

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PARAGUAY

DOWNTOWN REDEVELOPMENT, MODERNIZATION OF METROPOLITAN PUBLIC TRANSPORT, AND GOVERNMENT OFFICES

(PR-L1044)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Alejandro Taddia (INE/TSP), Project Team Leader; Miroslava de Nevo, Rafael Acevedo-Daunas, and Caterina Vecco (INE/TSP); Juan Manuel Leño (TSP/CPR); Roberto Camblor (FMM/PCR); Mariano Perales and Alberto de Egea (PDP/CPR); Kevin McTigue (LEG/SGO); and Graciela von Barga, Rocío González Cañete, and Gloria Pérez Ayala (consultants).

CONTENTS

PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING	1
A.	Background, problems addressed, and rationale	1
B.	Objectives, components, and cost.....	3
C.	Key results indicators.....	8
II.	FINANCING STRUCTURE AND MAIN RISKS.....	8
A.	Financing instruments	8
B.	Social and environmental risks	8
C.	Fiduciary risk	10
D.	Other special issues and risks.....	11
III.	IMPLEMENTATION AND MANAGEMENT PLAN	11
A.	Execution mechanism	11
B.	Summary of arrangements for monitoring and evaluation.....	14
C.	Significant activities after approval	14

ANNEXES	
Annex I	Development effectiveness matrix summary
Annex II	Consolidated results matrix
Annex III	Summarized procurement plan

ELECTRONIC LINKS	
REQUIRED	
1.	Procurement plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35290120
2.	Annual work plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35288650
3.	Monitoring and evaluation arrangement http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35294385
4.	Environmental and social management report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35294363
OPTIONAL	
1.	General presentation of Programa Asunción 2011 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292909
2.	Program execution plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35288717
3.	Urban redevelopment, 1st, 2nd, and final reports http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35292912 http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35292914 http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35292916
4.	Economic report on urban redevelopment - 2005 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292919
5.	General presentation of the urban transport program http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292922
6.	Plan CETA (master transport plan) – Final report 1999 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292924
7.	Public transportation review. – Final report 2009 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292927
8.	Economic and financial study – Prefeasibility http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35290953
9.	Institutional capacity assessment for program execution (ICAS) and design of the execution mechanism http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292947
10.	Transport sector note – 2008 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292954
11.	Safeguards policy filter and safeguards screening form http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35294404

ABBREVIATIONS

AWP	Annual work plan
BRT	Bus Rapid Transit
ESMR	Environmental and social management report
ICAS	Institutional capacity assessment system
IRR	Internal rate of return
LEED	Leadership in Energy and Environmental Design
MOPC	Ministry of Public Works and Communications
NPV	Net present value
OFID	OPEC Fund for International Development
PCU	Program coordination unit
PEP	Program execution plan
PROPEF	Project Preparation and Execution Facility
RMA	Región Metropolitana de Asunción [Metropolitan Region of Asunción]
SETAMA	Secretaría de Transporte del Área Metropolitana de Asunción [Metropolitan Asunción Department of Transportation]
TEU	Technical execution unit
UOC	Contract operations unit
VMAF	Office of the Deputy Minister for Administration and Finance

PROJECT SUMMARY

PARAGUAY

DOWNTOWN REDEVELOPMENT, MODERNIZATION OF METROPOLITAN PUBLIC TRANSPORT, AND GOVERNMENT OFFICES (PR-L1044)

Financial Terms and Conditions					
Borrower: Republic of Paraguay			Parallel financing		
			FSO	OC	OC
Executing agency: Ministry of Public Works and Communications (MOPC)		Amortization period:	40 years	30 years	25 years
		Grace period:	40 years	6 years	5 years
		Disbursement period:	5 years	5 years	5 years
Source	Amount (US\$ million)	Inspection and supervision fee	N/A	*	*
FSO parallel financing (20%)	15.6	Interest rate:	0.25%	LIBOR	LIBOR with the requirement to set the rate
OC parallel financing (80%)	62.4				
OC financing	47.0				
Cofinancing	35.0	Credit fee:	N/A	*	*
Total	160.0	Currency:	U.S. dollars	U.S. dollars from the Single Currency Facility	
Project at a glance					
Objective: The general objective is to improve the quality of life of the population in the intervention area through the rehabilitation and upgrading of urban and transportation infrastructure. To attain this objective, the program has been structured into the following main components: (i) renewal of downtown Asunción; (ii) construction of the first metropolitan public transport corridor; (iii) administration; and (iv) audits and evaluations.					
Special contractual conditions: The following will be conditions precedent to the first disbursement: (i) the program will have procedures and rules governing execution established in the Operating Regulations, which will be approved and enter into effect prior to the start of program execution (paragraph 3.4); (ii) the program will have a manual of procedures, which will be approved and enter into effect prior to the start of execution (paragraph 3.6); and (iii) the program coordination unit (PCU) and the technical execution units (TEUs) will be established and the following core areas will be covered: in the PCU, general coordination of the unit, planning and monitoring, and finances; in the TEU for the urban redevelopment component, technical coordination of the unit and procurements; and in the TEU for the first mass public transport corridor component, technical coordination of the unit and procurements (paragraph 3.2). The following will be special execution conditions: (i) prior to the start of the Plaza Ferial marketplace projects and the cleanup of Arroyo Jardín, an agreement will be signed covering the responsibilities, terms, modalities, timeline, and budget for resettlement of the affected families in Barrio San Jerónimo (paragraph 2.10); (ii) prior to the start of the work on Parque de la Solidaridad, evidence will be presented to the Bank that works on the Arroyo Jaén and Arroyo Jardín have been initiated, to address the problem of discharges of sewage into those waterways (paragraph 2.10); (iii) prior to the start of the Bus Rapid Transit (BRT) works on the section between the Cuatro and San Lorenzo markets, evidence will be provided of the agreement for the renovation and relocation of the stalls occupying public spaces in those areas (paragraph 2.10); (iv) prior to the call for proposals for the works associated with each component, agreements between the executing agency and municipal governments of Asunción, Fernando de la Mora, and San Lorenzo will be signed that guarantee the financial, environmental, and social functionality and sustainability of the works (paragraph 2.10); and (v) prior to the start of construction of the trunk corridor and feeder roads, the management entity must be operating and its director appointed (paragraph 3.3).					
Exceptions to Bank policies: None					
Project consistent with country strategy:		Yes [X]	No []		
Project qualifies as:		SEQ []	PTI []	Geographic []	Headcount []
Procurement: See paragraph 3.10.					
(*) 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 six-month 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, problems addressed, and rationale

