HONDURAS

CENTRAL DISTRICT PUBLIC TRANSPORTATION PROJECT (TEGUCIGALPA-COMAYAGÜELA)

(HO-L1061)

LOAN PROPOSAL

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ANNEXES

PRINTED ANNEXES

Annex I Development Effectiveness Matrix – Summary

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Annex III Procurement Plan – Summary

ELECTRONIC LINKS

REQUIRED

Procurement plan

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361642

2. Annual work plan

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361629

3. Monitoring and evaluation arrangements

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361272

4. Environmental and social management report

 $\underline{http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361298}$

5. Project execution plan

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361280

OPTIONAL

1. Economic and financial study – Prefeasibility

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361779

2. Technical note: Transport

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361864

3. Design of TRANS-450

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361846

4. Improvement of the urban road system in Tegucigalpa – Final report http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361829

5. Financial programming

http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35361749

ABBREVIATIONS

AMDC Alcaldía Municipal del Distrito Central [Central District Municipal

Government]

AWP Annual work plan BRT Bus rapid transit

ESMR Environmental and social management report

FSO Fund for Special Operations

ICAS Institutional Capacity Assessment System

IRR Internal rate of return
NPV Net present value
OC Ordinary Capital
PEP Project execution plan
PEU Project execution unit

SOPTRAVI Secretaria de Obras Públicas, Transporte y Vivienda [Department of Public

Works, Transport, and Housing]

TRANS-450 Programa de Transporte Público Masivo para la AMDC [Mass public

transport program for the AMDC]

EMU Environmental Management Unit

PROJECT SUMMARY

HONDURAS CENTRAL DISTRICT PUBLIC TRANSPORTATION PROJECT (TEGUCIGALPA-COMAYAGÜELA) (HO-L1061)

Financial Terms and Conditions											
		Paral	llel financing								
Government	Amortization period:	FSO	OC								
	_	40 years	30 years								
Amount	Grace period:	40 years	5.5 years								
US\$9 million	Disbursement period:	5 years	5 years								
110¢21'11'	Inspection and supervision fee:	N/A	*								
US\$21 million	Interest rate:	0.25%	LIBOR								
US\$3 million	Credit fee:	N/A	神								
**************************************			U.S. dollars from								
US\$33 million	US\$33 million Currency:		the Single Currency Facility								
	Amount US\$9 million US\$21 million US\$3 million	Government Amount US\$9 million US\$21 million US\$3 million Credit fee: Credit fee: Amount Grace period: Disbursement period: Inspection and supervision fee: Interest rate: Credit fee:	Government Amortization period: FSO 40 years 40 years US\$9 million US\$21 million US\$3 million Credit fee: N/A Paral FSO 40 years 40 years 5 years Inspection and supervision fee: N/A Interest rate: 0.25% N/A								

Project at a

Objective:

The program seeks to contribute to improved quality of life for the population of the targeted area through the rehabilitation and improvement of urban and transportation infrastructure. The objective of this project is to improve public passenger transportation conditions and transit in general, so as to create a city that is competitive, efficient, and equitable, offering sustainable mobility opportunities for the low-income population and facilitating travel to opportunities for work and economic and social development. The project has the following main components: (i) construction of the first mass public transport corridor; (ii) institution-strengthening; (iii) administration; and (iv) audits and evaluations.

Special contractual conditions:

As conditions precedent to the first disbursement: (i) the subsidiary execution agreement will be signed (see paragraph 3.2); (ii) the project execution unit (PEU) will be established with at least the following key positions filled: the project coordinator, a specialist in transportation, planning and monitoring, a procurement specialist, a financial specialist, a monitoring specialist, a social specialist, and an environmental specialist (see paragraph 3.2); and (iii) the project operations manual will be approved and in effect, subject to the Bank's no objection (see paragraph 3.3). As special execution conditions: (a) prior to signature of the contract for the Bus Rapid Transit (BRT) works, an environmental license will be obtained from the municipal government's Environmental Management Unit (EMU), and the corresponding arrangement to mitigate impacts will be signed between the PEU and the EMU (see paragraph 2.4).

Exceptions to Bank policies: None.	
Project consistent with the country strategy:	Yes [X] No []
Project qualifies as:	SEQ[]PTI[]Sector[]Geographic[]Headcount[]
Procurement: See paragraph 3.6	

The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given sixmonth period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

** Since the adjustable rate will be discontinued on 1 July 2009, it will be replaced by LIBOR, with the requirement to set the rate.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 General context. The Central District, comprising the cities of Tegucigalpa and Comayagüela, has close to 1 million inhabitants, most living in the outskirts. The downtown area is devoted mainly to business, offices, and public and private services. The movement of the population is governed by its geographic distribution and socioeconomic activities, which substantially impact transportation services and transit. The Central District Municipal Government (AMDC) has a Strategic Development Plan extending to the year 2028 (when the city will celebrate its 450th anniversary), produced through a participatory methodology and known as "Plan Capital 450." The plan forecasts that the AMDC's population will grow to 2 million in the next 20 years, and identifies the need for effective land-use planning and reform of the urban mobility system so that growth will occur around sustainable transportation systems. The mass public transport program for the AMDC (TRANS-450) addresses those needs.
- 1.2 **Urban transportation problems**. The main problems with transport and transit in the Central District include the preponderance of individual motorized transportation and the consequent traffic congestion, and the oversupply of urban public transport services. The AMDC has a large number of public transport vehicles, and the fleet of private automobiles has grown at a pace of 10% a year in the last five years as a result of economic growth, cheaper automobile prices, and the lack of an efficient public transport system.
- Public transport (including collective taxis, minibuses, and omnibuses) accounts for 71% of motorized trips. The service is of poor quality owing to traffic conditions and inappropriate infrastructure, but also to the lack of effective regulation and inspection. Licensing and regulation of transport routes are the responsibility of the central government. The AMDC is responsible for establishing stops and identifying roads authorized for traffic circulation. The centralized planning and regulation model for public transport affects the sector's development, since the municipal authority, which has the main incentives to answer for its performance, does not have the tools or autonomy to organize it. On the operating level, public conveyances do not use established stops, creating delays and lowering the quality of the service. The lack of roads with sufficient capacity to carry the growing number of vehicles and the lack of necessary signage limit the good use of infrastructure. This worsens traffic congestion in downtown Tegucigalpa, where most public transport routes converge.
- 1.4 The conditions under which urban transport operates have an impact on the quality of life and the competitiveness of the AMDC. On the one hand, public transport

