PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: AB6269

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Project Name	Cebu Bus Rapid Transit Demonstration Project	
Region	East Asia and Pacific	
Country	Philippines	
Sector	General Transportation Sector	
Lending Instrument	Specific Investment Loan	
Project ID	P119343	
{If Add. Fin.} Parent Project ID	n/a	
Borrower(s)	Government of the Philippines	
Implementing Agency	The Department of Transportation and Communications	
Environmental Screening	[]A [X]B []C []FI []TBD (to be determined)	
Category		
Date PID Prepared	January 24, 2011	
Estimated Date of Appraisal	November 15, 2011	
Completion		
Estimated Date of Board	May 15, 2012	
Approval		
Concept Review Decision	Following the review of the concept, the decision was taken	
	to proceed with the preparation of the operation.	

I. Introduction and Context

A. Country Context

- 1) Economic growth and poverty reduction. The Philippines economy averaged 4.9 percent annual growth between 1998 and 2008 and was one of the few economies that did not contract in 2009 as a result of the global financial and economic crises. Economic growth during the first half of 2010 was an impressive 7.9 percent with GDP per capita now over US\$2,100; and the growth rates for 2011 and 2012 projected at slightly over 5 percent per annum. Despite the economic growth, poverty incidence is not declining noticeably having in fact increased from 30 to 33 percent between 2003 and 2006. This is consistent with the high and growing income inequality and unequal sectoral and regional distribution of growth. The new administration has recognized weak governance as a major constraint to sustained growth and poverty reduction and is seriously focusing on weeding out corruption.
- 2) Targeting Public Private Partnerships (PPPs). With notable improvements in investor confidence in the Philippines over the past six months, total investment is projected to grow by double digits per annum over the next few years. The new administration has embarked on a new wave of PPP projects to fill some important gaps in public infrastructure and to enhance efficiency in service delivery. By utilizing private sector resources, PPP projects make more public funding available to directly support the poor. In addition, with the government's focus

on improving governance, PPP projects can contribute to poverty reduction indirectly through economic growth and rising incomes.

3) Plans to reduce Greenhouse Gas (GHG) emissions. The Philippines was ranked 39th in the world in 2005 with about 142 million tons of carbon dioxide equivalent (MtCO2e), excluding emissions due to land use change. The power and transport sectors are the principal sources of these emissions. With a population of about 92 million people, the fastest rate of urbanization in East Asia, a potential increase in fossil fuels for energy generation, and the projected high growth rate of private vehicle ownership and use, the increase in GHG emissions in the Philippines can be substantial. The government has embarked on a number of strategies in the transport and energy sectors to reduce GHG emissions including an ambitious Clean Technology Fund (CTF) Investment Program.

B. Sectoral and Institutional Context

- 4) Vehicle ownership in the Philippines has been growing by about 6 percent annually over the past two decades and is expected to accelerate over the next 10 to 15 years as incomes increase. At the same time, the urban population is expected to grow by more than 35 million people by 2030. Without significant intervention, this combination of urban population growth and rapidly increasing vehicle (auto and motorcycle) ownership will exacerbate on-going problems with congestion, air quality, GHG emissions and traffic safety in Philippine cities.
- 5) The negative impacts of unmanaged growth. Studies have indicated that losses due to congestion in Metro Manila alone were around 100 billion Pesos per year in 1996 prices, about 4.6 percent of GDP,¹ and those due to accidents were about 1 percent of GDP.² Carbon emissions from the transport sector have also increased by 6 to 12 percent per year since 1990,³ and transport's relative share of national greenhouse gas emissions has more than doubled, from 15 percent in 1990 to about 33 percent in 2009. At this rate of growth, greenhouse gas emissions from road transport, estimated at 24 MtCO₂e in 2007, are projected to increase to 37 and 87 MtCO₂e by 2015 and 2030, respectively.
- 6) Cebu City, the second largest city in the Philippines with a population of about 800,000 people in a contiguous metropolitan area (the Cebu Metropolitan Area-CMA) of over 2 million, has historically been the regional financial and administrative capital of the central Visayas Region in the central Philippines. It is a maritime hub and important tourist destination. Though relatively poor compared to Manila, the CMA is becoming increasingly important as a technology center aided by the rising importance of international call centers in the Philippines.
- 7) *Institutional framework*. Under the Philippine institutional structure for provision of road-based public transport, the sole responsibility for provision of road transit service -- planning, regulation, investment, and implementation -- falls under the jurisdiction of the

¹ Based on a study prepared by the National Center for Transportation Studies for NEDA and the Legislative-Executive Development Advisory Council in 2000.

