (PWDs), and people traveling with small children. The elevated walkways will be connected to mass transit stations to help promote the use of public transport. The project is a part of Department of Transportation (DOTr) efforts promote walking as zero emission transport and develops flagship walkway projects known as Greenways projects.2

II. THE PROJECT

A. Rationale

3. Growing demand for transport. The Philippines’ inadequate transport infrastructure has weighed down the country’s ability to compete regionally and globally. This is reflected in the country’s ranking on the Logistics Performance Index published by the World Bank, which steadily deteriorated from 44th in 2010 to 71st in 2016.3 Owing to major efforts of the government to address the huge infrastructure backlog, the overall ranking has improved to 60th in 2018. As a result of consistent underspending on public infrastructure, the Philippine’s public capital stock as of 2015 was the lowest among members of ASEAN.4 To address this shortcoming, the government in 2017 launched the comprehensive Build, Build, Build (BBB) infrastructure development program, which aims to attract investments, provide improved connectivity, and spur economic growth through infrastructure development.5

4. The recent improvement and expansion of the transport systems are still inadequate to keep up with the growing demand for transport, especially in urban areas such as Metro Manila. Commuters continue to shift to private vehicles because of a lack of reliable and convenient public transport and poor infrastructure for non-motorized transport. The quality and performance of public transport and supporting infrastructures thus require significant improvement. The proposed project is closely aligned with these efforts and included in the BBB program.

5. Worsening traffic on Epifanio de los Santos Avenue. EDSA is the most congested road in Metro Manila. The Metro Manila Development Authority reported that annual average daily

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1. Metro Manila, also known as the National Capital Region, includes the city of Manila and 16 surrounding suburbs.


4. The public capital stock of the Philippines was 35% of gross domestic product in 2015, significantly below the ASEAN average of 69%.

traffic on EDSA reached 405,882 vehicles per day in 2019. The worsening traffic congestion has caused a myriad of problems. Daily economic losses because of congestion are estimated at PHP2.1 billion, which could rise to PHP3.3 billion a day in 2035 if no action is taken. Deteriorating air quality and road safety are also causes for concern. To reverse these negative trends and improve the transport system, the government has been expanding urban rail networks in Metro Manila, with projects including the Metro Manila Subway, the North–South Commuter Railway, Metro Rail Transit (MRT) lines 4 and 7, and the extension of Light Rail Transit (LRT) lines 1 and 2. Creating convenient and attractive interchanges within and among public transport modes will encourage greater use of public transport, leading to reduced traffic congestion.

6. **Poor pedestrian facilities.** Pedestrians are the most vulnerable road users. Of the recorded traffic accidents in Metro Manila, pedestrians account for more than 40% of annual traffic fatalities on average. Facilities designed to accommodate pedestrian needs are severely lacking. Improving pedestrian safety while reducing conflict at the street level between pedestrians and motor vehicles is a pressing issue. Resolving this issue will require adequate provision of space and facilities to support improved pedestrian safety and comfort, such as separating pedestrians from traffic through elevated walkways. Existing pedestrian facilities are poorly designed and highly unsafe for walking. Pedestrian walkways are narrow, lack adequate protection from the elements (e.g., rain and direct sunlight), and are not well-connected. In addition, security is undermined by a lack of lighting to ensure safe walkability at night. Pedestrian-friendly measures around mass transit stations are required to improve comfort and safety for pedestrians.

7. **Enhanced mobility for all.** Government priorities have been shifting to people-mobility over vehicle-mobility to improve inclusive mobility and accessibility (footnote 2). Physical design features that are friendly to women, the elderly, PWDs, and people traveling with small children are required to improve the pedestrian environment. These features can vary according to expected number of users, and can include features such as elevators, ramps, sufficient space for people movement, and adequate lighting. The project will adopt a people-friendly approach to enhance the pedestrian experience for all types of users, irrespective of age, gender, or mobility.

8. **Alignment with ADB’s Strategy 2030.** The project supports ADB’s Strategy 2030, as summarized in Table 1. The project is also in line with the country partnership strategy 2018-2023 by supporting its strategic pillar 1: accelerating infrastructure and long-term investment.