Link: idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35286087

At present, the Central District has 2,250 54-passenger omnibuses, 1,500 14-passenger minibuses, 7,300 licensed taxis, and 3,000 unlicensed taxis.

users—mainly the low-income population—waste time, travel under uncomfortable and unsafe conditions, and must pay when they transfer since the service is not integrated. On the other hand, traffic congestion adversely affects the efficiency of passenger and freight transport services and other economic activities that depend on the transportation system.

- 1.5 **Road and transportation systems**. Tegucigalpa and Comayagüela have an irregular urban layout on account of their mining origins, their broken topography, and the river that separates the two cities. The city has grown from the center outwards without any land-use planning and has not invested in road infrastructure and public services, particularly in the informal growth areas on the periphery of the AMDC. The roads fall into three categories: primary distributor, secondary, and tertiary. About 10 main boulevards fall into the first category, most laid out radially from the historic center to the periphery, plus Boulevard Fuerzas Armadas, which crosses the AMDC from northeast to southwest, and the peripheral ring road in the south.
- In the last 15 years, three major transportation studies have been done to determine the needs of the AMDC: (i) a study on improving the urban road system of Tegucigalpa, prepared by the Japanese International Cooperation Agency (JICA) in 1995 and 1996; (ii) an urban transport and road feasibility plan for the Central District of Honduras, prepared by the APIA XXI / Intecsa-Inarsa S.A. consortium in 2004 and 2005; and (iii) a study on modernizing urban transport management and the operating fleet in Tegucigalpa, conducted by the firm REGIOPLAN in 2003 and 2004.
- 1.7 These studies were revised and consolidated, resulting in this proposal to restructure the transport and mobility system by strengthening transportation offerings through an integrated system with greater capacity and dedicated lanes fed from the outlying settlements. TRANS-450 calls for the development of several corridors, the first of which, to be financed under this operation, will run between Boulevard Suyapa and Boulevard Centro-América and will represent approximately 15% of public transport trips (equivalent to 70,000 passengers/day).
- 1.8 TRANS-450 is composed of corridors with dedicated priority lanes for high-capacity buses. This network of trunk corridors will be integrated with feeder roads served by lower-capacity vehicles. The timetable for implementing TRANS-450 includes an initial project involving a transport corridor to be built in the Boulevard Suyapa and Boulevard Centro-América corridors. Construction of this first corridor and the new transportation services will have a demonstration effect for the implementation of TRANS-450 and will act as a catalyst for the construction and startup of the other priority corridors.
- 1.9 Scheduling and control of the transport units will be run from an operations center, which will regulate the service to be supplied by the omnibus operators and monitor the operation of the stations on the system so that the number and frequency of the buses in circulation can be adjusted to demand in real time. The system will have

- integrated fares between trunk corridors and feeder roads. Fares will be collected by an independent company (see paragraph 1.16).
- 1.10 Country strategy. To address the problems of urban transport and their adverse impact on the quality of life of residents, the national and municipal authorities are committed to implementing a public passenger transport system in the AMDC with a sustainable and efficient legal and institutional strategy and high-quality service, through investments in infrastructure and reforms in the transport industry. In addition to the infrastructure components, development of a system of this kind will require changes in elements that regulate public transport and the issuance of new regulations. The national government agrees that it is important to transfer certain functions and responsibilities to the municipio, which has the greatest incentives and interest in providing quality service. Loan preparation has proceeded on the mutual understanding (between the national and municipal governments) that the mass transport system will lay the groundwork to demonstrate how an efficient system operates, and to spur a transformation of the industry, as has been the case in other countries. Under TRANS-450, the estimated cost of building the corridors with the highest demand is US\$120 million, and they will be built under several projects, based on the existing body of sector analytical studies for Central District. TRANS-450 consists of a series of projects that are related but independent in terms of their technical viability, economic feasibility, and operational aspects.
- 1.11 The Bank's country strategy with Honduras (2007-2010) has the objective of contributing to reduce poverty and improve equity by increasing access to opportunities for the poorest majority through: (i) improvement of the investment climate; (ii) competitiveness gains; (iii) human capital development; and (iv) strengthening of the institutional framework and risk management. This operation will enhance urban competitiveness by supporting public transport systems that increase urban economic efficiency by providing a system that enables all users to move about rapidly and safely, at a fare that balances the cost and quality of service.
- 1.12 **The Bank's involvement.** This operation is aligned with the country's strategy and with the Bank's, since it supports improvements in the mass public transport system. The rehabilitation of urban infrastructure is a key condition for greater competitiveness and rekindling and invigoration of the urban economy. Also, the provision of an effective transportation system accessible to low-income sectors will improve economic efficiency, mobility, and access to basic health care and educational services and job opportunities.
- 1.13 Coordination with other institutions and other donors. Given its scope, TRANS-450 requires broad institutional participation and coordination on the local, national, and international levels. In the transport sector, the Bank is a key point of reference for international donors operating in Honduras. While this operation was being prepared, work was carried out in coordination with the World Bank. At the national and local levels, the work has been coordinated with other institutions, including the Department of Public Works, Transport, and Housing (SOPTRAVI)

- and the Office of the Presidential Commissioner on Infrastructure, Public Services, and Modernization of the State. As part of these interagency meetings, consensus has been built as to the need for changes to the Transportation Act.
- 1.14 Based on the legal analysis performed, it was concluded that operation of the system can be grounded on the interpretation of the existing law. To supplement this legal grounding, changes to the Transportation Act are being explored, to specifically incorporate the new system (see paragraph 1.3). The AMDC is working with SOPTRAVI to analyze the transportation offerings and consolidate routes and frequencies in the program's corridors.