² Based on a study by Ricardo G. Sigua. "Scale, Characteristics and Cost of Road Accidents in the Philippines." 2004.

³ Six MtCO2e is based on the World Resources Institute's estimates, while 10 MtCO2e is based on the 2006 IPCC guidelines for estimating fuel emissions.

national government, specifically, the Department of Transportation and Communications (DOTC); and provincial, metropolitan, and local government entities do not have the legal authority to develop road-based public transport. There is currently no entity within Cebu City with a specific mandate for transportation and there is no formal framework for urban passenger transport. At the Cebu metropolitan level, the Metropolitan Cebu Development Council (MCDC) is mandated to formulate development plans, prepare programs and projects, and coordinate/monitor the implementation of programs and projects that address problems and concerns affecting Metro Cebu. MCDC is composed of the Provincial Governor of Cebu and the Mayors of the different cities and municipalities in the province. MCDC has no institutional or legal powers and resources, unlike the Metro Manila Development Authority (MMDA), the metropolitan governing body for the country's capital. MCDC defines the coverage of Metro Cebu for planning purposes only. There have been moves to institutionalize this metropolitan body through congressional legislation but this is yet to happen.

- 8) Congestion in Cebu City is particularly acute, with peak traffic speeds of 10 km per hour along the three major urban arterials. Key factors contribute to the congestion: (i) an insufficient, poorly operated arterial system with limited secondary streets, (ii) inadequate traffic engineering and management, (iii) limited protected pedestrian and bicycle facilities and safe roadway crossings, (iv) lack of a formal intra-city bus system, (v) the large number of low-quality, informally operated public transport vehicles--Jeepneys; and the increase of private vehicle ownership and use. The congestion situation is unlikely to improve as most of the economic and land development in Cebu City continues to occur at the city's fringes, particularly in the northeast. This sprawling pattern of urban development will only exacerbate the negative conditions if not promptly addressed.
- 9) Public Transport in Cebu City--the Jeepneys. In Cebu city, intra-city public transport is provided almost entirely by "jeepneys," a form of informal public transport. Jeepney franchise holders lease vehicles to individual drivers, whose entire income derives from fare collection. As a result of this institutional arrangement, drivers compete with each other for passengers on the street, resulting in typically chaotic ground-level conditions. Jeepney drivers "troll" for passengers along their franchised routes, with no designated stations and poor adherence to safety regulations. Like all informal public sector public transport, there are no schedules. Vehicles leave designated, crowded terminals only when they are full, and remain at busy intermediate stops (e.g., at shopping malls, universities) an inordinate amount of time to pick up the maximum number of customers.
- 10) Jeepneys—an unsustainable solution to public transport in Cebu. Jeepneys comprise more than 50 percent of the vehicle traffic stream on major Cebu corridors but their impact is much more in terms of the passenger car units. This is due to their constant weaving from the less congested median lanes to the curb lanes to stop and pick up and discharge passengers and their tendency to park where there are large potential markets, often by pedestrian overpasses over major arterials effectively reducing road capacity and causing accidents. Moreover, as congestion increases, Jeepney operators are forced to spend increasing amounts of time in service to be able to generate sufficient income, further exacerbating congestion. The inability of Jeepneys to operate efficiently in such a congested environment has lead to the emergence and rapid growth of unregulated motorcycle taxis, called "Habal-Habal".

