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**BRAZIL**

**LONDRINA SUSTAINABLE URBAN DEVELOPMENT PROGRAM  
PROCIDADES – LONDRINA**

**(BR-L1094)**

**LOAN PROPOSAL**

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ELECTRONIC LINKS	
<b>REQUIRED</b>	
1.	Multiyear execution plan (PEP) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38900621">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38900621</a>
2.	Annual work plan (AWP) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729696">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729696</a>
3.	Monitoring and evaluation plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729730">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729730</a>
4.	Initial project procurement plan – Itemized <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729735">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729735</a>
<b>OPTIONAL</b>	
1.	Financial evaluation of the municipio of Londrina – Report and Annex <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729791">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729791</a> <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729818">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729818</a>
2.	Risk mitigation matrix <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729770">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729770</a>
3.	Economic viability study of components 1 and 3 <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729906">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729906</a>
4.	Economic viability study of component 2 <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729930">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729930</a>
5.	Environmental assessment report (EAR) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729963">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729963</a>
6.	Environmental and social management report (ESMR) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730005">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730005</a>
7.	Involuntary resettlement plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730031">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730031</a>
8.	Program budget <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730085">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730085</a>
9.	Londrina Local Low-income Housing Plan (PLHIS) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730097">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38730097</a>
10.	Londrina Municipal Master Plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38734211">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38734211</a>
11.	Safeguard policy filter <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729637">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38729637</a>

## ABBREVIATIONS

APP	Área de Preservação Permanente [Permanent Conservation Area]
AWP	Annual work plan
B/C	Benefit/cost ratio
CMTU	Companhia Municipal de Trânsito y Urbanização de Londrina [Londrina Municipal Transit and Urban Development Company]
COHAB	Companhia de Habitação de Londrina [Londrina Housing Company]
ESMP	Environmental and social management plan
ESMR	Environmental and social management report
IBGE	Instituto Brasileiro de Geografia e Estatística [Brazilian Institute of Geography and Statistics]
IPPUL	Instituto de Pesquisa e Planejamento Urbano de Londrina [Londrina Urban Planning and Research Institute]
IPTU	Imposto sobre a Propriedade Predial e Territorial Urbana [Urban Land and Property Tax]
IRR	Internal rate of return
ISS	Imposto sobre serviços [Services tax]
LCF	Local Currency Facility
ML	Município of Londrina
NCI	Net current income
OC	Ordinary Capital
PDML	Plano Diretor Municipal de Londrina [Londrina Municipal Master Plan]
PMAT	Programa de Modernização da Administração Tributária [Tax Administration Modernization Program]
PML	Prefeitura Municipal de Londrina [Londrina Municipal Government]
PMR	Program monitoring report
PMU	Program Management Unit
SBC	Special Bidding Committee
SCF	Single Currency Facility
SIGLON	Sistema de Informação Geográfico de Londrina [Londrina Geographic Information System]
TCE/PR	Tribunal de Contas do Estado de Paraná [State of Paraná Audit Office]



## I. DESCRIPTION OF PROBLEMS AND OBJECTIVES

### A. Background

- 1.1 The Município of Londrina (ML) is located in the northern part of the State of Paraná, 377.7 kilometers from the state capital, Curitiba. It covers an area of 1,653 square kilometers, including an urban zone occupying 164.3 square kilometers and an expansion zone of 80.6 square kilometers. In 2013 Londrina was Paraná's second most populous city, with 537,566 inhabitants, 97% of whom were living in the urban area.<sup>1</sup> The município's GDP in 2011 was 10.8 billion Brazilian reais (R\$), having grown by 203% since 2002 (IBGE, 2013). Its economic activity generates 0.26% of national GDP, ranking 55th out of Brazil's 5,564 municípios. It has a human development index (HDI) of 0.778, which is above both the national HDI (0.727) and that of Paraná state as a whole (0.749).<sup>2</sup>

### B. Urban development features and main problems

- 1.2 Londrina is a major regional development hub and has a direct influence on more than 800,000 people in its metropolitan region. As a regional hub, the city suffers from high demand for infrastructure and services associated with the process of urban development and city expansion, compounded by threats to the environment and water resources, pressure on the road system, and budget constraints in addressing those problems.