<table>
<thead>
<tr>
<th>Strategy 2030 Operational Priorities</th>
<th>Project’s Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerating progress in gender equality (OP2)</td>
<td>The project will promote safety and mobility for women in urban infrastructure in Metro Manila and support gender equality by encouraging contractors to increase employment opportunities for women in all stages of civil works.</td>
</tr>
</tbody>
</table>

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8 Parts of the North–South Commuter Railway are financed by ADB. ADB. 2019. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to the Republic of the Philippines for the Malolos Clark Railway Project*. Manila.
9 The ratio of pedestrian fatalities is high compared to other ASEAN countries. The ratios in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, and Thailand are 10%, 21%, 6%, 9%, 26%, and 8% respectively. Metropolitan Manila Development Authority. *Metro Manila Accident Recording and Analysis System: Traffic Accident Report*. Manila (5 years: 2014-2018); and ASEAN Secretariat. 2016. *ASEAN Regional Road Safety Strategy*. Jakarta.
### Strategy 2030 Operational Priorities

| Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability (OP3) | The project will support climate and disaster resilience by encouraging the use of low-carbon transport modes, such as public transport and walking, and integrating disaster risk reduction measures throughout the design of walkways. |
| Making cities more livable (OP4) | The project will encourage and support the use of public transport by providing pedestrian facilities designed for all, including women, the elderly, and persons with disabilities. |
| Strengthening governance and institutional capacity (OP6) | The project, together with an ADB financed technical assistance, will support capacity development of DOTr to uphold applicable ADB environmental and social safeguards. |

ADB = Asian Development Bank, DOTr = Department of Transportation, OP = operational priority.

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9. **Recovery from coronavirus disease.** While the project was planned much earlier, it will support the Philippines’ recovery from the coronavirus disease (COVID-19) pandemic. The civil works contracts will be awarded in the first half of 2021. The project will create 2.8 million person-days of jobs in Metro Manila, and local materials equivalent to ₱3.0 billion will be purchased through the civil works contracts. The developed walkways will encourage walking and will also provide covered space for queuing for public transport users, with proper social distancing procedures to deal with any future pandemics.

### B. Project Description

10. The project is aligned with the following impact: Inclusive mobility and accessibility achieved through the prioritization of people-mobility over vehicle-mobility (footnote 2). The project will have the following outcome: number of pedestrians increased, and pedestrian experience improved.¹²

11. **Output: Pedestrian walkways built.** The project will build a total of 5 kilometers of elevated walkways, including construction of new disaster-resilient walkways and replacement or widening of existing footbridges at four locations along EDSA: Balintawak, Cubao, Guadalupe, and Taft stations. The elevated walkways will be covered and properly lit. Elevators will be attached to the elevated walkways to address the needs of the elderly, pregnant women, PWDs, and people traveling with small children.

### C. Value Added by ADB

12. Since 2017, ADB has supported the government to accelerate preparation and improve the quality of the BBB program (footnote 5). ADB’s Infrastructure Preparation and Innovation Facility (IPIF) and other complementary technical assistance are providing support in identification of priority projects, feasibility studies, designs, tender process, and capacity development of implementing agencies.¹³ ADB’s continuous support has helped to accelerate project preparation and contributed to improve the quality of projects. For the proposed project, an international

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¹² The design and monitoring framework is in Appendix 1.

consulting firm mobilized under IPIF is supporting the DOTr with the feasibility study to design and tender the works, which promotes consistency and coordination among the stakeholders.

13. The project will have synergies with the MRT-3 Rehabilitation Project implemented by the DOTr and financed by the Japan International Cooperation Agency.\(^\text{14}\) Three out of the four project areas include MRT-3 stations. While the MRT-3 Rehabilitation Project will increase the capacity of the MRT-3, the proposed project will improve pedestrian environment to promote the use of the MRT-3.

