

ECONOMIC AND FINANCIAL ANALYSIS

A. Introduction

1. The proposed project is part of the government's effort to improve walking facilities within high-density urban centers and will finance the construction or upgrading of 5 kilometers (km) of elevated walkway at four mass transit stations along Epifanio de los Santos Avenue (EDSA) in Metro Manila.¹ EDSA is the major transport corridor in Metro Manila, serving all main modes of transport and linking the North Luzon Expressway in the north to the South Luzon Expressway in the south. The proposed project locations, all busy residential and commercial centers, were selected for their low levels of pedestrian access and high density of various transport modes. The intense traffic and lack of adequate pedestrian facilities in the project areas impact negatively on quality of life. Pedestrian access to the project sites is limited because of overcrowding on the existing narrow or obstructed sidewalks. Congestion on the footpaths often overflows into the surrounding streets, impeding traffic. Some of the locations have existing footbridges, but they are poorly located, do not provide convenient links between different modes of transport, are inaccessible to persons with disabilities (PWDs), and do not provide protection from the sun and rain.

2. Improved pedestrian and interchange facilities between public transport services and the surrounding catchment areas will make public transport more attractive. The pedestrian facilities will link the main modes of transport (buses and light rails) with the surrounding areas via dedicated facilities to accommodate high volumes of pedestrians. Enhancing pedestrian connectivity can improve health, stimulate new economic opportunities, and improve quality of life at modest investment levels. Pedestrians will save time and hassle as they will no longer be forced to battle other pedestrians and vehicles on overcrowded existing sidewalks.

3. This economic and financial analysis summarizes the findings of ADB's due diligence and includes adjustments required to meet ADB guidelines.² The economic analysis was undertaken to assess the economic viability of the project. It compares the benefits and costs of the with-project and without-project scenarios over a 30-year operation period to estimate the economic internal rate of return (EIRR) and the net present value at a discount rate of 9.0%. The analysis uses the world numeraire; findings are presented in this document in United States dollars using an exchange rate of ₱50.20 = \$1.00. A financial analysis was undertaken to assess the financial sustainability of the project. A financial viability assessment is not presented here because revenue generated from the project will not be set at a level sufficient to ensure full recovery of the initial capital. The project investment decision is based on its economic viability.

B. Project Rationale

4. Enhanced pedestrian connectivity and facilities are a priority for the government, as described in its national transport policy, which seeks to improve pedestrian facilities in urban areas.³ The plan outlines a vision to promote pedestrian-friendly structures and inclusion of a network of "greenways", which include elevated and/or covered walkways to decrease people's reliance on road transport. Commuters continue to shift to private vehicles because of a lack of

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

² ADB. 2017. *Guidelines for the Economic Analysis of Projects*. Manila, and ADB. 2005. *Guidelines for the Financial Management and Analysis of Projects*. Manila; and ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila.

³ Government of the Philippines, National Economic Development Authority. 2018. [National Transport Policy and its Implementing Rules and Regulations](#). Manila.

reliable and convenient public transport and poor transport infrastructure for nonmotorized transport. The project is closely aligned with these efforts and will integrate various transport modes at four mass transit stations along EDSA to create safer and more functional, attractive, and user-friendly transport hubs in high-density commercial and residential areas. About 80% of the population in Metro Manila rely on public transport and walking; it is these people who suffer most from a poor pedestrian environment.⁴

5. The EDSA is the main corridor for several transport modes: the Metro Rail Transit Line 3 (MRT-3), the highest volume transit line in the city; provincial buses (the main route into and out of the city); city buses (EDSA is the busiest bus corridor in Metro Manila); and private vehicles (EDSA has the highest traffic volume of any road in the National Capital Region [NCR]).⁵ In addition, public utility jeepneys, taxis, and motorcycles ply passengers at prime locations along EDSA. EDSA is the most congested road in the NCR. Daily economic losses because of congestion in Metro Manila are estimated at ₱2.1 billion, which could rise to ₱3.3 billion a day by 2035 if no action is taken.⁶ To reverse this trajectory and improve the transport system, the government plans to expand Metro Manila's urban rail network to include the Metro Manila Subway, the North–South Commuter Railway, and the extension of the Manila Light Rail Transit System 1 (LRT-1) and LRT-2.⁷

6. The public transport interchange locations between EDSA and key cross routes are poorly served. For example, the MRT-3 interchanges with the LRT-2 at Cubao station; however, transferring between the two lines requires passengers to physically exit one station, walk more than 500 meters through congested streets, then queue up to enter the other station. Access to elevated MRT and LRT stations from street-level bus stops is compromised by poor facilities, resulting in unsafe, inconvenient, difficult, and more expensive trips for public transport users. Pedestrians are the most vulnerable road users. Of the recorded traffic accidents in Metro Manila, pedestrians account for more than 40% of total fatalities on average.⁸ This has led the government to target EDSA for enhanced pedestrian connectivity.