B. Objectives, components, and cost

1.15 The objective of this project is to improve public passenger transportation conditions and transit in general, so as to create a city that is competitive, efficient,

and equitable, offering sustainable mobility opportunities³ for the low-income population and facilitating travel to opportunities for work and economic and social development. This first corridor, at a cost of US\$33 million, is operationally feasible and financially self-sustainable, will be financed by the present operation. The loan will finance implementation of a modern Bus Rapid Transit (BRT) system that will connect the outlying areas to the areas where jobs and services



are generated. The project will reduce travel times, travel costs for users in the periphery, and road accidents in the corridors. It will also strengthen the public transport industry and reduce environmental pollution.

1.16 The physical interventions will include a dedicated lane, construction of stops and transfer terminals, bus yards, and works to revitalize downtown Tegucigalpa and the catchment areas that feed into the system and make downtown areas pedestrian-friendly. On the institutional level, the project is expected to reform the current regulatory framework and provide the public sector with better tools for planning, control, and supervision of transport operations. The project will also modernize the public transport industry in this first corridor by consolidating operators, linking

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Sustainable mobility satisfies the various travel needs of the urban population, serving its need for universal, safe, economically efficient, and environmentally sound travel through a variety of modes, with mass transport, nonmotorized transport, and pedestrians predominating over motorized private modes of transportation.

them to the service through concession contracts, and formalizing employment in the companies.

- 1.17 As in other countries, the startup and operation of the project are designed around a public-private partnership. The investments in infrastructure will be financed by the national government and the municipality. However, the operation of the buses will be granted in concession to private operators, which will be responsible for providing the rolling stock and for equipping the bus yards. The remuneration for their services will be based on kilometers travelled by the vehicles in accordance with the schedule and the established frequencies. The private investment would be US\$15.7 million. The operations center will supervise the quality of the service and will provide services for users.
- 1.18 Fares will be collected by a private company contracted through competitive bidding. The company will be independent of the bus service operators. A trust
 - fund will be established administer the funds. The fund will be used to: (i) pay the operators of the bus fleets as stipulated in their concession contracts; (ii) cover the costs of the fare collection system; (iii) cover the overhead operating costs of the project execution unit (PEU), including inspection and control of operations and safety in the

Public and private sector participation

Activities	Public	Private
Road infrastructure	C; M	M
Workshops and bus yards	P (land)	P; C
Transfer terminals	С	C; M
Stops	С	M
Control center	P; O	
Trunk and feeder vehicle fleet		P; O
Fare collection system		P; O
Trust fund to pay concessions		0

P: Procurement of equipment

C: Construction O: Operation

M: Maintenance

corridors; and (iv) establish a reserve fund to manage the fares.

- 1.19 The project has the following components:
- 1.20 Component 1: First mass public transport corridor (US\$31.4 million). This component will finance the design, configuration, and implementation of an integrated public passenger transport system, giving priority to high-capacity omnibuses using a system of dedicated lanes. In the first stage, the Boulevard Suyapa and Boulevard Centro-América corridor will be developed, which is the main route that carries the largest number of passengers, including feeder roads, improvements in the urban environment, and construction of a system of bicycle paths and pedestrian walkways. This component includes funds to contract consulting services to produce the designs for terminals, bus yards, and bus stops, and for execution and supervision of the works. The following activities will be financed:

The investment includes: (i) articulated omnibuses (35) US\$8.7 million; (ii) conventional buses (20) US\$2 million; (iii) bus yards and workshops US\$1 million; (iv) fare collection system US\$4 million.

- 1.21 **Supervision:** Technical, socioenvironmental, and financial supervision of the works.
- infrastructure 1.22 **Improvements** to and the urban environment: (a) implementation of a dedicated corridor approximately 4.3 kilometers in length. The central lanes of the selected corridor will be equipped to accommodate the articulated omnibuses and will be separated physically from lanes for mixed use by private vehicles, trucks, taxis, etc. The following works will be financed: (i) paving of all lanes; (ii) construction of sidewalks to facilitate access by nonmotorized transport to the transfer terminals and stations; (iii) signage, traffic lights at the major intersections of the corridors to allow optimization of general traffic, giving priority to flows of urban public transport; and (iv) implementation of the measures established in the environmental and social management plan; (b) paving and improvement of public spaces and roads in the Kennedy Circle-Colonia Kennedy section (1.5 km); (c) paving and improvements to feeder roads, including upgrading their signage and constructions of bus stops along the entire route, about 400 m apart; (d) design and construction of a bus yard and two intermediate stations for transfer between the trunk route and the feeder roads; (e) purchase of land for the terminals and bus yard; (f) design and construction of eight stations on the trunk system and nine stops on Centro-América and Suyapa Boulevards; (g) integrated system of traffic lights at 10 intersections connected to the control center; (h) urban improvements and landscaping along the corridor; and (i) bicycle and pedestrian systems in the historic center of Tegucigalpa.
- 1.23 **Control and operations center:** (i) technology platform for the control center: consulting services for the comprehensive security system and equipment for management and control; (ii) concessions: bidding on fare collection services and concession of transport services; and (iii) equipment and furniture.
- 1.24 **Social and environmental viability:** Includes: (i) support and mitigation of impacts on existing transport operators: business training and technical assistance for transport companies; (ii) awareness: design and implementation of a communications campaign; and (iii) social viability: design of a system to monitor the project's social impact; identification of job opportunities, training in technical trades, job exchange, and job placement services.
- 1.25 Component 2. Institution-strengthening (US\$200,000). This component includes consulting services and additional technical support to put the system into operation, such as detailed design of the control and operations system, rules for the certification of drivers and mechanics, control of system operating costs, contingency manuals (vehicle accidents, emergencies), and others.
- 1.26 **Component 3. Administration (US\$500,000).** This component includes: (i) management and support: specialists in the areas of public awareness, environment, transport planning, transport operation, finance/procurement, fare collection systems, strategic negotiations with transport operators; professional and