- 1.1 **General context.** Paraguay covers 406,752 km², has a population of 6.2 million, and an economic structure sustained basically by the agricultural and agri-business sectors, which account for about 25% of GDP and 30% of jobs. The city of Asunción, Paraguay's capital, covers 11,700 hectares and has an estimated population of 520,000, making it the country's largest urban area in terms of geography and population. The Metropolitan Region of Asunción (RMA) includes 23 municipios, which increases the population of the metropolitan area to about 1.9 million. The city is the seat of the country's three branches of government (executive, legislative, and judicial), the country's largest river port, and its cultural hub.
- 1.2 One of the main features of the RMA is the growth of the suburban cities of Luque, Fernando de la Mora, San Lorenzo, Lambaré, Ñemby, and Mariano Roque Alonso at rates that are clearly faster than Asunción. This, coupled with a vehicle ownership rate in the suburbs that is higher than the metropolitan area as a whole (160 vehicles for every 1,000 people), explains the scattered urban development that requires large investments in infrastructure and services to provide coverage.
- 1.3 **Urban development.** Downtown Asunción is one of the most important urban areas where a variety of activities are concentrated, and also one of the most dilapidated. The abandonment suffered by downtown Asunción has led to uneven growth in the city, expelling the population toward the outskirts. The main reasons for this imbalance are a series of misguided public policies and lack of government investment in infrastructure and equipment (roads, transport, drainage, sanitation, green areas, housing, etc.) in the center of the city. All these factors contributed first to the saturation of the downtown area and then to its gradual deterioration and to an increase in instability, a perception of insecurity, and a decline in property values. Nonetheless, its historical importance and high urban development potential have not been considered to date in any comprehensive rehabilitation and improvement plan that would restore it to its place as the center of urban life in Asunción.
- 1.4 **Roads and transport systems.** The main road system in Asunción consists of six radial roads and six circular roads. The radial roads originate in the microcenter and fan outward, and each one connects to national or department highways. The circular roads are one to two km apart.
- 1.5 Growth in the RMA's population coupled with the lack of public investment, has led to serious traffic congestion. The RMA has two urban transport studies that shed light on its needs (CETA 1984 and CETA 1998, Japan International Cooperation Agency). They underline the preeminence of Asunción and its downtown area in attracting and generating travel to and from the entire

metropolitan area.¹ Between 1984 and 1998, traffic volume grew by about 240% or the equivalent of 9% a year. These studies were reviewed in July 2009 and it was found that their recommendations are still valid.

- 1.6 In 1988, 64% of trips were made using public transportation. According to the most recent surveys conducted by the Metropolitan Asunción Department of Transportation (SETAMA), public transportation, which has 1.2% of the vehicle fleet, accounts for 52% of the total of 2,250,000 motorized trips in the RMA. This reduction is evidence of the loss of competitiveness of public transportation, increased traffic congestion, longer travel times, lower levels of service, and upward pressure on the fares charged to users.
- 1.7 Public transportation services are divided into two large groups: one in the direct orbit of SETAMA and one that comes under the jurisdiction of each municipio. There are approximately 70 companies in SETAMA's orbit, which have a fleet of 2,445 units and serve 175 routes. On average, each vehicle makes 5.5 trips a day and 75% of all trips pass through the downtown area. The companies in the municipios have about 1,000 units, 331 of which operate in Asunción. The age of the vehicles averages 20 years for SETAMA's fleet and 25 years for the municipios' fleet.
- 1.8 The transportation studies (paragraph 1.5) were consolidated in the metropolitan transport plan. This plan is a proposal to restructure the metropolitan transport and mobility system in response to the need to provide the RMA with better infrastructure and, in particular, with public transportation services, with the goal of reducing congestion on the main radial avenues entering Asunción, where bus capacity is not used to its fullest. Accordingly, the supply of transport should be upgraded, with an integrated system with higher capacity and dedicated lanes running from the barrios and the outlying cities. The project consists of developing several corridors, the first along Avenida Eusebio Ayala which offers the highest individual coverage in the entire RMA, accounting for about 42% of trips using public transportation (equivalent to 17,000 passengers/hour/direction.)
- 1.9 **Institutional structure.** The Ministry of Public Works and Communications (MOPC) is the government agency responsible for designing, proposing, and implementing executive branch policies on infrastructure and basic services for the country's integration and economic development. The MOPC has a Deputy Minister of Transportation and a Deputy Minister of Public Works to which the Public Works Department reports.
- 1.10 **Country strategy.** The government's economic and social strategy plan includes reactivation of the economy and job creation under a sustainable development model among its priority development objectives. It specifically includes improvement of the public transport system in the RMA and urban renewal of the city of Asunción, chiefly the barrios in low-lying zones and the microcenter.

¹ Every workday, the city receives nearly 550,000 people commuting on public transportation, as well as 240,000 vehicles.

- 1.11 **Bank strategy.** The Bank's analysis in its strategy for the period 2009-2013 indicates that: (i) shortfalls in infrastructure are one of the main obstacles to the country's growth, and have a negative impact on its competitiveness; (ii) given the decline of the downtown area and the barrios in low-lying parts of the city (the oldest parts), an urban renewal operation in downtown Asunción is needed; and (iii) the RMA's public transport system requires a change in its economic and institutional model in addition to upgrades to infrastructure and vehicles.
- 1.12 **Bank participation.** This operation fits into the country and the Bank strategy since it supports urban remodeling of the downtown area of the city of Asunción and improvement of its public transport system. Rehabilitation of urban infrastructure is a basic condition for boosting competitiveness and reactivating and spurring the urban economy. Also, the provision of an adequate and accessible transport system for low-income sectors will improve economic efficiency, population mobility, and access to basic health care and education services and job opportunities. In addition, the program contributes to modernization of the State by promoting interagency coordination and strengthening management capacity. Therefore this program is consistent with the objectives established by the government in its economic and social strategy plan and with the Bank strategy.
- 1.13 **Coordination with other institutions and donors.** Given its scope and impact, this program requires broad institutional participation and coordination on the local, national, and international levels. In the transportation sector, the Bank is a key standard of reference for international donors active in Paraguay. When this operation was being prepared, possibilities for program cofinancing were explored with OPEC's Fund for International Development (OFID), which would allow it to attain a suitable scale and obtain financing compatible with its objectives and scope, ensuring fulfillment of the expected results. Coordination on the national and local levels included work with other institutions, among them the municipalities of Asunción, Fernando de la Mora, and San Lorenzo.

B. Objectives, components, and cost

- 1.14 **Objectives.** The program has the goal of improving the quality of life of the population in the intervention area through the rehabilitation and upgrading of urban and transportation infrastructure. The main objectives of the operation are: (i) revitalization of downtown Asunción by improving the urban infrastructure in Barrio San Jerónimo, renewing and establishing open spaces for public use, establishing pedestrian walkways and bicycle paths, building government offices and citizen service centers, and restoring historic buildings; and (ii) gradually establishing an integrated and efficient transport system for the orderly, rapid, and mass transport of the population between downtown San Lorenzo and downtown Asunción. To attain these objectives, the program will finance two interrelated components for the improvement of public transportation and land use.
- 1.15 **Component 1. Urban renewal (US\$28.46 million).** The main objective of this component is to renew and improve downtown Asunción, to reverse the current process of urban deterioration, promoting a rise in property values in the zone and

creating a hub of urban development for the city. This component includes funds to contract consulting services to perform the technical studies, prepare the designs, and execute and supervise the works. Funds will be provided to finance the following activities:

- 1.16 **Urban rehabilitation and improvement of Barrio San Jerónimo.** This includes: (i) final design of improvements to Barrio San Jerónimo; (ii) upgrading of urban infrastructure: regularization of sewer, storm drain, and water connections; works to rehabilitate and protect the banks of Arroyo Jaén and Arroyo Jardín; rehabilitation of approximately 2,500 m² of road and pedestrian infrastructure; and electrification works and fixed telephone lines, cables, and data transmission lines; (iii) urban equipment and furniture: purchase of land, detailed designs, and construction of the community center and belvedere; installation of urban furniture including benches, signage, public lighting, etc.; restoration of facades and surrounding areas; and development and implementation of a pilot waste recycling project; (iv) Plaza Ferial marketplace: creation of intermediate and open spaces, including equipment, urban furniture, walkways, services, and installations for a permanent marketplace that will provide sustainability for part of the population of San Jerónimo; and creation and start up of an organization to manage the market; (v) studies and consulting services: development of a specific regulatory framework and plan to strengthen self-management of Barrio San Jerónimo, start up, and monitoring.
- 1.17 **System of open spaces for public use.** Includes demolition, land preparation, sidewalks, perimeter treatment, lighting, landscaping, drainage, and furniture for rehabilitation of Jaén Park, Plaza Rodríguez de Francia, and Plazoleta Isabel la Católica and construction of Plaza de los Inmigrantes and Parque de la Solidaridad, totaling about 9 hectares of green areas.
- 1.18 **Road network between the three branches of government and basic services infrastructure.** Includes: (i) regularization of basic services and networks along the roads connecting the seats of the three branches of government: 3,600 m of electric, telephone, and data transmission lines, trunk sewer, water main, and storm drain; and (ii) regularization and treatment of road infrastructure for approximately 4.6 km.
- 1.19 **Government offices and citizen service centers.** Includes: (i) temporary lease of premises to relocate the offices currently occupying the site; (ii) final detailed designs for government office blocks and a citizen service center; and (iii) construction of the office blocks, parking, and development of the external space for approximately 54,000 m² in total.
- 1.20 **Restoration of historic public buildings.** Includes works to restore the public buildings that will be vacated when the offices they contain are moved to the new blocks that will be built (paragraph 1.19).
- 1.21 **Component 2. First metropolitan public transport corridor (US\$115.90 million).** This component will finance the design, structuring, and implementation of an integrated public passenger transport system, giving priority to high-capacity bus transit in dedicated lanes (Bus Rapid Transit, BRT). The first

stage will be built in the San Lorenzo–downtown Asunción corridor, along Avenida Eusebio Ayala, the main route which carries the largest volume of passengers. This component includes funds to contract consulting services to conduct the technical studies, prepare designs, and execute and supervise the works. Funds will be set aside for the following activities:

- 1.22 **Upgrading the urban infrastructure and environment.** Includes: (i) design and construction of approximately 17 km of dedicated corridors: consulting services for the basic services project; consulting services for the property and cadastral studies; construction of the trunk corridor, and construction of service networks; (ii) design and construction of approximately 100 km of feeder roads; (iii) design and construction of two bus yards, an intermediate transfer station, and two terminals, one in Asunción and one in San Lorenzo; (iv) access to the system: design and construction of approximately 27 stations in the trunk system and approximately 100 stops on the feeder system; consulting services for signage and communications systems with users; and provision and installation of signage at the stations and stops on the system; (v) integrated system of traffic lights at approximately 25 intersections connected to a control center; (vi) improvement in the urban environment: consulting services for the inclusion of urban design in the project; consulting services on treating the landscape in the corridor; and urban improvement works and landscaping along the corridor; and (vii) bicycle paths and pedestrian walkways: consulting services for the bicycle paths, pedestrian walkways, and stops; and approximately 20 kilometers of works to construct the bicycle paths, and 3 kilometers of pedestrian walkways and stops.
- 1.23 **Control and operations center.** Includes: (i) a technology platform for the control and management center: consulting services for the comprehensive security system; and construction and equipping of the management and control center; (ii) environmental monitoring center: development and implementation of the environmental monitoring center; and procurement of equipment for the center, with at least five monitoring points; (iii) service concessions: bids for ticketing concessions and bids for transport service concessions; (iv) studies and consulting services: economic and financial study, quality systems and manuals of functions and operations; advisory services for implementation of the mass transport system; development of research capacity in the university; (v) equipment and furniture; and (vi) administrative and operating costs.
- 1.24 **Promotion of social and environmental viability.** Includes: (i) support and impact mitigation for current operators of the transport system: training and technical assistance for transport companies; training for drivers and technicians for the new mass public transportation system; (ii) social communications: design and implementation of a communications campaign; (iii) promotion of environmental viability: program to scrap the fleet; monitoring of air quality and noise along the corridor; baseline study and design; and (iv) promotion of social viability: design of the project's social impact monitoring system and social baseline; relocation study and formalization of informal businesses in the Asunción and San Lorenzo markets;

identification of job opportunities; technical training in trades, labor exchange and job placement services; solutions in the markets and for informal vendors.

- 1.25 **Component 3. Administration (US\$4.20 million).** Includes: (i) management and support: social communications specialist; environmental specialist, transport planning specialist; service programming specialist; financial specialist; ticketing systems specialist; coordinator of strategic negotiations with transporters; technical-professional and support staff; bonuses for special services; etc.; (ii) equipment; and (iii) miscellaneous expenditures.
- 1.26 **Component 4. Financial auditing and evaluation (US\$0.20 million).** This component includes funds to contract independent external audits and evaluations in the financial, technical, operations, environmental, and social areas.
- 1.27 The technical, economic, and environmental studies required for the initial development of the urban renewal component are being financing with proceeds from loan 1143/OC-PR, preinvestment program, currently being executed by the Ministry of Finance. As for the first metropolitan public transport component, intraregional technical-cooperation funding was used to finance a trip by officials from the MOPC to visit officials from the Office of the Deputy Minister for Transportation of Colombia to learn about similar public transportation programs that were implemented in Bogota, Cali, and Pereira, among other cities.
- 1.28 The national authorities applied to the Bank to use funds from the Project Preparation and Execution Facility (PROPEF) line of credit (PPF-004/PR) to carry out urgent priority actions in the sector. This operation (PR-L1056, loan 2316/OC-PR, US\$4.9 million), approved by the Bank in April 2010, is financing urban renewal works, technical studies for the design of the first public transport corridor, and initial support for program implementation.
- 1.29 **Costs.** The program will be financed through a multiyear investment loan. The total cost will be US\$160 million, to be financed as follows: (i) US\$125 million from the IDB; and (ii) US\$35 million in counterpart funding. The Bank's funding includes: (i) US\$78 million in parallel resources from the Fund for Special Operations (FSO) and the Ordinary Capital (OC) viewed as a single loan with two sources representing 20% and 80% respectively, to be disbursed at the same rate; and (ii) US\$47 million from the Ordinary Capital. The Paraguayan government is negotiating a loan with OFID to cofinance the program. A table summarizing program costs and financing is presented below.