7. The four locations along EDSA identified for prioritized enhanced pedestrian connectivity and facilities are the Balintawak, Cubao, Guadalupe, and Taft mass transit stations, spanning the NCR cities of Quezon City, Makati, and Pasay. The project locations were selected because of their proximity to multiple transport modes and the high density of commercial and residential establishments in each location.

C. Demand Analysis

8. Feasibility study consultants carried out pedestrian surveys in 2018 at each project location, which were used to project levels of pedestrian traffic. The base data from these surveys was used in the *MassMotion* model, which is crowd simulation software that uses pedestrian

⁴ JICA Department of Transportation and Communication. 2015. *The Project for Capacity Development on Transportation Planning and Database Management in the Republic of the Philippines – Transportation Demand Characteristics Based on MUCEP Person Trip Survey*. http://open_jicareport.jica.go.jp/pdf/12247623.pdf.

⁵ MRT-3 is a 19.6 km line with 13 stations, originating at North Avenue station in Quezon City and ending at Taft Avenue station in Pasay City.

⁶ Japan International Cooperation Agency (JICA). 2019. Follow-up Survey on Roadmap for Transport Infrastructure Development for Greater Capital Region. Manila.

⁷ LRT-1 is a 19.65 km line with 21 stations starting at North Avenue station and ending at Baclaran station in Pasay City. LRT-2 is a 13.8 km line with 11 stations, originating at Santolan station in Pasig City and ending at Recto station in Manila.

⁸ Metropolitan Manila Development Authority. 2016. Metro Manila Accident Recording and Analysis System: *Traffic Accident Report January to December 2016*.

modelling technology.⁹ The model projected pedestrian traffic volumes in the with-project scenario (using the new and/or improved walkways) and without-project scenario (using existing sidewalks) based on walking conditions and traffic interference. It is projected that pedestrian traffic will increase by 7.0% as a result of the proposed project as vehicle users shift to walking.¹⁰

9. Additional demand will be generated from PWDs and elderly pedestrians who may not use the existing sidewalk network because of crowds and poor walking conditions. The new elevated walkways will be more accessible because of the addition of elevators. Additional demand has been estimated using the proportion of PWDs in the total population of the Philippines, equating to an additional 1.5% of overall walkways users using the proposed walkways.¹¹ It was also projected that an additional 4.5% of overall walkways users will be elderly pedestrians based on the proportion of elderly in the Philippines.¹² Table 1 shows the pedestrian forecast at each project location. The growth rates used for the pedestrian forecast are based on a projected cumulative population growth rate for the NCR from 2022 to 2051 of 11%.¹³

Table 1: Pedestrian Forecasts
(pedestrians per day)

Location	Without Project		With Project	
	2022	2051	2022	2051
Balintawak	229,897	255,166	239,892	266,260
Cubao	370,272	410,970	388,531	431,236
Guadalupe	157,327	174,620	163,909	181,925
Taft	296,768	329,387	311,940	346,226

Source: Government of the Philippines, Department of Transportation. 2019. *EDSA Greenways Feasibility Study*. Manila

D. Costs

10. The costs to be incurred for the project comprise construction, equipment, land acquisition and resettlement, and operation and maintenance (O&M) costs.¹⁴ Economic costs were derived from financial costs through the following adjustments: (i) excluding price contingencies, taxes and duties, and interest during construction; and (ii) applying a standard conversion factor of 0.93 (estimated based on trade data for the Philippines in 2017) for domestic input and a shadow wage rate factor of 0.60 for unskilled labor. The costs provided by design consultants' estimates were adopted. The total economic cost of the project is \$138.40 million.