- technical personnel and support staff; etc.; (ii) equipment; and (iii) miscellaneous costs.
- 1.27 **Component 4. Financial audits and evaluation (US\$250,000)**. This component includes funds to contract independent financial audits and external evaluations.
- 1.28 An Infrafund technical-cooperation operation (ATN/OC-12220-HO) is financing the technical, economic, legal, and socioenvironmental studies required for the initial development of the project. The following studies are included: (i) demand and economic and financial viability; (ii) functional design of the corridor and predesign of operations; (iii) financial, legal, and institutional structuring; (iv) project engineering designs; (v) communication and awareness strategy; and (vi) socioenvironmental analysis. The studies in points (i) to (iv) are in the final stage of contracting. The project engineering designs are to be completed in late March 2011. Legal advisory services to develop the legal instruments needed to consolidate the agreements reached between the government and the AMDC to develop the system are in the process of being contracted. The technical-cooperation operation is also financing the strengthening of the municipal project executing unit, through the full-time support of international experts.
- 1.29 Another technical-cooperation operation (HO-T1142) is being arranged to finance an analysis of urban mobility that is sustainable in the medium and long term, to structure sector investments and management and to support Plan Capital 450. This technical assistance will include the detailed design of: (i) land use plans for the direct area of influence of the corridors, to spur diversified land use; (ii) vehicle and pedestrian circulation plan in the central area and around the stadium; (iii) detailed plans for parking restrictions in the main areas of Tegucigalpa; and (iv) plans for upgrading pedestrian access routes to the BRT corridors, ensuring universal access.
- 1.30 Cost. The project will be financed with an investment loan. The total cost will be US\$33 million, financed as follows: (i) US\$30 million from the IDB, and (ii) a counterpart contribution of US\$3 million. The counterpart resources will be contributed by the AMDC. The bicycle paths and pedestrian walkways will be financed with the loan from the International Finance Corporation (IFC). With regard to the purchase of land, the intention is to make maximum use of public land for the terminals in this first stage of the project. The Bank loan includes US\$30 million in parallel resources from the Fund for Special Operations (FSO) and the Ordinary Capital (OC), which are viewed as a single loan with dual sources representing 30% and 70%, respectively, to be disbursed on a pari passu basis.

Cost Table

	Category	IDB	AMDC	Total
1.	First mass public transport corridor	29,050,000	2,350,000	31,400,000
1.1	Works supervision	1,300,000		1,300,000
1.2	Improvements to infrastructure and the urban environment	25,500,000	2,350,000	27,850,000
1.2.1.	Dedicated corridors	11,180,000	-	11,180,000
1.2.2.	Paving and improvement of public spaces	4,370,000	=	4,370,000
1.2.2.	Feeder roads	1,425,000	-	1,425,000
1.2.4.	Transfer terminals and bus yards	4,275,000		4,275,000
1.2.5.	Purchase of land	210,000	1,600,000	1,810,000
1.2.6.	Access stations to the trunk systems and bus stops	2,565,000		2,565,000
1.2.7	Traffic lights	1,000,000		1,000,000
1.2.8.	Improvements to the urban environment	475,000		475,000
1.2.9	Bicycle paths and pedestrian walkways	-	$750,000^{5}$	750,000
1.3	Control and operations center	1,750,000		1,750,000
1.4	Social and environmental viability	500,000		500,000
2.	Institution-strengthening	200,000		200,000
3.	Administration	500,000	650,000	1,150,000
3.1	Work team	500,000	250,000	750,000
3.2	Equipment		200,000	200,000
3.3	Operating costs		200,000	200,000
4.	Project audits and evaluation	250,000		250,000
	TOTAL	30,000,000	3,000,000	33,000,000

C. Key results indicators

- 1.31 The main expected outcomes are: (i) an increase in the commercial speed of vehicles in the public transportation trunk corridor; (ii) reduction in travel times of the users of public transport; and (iii) reduction in waiting times at stops in the historic center of Tegucigalpa. The main output indicators are: (a) public transport system built: trunk corridor, feeder system, terminals, and bus yards, (b) system of bicycle paths, (c) pedestrian streets in the historic center of Tegucigalpa; and (d) improvement of public spaces.
- 1.32 The proposed indicators and means of verification optimize the use of the information available in the AMDC and the information to be obtained directly or indirectly during execution of the loan. A baseline exists for some indicators, whereas one for the remainder will be developed at the outset of the consulting engagements to be financed under technical-cooperation operation ATN/OC-12220-HO. The baseline thus established will be the yardstick for project

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⁵ Resources from IFC financing.

evaluation. The measured results will be compared with the projected values given in the Results Matrix.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

2.1 The first project in the TRANS-450 program will cost a total of US\$33 million, financed as indicated in paragraph 1.30. The expected execution period is five years.