### Box: Noteworthy Features of the Project

- The project will improve current poor pedestrian environment in the four project areas along Epifanio de los Santos Avenue (EDSA) through building and/or improving a total of 5 kilometers of elevated walkways. The elevated walkways will be connected to mass transit stations to help promote the use of public transport.
- Elevators will be attached to the elevated walkways to address the needs of the elderly, pregnant women, persons with disabilities, and people traveling with small children. The elevated walkways will have a roof protecting pedestrians from direct sunlight and rains and be equipped with sufficient lighting and monitoring cameras to provide a safe and secure pedestrian environment.
- Disaster resilience is embedded in the designs to ensure hazard-resistant structures.
- The project areas are highly urbanized along one of the busiest corridors in the Philippines. Intensive assessments and consultations with stakeholders for the design and construction plan have been undertaken, so that the elevated walkways can be built and/or improved without sacrificing traffic lanes on EDSA after construction, and with minimum traffic disturbance during construction.
- The project includes measures to ensure sustainable operation and maintenance (O&M) of the project facilities. The elevated walkways will have space for advertisements and small kiosks, and the income generated from these is projected to be more than sufficient to cover the costs of routine O&M. The Department of Transportation will also make arrangements with private sector entities, government-owned and controlled corporations, and/or local government units for continuous routine O&M.

### D. Summary Cost Estimates and Financing Plan

14. The project is estimated to cost $179.3 million (Table 2). Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).\(^\text{15}\)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount(^a) ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Base Cost(^b)</td>
<td></td>
</tr>
<tr>
<td>1. Output 1: Pedestrian walkways built</td>
<td>156.63</td>
</tr>
<tr>
<td>Subtotal (A)</td>
<td><strong>156.63</strong></td>
</tr>
<tr>
<td>B. Contingencies(^c)</td>
<td>17.94</td>
</tr>
<tr>
<td>C. Financial Charges During Implementation(^d)</td>
<td>4.73</td>
</tr>
<tr>
<td>Total (A+B+C)</td>
<td><strong>179.30</strong></td>
</tr>
</tbody>
</table>

\(^a\) Includes taxes and duties of $18.22 million, which will be finance by the government through cash contribution. Such amount does not represent an excessive share of the project cost.

\(^b\) In mid-2020 prices as of June 2020.

\(^c\) Includes physical contingencies, computed at 6.5% for civil works and consulting services and 12% for land acquisition and utility relocation cost; and price contingencies, computed at average of 1.5% on foreign exchange costs and 3.8% on local currency costs.

\(^d\) Includes interest and commitment charges. Interest during construction for the Asian Development Bank’s ordinary capital resources (OCR) loan and the ASEAN Infrastructure Fund (AIF) loan have been computed based on the 5-year United States dollar fixed swap rate. For ADB’s OCR loan, an effective contractual spread of 0.50% and maturity

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\(^\text{14}\) The government signed the loan agreement in November 2018. The contractor was mobilized in May 2019 and the rehabilitation works are expected to be completed in 2021.

\(^\text{15}\) Project Administration Manual (accessible from the list of linked documents in Appendix 2).
premium of 0.20% are added. For the AIF loan, the contractual spread is 0% during the grace period, after which the contractual spread is 1.40%. The commitment charges for the OCR and AIF loans are 0.15% per year to be charged on the undisbursed loan amounts.

Source: Asian Development Bank estimates.

15. The government has requested a regular loan of $123.0 million from ADB’s ordinary capital resources (A loan) and $15.0 million from the ASEAN Infrastructure Fund (AIF) (B loan) through its ASEAN Catalytic Green Finance Facility, to help finance the project. The A loan will have a 28-year term, including a grace period of 9 years; an annual interest rate determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan agreement for ordinary capital resources. Based on the custom-tailored repayment method, the average loan maturity is 19.0 years and the maturity premium payable to ADB is 0.20% per year. The B loan will have a 10-year term, including a grace period of 7 years; an annual interest rate determined in accordance with ADB’s LIBOR-based lending facility; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan agreement for AIF. Based on the straight line repayment method, the average maturity is 8.75 years, and there is no maturity premium.

16. The summary financing plan is in Table 3. The A loan will finance expenditures in relation to civil works, and consulting services for project management and construction supervision. The B loan will finance expenditures in relation to civil works, to be disbursed prorated with the A loan for the same category. The B loan will be administered by ADB. The government will provide $41.3 million for utility relocation, land acquisition and resettlement, taxes and duties, interest during construction and commitment charges, and administration costs.16

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount ($ million)</th>
<th>Share of Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Development Bank</td>
<td></td>
<td></td>
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<tr>
<td>Ordinary capital resources (regular loan)</td>
<td>123.0</td>
<td>68.6</td>
</tr>
<tr>
<td>ASEAN Infrastructure Fund through ACGF</td>
<td>15.0</td>
<td>8.4</td>
</tr>
<tr>
<td>Government of the Philippines</td>
<td>41.3</td>
<td>23.0</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>179.3</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations, ACGF = ASEAN Catalytic Green Finance Facility.