E. Benefits

11. The economic benefits considered in the economic analysis include (i) reduced travel time for pedestrians and vehicles; (ii) marginal external cost savings from removed vehicle-km on the network; and (iii) physical activity benefits from induced demand generated by this project. In the without-project scenario, pedestrian facilities are assumed to remain in their present condition, comprising footpaths and some footbridges. The with-project scenario includes the construction

⁹ MassMotion is proprietary software of the feasibility study consultants. Oasys. 2019. *MassMotion*. <https://www.oasys-software.com/products/pedestrian-simulation/massmotion/>.

¹⁰ Queensland Department of Transport and Main Roads. 2016. *An evidence-based assessment of the impact of cycling infrastructure in South East Queensland*. Queensland. The 7% diversion rate aligns with a similar intervention assessment conducted in Queensland, Australia for a pedestrian overpass. The assessment estimated an average mode shift from cars to walking from 5% to 9%; 7% aligns with this.

¹¹ Government of the Philippines, Department of Health. 2018. *Persons with Disabilities*.

¹² Republic of the Philippines. *Commission on Population and Development*.

¹³ Republic of the Philippines. *Philippine Statistics Authority Database*. (accessed 01 April 2019).

¹⁴ The assumptions used to estimate the O&M cost are described in para. 20.

of new elevated walkways and the replacement or widening of existing footbridges. The analysis considered a 3-year design and construction period with the project walkways fully opening in a phased approach from the end of 2022 to the end of 2023, followed by 30 years of operation. Best practices will be applied to minimize negative impacts to travelers using roads and walkways during construction. Disruption to road users during construction has been included in the analysis (para. 14).

12. **Pedestrian time savings.** The project will provide faster, more comfortable, and more direct routes between public transport modes for pedestrians at the four project locations. The project will mainly displace highly congested, traffic-exposed sidewalks along the roads around EDSA. The *MassMotion* model estimated the time savings for pedestrians transferring to the elevated walkways from the existing sidewalks. Pedestrian time savings were increased to account for perceived amenity benefits from improved comfort when walking. Pedestrians who transfer to the elevated walkways will also benefit from increased protection from direct sunlight and rain, resulting in journeys that are perceived to be 12.75% quicker based on a study in Singapore.¹⁵ Including this additional time saving, it is estimated that pedestrians will benefit from time savings of 0.62 to 1.43 minutes per trip at the project locations.

13. **Vehicle time savings.** Pedestrians often clash with road users, which slows down traffic in the project areas. It is assumed that two situations will result in vehicle time savings: decrease in the delay for vehicles turning right, and fewer people walking directly on EDSA. In the absence of data on vehicles that make turns on EDSA, it is assumed that 1% of vehicles on roads surrounding the Balintawak and Taft locations will turn right. At Cubao and Guadalupe, where it was observed to be busier during the feasibility study site visits, it is assumed that 5% of vehicles will turn right. Vehicle time savings from a reduced number of pedestrians on the roads was estimated during the feasibility study site visits. It was estimated conservatively that smoother traffic flows would result in a 5-second time saving per vehicle at the project locations.

14. To estimate the number of vehicles benefiting from this time saving, traffic counts from the Metro Manila Urban Transportation Integration Study Update and Capacity Enhancement Project (MUCEP) model were used. The MUCEP transport database is based on a person-trip survey conducted in 2014. The cumulative population growth rate for the NCR from 2015 to 2022 of 6.5%, and the projected cumulative growth for 2022 to 2051 of 11% was used to estimate the traffic growth of vehicles using the roads next to the project walkways (footnote 13). Time savings were valued using a base value of time in 2019 of \$0.05 per minute for pedestrians, and \$0.13 per minute for car users.¹⁶ The value of time was derived from 2017 values of regional per capita income in the NCR. The value of time for travelers for work purposes (43% of all trips) was adjusted upwards by 20.0% to account for employer overhead costs, while the value of time for leisure and commuting was reduced by 50%, which is consistent with international practices. The value of time is assumed to grow in line with per capita income growth in real terms. The per capita income in Metro Manila grew at an annual average of 6.0% in real terms during 2015–2017. For the analysis, 6.0% annual growth in the value of time in real terms up to 2030 is assumed, declining to 3.0% per annum beyond 2030. Construction of the elevated walkways will temporarily impact traffic because of a potential reduction in the number of vehicle lanes and in lane width. A

¹⁵ A. Erath et al. 2015. [Modelling for Walkability – Understanding pedestrians' preferences in Singapore](#). *IVT, ETH Zurich*. The study found that a covered walkway shortened perceived travel time by 17% in Singapore; this was adjusted down by 25%, to 12.75% for the Philippines to account for an optimism bias.