	Category	IDB	Counterpart	Total
1	Urban redevelopment	22,190,000	6,270,000	28,460,000
1.1	Urban renewal and improvement of Barrio San Jerónimo	1,590,000	710,000	2,300,000
1.2	Open spaces for public use (squares)	54,000	6,000	60,000
1.3	Road network between the seats of the three branches of government and basic services infrastructure	4,732,000	468,000	5,200,000
1.4	Government buildings and citizen service centers	13,630,000	4,870,000	18,500,000
1.4.1	Temporary leasing of premises	910,000	90,000	1,000,000
1.4.2	Final designs	360,000	40,000	400,000
1.4.3	Construction (includes demolition)	11,450,000	4,650,000	16,100,000
1.4.4	Supervision	910,000	90,000	1,000,000
1.5	Restoration of historic public buildings	2,184,000	216,000	2,400,000
2	First mass public transport corridor	89,100,000	26,800,000	115,900,000
2.1	Upgrading infrastructure and the urban environment	80,350,000	24,650,000	105,000,000
2.1.1	Dedicated corridors	43,900,000	13,700,000	57,600,000
2.1.2	Feeder roads	12,100,000	3,900,000	16,000,000
2.1.3	Integration terminals and bus yards	13,000,000	3,800,000	16,800,000
2.1.4	Access stations to the trunk system and stops	6,700,000	1,900,000	8,600,000
2.1.5	Traffic lights	1,250,000	350,000	1,600,000
2.1.6	Improvements to the urban environment	1,700,000	500,000	2,200,000
2.1.7	Bicycle lanes and pedestrian walkways in historic downtown Asunción	1,700,000	500,000	2,200,000
2.2	Control and operations center	6,310,000	1,890,000	8,200,000
2.3	Promotion of social and environmental viability	2,440,000	260,000	2,700,000
3	Administration	3,824,000	376,000	4,200,000
3.1	Personnel team	3,458,000	342,000	3,800,000
3.2	Equipment	145,600	14,400	160,000
3.3	Operating costs	220,400	19,600	240,000
4	Program audits and evaluations	182,000	18,000	200,000
5	Contingencies	4,804,000	436,000	5,240,000
	SUBTOTAL	120,100,000	33,900,000	154,000,000
6	Reimbursement of PROPEF (PR-L1056)	4,900,000	1,100,000	6,000,000
6.1	Component 1. Consulting services, final designs, and execution of works	2,900,000	223,500	3,123,500
6.1.1	Roadwork on Avenida Stella Maris	800,000	80,000	880,000
6.1.2	Parque de la Solidaridad	1,000,000	100,000	1,100,000
6.1.3	Plaza Rodríguez de Francia and Plazoleta Isabel la Católica	105,000	10,500	115,500
6.1.4	Implementation of resettlement plan	665,000	0	665,000
6.1.5	Land for Plaza Ferial	90,000	9,000	99,000
6.1.6	Cleanup of Arroyo Jaén and Arroyo Jardín and complementary works in Barrio San Jerónimo	240,000	24,000	264,000
6.2	Component 2 – Supervision of works	110,000	11,000	121,000
6.3	Component 3 – Technical studies for construction of the first BRT corridor	1,500,000	428,241	1,928,241
6.3.1	Consulting services for construction of the corridor	1,300,000	325,000	1,625,000
6.3.2	Technical support consulting services	200,000	103,241	303,241
6.4	Component 4 – Program implementation support	370,000	37,000	407,000
6.5	Component 5 – Program audit	20,000	2,000	22,000
6.6	Component 6 – Institution-strengthening	0	398,259	398,259
	TOTAL	125,000,000	35,000,000	160,000,000

C. Key results indicators

- 1.30 The principal expected outcomes are: (i) appreciation of property values in the intervention zone; (ii) increase in the speed of commercial vehicles in the public transport trunk corridor; (iii) reduction in travel times for public transportation users; and (iv) reduction in accidents in the trunk corridor involving buses. Also, the principal output indicators are: (i) Barrio San Jerónimo rehabilitated and improved; (ii) more open spaces for public use; (iii) government office complex built; and (iv) public transportation system built: trunk corridor, feeder network, stations, terminals, and bus yards.
- 1.31 The proposed indicators and means of verification optimize use of the information available in the MOPC and data to be obtained directly or indirectly during implementation of the loan. A baseline exists (year 2008) for some of the indicators, while one will be developed for the rest at the start of the respective consulting assignments. The baseline thus established will be the benchmark for project evaluation. All the output indicators will be verified directly; the outcome indicators may be measured directly, or indirectly in the case of road accidents. The results of the measurements will be compared with the expected values presented in the results matrix.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The program will cost a total of US\$160 million to be financed as indicated in paragraph 1.29. The Bank financing will take the form of two loans, the first involving parallel financing using funds from the Ordinary Capital and the Fund for Special Operations in a ratio of 80% and 20% respectively, and the second from the Ordinary Capital. The expected execution period is five years.

B. Social and environmental risks

- 2.2 An analysis framework has been used for the project that includes the entire general area of influence, covering the different urban renewal works and the mass public transportation system in the city's metropolitan area. As the basis for the analysis, the concept of sustainable transport coupled with urban development was used and in this framework, in addition to the individual studies for specific works, a series of complementary studies will be carried out financed by the PROPEF (PR-L1056) (under way) and by a technical cooperation project (PR-T1107) (in preparation). The program strategy is described below and the corresponding Environment and Social Management Report (ESMR) is presented in the electronic link (<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35294363>).
- 2.3 The program is still in the study stage and the final designs of the works in the different components will not be available by the date on which the loan is expected to be approved. The environmental and social reports for the BRT and the urban renewal works financed by the PROPEF and the designs of the government buildings to be financed by the loan require information from the corresponding

- engineering studies and will be carried out parallel to them, to ensure that the necessary measures feed back into the final designs.
- 2.4 To prepare the environmental and social strategy, the project team performed a careful review of the existing information, paid field visits to verify the baseline conditions, contracted specialized consulting services in environmental and urban development subjects and, based on the information available, it defined the scope and terms of reference for the studies to be conducted.
- 2.5 For the BRT project, a complete environmental and social impact study will be conducted to identify all subjects of interest, financed with the PROPEF. The expected environmental impacts are typical of medium-sized civil works and the project will be carried out in an area of scant ecological importance and therefore no significant environmental impacts are anticipated that cannot be adequately mitigated through management plans. The most relevant expected impacts will be in the social area and therefore more work will be done on the following topics: (i) physical expropriation of properties and businesses, including inventories, and where necessary, preparation of resettlement plans in accordance with policy OP-710 on involuntary resettlement; (ii) plan to relocate businesses in the Cuatro and San Lorenzo markets and for tapping business opportunities that arise from the development of the mass transport system; and (iii) a labor retraining plan for drivers and service suppliers who could potentially be affected by the introduction of a BRT system. It should be noted that the bid documents for the BRT clearly specify the need to pay special attention to the subject of road, pedestrian, and cyclist safety and to universal access to the transport system. Outreach and public consultation activities are already beginning and will continue permanently throughout the project.
- 2.6 As for the works planned in the urban renewal component, they are minor and with very localized impact which, from the environmental standpoint, can be adequately managed by: the use of technical environmental specifications approved by the MOPC, which are compulsory for all projects; the preparation of specific environmental and social management plans for the different works; and an involuntary resettlement plan being developed to relocate 22 families in Barrio San Jerónimo to renovated housing in the same barrio, to permit the construction of the Plaza Ferial marketplace and the cleanup of Arroyo Jaén and Arroyo Jardín. The management plans to be financed with the loan proceeds will be prepared simultaneously with the designs and the resettlement of the affected families in Barrio San Jerónimo will be a condition precedent for the execution of certain works. The ESMR describes the minimum scope of the management plans to be prepared for each work.
- 2.7 The government buildings component consists of the construction of approximately 22,000 m² to house the services of different government institutions. The United States' Leadership in Energy and Environmental Design (LEED) certification system will be used to ensure that the buildings have a smaller environmental footprint and are energy efficient, which will help to reduce the maintenance and management costs of the government offices. Like the urban renewal works, their