Source: Asian Development Bank estimates.

17. Climate mitigation is estimated to cost $179.3 million. ADB and AIF will finance 68.6% and 8.4% of mitigation costs, respectively. Details are in the PAM (footnote 15).

E. Implementation Arrangements

18. The DOTr will be the executing agency for the project. A project management office (PMO) will be established under the DOTr’s Office of the Undersecretary for Road Transport and Infrastructure. The PMO will be headed by a full-time project manager and will be directly responsible for the day-to-day implementation of the project. The construction supervision consultants financed under the A loan will advise the PMO in project preparation and project management. Consultants financed under the IPIF (footnote 13) are preparing the schematic design for design-and-build contracts and will support procurement of contractors under the project. As the AIF will cofinance the project, universal procurement will apply for both civil works and consulting services.17

16 Utilities such as electricity and communication lines, gas, water, and drainage pipes will be relocated before the construction of elevated walkways.

19. The implementation arrangements are summarized in Table 4 and described in detail in the PAM (footnote 15).

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>December 2020–June 2023</td>
</tr>
<tr>
<td>Estimated completion date</td>
<td>30 June 2023</td>
</tr>
<tr>
<td>Estimated loan closing date</td>
<td>31 December 2023</td>
</tr>
<tr>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>(i) Executing agency</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>(ii) Key implementing agency</td>
<td>Project management office (full-time project manager with up to 22 staff)</td>
</tr>
<tr>
<td>(i) Procurement agency</td>
<td>OCB</td>
</tr>
<tr>
<td>(ii) Procurement</td>
<td>2 packages $114 million</td>
</tr>
<tr>
<td>Estimated loan closing date</td>
<td>31 December 2023</td>
</tr>
<tr>
<td>Management</td>
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</tr>
<tr>
<td>Estimated loan closing date</td>
<td>31 December 2023</td>
</tr>
</tbody>
</table>

**Table 4: Implementation Arrangements**

Source: Asian Development Bank estimates.

### III. DUE DILIGENCE

#### A. Technical

20. The project’s technical viability has been confirmed and the schematic design of the project is being prepared through the IPIF consultants (footnote 13). The civil works will be procured through design and build contracts, and the contractors will finalize the detailed engineering design based on the schematic design.

21. Since EDSA is one of the busiest corridors in Metro Manila and the project sites are highly urbanized with only narrow sidewalks, the consultants conducted intensive assessments and prepared plans to relocate public utilities and traffic management before and during construction as well as coordinating these plans with other ongoing and/or planned infrastructure projects in the same areas. Elevated walkways will be built overhanging to EDSA carriageway with cantilever structure to create additional space for pedestrians without sacrificing congested traffic lanes of EDSA. Although the cantilever structure requires larger foundations, the consultants developed the reference construction plan which will allow the constructions to be done within the restricted space on EDSA. To minimize the disturbance to EDSA traffic during construction, the reference construction plan adopted a twenty-four hour construction scheme. These factors have increased cost implications that has been factored in the cost estimate.

22. The sites are in proximity to the West Valley Fault and are exposed to multiple hazards including earthquakes, liquefaction, tsunamis, and floods. Disaster resilience is being embedded in the schematic designs to ensure hazard-resistant structures, and will also be taken into account in the detailed engineering designs. The elevated walkways will have a width of 5 meters with a roof protecting pedestrians from direct sunlight and rain. The elevated walkways will be equipped

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18 The West Valley Fault cuts through six cities of Metro Manila: Makati, Marikina, Muntinlupa, Pasig, Quezon, and Taguig.
with sufficient lighting and monitoring cameras to provide a safe and secure pedestrian environment. The environment underneath the elevated walkways will be also improved by refurbishing pavement and providing lightings.

23. The impact of COVID-19 is evolving. The project will be responsive and flexible in meeting emerging needs and new best practices in construction. The implementing agency, the construction supervision consultants, and the contractor will incorporate emerging international construction best practices on managing COVID-19 risks. Such practices will also consider government guidance on safe working conditions during the COVID-19 pandemic.