¹⁶ The value of time is consistent with the economic analysis of the Malolos–Clark Railway Project. ADB. 2019. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranchise Financing Facility to the Republic of the Philippines for the Malolos–Clark Railway Project*. Economic and Financial Analysis (accessible from the list of linked documents in Appendix 2). Manila.

speed-flow curve was used to estimate the impact.¹⁷ It is estimated that the daily per vehicle time delay during construction is 0.13 to 1.07 minutes at the different project locations.

15. **Marginal External Cost Savings.** It is estimated that the project will increase pedestrian demand by 7% as road users shift to walking. The removed vehicle-km will reduce vehicle external costs, resulting in improved local air quality and reduced road congestion, noise, greenhouse gas emissions, accidents, and infrastructure damage. Road congestion will be reduced through an estimated 7% reduction in road users as vehicle users choose to walk on the project walkways instead. The United Kingdom National Transport Model was used to estimate the cost savings.¹⁸ Removed vehicle-km was estimated from induced demand using a vehicle trips per person value of 1.3 based on the MUCEP study and a car occupancy factor of 3 people per vehicle. The estimated cost savings per vehicle-km removed are ₱2.06 for road congestion, ₱0.29 for accidents, ₱0.02 for reduced noise, ₱0.01 for infrastructure, ₱0.01 for local air quality, and ₱0.11 for reduced greenhouse gases.

16. **Physical Activity Benefits.** The health of the population will improve as a result of the 7% induced demand of road users diverting to walking on the project walkways. The World Health Organization's Health Economic Assessment Tool (HEAT) was used to estimate the economic value of a reduction in mortality because of increased physical activity. The tool uses a relative risk to calculate the reduction in expected deaths from all causes combined in the population as a result of increased walking levels.¹⁹ The inputs used in the HEAT included: (i) mortality rates for the Philippines of 263.5 deaths per 1,000 adult males and 139.2 deaths per 1,000 adult females in 2014;²⁰ (ii) the increased number of pedestrians aged 20–74, which is 44,244 people per day across all four project locations; and (iii) the value of a statistical life, which is estimated to be \$0.6 million for the Philippines.²¹

F. Results of the Economic Analysis

17. The economic analysis was carried out for each project location and the results are summarized in Table 2. The economic indicators provided are: (i) net present value, and (ii) economic internal rate of return (EIRR). The results indicate that the overall project investment has an economic internal rate of return of 21.8%, which is above 9%. The EIRR for individual locations ranges from 11.8% to 30.1% above 9.0%. The cash-flow streams for the project are given in Table 3.

¹⁷ JICA. 2014. *JICA Laguna Lakeshore Expressway–Dike Project Feasibility Study*. The speed-flow curve assumes that vehicles can travel at the speed limit when the traffic volume is up to 30% of the maximum capacity. When traffic volume exceeds the maximum capacity, vehicle speed will correspondingly decrease to 10% of the speed limit. Vehicle volumes before and during construction are based on the volumes from the MUCEP Area Model, which are assumed to increase in line with local population growth during the construction period. The length of the impacted construction sections is divided by the estimated travel speed from the speed-flow curve to derive the resulting travel times.

¹⁸ The National Transport Model is a multimodal model containing estimates of the external costs of congestion, accidents, noise, infrastructure damage, local air quality, and greenhouse gases. These values were adjusted for the Philippines using gross domestic product per capita adjusted for purchasing power parity.

¹⁹ The tool uses a relative risk from a meta-analysis of published studies, which for walking is 0.89 for regular walking of 168 minutes per week for 52 weeks of the year (146 hours of walking per year). Therefore, a population of regular walkers receives a protective benefit of 11% (1.00 minus 0.89) where they are overall 11% less likely to die from all causes combined than a population of non-walkers.

²⁰ World Bank. World Bank Open Data. <https://data.worldbank.org/> (accessed 15 January 2019).

²¹ W. Kip Viscusi and C. Masterman. 2017. [Income Elasticities and Global Values of a Statistical Life](#). *Journal of Benefit–Cost Analysis*. 8 (2).

Table 2: Economic Analysis Summary

Location	EIRR (%)	NPV (\$ million)
Balintawak	15.0	28.8
Cubao	30.1	129.8
Guadalupe	11.8	7.5
Taft	25.9	67.0
Overall project	21.8	233.2

EIRR = economic internal rate of return, NPV = net present value.
Source: Asian Development Bank.