B. Environmental and social safeguard risks

- 2.2 The project will have mainly positive impacts, since it will contribute to greater mobility of the population, particularly the low-income segment, through better public transport offerings. These improvements will be seen in terms of quality (greater frequency and reliability of service, new vehicles with sustainable technology), accessibility, and travel speed, connecting the areas where the low-and middle-income population live to the areas where jobs and social services are concentrated, such as the teaching hospital and the university. It will also promote the improvement of streets, of conditions for pedestrians, and, above all, of the urban spaces in downtown Tegucigalpa and the surrounding areas.
- 2.3 The project will help to reduce air pollution and CO₂ emissions by reducing the number of vehicles driven in the Central District as a result of the rationalization of routes, the attraction of drivers of individual vehicles to public transport, and promotion of the use of nonmotorized transport.
- 2.4 A specific environmental and social analysis was done for the project during preparation (see electronic link 5: "Environmental and social management report"), which addressed the Bank's environmental and social safeguards and policies and the legal framework at the national and local levels. Under the legal framework, prior to signature of the contract for the works, an environmental license must be obtained from the municipal government's Environmental Management Unit (EMU), and the corresponding impact mitigation agreement must be entered into between the project execution unit (PEU) and the EMU.
- 2.5 Based on the socioenvironmental analyses performed, the environmental impacts will be limited to the construction stage, and will be limited, localized, temporary, and reversible. The mitigation measures are well-known and easy to apply. These measures form an integral part of the plan for environmental control of the works presented in the environmental and social management report (ESMR), and will be incorporated into the bidding documents and contracts for execution and supervision of the works in the corridors. Also, the detailed engineering plans for the corridors will include a vulnerability analysis and, if necessary, analysis of adaptation to climate change.
- 2.6 According to the technical studies and field visits, the project is not expected to affect individuals or economic activities. However, if necessary, a relocation plan

will be developed in keeping with the ESMR guidelines for the purchase of land and involuntary settlement, which were designed in keeping with Bank Operational Policy OP-710. The necessary legal arrangements will be established in accordance with OP-710 and Honduran legislation, which allow for compensation and relocation in compliance with OP-710 and significantly minimize the risks associated with legal claims regarding expropriation processes. The main social impacts are related to the change in the transportation system and the corresponding impact on current operators and users. To mitigate them, mechanisms will be designed to promote participation by existing operators in the new public transport arrangement. For those left out of the system, training sessions will be promoted to support their reentry into the workforce. Publicity campaigns will be held to raise public awareness of the features of the BRT system, including the new rules of operation, public transportation ethics, and environmental education practices associated with its use.

C. Fiduciary risk

- 2.7 An institutional capacity assessment of the executing agency was conducted, which found that, although the Central District Municipal Government (AMDC) does execute major works, it has certain limitations for the execution of this project, given the specialties required and the periods envisioned. It was agreed that the most efficient way of executing the project is through a specific project execution unit (PEU), to be established in the Public-Private Investment Office of the AMDC. Agreement was also reached on the unit's personnel and the timeline for hiring them, with emphasis on achieving: (i) capacity to contract and manage large-scale works, using Bank procurement procedures; (ii) planning and operations management capacity, particularly for aspects related to operations and transportation economics (costs and fares); and (iii) bidding processes for transport and fare collection services. Technical-cooperation operation ATN/OC-12220-HO includes resources for training the senior PEU personnel, and the project will allocate resources to strengthen the PEU's capacity to operate the system.
- 2.8 Three months after the PEU is established, an institutional evaluation will be performed using the Institutional Capacity Assessment System (ICAS) methodology and, based on the findings, additional strengthening actions will be proposed as well as the necessary measures, actions, and modifications related to the fiduciary arrangements. Periodic analyses will be conducted during the project to confirm that the mitigation measures have been implemented and are working as planned, and to detect any changes in risk levels so as to adjust the mitigation measures.

Procedures similar to those established in Congressional Legislative Decrees 72-2007 and 14-2008 with regard to expropriation on grounds of public utility and pursuant to the Property Act and the Millennium Challenge Account Act of 1 September 2005.

D. Other key issues and risks

- 2.9 **Economic evaluation.** An economic evaluation of the project was performed, quantifying the most significant direct impacts. The direct benefits considered in the evaluation of the component to improve public transport include savings in the operating costs of vehicles and savings in time by users. To determine the benefit of the reduction in operating costs, the number of kilometers travelled by buses at present and the number envisaged under the new system were considered, as well as the increase in commercial speed. To determine the benefits from the savings in travel time, the time differential was calculated for an average trip at current speeds and the speed once the BRT is implemented, applying the person-hour value weighted for the different reasons for travel.
- 2.10 The economic evaluation considered a 20-year analysis horizon, running from completion of the works and a discount rate of 12%. The public transportation project yields a NPV of US\$19.3 million and an IRR of 21%. A sensitivity analysis was done of the most significant variables, and in all cases the rates of return were above 12%, confirming that the project is robust.
- 2.11 **Financial capacity of the AMDC**. An analysis of the AMDC's financial statements indicated that it can assume the financial obligations associated with project execution, which amount to US\$3 million. The following table shows the consolidated values of the AMDC balance sheet and the income statement for the years 2006, 2007, and 2009.⁷

AMDC Financial Statements (in US\$ millions)

	2006	2007	2009
Balance sheet			
Assets	111.79	143.58	226.63
Liabilities	88.53	114.47	170.11
Equity	23.26	29.11	56.53
Income statement			
Income	63.63	70.58	102.95
Expenditures	61.11	64.79	83.63
Result	2.53	5.79	19.32

2.12 In this period, municipal finances have consistently run a surplus, as shown by the income statements, which are positive at the end of each year. The result for each period has been gradually increasing. Also, municipal equity has grown significantly over the same period. Despite the increase in municipal debt in the period under consideration (currently US\$148 million), current assets have also increased (currently US\$173 million), demonstrating an acceptable level of liquidity. Current liabilities and short-term financial transactions have taken on greater weight during this period, now accounting for 85% of total municipal

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The data for 2008 were not available when this document was prepared.