B. Economic and Financial Viability

24. Economic and financial analyses undertaken concluded that the project is economically viable and financially sustainable. The main benefit of the project is an improved pedestrian experience, reflected in shorter perceived travel times for pedestrians. The overall economic internal rate of return of the project is estimated to be 21.8%. Each of the four project locations is economically viable, with economic rates of return exceeding 10.0%. The project’s elevated walkways will not be tolled and the government will shoulder the capital cost.

C. Sustainability

25. The DOTr will own the constructed walkways and be primarily responsible for operation and maintenance (O&M) of the walkways. The elevated walkways will have space for advertisements and small kiosks, and the income generated from these is projected to be more than sufficient to cover the costs of routine O&M. The DOTr will make arrangements with private sector entities, government-owned and controlled corporations and/or local government units for continuous routine O&M. The DOTr has experience in O&M of public transport assets and in making arrangements with private companies to build connections between MRT-3 stations and privately owned facilities.

D. Governance

26. The financial management assessment was prepared following ADB’s Guidelines for the Financial Management and Analysis of Projects, Financial Due Diligence: A Methodology Note, and related technical guidance notes. The assessment found that the DOTr has sound financial and accounting systems; adheres to the procedures, manuals, policies, guidelines, and reporting framework prescribed by the Commission on Audit of the Government of the Philippines; follows accrual-based accounting using an Enterprise Resource Planning system based on the Philippines Public Sector Accounting Standards; and has an internal control system with a separate internal audit division. The assessed pre-mitigation financial management risk is substantial, mainly because an insufficient number of DOTr staff are capable of accounting and internal auditing. Appropriate risk mitigation measures will be in place. Details of risks and key

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19 Financial Analysis and Economic Analysis (accessible from the list of linked documents in Appendix 2).
20 Private operators operate and maintain LRT lines 1 and 2 under concession agreements with the DOTr, while the DOTr directly maintains the MRT-3 line. The DOTr also has experience in opening direct connection from MRT-3 stations to neighboring malls or buildings. The DOTr signs memorandums of agreement with private companies setting out the terms and conditions for such connections.
mitigating measures are in the PAM (footnote 15) and in the risk assessment and risk management plan.\textsuperscript{22}

27. ADB will review procurement-related documents at all major milestones before proceeding with the procurement process. ADB’s Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the DOTr. The specific policy requirements and supplementary measures are described in the PAM (footnote 15).

E. Poverty, Social, and Gender

28. The project will improve the pedestrian environment and facilitate access to public transport. Public transport users and pedestrians are the beneficiaries of the project, and they are largely from poor and vulnerable segments. Better access to public transport and improved pedestrian safety will directly improve users’ quality of life. Particular attention will be given to ensuring suitable design features for PWDs, women, the elderly, and people traveling with small children.

29. Gender action plan. The project, categorized as effective gender mainstreaming, seeks to address the following gender issues: (i) inaccessible, unsafe, and inconvenient pedestrian facilities for women and marginalized groups (elderly, PWDs, children, and sexual minorities); (ii) unequal access to women and marginalized sectors, compared with able-bodied men, to employment opportunities generated by the project; and (iii) sexual exploitation, abuse, and harassment committed during civil works construction and in overall project implementation. Key gender action plan (GAP) activities include (i) integration of physical design features to make infrastructure accessible, convenient, and safe for all users (e.g., glass elevators, barricades, grab rails, tactile surfaces and signage, provisions for passive surveillance, rest areas, and greenery); (ii) proactive participation of women and PWDs in employment opportunities created by the project, and ensuring gender-sensitive and inclusive workplaces for them; (iii) awareness-raising and setting up of mechanisms to protect women, children, sexual minorities, and elderly from sexual exploitation, abuse, and other gender-based violence in the context of the project’s construction of civil works and overall project implementation; and (iv) ensuring effective GAP implementation and sustainability of gains. The GAP was informed by extensive consultations with stakeholders including civil society groups representing women, children, the elderly, PWDs, and the lesbian, gay, bisexual, and transgender communities. Its final formulation is the outcome of a series of workshops and discussions with government counterparts, including the DOTr Gender and Development Focal Point System for Road Sector.