- 11) Vulnerability of low income groups. Low-income residents who are unable to afford taxis or private transport are particularly vulnerable to the security, safety and environmental risks posed by Jeepney travel in these travel conditions as confirmed by recent focus group surveys (women and the elderly were concerned about safety and security in particular) and statistics on accidents that indicate levels in Cebu City (about 10,000 in 2006) almost as high as in Metro Manila.
- 12) To deal with the outlined problems in Cebu City, the Cebu City Government (CCG) has chosen to take an aggressive approach to improve its public transport system and use the inducement of public transport and other traffic management schemes to promote sustainable land use patterns in rapidly urbanizing parts of the city such as the northeast as well as in the planned new development in the South Reclamation Project Area.
- National Environmentally Sustainable Transport Strategy (NESTS). In an effort to create a new institutional structure that can address these worsening transport conditions and reduce GHG emissions, DoTC has taken the lead in developing a strategy for sustainable transport for the country that sets a path to reform the transportation sector, by defining and implementing policies favoring non-motorized transport and mass transport systems. NESTS, currently being finalized, will promote, among others, the development of Bus Rapid Transit (BRT) systems, expansion of the urban rail network in Metro Manila, deployment of hybrid vehicles in the public transport fleet, and acceleration of fuel-switching in certain public transport modes. NESTS will set outcomes and indicators in several areas including: (i) air quality and public health; (ii) vehicle emission control, inspection and maintenance; (iii) clean(er) fuels; (iv) public transport planning and travel demand management; (v) non-motorized transport; (vi) land use planning; (vii) road safety; (viii) social equity and gender.

C. Relationship to CAS

14) The Project will contribute to two Strategic Objectives (SOs) in the 2010-2012 Country Assistance Strategy (CAS) for the Philippines as well as to its Cross Cutting Theme on Good Governance. Specifically, the Project is expected to contribute to two outcomes under SO2 on Improved Investment Climate: Outcome 1 on increased and improved delivery of infrastructure; and Outcome 2 on enhanced regulatory and policy frameworks and institutional capacity relating to private participation in local infrastructure; and Outcome 2 on emission reductions under SO4 on Reduced Vulnerabilities. The Project is also expected to contribute to strengthened local government performance for more effective service delivery under the Good Governance theme. Also consistent with the CAS, this activity will contribute to the knowledge agenda by supporting Cebu City conceptualizing the country's first BRT.

II. Proposed Development Objective(s)

A. Proposed PDO

1) The Project Development Objectives are to (i) improve passenger mobility in project corridors by providing an alternative that is safer, more secure, more efficient, and generates

fewer emissions; and (ii) to demonstrate effective public private partnership arrangements in the Philippines' first BRT.

B. Key Results

2) Achievement of the PDO will be evaluated using the following measures: (i) reduction in average public transport origin to destination travel times between select origin-destination pairs, (ii) reduction in average energy consumption and GHG emissions (per passenger-km and in absolute terms), (iii) reduction in the number of traffic accidents along project corridors, and (iv) Qualitative improvement in public transport convenience, comfort, safety, and security.

III. Preliminary Description

- 1) Rationale for CTF support. The Cebu BRT would be the first BRT in the Philippines and as such CTF financing and support are necessary to help overcome some of the initial financial and institutional barriers and would help demonstrate at scale successful deployment for BRT systems in the Philippines. The successful introduction of BRT systems as part of a well integrated public transport system in the Philippines in Cebu is expected to increase the awareness and acceptance of these systems as well as the realization of their cost effectiveness and attractiveness. More directly, the expected reduction in GHG emissions as a result of this 15 Km BRT Project in Cebu is around 150,000 tCO2e per annum.
- The concept for the project that emerged from the pre-feasibility study (pre-FS) was for phased implementation of the BRT in an approximately 15 Km long corridor extending from Talamban in the northeast to Bulacao in the southwest of the City (see attached map). The BRT service plan would include five different routes and no other vehicles would be allowed to use BRT platforms or transit ways making for a so-called "closed" service plan. BRT services would be supplemented by Jeepneys operating in a "feeder" mode and providing lateral access/egress to/from adjacent communities. At full build-out, there would be three major passenger interchange terminals (Talamban, Bulacao and Ayala Mall) and 22 other stations. The project would incorporate footpaths, both parallel and penetrating the neighbourhoods in the corridor as well as improved street lighting. The concept assumes a significant ITS effort to provide real time passenger information, assist in managing and operating public transport services, collect fares and manage general traffic.
- 3) The total project cost has been estimated in the pre-FS at about 130-150 million USD to be financed as follows: (i) US\$15 million from a CTF loan provided on concessional (IDA) terms, (ii) 65-80 million USD from IBRD; (iii) 15-20 million USD from Agence Francaise de Developpement (AfD), (iv) US\$15 million from the Government of the Philippines; and (v) 20 million from the private sector.