### C. Environmental condition of the *fundos de vale*

- 1.3 The most serious environmental problem facing the município is the threat to its permanent conservation areas (APPs), which protect the lower reaches of the watersheds of its numerous rivers and streams, known as *fundos de vale* (valley bottoms). The city's population has grown rapidly, and in the absence of effective control over the occupation of urban land the valley bottoms suffer from problems such as: (i) unregulated occupation for housing in settlements prone to flooding and landslides, the risks of which could intensify in the future owing to the impacts of climate change; (ii) pollution of watercourses and sedimentation of river beds; and (iii) health problems among the population living on the banks of the rivers and streams caused by their use of polluted water for domestic and recreational purposes. *Ribeirão Cambé* and *Ribeirão Lindóia* are the two main watercourses in the urban area of Londrina and are located in the most populous parts of the city. *Ribeirão Lindóia* is the município's second largest and most polluted river. In the north and east regions, where this river is situated, there are 28 valley bottom areas with unregulated settlements.
- 1.4 Data from the Londrina Local Low-income Housing Plan (2010) report 3,510 unregulated households located in valley bottom areas, 1,256 of which are in the *Ribeirão Lindóia* watershed. Of the total number of households in an

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<sup>1</sup> Source: Estimated population in 2013. [Brazilian Institute of Geography and Statistics \(IBGE\), 2010 Census.](#)

<sup>2</sup> United Nations Development Programme (UNDP), Municipal Human Development Index, (MHDI, 2010), [Atlas of Human Development 2013.](#)

unregulated status, 2,914 families<sup>3</sup> are being provided with dwellings financed through the federal government program, “Minha Casa, Minha Vida” [My House, My Life] (MCMV).<sup>4</sup> Nonetheless, the Prefeitura Municipal de Londrina [Londrina Municipal Government] (PML) lacks the resources to continue relocating families or reclaim these areas.

- 1.5 The PML also has difficulties effectively protecting its greenspace, owing particularly to a lack of investment to protect these areas from squatting and unregulated occupation. The problem is most obvious in the *Ribeirão Cambé* park strip, which contains over 40 creek branches, and serves as the city’s most important breathing space. Also worrying is the condition of *Ribeirão Lindóia*, already suffering from the effects of unregulated occupation of its tributaries and springs, with household waste being discharged directly into its water and sediments building up as a result of squatting. This serves to reduce the volume and quality of its water resources. These areas, which are either already deteriorated or informally urbanized, require the resettlement of families, environmental reclamation,<sup>5</sup> and physical protection, to prevent their incursion.

#### **D. Mobility and transportation**

- 1.6 As a consequence of Brazil’s recent economic boom, the number of cars on the road in the Município of Londrina has grown rapidly. From 2002 to 2013, it doubled from 176,011 vehicles to 352,697, representing a 100% increase and an average annual growth rate of 6.52%<sup>6</sup>—five times faster than the município’s population growth of 1.26% per year in the same period. The number of motorcycles has risen even faster, rising from 31,940 units in 2002 to 77,873 in December 2013—an increase of 144%. Thus, by 2013, Londrina had attained a car ownership rate of 442 automobiles per 1,000 inhabitants, compared to a national average of 254. The average speed on the main roads is currently 15.5 kilometers per hour. This, in conjunction with an urban footprint spreading into new, low-density neighborhoods in outlying areas, has resulted in severe traffic jams during rush hours, causing delays, more traffic accidents, higher operating costs, and air pollution. This also has an adverse effect on the mass transit system by reducing the average speed of journeys into the city center, thereby imposing longer waiting and travel times on users, who are mostly low-income people.
- 1.7 Investment to upgrade and expand the urban road network has not kept pace with the growth of the vehicle fleet and the city, leaving many critical points with insufficient capacity to meet current demand. To improve traffic flows and enhance the safety of the road network, urgent investments are needed at some of these critical points. Another option for improving traffic in the city is to stimulate

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<sup>3</sup> Source: Londrina Housing Company (COHAB), up to October 2013.