30. HIV/AIDS and human trafficking. Transport and road projects pose a potential increase in HIV/AIDS and human trafficking cases, as they involve an influx of workers during construction. The construction supervision consultants will be tasked to design and implement information dissemination activities to raise awareness of sexual harassment, sexually transmitted diseases, HIV/AIDS, human trafficking prevention, city ordinances on women and gender and PWDs, and gender and disability sensitivity. The construction supervision consultants will raise the awareness of all contractors’ workers and residents of surrounding barangays of the four stations on gender equality and social inclusion in transport and infrastructure.\textsuperscript{23}

\textsuperscript{22} Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).
\textsuperscript{23} Barangay is the smallest public administrative division in the Philippines. Cities and municipalities are subdivided into barangays.
F. Safeguards

31. In compliance with ADB’s Safeguard Policy Statement (2009), the project’s safeguard categories are as follows.24

32. **Environment (category B).** The project is classified category B for environment under ADB’s Safeguard Policy Statement. An initial environmental examination was prepared and disclosed on the project website.25 Under the Philippine Environmental Impact Statement System, the project is not subject to an environmental compliance certificate.26 The project is expected to generate significant public health and well-being benefits by promoting safe, all-weather, inclusive, and zero-emission pedestrian transport facilities. The project will promote diversion of passengers from vehicular modes to walking and will reduce carbon dioxide emissions by an estimated 886 tons per year. Some adverse impacts on environment are anticipated during project implementation, primarily construction noise and dust, temporary traffic disturbances, and community and occupational safety hazard during construction. These impacts and risks will be temporary and site-specific and can readily be mitigated to acceptable levels through good construction practices and standard mitigation measures outlined in the environmental management plan (EMP). The EMP will be a part of the bidding documents for the civil works. The PMO, with the support of project management consultants to be hired under the A loan, will have primary responsibility to ensure that contractors comply with the provisions of the EMP and the environmental regulatory framework of the Philippines. PMO staff will be trained in environmental safeguard requirements through ADB technical assistance.27 Meaningful public consultations involving 243 people confirmed broad community support for the project. Community concerns and complaints will be promptly addressed through the project’s grievance redress mechanism (para. 34).

33. **Involuntary resettlement (category B).** The project is classified category B for involuntary resettlement under ADB’s Safeguard Policy Statement. Resettlement impacts have been minimized by confining the design and construction works within the road right-of-way. About 250 affected persons have been identified in the four station areas, including ambulant vendors and private individual landowners. With respect to the total land to be acquired (6,430 square meters), about 26.5% (1,705 square meters) belong to private individuals and corporations or 13 affected persons, the rest being public and/or government land. Of the 13 affected persons, only three (two corporations and one individual) will lose 10% or more of their lands. Four resettlement plans have been prepared—one for each of the four walkway locations. The plans espouse both national laws and regulations and ADB’s Safeguard Policy Statement (2009) to address the following involuntary resettlement impacts: (i) permanent loss of land from public (government and government corporations) and private (individuals and corporations) entities; (ii) permanent damage to secondary private and community structures mostly made of semi-permanent materials and public utility structures; (iii) temporary loss of access to business establishments during construction works and disruption of city services because of required relocation of electric posts; (iv) temporary physical displacement of ambulant vendors to alternative selling sites and displacement of one homeless individual; and (v) disruption of city services because of required relocation of electric posts.

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24 ADB. Safeguard Categories.
25 Initial Environmental Examination (accessible from the list of linked documents in Appendix 2).
26 The DOTr secured a certificate of non-coverage from the Environmental Management Bureau of the Department of Environment and Natural Resources on 9 July 2019.
34. The four resettlement plans will be updated based on the schematic designs of the walkways. The schematic design-based resettlement plans will reflect results of surveys including independent property appraisals and detailed measurement surveys.\(^{28}\) The resettlement plans mitigate involuntary resettlement impacts by providing compensation at replacement cost. Measures have been incorporated to improve the living standards of vulnerable affected people specifically through special assistance and livelihood restoration actions. As the DOTr has limited experience in implementing resettlement plans, ADB will provide capacity development training under ADB technical assistance (footnote 13) for staff of the Environment, Social and Right-of-Way Division on provisions of the resettlement plans and ADB’s Safeguard Policy Statement (2009). A grievance redress mechanism for resettlement and environmental issues has been put in place. The government will finance implementation of the resettlement plans. The resettlement plans have been disclosed on ADB’s website and to affected households.