- liabilities. Lastly, the total long-term debt has remained unchanged since 2006 at US\$26 million.
- 2.13 **Execution risks.** With regard to construction, the works are not difficult, and there is a sizeable national and international market of qualified supervision and construction companies for the types of works to be financed. With regard to transport, this is a specialized area for the AMDC, and a PEU will be established and its personnel strengthened with funds from technical-cooperation operation ATN/OC-12220-HO. With regard to the environment, the works do not present significant indirect impacts, and the direct impacts related to building the works will be effectively addressed in the works and supervision contracts. With regard to the procurement of land for the terminals and bus yards, some public land has been indentified preliminarily. In the event that it is not suitable, the project has set aside funds to commission studies for developing the yards and terminals with public-private partnerships.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Execution mechanism

- 3.1 The borrower will be the Republic of Honduras. The executing agency will be the Central District Municipal Government (AMDC). The two will enter into a subsidiary execution agreement setting out the commitments of the parties and the obligations associated with those commitments. To execute the project, the AMDC will establish a project execution unit (PEU) as a line unit reporting directly to the mayor, which will receive support from the AMDC's other line offices.
- 3.2 As conditions precedent to the first disbursement, the subsidiary execution agreement will be signed, and the PEU will be established with at least the following key positions filled: the project coordinator, a specialist in transportation, planning and monitoring, a procurement specialist, a financial specialist, a monitoring and supervision specialist, a social specialist, and an environmental specialist. These key personnel will be recruited based on job descriptions and terms of reference agreed upon with the Bank, using performance-based contracts. The renewal or replacement of these personnel will require the Bank's concurrence.
- As a condition precedent to the first disbursement, the project will have and operations manual, presented to the Bank for consideration. The manual must include planning procedures (multiyear budget, project execution plan, annual work plan, procurement plan), and procedures for execution and control of execution of the operation. The manual must also: (i) establish planning procedures, including the preparation, monitoring, and execution of the annual work plan (AWP); (ii) have a section on procurement procedures applicable to the project that clearly identifies the segregation of incompatible functions and includes at least the following processes: (a) procurement planning, (b) publicity and notice of procurement processes, (c) preparation of bid documents and contracts,

- (d) acceptance and opening of bids, (e) bid analysis and evaluation, (f) award and entry into effect of the contracts, and (g) contract administration during execution; (iii) have a section containing detailed procedures for financial management of the project that identifies: (a) the activities and tasks of the different AMDC entities involved throughout the process (budget, payments, accounting, reporting, etc.), (b) procedures and systems to facilitate real-time reporting of financial commitments and transactions, (c) principal internal control measures and procedures to be adopted for project execution, and (d) procedures for managing external audit services; (iv) address the environmental considerations identified in the ESMR; and (v) contain procedures for purchasing land.
- The duties and responsibilities of the PEU include: (i) planning, based on the project execution plan (PEP), the budgets, and the AWP; (ii) preparing, managing, and monitoring execution of the AWP based on the PEP; (iii) conducting project procurements; (iv) implementing and maintaining a control system that guarantees proper use of the loan proceeds and their safekeeping, and maintaining documentary records on transactions; (v) monitoring and supervision of AWP execution for each component and of the Results Matrix indicators; (vi) preparing physical and financial progress reports; (vii) preparing and updating the AWPs, the procurement plans, the six-monthly status reports, the evaluation reports, and the project completion report; (viii) periodically preparing and presenting progress reports to the AMDC on the qualitative and quantitative aspects of the project; (ix) coordinating and maintaining close relationships with all AMDC line units to carry out the planned activities; and (x) contracting the external evaluations and the independent audits.
- 3.5 In technical areas, the PEU has the following duties and responsibilities: (i) design, execution, and supervision of the technical aspects of the project; (ii) preparation of technical files for the execution of each component; (iii) identification of needs for budgeting and financial programming of each component; (iv) participation in the bid evaluation committees for the different procurement processes, as required; and (v) processing requests for payments to suppliers, based on the certification contained in the supervision reports on works, services, or goods procured. Also, the PEU will: (a) arrange for disbursements and transfers from the external credit and counterpart resources; (b) process payments to suppliers; (c) prepare requests for the replenishment of funds and the quantitative financial information corresponding to project execution in accordance with the requirements of applicable law and of the Bank, as agreed in the loan contract; and (d) retain all accountability documentation for the operation.
- 3.6 **Procurement**. The procurement of consulting services, works, and goods to be financed with the loan proceeds will be conducted in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB (document GN-2349-7) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-7), both of July 2006. All procurements will be subject to ex ante review.

- 3.7 **Disbursements.** The project will have a special account in the project's name at the Banco Central de Honduras for disbursements of the loan proceeds, to be administered by the Office of Public Credit of Honduras's Department of Finance. The funds will be transferred to the project's special operating account, to be opened at a commercial bank in the country, to meet commitments to pay suppliers as established by the municipality's PEU.
- 3.8 The project will disburse resources under the advance of funds modality, reflecting the actual cash requirements of the project. The frequency of the advances will be determined on the basis of the project's financial programming. Thus, the executing agency will periodically update its financial plan to establish the loan proceeds necessary for project execution, based on the budget, the work plan, and commitments. At least 80% of each advance must be justified, before the next advance will be made.

B. Summary of arrangements for monitoring and evaluation

- 3.9 The monitoring arrangement includes audits, six-monthly administration missions, six-monthly status reports, the annual work plan, and annual external audits. A breakdown of these activities is presented in the required electronic link, "Monitoring and evaluation arrangements."
- 3.10 **Financial supervision.** The supervision method will be ex post, although the first disbursements will be subject to ex ante review, to confirm the executing agency's reporting capacity, since interim and annual operational/financial audits will be provided with six-monthly reports. The Bank will supervise proper implementation of the systems to be used (SAFOBID and automated accounting system), and will review the auditor's reports and require action plans to address any qualifications or findings, as well as actions to mitigate any risks identified. These actions will be monitored through six-monthly onsite reviews at the offices of the executing agency and through visits to the project works. In addition, desk reviews will be performed of both disbursements and the reconciliation of the special account for advances of funds.