- environmental impact is typical of medium-sized civil works, is highly localized, and can be adequately mitigated through environmental and social management plans which will be carried out in parallel with the architectural and engineering designs.
- 2.8 Use of LEED or Green Roads, as applicable, is being encouraged for all the works to promote appropriate energy efficient technologies and smaller carbon footprints.
 - 2.9 To contribute to the sustainability of the interventions, technical-cooperation funds were requested (PR-T1107, in preparation) to finance a strategy for planning, management, and an institutional framework for land use and sustainable development of the RMA. Funds from the same technical-cooperation operation will also be used to finance a Nationally Appropriate Mitigation Actions (NAMA) pilot project for the metropolitan transport system of Asunción with the objective of obtaining funds from climate-change financing mechanisms.
 - 2.10 The following will be special execution conditions: (i) prior to the start of the Plaza Ferial marketplace projects and the cleanup of Arroyo Jardín, an agreement will be signed covering the responsibilities, terms, modalities, timeline, and budget for resettlement of the affected families in Barrio San Jerónimo; (ii) prior to the start of the works for Parque de la Solidaridad, evidence will be presented to the Bank that cleanup works on the Arroyo Jaén and Arroyo Jardín have been initiated, to address the problem of discharges of sewage into those waterways; (iii) prior to the start of the BRT works on the section between the Cuatro and San Lorenzo markets, evidence of the agreement for renewal and relocation of the stalls occupying public space in those areas must be presented; and (iv) prior to the call for proposals for the works associated with each component, agreements between the executing agency and municipal governments of Asunción, Fernando de la Mora, and San Lorenzo will be signed that guarantee the financial, environmental, and social functionality and sustainability of the works. All resettlement plans will follow Bank policy OP-710.

C. Fiduciary risk

- 2.11 An assessment of institutional capacity was done using ICAS, and the following results were obtained: (i) institutional: medium development and risk. The principal risk is related to delays in execution due to failure to delegate authority and the lack of timely communications. As a mitigation measure, the MOPC plans to implement a process of delegation of authorization by level of authority. The program's Operating Regulations will establish a delegation plan that gives maximum management autonomy to the general program coordinator; and (ii) Operational: medium development and risk. The principal risk is related to delays in the bidding and procurement processes and in shortcomings in the management of program execution. As a mitigating factor, the MOPC plans to establish a coordination unit and give the program the status of a procurement operations subunit to facilitate the execution and administration of all program procurements. The manual of procedures will establish the processes applicable to the program. Training will also

be included for staff responsible for applying the Bank's policies and operating procedures.

D. Other special issues and risks

- 2.12 **Economic evaluation.** An economic evaluation was performed of the impacts of the projects included in each of the two components, quantifying the most significant direct impacts. A consolidated evaluation of the program was also made and sensitivity analyses were performed for optimistic and pessimistic scenarios for the most significant variables.
- 2.13 The direct benefits considered in the evaluation of the urban redevelopment component include the appreciation in property values and savings in rent by the government. To determine the benefit for the rise in property values in the project's area of influence, the hedonic price model developed in 2005 was updated. This econometric model permits the impact of the different features of a property on its price to be isolated and to determine how much individuals would be willing to pay for an improvement in those features. Similarly, for the rents avoided, the benefits were calculated considering average values on the real-estate market.
- 2.14 The direct benefits considered in evaluating the public transport component include savings in the operating costs of vehicles, savings in time by users, and a reduction in the costs associated with the improvement in road safety. To determine the benefit from the reduction in operating costs, the reduction in the number of kilometers that the buses travel at present and the number they will travel under the new system, and the increase in commercial speed were considered. To determine the benefits from savings in travel time, the differential between the time required to take an average trip at current speeds and the time that would apply once the BRT system is built was calculated, applying person/hours weighted for the different reasons for traveling. Similarly, to calculate the reduction in costs from improved road safety, the reduction in the road accident rate and its impact on costs for the health care system were calculated.
- 2.15 The economic evaluation considered an analysis period of 20 years after the works are completed and a discount rate of 12%. The urban renewal component presents a net present value (NPV) of US\$14.8 million and an internal rate of return (IRR) of 28%; the public transport component presents a NPV of US\$214.1 million and an IRR of 31%. The consolidated program presents a NPV of US\$228.9 million and an IRR of 31%. A sensitivity analysis of the most significant variables was performed and in all cases, the rates of return were above 12%, which confirms the project's robustness.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Execution mechanism

- 3.1 The borrower will be the Republic of Paraguay and the executing agency will be the MOPC. The MOPC will establish a technical execution unit (TEU) for the urban redevelopment component, which will come under the Public Works

Department, and a TEU for the first mass public transport corridor component, which will report directly to the Deputy Minister for Transportation. Component I will be executed by the MOPC in coordination with the Ministry of Finance. For program monitoring, a program coordination unit (PCU) will be created, which will report directly to the highest office of the MOPC.

- 3.2 As a condition precedent to the first disbursement, **the PCU and the TEUs will be established and the following key areas will be covered: in the PCU, general coordination of the unit, planning and monitoring, and finances; in the TEU for the urban redevelopment component, technical coordination of the unit and procurements; and in the TEU for the first mass public transport corridor component, technical coordination of the unit and procurements.**
- 3.3 The second component plans to establish and strengthen a management entity that will take charge of operating the new system. It is expected that it will be established and staffed with human resources who, in the first stage, will be selected and trained as members of the TEU for this component. The start up of the management entity and the appointment of its general manager will be conditions precedent to the start of the works for the construction of the trunk corridor and the feeder roads.
- 3.4 As a condition precedent to the first disbursement, **the program will have procedures and rules governing execution established in the Operating Regulations, which will be approved and enter into effect prior to the start of program execution.** These Operating Regulations will include: (i) the functions and responsibilities for planning, programming, and management of the different MOPC line units linked to the program, the PCU, and the TEUs specially established for program execution; (ii) establishment of a plan for the delegation of functions by level of authority, with maximum autonomy conferred on the general program coordination unit; and (iii) the annex should include a fiduciary manual that establishes fiduciary requirements and arrangements for procurements and financial management of the program.
- 3.5 In accordance with the definition of functions to be established in the Operating Regulations, a procurement operations subunit will be created and will report to the central contract operations unit (UOC) of the MOPC, to efficiently carry out and manage program procurements in coordination with the central UOC. Regulations will also be prepared for the different types of contracts and procurements, containing levels of delegation of authority by amount and complexity.
- 3.6 As a condition precedent to the first disbursement, **the program will have a manual of procedures for program execution, which will be approved and enter into effect prior to the start of program execution.** The manual should include procedures for planning (multiyear budget, program execution plan, annual work plan, and procurement plan), implementation, and program oversight. The manual will also: (i) establish procedures for planning, implementation, and oversight of the operation, including preparation and monitoring of the annual work plan; (ii) include a chapter on procurement procedures applicable to the program