35. Indigenous peoples (category C). Indigenous peoples are not present in the project area. The project is classified category C for indigenous peoples under ADB’s Safeguard Policy Statement.

G. Summary of Risk Assessment and Risk Management Plan

36. Significant risks and mitigating measures are summarized in Table 5 and described in detail in the risk assessment and risk management plan (footnote 22).

<table>
<thead>
<tr>
<th>Risks</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in procurement</td>
<td>• A consulting firm has been mobilized under the IPIF to prepare the schematic designs and bid documents and provide procurement support.</td>
</tr>
<tr>
<td></td>
<td>• Two individual consultants have been mobilized under ADB TA, Strengthening Infrastructure Capacity and Innovation for Inclusive Growth (footnote 13), to develop the capacity of DOTr staff.</td>
</tr>
<tr>
<td>Delay in utility relocation</td>
<td>• The DOTr organizes consultation meetings with the utility owners, including private electricity, communication, gas, and water supply companies, the Department of Public Works and Highways, and local government units.</td>
</tr>
<tr>
<td></td>
<td>• The consultants mobilized under the IPIF are facilitating consultations with utility owners to implement the relocations in a timely manner.</td>
</tr>
<tr>
<td>Financial management of the project is not carried out effectively</td>
<td>• The CSC will include a national financial management specialist on its team to support the PMO in reviewing and processing the claims for payment to the contractors/consultants.</td>
</tr>
<tr>
<td>Insufficient qualified counterpart staff</td>
<td>• A PMO will be established in the DOTr and a CSC will be mobilized to mitigate the lack of experience in project management.</td>
</tr>
<tr>
<td></td>
<td>• Training for DOTr staff will be provided under ADB TA, Strengthening Infrastructure Capacity and Innovation for Inclusive Growth (footnote 13), including training on environmental and involuntary resettlement safeguards, gender mainstreaming, civil works contract management, and accounting.</td>
</tr>
<tr>
<td>Delayed and insufficient provision for O&amp;M, since the government will</td>
<td>• Consultants mobilized under the IPIF will propose various types of O&amp;M arrangements, identify the legal and regulatory requirements for each type, and help the PMO select the most appropriate type of arrangement.</td>
</tr>
<tr>
<td>approve O&amp;M budget every year and there is no guarantee that</td>
<td>• The CSC will be mobilized to facilitate the discussion with stakeholders and prepare budget scheme proposals for the government, if necessary.</td>
</tr>
</tbody>
</table>

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\(^{28}\) Detailed measurement surveys are social surveys that include measurements or inventory of losses, census and socioeconomic survey of affected households, and property appraisal. Under the DOTr right-of-way and site acquisition manual, a qualified, professional geodetic engineer is to conduct a detailed measurement survey well in advance of construction, and qualified property assessors from a government financial institution and/or independent property appraisers are to conduct property appraisals to provide valuations of the land, assets, structures and improvements, crops, and trees, as appropriate.
### IV. ASSURANCES

37. The government and the DOTr have assured ADB that implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM and loan documents.

38. The government and the DOTr have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement.

### V. RECOMMENDATION

39. I am satisfied that the proposed loans would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

(i) the A loan of $123,000,000 to the Republic of the Philippines for the Epifanio de los Santos Avenue Greenways Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 28 years, including a grace period of 9 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board; and

(ii) the B loan of $15,000,000 to the Republic of the Philippines for the Epifanio de los Santos Avenue Greenways Project, to be funded through the participation of the ASEAN Infrastructure Fund under its ASEAN Catalytic Green Finance Facility, on terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Masatsugu Asakawa  
President

20 November 2020
## DESIGN AND MONITORING FRAMEWORK

### Impact the Project is Aligned with

Inclusive mobility and accessibility achieved through the prioritization of people-mobility over vehicle-mobility (National Transport Policy and its Implementing Rules and Regulations)\(^a\)