C. Significant activities post-approval

3.11 **Public transport.** The technical, institutional, and socioenvironmental studies, and preparation of designs and bidding documents are being financed with funds from the technical-cooperation operation now in execution (ATN/OC-12220-HO), as is strengthening of the executing unit. The bidding processes for these studies are at an advanced stage. The remaining technical studies will be executed with the loan proceeds.

Banco Interamericano de Desarrollo (BID)

ANEXO CONFIDENCIAL CONFIDENTIAL ANNEX

INE-TSP@iadb.org

RESULTS MATRIX

Outcome indicators	Baseline	Target	Comments								
Objective of component 1	Design, configuration, and implementation of an integrated public passenger transport system, giving priority to high-capacity omnibuses undedicated lanes (Bus Rapid Transit, or BRT). In the first stage, the Boulevard Suyapa y Boulevard Centro-América corridor will be develop which is the main route that carries the largest volume of passengers.										
Purpose of the project	To improve the efficiency, effectiveness, and quality of the public transportation system, and build the first stage of the BRT project in the corridors in question.										
Outcome indicators	Baseline	Comments									
Increase in the commercial speed of vehicles on the trunk route when the system comes into operation	Year 0: Current commercial speed is 8 km/h	Year 5: Increase in commercial speed in the transport system to not less than 20 km/h	The measurement will be taken at the outset of the consulting services to determine current speed and set the baseline, and then taken once the system comes into operation.								
Reduction in waiting times at stops in the historic center of Tegucigalpa	Year 0: Current waiting time at the downtown stops is 25 minutes on average	Year 5: Reduction of waiting time to no more than 15 minutes	The measurement will be taken at the outset of the consulting services to determine current speed and set the baseline, and then taken once the system comes into operation.								
Savings in travel time for users	Year 0: Results of surveys of origin and destination	Year 5: At least a 25% reduction compared to the baseline	The baseline will be set using specialized surveys.								

Component 1. First public mass transport corrido	r										
Objective of subcomponent 1.2 Improvements to infrastructure and the urban environment		Design, construction, installation, and startup of the works, systems, and technical solutions to enable the BRT system ar urban surroundings to operate.									
Subcomponent 1.2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					Target Comments					
Outputs Configuration of the BRT system infrastructure	0		100%				 Infrastructure final designs prepared Terms of reference for the final designs prepared 				
Trunk system	0 km	20%	45%	25%	10%		4.3 km	The yearly targets correspond to the percentage progress of works.			
Feeder roads repaved	0 km		15%	50%	35%		1.0 km				
Transfer terminals and yards	0				1 terminal	2 terminals 1 yard	• 1 terminal (Kennedy or Suyapa)				
							• 1 terminal on the island (one is intermediate)				
							• 1 yard				
Access stations to the trunk system and stops	0				8 stations		• 8 stations				
					9 stops		• 9 stops				
Intersections with traffic lights connected to the control center and stations that require pedestrian stoplights operating in a centralized manner	0			70%	30%		 10 intersections with traffic lights 100% of stations that so require with pedestrian stoplights 	The yearly targets correspond to the percentage progress of procurement and installation.			

Subcomponent 1.2	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Target	Comments
Urban improvement works: sidewalks repaired, public lighting installed, public squares refurbished, and pedestrian bridges along the corridors and around the transfer terminals	0	1	_	100%			km of sidewalks public lighting units pedestrian crosswalks	The targets will be set when the final designs for the works are developed.
Bicycle paths, pedestrian walkways and patrol system operating	0		1 km walk- ways		2 km bicycle paths		km of bicycle paths 1 km of pedestrian walkways	астегоров.
Objective of Subcomponent 1.3: Control and operations center	Provide the	BRT wit	h the neces	ssary struct	ure and capaci	ity for plan	nning, management, and control for	its optimal operation.
Subcomponent 1.3	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Target	Comments
<u>Outputs</u>							Fare model developed	
Configuration of the fare model and the business plan			100%				Business model developed	
							• Design of the institutional structure developed	
Control center in operation (technology platform)	0				1 control center		Management and control center in operation	
Transport, collection, and fleet optimization systems concessioned					Transport system		Startup of the:	
					Collection system	1	• Transport system in the corridor	

Optimized fleet size

system

• Collection system

• Optimized fleet size system

Objective of Subcomponent 1.4 Socioenvironmental viability	Take action	ake action to mitigate the potential social, environmental, and business impacts of project execution.									
Subcomponent 1.4	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target	Comments			
Outputs Businesspeople affected by implementation of the BRT have received training and technical assistance			20%		80%		entrepreneurs trained and provided with technical assistance	The target will be completed once the technical unit determines the number of businesspeople affected.			
Communications campaigns conducted		5%	15%	30%	25%	25%	 1 program communications plan 1 campaign in each year of the project. 	100% of this campaign must carried out every year. The content communicated in each campaign will be drawn from the strategic communications plan to be prepared in year 1.			

Objective of component 2 Institution-strengthening	Supplemen	Supplemental technical support to put the system into operation									
Subcomponent 2	Baseline Year Year Year Year Year Target 5							Comments			
Outputs Operations plan of the BRT system developed	0	100%					Operational design developed	Development of the operations plan of the BRT system.			
System manuals implemented	0				Manual on certification Technical manuals for vehicles Contingency manuals		Manual on driver certification, technical manuals for vehicles, and contingency manuals				

PROCUREMENT PLAN SUMMARY

I. GENERAL INFORMATION

Country Republic of Honduras

Project name: Central District Public Transportation Project

(Tegucigalpa-Comayagüela)

Project number: HO-L1061

Borrower: Republic of Honduras

Executing agency: Central District Municipal Government (AMDC)

II. BRIEF DESCRIPTION OF THE PROJECT'S OBJECTIVES AND COMPONENTS

The objective of this project is to improve public passenger transportation conditions and transit in general, so as to create a city that is competitive, efficient, and equitable, offering sustainable mobility opportunities for the low-income population and facilitating travel to opportunities for work and economic and social development.