- that clearly defines incompatible functions and that includes the following processes as a minimum: (a) procurement planning; (b) publicity and bid announcements; (c) preparation of bidding documents and contracts; (d) reception and opening of bids; (e) analysis and evaluation of bids, (f) award and entry into force of contracts; and (g) management of contracts during implementation; (iii) include a chapter on detailed procedures for financial administration of the program that defines: (i) the activities and tasks to be performed by the different areas of the MOPC that participate throughout the process (budget, payments, accounting, reporting, etc.); (ii) procedures and systems to facilitate the recording of financial commitments and transactions at the time they occur; (iii) principal measures and procedures for internal control to be adopted for program implementation; and (iv) procedures for the management of external auditing services.
- 3.7 The functions and responsibilities of the PCU include: (i) consolidating and integrating the planning for both components, based on the Program execution plan (PIP), the budgets, and the annual work plans (AWPs) prepared by the respective project TEUs; (ii) preparing, managing, and monitoring implementation of the AWPs based on the PIP; (iii) coordinating and consolidating budget and financial planning for the program as a whole, based on the requirements of the respective TEUs and performing the respective monitoring, in close coordination with the ministry's line units; (iv) processing program procurements; (v) coordinating implementation and maintenance of a control system with the Department of Public Credit to ensure proper use and safekeeping of the loan proceeds, and maintaining a file containing transaction documents; (vi) monitoring implementation of the AWPs for each component and the indicators established in the results matrixes and updated in the Ministry's Dashboard; (vii) preparing physical and financial progress reports; (viii) preparing and updating the initial project report, the AWPs, the procurement plans, the semiannual status reports, the evaluation reports, and the project completion report; (ix) periodically preparing and presenting progress reports to the MOPC on qualitative and quantitative aspects of the program; and (x) coordinating and maintaining close relations with all the ministry's line units involved and with the program's TEUs for implementation of the planned activities.
- 3.8 The MOPC's Public Credit Department will be responsible for: (i) managing disbursements and transfers of external credit and the corresponding counterparts; (ii) processing payments to suppliers channeled through the PCU; and (iii) preparing requests for replenishments of funds and quantitative financial information on program execution, in accordance with current laws and the Bank's requirements, as agreed in the loan contract. The ministry's Accounting Department will be responsible for: (i) reporting program operations in the integrated accounting system (SICO); and (ii) safeguarding all the accounting documentation for the operation.
- 3.9 The functions and responsibilities of the TEUs include: (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 budget and

financial planning for each component, in coordination with the PCU and the guidelines of the MOPC's line departments; (iv) preparation of technical specifications and terms of reference for processing procurements through the procurement operations subunit; (v) participation in the bid evaluation committees, as warranted, for the different procurement processes; (vi) submission through the PCU of requests for processing payments to suppliers based on the certification contained in inspection and supervision reports, for works, services, and goods; (vii) support for the preparation of physical and financial progress reports on each component; and (viii) cooperation in preparing and updating the semiannual reports on each component.

- 3.10 **Procurement.** Consulting services, works, and goods to be financed from the loan will be procured 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.
- 3.11 **Disbursements.** The program will disburse funds based on advance payments that reflect the true cash requirements of the project. The frequency of the payments will be determined in function of the project's financial programming. The executing agency will periodically update its financial plan, estimating the funds necessary for project execution on the basis of the budget, work plan, and commitments. At least 80% of each advance payment must be justified before the next advance payment will be made.

B. Summary of arrangements for monitoring and evaluation

- 3.12 The monitoring arrangement includes audits, semiannual administration missions, semiannual progress 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."

C. Significant activities after approval

- 3.13 To facilitate the start of program execution, the Bank approved a PROPEF (PR-L1056, loan 2316/OC-PR) that will finance urgent priority actions. Resources from the PROPEF will finance preparation of the Operating Regulations and the manual of procedures.
- 3.14 **Urban renewal.** The technical and socioenvironmental studies and preparation of designs and bidding documents for works prioritized in this component are being carried out with proceeds from loan 1143/OC-PR; execution of those works will be financed by the PROPEF.
- 3.15 **Public transportation.** The technical, institutional, and socioenvironmental studies and preparation of designs and bidding documents will be financed by the PROPEF; the bid processes for these studies are in an advanced stage. The remaining technical studies will be financed with program resources.

Banco Interamericano de Desarrollo (BID)

ANEXO CONFIDENCIAL

CONFIDENTIAL ANNEX

INE-TSP@iadb.org

CONSOLIDATED RESULTS MATRIX

Objective of component 1	To reverse the current process of urban deterioration, promoting a rise in property values in the zone and creating a new hub of urban development for the city.		
Purpose of the project	<ul style="list-style-type: none"> a. To improve the quality of life of the population in the area of influence. b. To rebalance urban growth in the city of Asunción. c. To improve the conditions in which people live, work, and use the project area and to reactivate its property market. 		
Outcome indicators	Baseline	Target	Comments
Appreciation in the price of land in the project zone	Year 2008 = US\$70 m ²	Year 4 = US\$100 m ²	Baseline: Economic and financial study
Objective of component 2	Design, organization and implementation of an integrated public passenger transport system, giving priority to high-capacity bus travel along dedicated lanes (BRT). The first stage will be developed in the San Lorenzo–downtown Asunción corridor along Avenida Eusebio Ayala–Avenida Mariscal Estigarribia, the main route which carries the largest volume of passengers.		
Purpose of the project	To improve the efficiency, effectiveness, and quality of the metropolitan public transport system and construct stage one of the BTR project in the Eusebio Ayala–Mariscal Estigarribia corridor between Asunción and San Lorenzo.		
Outcome indicators	Baseline	Target	Comments
Increase in commercial speed of vehicles in the trunk corridor when the system comes into operation	Year 0: Commercial speed is currently 11 km/h	Year 5: Increase in commercial speed in the transport system of not less than 50% compared to current speed	The measurement will be performed at the start of consulting services to establish current speed which will be used as the baseline when the system comes into operation.
Reduction in the accident rate involving public buses in the corridor	Year 0: To be determined	Year 5: 15% reduction in traffic accidents involving buses	The baseline will be developed by the technical unit for this component using police statistics, medical emergency statistics, and statistics from the violence observatory of the Ministry of Public Health and Social Welfare (MSPyBS).
Savings in travel time for users	Year 0: Result of origin and destination surveys	Year 5: At least 25% reduction compared to the baseline	The baseline will be determined using specialized surveys.

Component 1. Urban redevelopment									
Objective of Subcomponent 1. Urban rehabilitation and improvement of Barrio San Jerónimo	San Jerónimo rehabilitated and improved, given its privileged urban location and its strong community identity.								
Subcomponent 1	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Outputs Resettled families free up land for construction of the market square	0	60%	100%					54 families resettled	
Arroyos Jaén and Jardín cleaned up and complementary works carried out in Barrio San Jerónimo	0	20%	80%					... m ²	
Storm drains and sewers, water and electric systems in optimum operating condition in the houses and public spaces in Barrio San Jerónimo	To be determined		60%	40%				100% of houses and public spaces (134 regularized sewer connections, 130 linear meters of stream banks)	The data to determine the baseline will be provided by the consultant on environmental sanitation, sewers, storm drains, and water systems.
Improvement in road and pedestrian mobility in Barrio San Jerónimo	To be determined			100%				100% of the road structure (2,400 m ² of rehabilitated roads; 380 m ² of rehabilitated pedestrian walkways - passageways)	The data to determine the baseline will be provided by the consultant on environmental sanitation, sewers, storm drains, and water systems.

Subcomponent 1	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Barrio San Jerónimo community center promotes community development and training.	0				1			Community center built (500 m ²)	
Barrio San Jerónimo belvedere built	0				1			Belvedere built	
Plaza Ferial marketplace in Barrio San Jerónimo operating	0		30%	70%				Marketplace built and in operation 30 people – 10 hours of training, and follow up.	The people currently occupying the land where the marketplace is to be built will be resettled.
Outcomes Improvement in the urban image in Barrio San Jerónimo	10% improvement in the urban image of Barrio San Jerónimo			70%	30%			100% treatment of facades and immediate surroundings of housing and public spaces (aprox. 3,655 m ² of treatment and renewal of facades and immediate surroundings of housing in Barrio San Jerónimo; urban equipment and furniture installed)	There are 134 families.