<sup>4</sup> The federal government’s MCMV program finances subsidized housing for low-income families. Families that are not [MCMV](#) beneficiaries being assisted by COHAB.

<sup>5</sup> Activities to improve a public area in terms of environment, landscape, and urban development.

<sup>6</sup> Source: [National Transit Department \(DENATRAN\)](#), Vehicle fleet statistics 2000-2013.

nonmotorized transportation. The city has an 11.5-kilometer network of bicycle paths, which the PML is expanding with a view to making other mobility alternatives viable. With financing from the Ministry of Tourism, the PML is extending the bicycle path network by an additional 10 kilometers at a cost of R\$1 million, 40% of which would be spent on constructing bicycle paths in recreation areas, and the other 60% would be used to adapt roads to make them suitable for travelling to work by bicycle. According to the latest survey of mobility in Londrina, 36% of people use public transportation, 34% use private vehicles, 24% travel on foot, and 6% use a bicycle as their means of transportation. Other research<sup>7</sup> has identified a high level of receptiveness towards using bicycles, in which 56% of people who drive private vehicles, 40% of those who ride buses, and 59% of pedestrians interviewed would choose this transportation alternative if there was a more extensive system of bicycle lanes. Currently, bicycles are mainly used on roads with heavy vehicle traffic flows, exposing cyclists to run-ins and accidents.

#### **E. Institutional considerations**

- 1.8 The PML has experience managing programs financed by the state and federal governments. In the domain of urban projects, the Londrina Urban Planning and Research Institute (IPPUL) has skilled technical staff for project design and execution. The Londrina Municipal Master Plan (PDML) ([optional electronic link 10](#)) is up to date, but due to the city's rapid growth needs to be supplemented with sector-level macrodrainage and mobility plans. To overcome failings in the control of urban growth and settlement of the city, the PML needs a modern tool to gather georeferenced information on the city and on the activities of the different municipal agencies. The objective of the proposed Londrina Geographic Information System (SIGLON) is to integrate many different databases to provide an integrated overview of territorial development and better control and supervision of activities in the urban area. In addition, SIGLON will incorporate the municipal taxpayer cadastres, thereby enhancing municipal tax management. Another priority institutional area is the PML public archive, which is currently manual and does not meet the information access needs of the municipal government and the user population. The PML intends to implement an electronic document management system, to streamline access to information on judicial processes generally, and tax cases in particular, while also helping to improve fiscal management.
- 1.9 **Fiscal position.** The ML has a sound financial position, posting surpluses every year since 2008, except 2011 (see paragraph 2.3). Its total revenues for 2012 were equivalent to US\$576.2 million, with a current surplus of US\$52.8 million. Its tax revenues were US\$158 million in 2012, with the urban land and property tax (IPTU) generating 33.9%, and the remainder being provided by the other taxes: the services tax (ISS), the real estate transfer tax (ITBI), and levies for improvements. Until 2010, the PML received support from the Tax Administration Modernization

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<sup>7</sup> Survey on nonmotorized transportation by bicycle, conducted in the city of Londrina, IPPUL (2006).



Program (PMAT)<sup>8</sup> to improve its finances. As a result of that program, tax revenue intake grew by an annual average of 23% in the period 2002-2008. Nonetheless, there is potential for expanding the municipal tax base, since the PML has no unified cadastre of taxpayers for its various taxes (IPTU, ISS, and ITBI), and the IPTU tax base is also out of date. This integration of tax bases is envisaged in the current program. Higher tax revenue intake would make it viable to fund the investments needed to address the problems created by the city's rapid expansion and ensure the sustainability of the new investments and existing public infrastructure.