<table>
<thead>
<tr>
<th>Results Chain</th>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Number of pedestrians increased and pedestrian experience improved | By 2024:  
  a. Pedestrian traffic increased by 5% at key walkway intersections, disaggregated by sex, age, and PWD (2019 baseline: Balintawak 35,000; Cubao 148,900; Guadalupe 40,000; and Taft 130,000) (OP 4.1)  
  b. Safety and mobility deficits reported in pedestrian survey at project completion reduced by 70%. (baseline: 2.35 deficits reported per person in pedestrian survey during feasibility study) (OP 4.1.2)  
  c. Safety and mobility deficits reported by female in pedestrian survey at project completion reduced by 70% (baseline: 2.41 deficits reported per female in pedestrian survey during feasibility study) (OP 2.4.1) | a. Project completion report of DOTr  
  b–c. Feasibility study report and project completion report of DOTr, survey results | Fewer pedestrians because of limited operation capacity of mass transit due to the coronavirus pandemic and delay in the MRT-3 rehabilitation project.\(^b\) |
| **Output**    |                                               |                                      |       |
| Pedestrian walkways built | By 2023:  
  a. 5 km of elevated walkways constructed or improved around EDSA (2020 baseline: Not applicable)  
  b. Responsive physical design features integrated along 5 km of walkways in all four project locations for enhanced safety, accessibility, and convenience, based on consultations with the elderly, women, PWDs, and LGBT+ individuals (2020 baseline: Not applicable) | a.–b. Project completion report of DOTr, pedestrian interview survey deployed during feasibility study and again at project completion | Delay in relocating utilities |
### Key Activities with Milestones
#### Pedestrian walkways built
1. Finalize the inclusive schematic designs, reflecting outcomes from public consultations with women, senior citizens, PWDs, and LGBT+ groups, by Q3 2020.\(^c\)
2. Complete land acquisition by Q2 2021.
3. Award civil works contracts by Q2 2021.
4. Develop and implement campaigns to raise public awareness on pedestrian road safety and use of walkways in Q3 2021.
5. Complete construction or improvement of 5 km of elevated walkways by Q2 2023.

#### Project Management Activities
- Establish project management office.
- Recruit construction supervision and project management consultants.

### Inputs
- ADB: $123.0 million (loan)
- ASEAN Infrastructure Fund (fully administered by ADB): $15.0 million (loan)
- Government of the Philippines: $41.3 million

### Assumptions for Partner Financing
Not applicable

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\(^b\) Three out of four project sites are connected to MRT-3 stations. MRT-3 is being operated in full capacity and there will be no room to increase the number of MRT-3 users without completing the MRT-3 rehabilitation project (financed by the Japan International Cooperation Agency and expected to be completed in 2021).

\(^c\) Final features will be determined during the detailed engineering design, but will include proper lighting, elevators, visibility on the walkways, and ramps for wheelchairs, etc.

**Contribution to ADB Corporate Results Framework 2019–2024**
- OP 4.1 People benefiting from improved services in urban areas. Expected: 371,595 existing and additional pedestrian traffic expected to benefit from increased mobility and accessibility.
- OP 2.4.1 Time-saving or gender-responsive infrastructure assets and/or services established or improved. Expected: 1 asset
- OP 4.1.2 Urban infrastructure assets established or improved. Expected: 1 asset
- In addition to the OP indicators tagged in the DMF, this operation will contribute results for:
  - OP 1.2 Jobs generated. Expected: 2.8 million person-days
  - OP 3.1 Total annual greenhouse gas emissions reduction (tCO2e/year). Expected: 886
  - OP 3.2.5 New and existing infrastructure assets made climate and disaster resilient. Expected: 1 asset

LIST OF LINKED DOCUMENTS
http://www.adb.org/Documents/RRPs/?id=51117-003-3

1. Loan Agreement: Ordinary Operations
2. Loan Agreement: ASEAN Infrastructure Fund
3. Sector Assessment (Summary): Transport
4. Project Administration Manual
5. Economic and Financial Analysis
6. Summary Poverty Reduction and Social Strategy
7. Risk Assessment and Risk Management Plan
8. Gender Action Plan
9. Initial Environmental Examination
10. Resettlement Plan: Balintawak Station
11. Resettlement Plan: Cubao Station
12. Resettlement Plan: Guadalupe Station
13. Resettlement Plan: Taft Station