The first mass public transport corridor has the objective of design, configuration, and implementation of an integrated public passenger transport system, giving priority to high-capacity omnibuses using a system of dedicated lanes (Bus Rapid Transit, or BRT).

- Date of project approval by the Board of Executive Directors: November 2010
- **Date of signature of the loan contract:** December 2010
- Estimated date of the last disbursement: March 2016
- Address of the office responsible for the procurement plan: Gerencia de Inversión Pública Privada/AMDC, Colonia Palmira, Edificio Zafiro, 4to piso, Tegucigalpa, M.D.C.

TOTAL CONTRACTS PLANNED UNDER THE PROGRAM

Component	7	Works			Goods		Nonconsulting services		se	nsultin ervices Firms	_		Total	
	ICB	NCB	S	ICB	NCB	S	NCB	S	SSS	QCBS	LCS	SSS	NICQ	
Comp. 1. BRT	2	1		2						2			10	17
Comp. 2. Institution- strengthening										1			3	4
Comp. 3. Administration													10	10
Comp 4. Audits										1			2	2
Total	2	1		2						4			25	34

Period covered by this procurement plan: December 2010 to March 2016

Component 1: First mass public transport corridor

Ref.	Category and description of the procurement contract	Estimated cost (US\$)	Method**	Review	Source of financing		Prequal.	Estimated dates		Status	Comments
no.					IDB	Local/ Other	Yes/No	Start	End	Status	Comments
WORKS											
1	Construction of the trunk corridor (with stops) and feeder roads	20,225,000	ICB	Ex ante	100%		No	Mar 11	Dec 12	Pending	
2	Construction of bicycle paths and pedestrian walkways in the historic center	712,500	NCB	Ex ante		100%	No	Mar 11	Jan 12	Pending	
3	Construction of transfer terminals and yards	4,275,000	ICB	Ex ante	100%		No	Jan 12	Dec 12	Pending	
CON	SULTING SERVICES										
	Supervision of the trunk corridor and feeder roads	1,075,000	QCBS	Ex ante	100%		N/A	Dec 10	Jan 13	Pending	
	Supervision of terminals, yards, and stations	225,000	QCBS	Ex ante	100%		N/A	Sept 11	Jan 13	Pending	
	Inspection of the bicycle paths and pedestrian walkways in the historic center	37,500	QCBS	Ex ante		100%	N/A	Dec 10	Feb 12	Pending	
	Training and communications for social and environmental viability	500,000	CQS	Ex ante	100%		N/A	June 11	Mar 14	Pending	
GOC	DDS AND RELATED SERVICES	_	_								
	Supply and installation of the integrated traffic light system	1,000,000	ICB	Ex ante	100%		N/A	Jan 12	Sept 12	Pending	
	Supply, installation, and start up of the control center	1,750,000	ICB	Ex ante	100%		N/A	Feb 12	Sept 12	Pending	

Component 2: Institution-strengthening

Ref.	Category and description of the contract	Estimated cost (US\$)	Method**	Review	Source of financing		Prequal.	Estimated dates		Status	Comments
					IDB	Local/ Other	Yes/No	Start	End	Sucus	
CON	SULTING SERVICES										
	Technical studies	100,000	QCBS	Ex ante	100%		N/A	Jan 12	Dec 12	Pending	
	Technical studies	100,000	NICQ	Ex ante	100%		N/A	Jan 12	Dec 12	Pending	3 consultants

Components 3 and 4: Administration, audits and evaluation

Ref.		Estimated cost (US\$)	Method**	Review	Source of financing		Prequal.	Estimated dates		Status	Comments
no.					IDB	Local/ Other	Yes/No	Start	End		
CON	SULTING SERVICES										
	Program administration	750,000	CQS	Ex ante	67%	33%	N/A	Dec 11	Aug 14	Pending	
	Project audits	200,000	QBS	Ex ante	100%		N/A	Dec 10	Apr 15	Pending	
	Midterm review	25,000	CQS	Ex ante	100%		N/A	July 12	Jan 13	Pending	
	Final evaluation	25,000	CQS	Ex ante	100%		N/A	July 14	Dec 14	Pending	
GOO	DS AND RELATED SERVICES										
	Equipment and furniture for the PEU	200,000	NCB	Ex ante		100%	N/A	Dec 10	Jan 11	Pending	

^{*} Ex post reviews below the thresholds will apply after two program processes have been reviewed ex ante in each category and have been found satisfactory by the Bank. In other words, the first two bidding processes that should be subject to ex post review will be subject to ex ante review.

Consulting firms: QCBS: Quality- and cost-based selection QBS: Quality-based selection FBS: Selection under a fixed budget; LCS: Least-cost selection; CQS: Selection based on the consultants' qualifications; SSS: Single-source selection.

Individual consultants: NICQ: National Individual Consultant selection based on Qualifications; IICQ: International Individual Consultant selection based on Qualifications.

^{**} Goods and works: ICB: International competitive bidding; LIB: limited international bidding; NCB: national competitive bidding; S: shopping; DC: direct contracting; FA: force account; PSA: Procurement through specialized agencies; PA: Procurement agents; IA: Inspection agents; PLFI: Procurement in loans to financial intermediaries; BOO/BOT/BOOT: Build, own, operate/build, operate, transfer/build, own, operate, transfer; PBP: Performance-based procurement; PLGB: Procurement under loans guaranteed by the Bank; PCP: Community participation procurement.