Objective of Subcomponent 2 System of open public spaces	Rehabilitation of existing public spaces and establishment of new ones								
Subcomponent 2	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Outputs Parque de la Solidaridad built	0		100%					100% = 9,300 m ² of area built up, 52,000 m ² of exterior area treated, complementary works and installations	
Plaza Rodríguez de Francia rehabilitated	0		100%					100% = 1,300 m ² of sidewalks and perimeter treatments; public restrooms built; consolidation and protection of streetscape, lighting, furniture, and landscaping	
Plazoleta Isabel la Católica rehabilitated	0		100%					100% = 750 m ² tiled pavement, 250 m ² harbor, complementary works; drainage and furniture	
Plaza de los Inmigrantes developed	0		100%					100% = 930 m ² sidewalk and perimeter treatment; lighting and landscaping; drainage and furniture. Inspection	

Subcomponent 2	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Jaén Park built	0		100%					100% = 580 linear meters protection banks of Arroyo Jaén; 2,600 m ² tiled pavement; 1,950 m ² bicycle paths; lighting, furniture, and landscaping	
Outcomes Increase in the availability of revitalized public spaces	Year 2010 = 87,000 m ²		100%					Year 4 = 160,000 m ²	Baseline: data from the municipality of Asunción
Objective of Subcomponent 3 Road linking the seats of the three branches of government and basic services infrastructure	Regularization, development, and provision of systems and construction of roads in the area of intervention								
Subcomponent 3	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Outputs Avenida Stella Maris rehabilitated				100%				100% = 800 m ² of public service systems and road infrastructure	
Regularization, development, and provision of public services in the intervention area	0		30%	70%				100% = 4,600 linear meters (public service networks), main sewer, branch sewer, water main). Includes a sewage pretreatment plant.	
Outcome Road network built	0			100%				4.6 km of road infrastructure, includes regularization of public services	

Objective of Subcomponent 4 Government offices and citizen service centers		Design and construction of a government office complex and citizen service centers							
Subcomponent 4	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Outputs Final design completed	0			100%				Final designs for the complex—blocks I, II, III, and parking	
Government office complex	At present, the property where the complex will be built is occupied by CAPASA, the Armed Forces and the National Printing Bureau.				25%	25%	50%	Complex built. Blocks I, II, III (total 22,565 m ²); Parking (14,340 m ²); Exterior space (19,123 m ²)	The government undertook to free up the property within the deadline at no cost to the program.
Outcome Savings of time by taxpayers when doing business at the taxpayer service centers in the complex								30% reduction in time	The baseline will be established during execution of the program with support from the technical unit for modernization of the State.
Objective of Subcomponent 5 Restoration of historic public buildings		Restoration of historic buildings belonging to the public domain							
Subcomponent 5	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Year 6	Target	Comments
Outputs M ² of historic public buildings restored	0					100%		3,800 m ² of public buildings restored	The target is subject to adjustments depending on the priorities and definitions established for the project.

Component 2. First mass public transport corridor								
Objective of Subcomponent 1: Improvement of urban infrastructure and environment	Design, construction, installation, and startup of works, systems, and technical solutions for the operation of the BTR system and its urban environment.							
Subcomponent 1	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Target	Comments
Outputs Structuring of the infrastructure of the BRT system	0		100%				<ul style="list-style-type: none"> Final design of the infrastructure completed Terms of reference for the final designs (detailed) developed 	
Trunk system	0 km			20%	35%	45%	17 km	The yearly targets correspond to the % of progress in the work.
Feeder roads with all-weather pavement	0 km			15%	65%	20%	100 km	
Integration terminals and yards	0				1 terminal	2 terminals 2 yards	<ul style="list-style-type: none"> 1 terminal in San Lorenzo 2 terminals in Asunción (one is intermediate) 2 yards 	
Access stations to the trunk system and stops	0				10 stations 50 stops	17 stations 100 stops	<ul style="list-style-type: none"> 27 stations 100 stops 	
Intersections with traffic lights connected to the traffic light control center and stations that require pedestrian stoplights operating in a centralized manner.	0				40%	60%	<ul style="list-style-type: none"> 25 intersections with traffic lights 100% of stations that require pedestrian stoplights equipped 	The yearly targets correspond to the % of progress in procurements and installation.
Urban improvement works: sidewalks repaired, public lighting installed, squares rehabilitated, and pedestrian footbridges along the corridors and around the transfer terminals.	0				100%		<ul style="list-style-type: none"> ... km of sidewalks ... public lighting units ... rehabilitated squares ... pedestrian footbridges 	The targets will be established when the final designs for the works are ready.

Bicycle paths, pedestrian walkways, patrol system operating.	0				20 km bicycle paths 3 km pedestrian walkways 1 patrol system		<ul style="list-style-type: none"> • 20 km of bicycle paths • 3 km of pedestrian walkways • A patrol system operating 	
Objective of Subcomponent 2: Control and operations center	Provide the BTR system with the planning, management, and control structure and capacity needed to operate optimally.							
Subcomponent 2	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Target	Comments
Outputs Organization of the operating plan for the BRT system	0		100%				<ul style="list-style-type: none"> • Operating plan developed 	
Organization of the fare model and the business plan			100%				<ul style="list-style-type: none"> • Fare model developed • Business plan developed • Design of the institutional model developed 	
Management and control center in operation (technology platform)	0				1 control center		A management and control center in operation	
Environmental monitoring center in operation, established in the corridor	0					5 monitoring points	<ul style="list-style-type: none"> • At least 5 monitoring points operating for one year 	
Transportation and ticketing systems, and optimization of the concessionary fleet				Analysis report	Transport system Ticketing system Fleet size system optimized		Start up of: <ul style="list-style-type: none"> • Transport system in the corridor • Ticketing system • Analysis report on optimum fleet size • Fleet size system optimized 	
Outcome Management entity plans, administers, and controls the system	0					100%	Management entity receives information on system operation and issues service orders.	

Objective of Subcomponent 3 Promotion of socioenvironmental viability	Take action to mitigate social, environmental, and business impacts, to allow for project execution.							
Subcomponent 3	Baseline	Year 1*	Year 2**	Year 3	Year 4	Year 5	Target	Comments
Outputs Entrepreneurs affected by establishment of the BTR received business training and technical assistance.			20%		80%		...entrepreneurs trained and provided with technical assistance	The target will be established once the technical unit determines the number of entrepreneurs who will be affected.
Drivers and technical workers received sufficient training to operate the BTR.				50%	50%		...of drivers trained	The target will be established once the technical unit determines the number of drivers and workers who will be affected.
Communication campaigns carried out.		5%	15%	30%	25%	25%	<ul style="list-style-type: none"> 1 program communications plan 1 campaign in each year of the project 	100% of this campaign should be carried out every year. What is communicated in each campaign will be drawn from the strategic communications plan to be prepared in year 1.
Informal vendors in Mercado Cuatro of Asunción operating on the trunk road are relocated or agree to compensation as an alternative to occupational change.			30%	70%			<ul style="list-style-type: none"> 100% informal vendors in Mercado Cuatro of Asunción 	The baseline will be determined by the consulting services under the PROPEF (March, 2011)
Vendors in the San Lorenzo market operating on the trunk road are relocated or agree to compensation and as an alternative to occupational change.	0		30%	70%			<ul style="list-style-type: none"> 100% vendors in the San Lorenzo market 	The baseline will be determined by the consulting services under the PROPEF (March, 2011)

* Corresponds to year 1 of the Project Preparation Facility (PROPEF).