The Project is expected to have five components:

4) **Component 1: Detailed BRT System Design** (estimated cost US\$5 million) for the BRT physical investments listed under Component 2 (i) below, as well as a number of technical assistance packages required for the implementation of the BRT. Building on the recommendations and work completed during the FS, these packages include (i) the preparation of detailed operating plans; (ii) detailed traffic management plans; (iii) integrated public

transport and land use plans including a high-level scheme for integrating public transport in general and the BRT in particular into the citywide urban and transport plans; as well as detailed site plans for development in the vicinity of proposed station and terminal area; and (iv) a traffic safety plan.

- 5) *Component 2: BRT Implementation* (US\$115 million). This will cover (i) physical investments in bus ways, terminals, stations, depots, control systems, ITS and fare collection equipment and software, the development of a feeder route system, and pedestrian and commuter access including sidewalks, bikeways and street lighting, as well as (ii) the implementation of the BRT plans listed under Component 1.
- 6) **Component 3: Bus Fleet** (estimated cost US\$20 million). The FS will address the question of bus propulsion technology and will consider different options based on economic, financial and environmental considerations including the impacts of GHGs. This component is expected to be financed by the bus operators of the BRT.
- 7) Component 4: Operationalizing the Institutional/Organizational Arrangements for Ownership, Management and Operation of the BRT and its Ancillary Services and related Capacity Development (estimated cost US\$ 3.5 million). The Pre-FS identified a number of potential options under which BRT could be implemented and subsequently managed and operated in Cebu. These options, addressing national and municipal levels of governments and the private sector, will be explored in more detail during the FS stage to arrive at the appropriate option. BRT implementation will require expanding the functions of existing institutions and/or the establishment of new ones to manage implementation, procurement, operation, regulatory oversight. This will require new legal, administrative and procedural mechanisms. As the implementation of these arrangements will require legislative changes, the FS will focus on the institutional arrangements for the project itself irrespective of the longer term permanent institutional arrangements for BRT in the Philippines. These arrangements will need to be established before the project's appraisal. This component will include capacity building to institutional stakeholders, such as Cebu City and Province government agencies (e.g., planning, public works), GoP agencies (e.g., DOTC, LTFRB,), as well as training for former Jeepney drivers/operators, conductors and mechanics and BRT station, terminal, fare collection and security personnel. A communication plan will also be developed building on earlier communication plans to continue to increase the awareness of the public and enhance the cooperation among the different stakeholders.
- 8) A *PPP model for the Cebu BRT* will be identified during the FS stage based on an analysis of international experience with PPP models for the implementation (ownership, construction and operation and maintenance) of BRT Projects and their effectiveness in the Philippines context.
- 9) **Component 5: Support in the implementation of NESTS** (estimated cost US\$2.0 million). Institutional development to strengthen the capacity of transport officials from DoTC and other major cities in transport planning, regulation, monitoring and administration; and particularly in planning for, and implementing, NESTS and the National Transport Plan (2011-2016)—details to be worked out during preparation.

10) The key risks to the project are at the institutional and implementation agency levels. These are (i) the perceived high risk of corruption in the transport sector, (ii) weak capacity and governance, (iii) potential opposition from the informal transport sector, people to be resettled and proponents of a light rail system for Cebu, and (iv) given that this the first BRT project in the Philippines, the lack of clear institutional arrangements defining the roles of the national and local governments in project implementation, ownership, operation and management. Another important risk at this stage is the uncertainty as to whether the ultimate borrower will be DoTC or Cebu City.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
Natural Habitats (OP/BP 4.04)		X	
Pest Management (OP 4.09)		X	
Physical Cultural Resources (OP/BP 4.11)		X	X
Involuntary Resettlement (OP/BP 4.12)	X		
Indigenous Peoples (OP/BP 4.10)		X	
Forests (OP/BP 4.36)		X	
Safety of Dams (OP/BP 4.37)		X	
Projects in Disputed Areas (OP/BP 7.60)*		X	
Projects on International Waterways (OP/BP 7.50)		X	

V. Tentative financing

Source:		(\$m.)
Borrower/Recipient		15.00
IBRD		80.00
IDA		0.00
France: French Agency for Development		15.00
Climate Investment Funds		15.00
Local Sources of Borrowing Country		20.00
	Total	145.00

VI. Contact point

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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

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