#### **F. The município's strategy**

- 1.10 The program will support the PML in implementing its sustainable urban development policy, particularly in meeting the targets set in the PDML. The key targets are: (i) to promote balanced urban development, with a view to guaranteeing sustainable land occupation. For this purpose, 15 valley bottom areas will be reclaimed in areas prone to social, environmental, and health hazards. This will involve the resettlement of low-income families currently occupying the banks of *Ribeirão Lindóia* on an unregulated basis, and the reclamation of about 1 million square meters of the banks of the *Ribeirão Cambé* park strip, implementing flood controls; and (ii) to increase mobility in the city and provide incentives for bicycle use. To make this process sustainable, support will be provided to improve the municipal government's fiscal management and sector planning capacity.
- 1.11 Reclamation of the valley bottom areas is part of the activities to reclaim the banks of the *Ribeirão Lindóia* and the *Ribeirão Cambé* park strip, since these are the city's two main watercourses and their sources are threatened. Unregulated squatting on *Ribeirão Lindóia* causes water pollution and riverbed sedimentation, and restricts use of the watersheds. Reclamation of the banks of *Ribeirão Cambé* will make it possible to reduce the areas of flooding that impact the city, and enhance the connectivity of its bicycle lane network and recreational greenspace.

#### **G. Lessons learned**

- 1.12 The program satisfies the requirements of the PROCIDADES credit facility (loan [1668/OC-BR](#)), and the strategy used to prepare the operation reflected lessons learned and the Bank's nearly 20 years of experience in preparing and implementing comprehensive neighborhood improvement and river reclamation projects. The programs in Brazil include the following PROCIDADES programs: Toledo (loan [1961/OC-BR](#)), Curitiba (loan [2246/OC-BR](#)), Vitoria (loan [1986/OC-BR](#)) and Campo Grande (loan [1960/OC-BR](#)); along with the three "Favela Bairro" urban upgrading programs in Rio de Janeiro (loans [898/OC-BR](#), [898/OC-CPS](#), and [1241/OC-BR](#)). The lessons learned and successful practices both

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<sup>8</sup> Financed by the National Economic and Social Development Bank (BNDES).

- in Brazil and elsewhere in Latin America have been widely studied and documented in several publications, including some of the Bank's own.<sup>9</sup>
- 1.13 The main lessons include the following: (i) interventions in unregulated settlement areas should consist of integrated multisector actions that, in addition to basic infrastructure, include priority social services for the population of these communities; (ii) for the relocation of families, specific and detailed resettlement plans should be prepared before works execution, with full community participation. This program has an involuntary resettlement plan ([optional electronic link 7](#)); and (iii) environmental protection areas where squatters have settled need to be protected and reclaimed immediately, preferably through collective use such as for public parks. This lesson will be applied through a combination of environmental and social projects, specifically the creation of park strips along the banks of the rivers targeted by the program, providing social services and sports facilities. This is a practice adopted by several different Brazilian municípios; a successful example is the Tietê Ecological Park in the city of São Paulo.<sup>10</sup>
- 1.14 The program design also reflected the Bank's experience in the two São Bernardo do Campo Urban Transportation Programs (loans [1571/OC-BR](#) and [288/OC-BR](#)), as well as the PROCIDADES programs in Curitiba (loan [2246/OC-BR](#)) and Maringá (loan [2121/OC-BR](#)), which included actions to enhance traffic flows at critical points of the urban road network. In relation to the urban mobility component, international experience has demonstrated that immediate operational and economic benefits can be gained by expanding road capacity at specific bottleneck points. The actions in this component were designed following national and international recommendations for the functional analysis and design of this type of works, to ensure that they are effective.<sup>11 12 13</sup>

## **H. Strategic alignment and intervention strategy**

- 1.15 The operation supports the four strategic priorities set in the Bank's country strategy with Brazil (2012-2014) (document [GN-2662-1](#)), inasmuch as it will contribute to sustainable growth of the city by: (i) increasing capacities for urban management; (ii) improving the delivery of infrastructure and municipal

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<sup>9</sup> *Slum upgrading: lessons learned in Brazil*, IDB (2012); *Building cities: neighborhood upgrading and urban quality of life*, IDB (2009).