Table 3: Economic Cost and Benefit Flows

(\$ million)

Year	Capital Costs	Operation & Maintenance Costs	Pedestrian Time Savings	Vehicle Time Savings	Marginal External Cost Savings	Physical Activity Benefits	Net Benefits
2021	43.27	0.00	0.00	(5.93)	0.00	0.00	(49.19)
2022	77.87	0.01	0.69	(11.73)	0.01	0.28	(88.62)
2023	17.27	0.07	11.15	(3.68)	0.15	4.00	(5.72)
2024		0.12	22.37	0.53	0.28	7.46	30.53
2025		0.13	26.25	0.60	0.32	8.23	35.28
2026		0.21	27.92	0.64	0.34	8.26	36.96
2027		0.12	29.71	0.68	0.36	8.29	38.91
2028		0.12	31.60	0.73	0.37	8.32	40.90
2029		0.12	33.62	0.77	0.39	8.35	43.01
2030		0.13	35.76	0.82	0.41	8.38	45.24
2031		0.21	36.97	0.85	0.43	8.41	46.45
2032		0.12	38.21	0.88	0.46	8.44	47.86
2033		0.12	39.50	0.91	0.48	8.47	49.23
2034		0.12	40.82	0.94	0.51	8.50	50.65
2035		0.29	42.20	0.97	0.53	8.53	51.94
2036		0.36	43.61	1.01	0.53	8.56	53.35
2037		0.12	45.08	1.04	0.53	8.59	55.12
2038		0.12	46.59	1.08	0.54	8.62	56.70
2039		0.12	48.16	1.11	0.54	8.65	58.33
2040		0.14	49.77	1.15	0.54	8.68	60.00
2041		0.21	51.44	1.19	0.54	8.71	61.67
2042		0.12	53.17	1.23	0.54	8.74	63.56
2043		0.12	54.95	1.27	0.54	8.77	65.41
2044		0.12	56.79	1.32	0.55	8.80	67.33
2045		0.13	58.69	1.36	0.55	8.83	69.30
2046		0.21	60.66	1.41	0.55	8.86	71.27
2047		0.12	62.69	1.46	0.55	8.89	73.46
2048		0.12	64.78	1.51	0.55	8.92	75.64
2049		0.12	66.95	1.56	0.56	8.95	77.90
2051		0.29	69.19	1.61	0.56	8.99	80.05
2052		0.36	71.74	1.67	0.56	9.02	82.63
EIRR							21.8%
NPV at 9%							233.2

() = negative, EIRR = economic internal rate of return, NPV = net present value.

Note: Numbers may not sum precisely because of rounding

Source: Asian Development Bank.

18. Sensitivity tests and calculations of switching values were carried out to determine the effect of variations in key input parameters on the key economic indicators. Table 4 shows the results of the sensitivity analysis. The sensitivity analysis demonstrates that the economic appraisal results are robust across the range of variations considered. Sensitivity analysis was also conducted for each individual elevate walkway location and the results show that the EIRR remains above 9.0% for all scenarios but is most sensitive to a decrease in pedestrian time benefits.

Table 4: Result of the Sensitivity Analysis

Scenario	Overall			Balintawak	Cubao	Guadalupe	Taft
	NPV (\$ million)	EIRR (%)	Switching Value (%)	EIRR (%)	EIRR (%)	EIRR (%)	EIRR (%)
Base	233.2	21.8		15.0	30.1	11.8	25.9
Case 1	216.9	19.9	214	13.3	27.8	10.6	23.4
Case 2	190.2	19.9	81	13.5	27.4	10.5	23.5
Case 3	232.3	21.8		14.9	31.0	12.1	26.0
Case 4	232.7	19.2		14.9	30.0	11.8	25.9
Case 5	223.7	18.7		14.6	29.3	11.5	25.4
Case 6	165.4	17.7	52	11.9	25.9	9.7	21.4

Case 1: Construction costs increased by 15%, Case 2: Value of pedestrian time decreased by 15%, Case 3: Value of vehicle time decreased by 15%, Case 4: Value of marginal external cost savings decreased by 15%, Case 5: Value of physical activity benefits decreased by 15%, Case 6: Construction costs increased by 15% and benefits decreased by 15%

EIRR = economic internal rate of return, NPV = net present value.