** Corresponds to year 2 of the PROPEF and year 1 of the principal loan according to the implementation timetable.

SUMMARIZED PROCUREMENT PLAN

I. GENERAL INFORMATION

Country: Republic of Paraguay
Project name: Downtown redevelopment, modernization of the metropolitan public transport system, and government offices
Project number: PR-L1044
Borrower: Republic of Paraguay
Executing agency: Ministry of Public Works and Communications

II. BRIEF DESCRIPTION OF PROJECT OBJECTIVES AND COMPONENTS

The purpose of the program is to rehabilitate and upgrade urban and transportation infrastructure, improving the quality of life of the population in the intervention area.

- i. Component I. Urban redevelopment (UR), is intended to revitalize and improve public spaces in downtown Asunción to reverse the current process of urban deterioration, promote a rise in property values in the zone, and create a pole of urban development for the city.
- ii. Component II. First metropolitan mass public transport corridor is intended to design, organize, and implement an integrated public passenger transport system, giving priority to high-capacity bus transit on dedicated lanes (Bus Rapid Transit, BTR).
 - **Date of approval of the project by the Board of Executive Directors:** October 2010
 - **Date of signature of the loan contract:** October 2010
 - **Estimated date of the last disbursement:** March 2016
 - **Address of the office responsible for the procurement plan:** Edificio Parapití – O’Leary c/Estrella – 2^{do} piso

III. TOTAL CONTRACTS PLANNED UNDER THE PROGRAM

Component	Works			Goods			Nonconsulting services			Consulting services Firms			Consulting services Individuals	Total
	ICB	NCB	S	ICB	NCB	S	NCB	S	DC	QCBS	LCS	DC	NICQ	
Comp. 1. UR	2	4	1			3				3	4		3	20
Comp. 2. BRT	3	2	0	3	3	2	1	2		20		2	48	86
Comp. 3. Administration				1		2		1	1		1		33	39
Total	5	6	1	4	3	7		3	1	23	5		84	142

Period covered by this procurement plan: March 2011 to March 2016

Component 1: Urban renewal

Ref. No.	Category and description of the contract	Estimated cost (US\$)	Method (**)	Review	Source of financing		Prequal. YES/NO	Estimated contracting dates		Status	Comments
					IDB	Local/ Other		Start	End		
WORKS											
1	Public works and regularization and treatment of road infrastructure in the area of intervention	4,952,000	ICB	Ex ante	91.00%	9.00%	NO	May 11	June 12	Pending	
2	Construction of government offices and citizen service centers	16,100,000	ICB	Ex ante	71.12%	28.88%	NO	Mar 12	Mar 15	Pending	
CONSULTING SERVICES- Firms											
3	Supervision of the road construction works	248,000	LCS	Ex ante	91.00%	9.00%	N/A	May 11	June 12	Pending	
4	Final designs for government offices and the citizen service center	400,000	QCBS	Ex ante	90.00%	10.00%	N/A	May 11	Mar 12	Pending	
5	Supervision of the construction of the government offices and citizen service center	1,000,000	LCS	Ex ante	91.00%	9.00%	N/A	Apr 12	Mar 15	Pending	
GOODS											
6	Land for the Barrio San Jerónimo community center	60,000	DC	Ex ante	69.13%	30.87%	N/A	Oct 10	Oct 11	Pending	
7	Land for the belvedere	21,000	DC	Ex ante	69.13%	30.87%	N/A	Oct 10	Sept. 11	Pending	

Component 2: First mass public transport corridor

Ref No.	Category and description	Estimated cost (US\$)	Method (**)	Review	Source of financing		Prequal	Estimated dates		Status	Comments
					IDB	Local / Other		YES/NO	Start		
WORKS											
8	Construction of the trunk corridor	54,730,000	ICB	Ex ante	76.22%	23.78%	NO	July 11	July 13	Pending	
9	Construction, rehabilitation, or maintenance of feeder roads	15,200,000	ICB	Ex ante	75.63%	24.38%	NO	Mar 12	July 13	Pending	
10	Construction of three integration terminals and two yards	16,000,000	ICB	Ex ante	77.38%	22.62%	NO	July 11	Mar 13	Pending	Bidding will be by lots.

Ref No.	Category and description	Estimated cost (US\$)	Method (**)	Review	Source of financing		Prequal	Estimated dates		Status	Comments
					IDB	Local / Other		YES/NO	Start		
CONSULTING SERVICES - Firms		8.315.000								-	
11	Supervision services for the trunk corridor	3,600,000	QCBS	Ex ante	76.22%	23.78%	N/A	Aug 11	July 13	Pending	
12	Supervision services for terminals, yards, and stations	800,000	QCBS	Ex ante	77.38%	22.62%	N/A	Oct 11	Mar 13	Pending	5,290,000
13	Supervision services for feeder system construction	410,000	QCBS	Ex ante	77.91%	22.09%	N/A	July 12	July 13	Pending	
14	Supervision services for the bicycle paths and pedestrian walkways in the historic center of Asunción	200,000	QCBS	Ex ante	77.27%	22.73%	N/A	Dec 11	Aug 13	Pending	
15	Supervision services (Transportation)	500,000	QCBS	Ex ante	76.95%	23.05%	N/A	Sept 11	May 13	Pending	
16	Supervision services (Ticketing)	700,000	QCBS	Ex ante	76.95%	23.05%	N/A	June 12	Aug 13	Pending	
17	Supervision services (Fleet optimization)	200,000	QCBS	Ex ante	76.95%	23.05%	N/A	May 12	July 13	Pending	
18	Transfer of technology to implement the system based on the experience of the Colombian government	200,000	DC	Ex ante	76.95%	23.05%	N/A	Aug 11	Nov. 13	Pending	An agreement on technology transfer is planned.
19	Research to develop a transportation institute in a strategic partnership with one or more universities	250,000	QCBS	Ex ante	76.95%	23.05%	N/A	May 11	May 14	Pending	Several contracts are planned.
20	Manuals of procedures for operating the BTR system	250,000	QCBS	Ex ante	76.95%	23.05%	N/A	May 12	July 13	Pending	
21	Study on the relocation and formalization of informal business in the Asunción and San Lorenzo markets	100,000	QCBS	Ex ante	90.37%	9.63%	N/A	Nov 11	Sept. 12	Pending	
22	Technical assistance to identify job opportunities, provide technical training in trades, establish a labor exchange and job placement program	250,000	QCBS	Ex ante	90.37%	9.63%	N/A	Sept. 11	July 13	Pending	

GOODS AND RELATED SERVICES											
23	Supply and installation of stations and stops	8,120,000	ICB	Ex ante	77.91%	22.09%	N/A	May 12	July 13	Pending	
24	Supply and installation of the integrated traffic light system	1,500,000	ICB	Ex ante	78.13%	21.88%	N/A	Apr 12	Aug. 13	Pending	
25	Supply, installation, and start up of the control center, including upgrading of the building to meet technical requirements	3,650,000	ICB	Ex ante	76.95%	23.05%	N/A	July 12	July 13	Pending	

Components 3 and 4: Management, auditing, and evaluation

Ref No.	Category and description	Estimated cost (US\$)	Method (**)	Review	Source of financing		Prequal	Estimated dates		Status	Comments
					IDB	Local / Other		Yes/No	Start		
NONCONSULTING SERVICES											
26	Rentals	59,000	DC	Ex post	91.83%	8.17%	N/A	Feb 1	Mar 16	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 bids that should be reviewed ex post will be reviewed ex ante.

** **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.

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.