Note: Switching values for value of value time, marginal external cost savings, and physical activity benefits are not considered since a 100% reduction of these benefits will still yield an EIRR above 9%.

Source: Asian Development Bank.

D. Financial Analysis

19. A financial assessment was undertaken to examine the sustainability of the investment, based on the associated incremental earnings and operational costs that will accrue to the government. Advertising revenues and commercial space rental along the proposed walkways are the main source of direct revenues from the walkways. Rent would be generated from the lease of small kiosks to food or trinket vendors around each end of the walkway. The estimated total revenue generated at each walkway location for 30 years of operation are in Tables 5 and 6.

Table 5: Advertising Revenue

Location	Advertising Area Available ^a (m ²)	Advertising Rate ^b (₱/m ² per month)	Total Revenue ^c (₱ millions)
Balintawak	1,760	1,656	1643.90
Cubao	1,445	1,656	1336.05
Guadalupe	790	1,656	737.88
Taft	975	1,656	901.49

^a Area available is based on the length of the walkways assuming both sides of inward-facing walls are used and an average wall height of 0.5 meters.

^b Based on 2019 market rates in Metro Manila for wall advertising.

^c Total revenue uses the base rental rates increased in line with inflation and is calculated using an assumed occupancy of 80% in years 1–2 and 90% thereafter.

m² = square meters.

Source: Feasibility study estimates.

Table 6: Commercial Space Rental Revenue

Location	Number of Kiosks ^a	Commercial Area Available ^b (m ²)	Rental Rate ^c (₱/m ² per month)	Total Revenue ^d (₱ millions)
Balintawak	12	54	1,970	66.80
Cubao	16	72	1,970	88.08
Guadalupe	8	36	1,970	44.54
Taft	16	72	1,970	88.08

^a Number of kiosks is assumed to be two per elevated walkway access point.

^b Based on a 4.5m² average size of kiosks found in Metro Manila and Bangkok.

^c Based on 2019 market rates in Metro Manila for similar kiosks.

^d Total revenue uses the base rental rates increased in line with inflation and is calculated using an assumed occupancy of 80% in year 1 and 100% thereafter.

m² = square meters.

Source: Feasibility study estimates.

20. The economic life of the elevated walkways is measured to be 30 years. The incremental O&M cost associated with the project walkways is estimated as follows: (i) general cleaning daily, (ii) lift-checking and maintenance every 6 months, (iii) escalator checking and maintenance every 3 months, (iv) painting every 3 years, (v) drainage repair and replacement every 3 years, (vi) wear and tear (e.g., tile, rail, and lighting replacement) every 2 years, (vii) energy costs for operations (e.g., CCTV, lighting, lifts, and escalators), (viii) bearing and movement joint replacement every 20 years; (ix) maintenance of kiosks every 5 years, and (x) maintenance of advertising panels every 15 years. Applying this, the incremental maintenance cost for the 5 km of walkways under the project results in an annual average O&M cost of \$0.35 million. Table 7 shows the yearly revenue projection and O&M costs for the project for 10 years from project completion.

Table 7: Financial Forecasts

(\$ million)

Year	O&M	Revenues	Net
2024	0.15	1.93	1.78
2025	0.17	2.09	1.92
2026	0.27	2.16	1.89
2027	0.17	2.22	2.05
2028	0.17	2.29	2.12
2029	0.18	2.36	2.18
2030	0.20	2.43	2.23
2031	0.33	2.50	2.17
2032	0.20	2.57	2.37
2033	0.21	2.65	2.44

O&M = operation and maintenance.

Sources: Feasibility study; and Asian Development Bank estimates.

21. **Financial sustainability.** The project is considered financially sustainable. The projected incremental total revenue for the Epifanio de los Santos Greenways Project over 30 years of operation is \$93.46 million, which is sufficient to cover all O&M costs (\$10.59 million). The Department of Transportation (DOTr) will be responsible for O&M of the project walkways. Prior to the completion of civil works, DOTr will select the best option for continuous O&M, which may include: (i) entering into an O&M arrangement with mall owners connected to the walkways; (ii) competitively selecting a private O&M company; or (iii) the DOTr granting advertising rights on the walkways together with O&M obligations to a competitively selected private O&M company. The viability of the project for the public sector will be higher than for the private sector, as the government will collect taxes and duties on the project works and operations. The investment decision on the public goods is based on the project's strong economic viability rather than on its financial viability.