<sup>10</sup> In 1976, the architect Ruy Othake was commissioned to prepare the architectural and landscaping design for the Tietê Ecological Park, including: (i) restoration of the original forests, flora, and fauna; (ii) creation of lakes for recreational use and landscape enhancement; and (iii) creation of social facilities for leisure, educational, and research activities. The park was inaugurated in March 1982, and its conservation continues to this day. On weekends it attracts some 60,000 visitors (Department of Water and Electric Power (DAEE), (2009)).

<sup>11</sup> *Highway Capacity Manual 2010*, Transportation Research Board (2010).

<sup>12</sup> “*Caderno 1: Plano de mobilidade por bicicleta nas cidades*” [Section 1: Plan for bicycle mobility in the cities], Ministry of Cities, Brazil (2007).

<sup>13</sup> *Bicycle transportation: A handbook for cycling transportation engineers*, J. Forester (1997), MIT Press.

management services in medium-sized cities; (iii) improving the urban habitat of the *favelas*; and (iv) improving urban transportation in medium-sized cities. The program will also contribute to the lending priorities of the Report on the Ninth General Increase in the Resources of the Inter-American Development Bank (document [AB-2764](#)) in two areas: poverty reduction and equity enhancement, and support for climate change initiatives, as well as to the following regional goals: (i) infrastructure for competitiveness and social development, through investments to improve the road system and increase the proportion of people living in dwellings with hard floor; and (ii) institutions for development, through improvement of the município's ratio of actual to potential tax revenues. The program will also contribute to the Bank's outputs of: (i) households with new or upgraded water supply; (ii) households with new or upgraded sanitary connections; (iii) households with new or upgraded dwellings; (iv) subnational governments strengthened, particularly public financial systems implemented or upgraded; (v) municipal governments supported; (vi) number of people given access to improved public low-carbon transportation systems; and (vii) environmental protection and climate change adaptation measures supported (flood protection and the reclamation of riverbanks in the valley bottom areas). The program is included in the 2014 Operational Program Report (document [GN-2756](#)).

#### **I. Specific objectives and description of components**

- 1.16 The program's objective is to promote Londrina's sustainable urban development through environmental reclamation of degraded areas along the banks of its rivers and streams, improvement of urban mobility, and strengthening of the local government's fiscal and urban management.
- 1.17 The program includes the following works and actions in the city of Londrina under three components:
- 1.18 **Component 1. Environmental reclamation and redevelopment (US\$17.09 million).** This component supports the environmental reclamation of degraded valley bottom areas in the north and east parts of the city, where there are hazard-prone unregulated settlements, as well as environmental reclamation and redevelopment of other degraded permanent conservation areas (APPs). These are located in the *Ribeirão Lindóia* watershed and in the *Ribeirão Cambé* park strip. For these interventions, it will be necessary to relocate the low-income families living in the *Ribeirão Lindóia* APP, which is at high risk of flooding and landslides.<sup>14</sup> Resettlement will make it possible to provide this population with better housing conditions in neighborhoods with infrastructure and access to core public utilities and social services (see paragraph 2.6).
- 1.19 In particular it will finance: (i) the reclamation and redevelopment of at least 15 valley bottom areas covering 507,000 square meters of hazard-prone areas; (ii) the reclamation of at least 10 sectors of the banks of the *Ribeirão Cambé* park

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<sup>14</sup> Of the estimated 326 families to be resettled as a result of this program, 44% are headed by women.

- strip covering approximately 1,062,000 square meters; and (iii) the relocation and provision of basic dwellings for the around 326 low-income families currently squatting in the *Ribeirão Lindóia* valley bottoms. This component aims to increase the number of people making use of the revitalized greenspace, thereby discouraging squatting in the targeted areas. It also reduces the physical and social vulnerability of the households to be resettled to the impacts of climate change.
- 1.20 **Component 2. Urban mobility (US\$11.85 million).** This component seeks to improve mobility in Londrina by eliminating critical points of heavy traffic congestion. At the same time it will promote more intensive bicycle use by expanding the city's bicycle path network.
- 1.21 The program will help to shorten travel times on the heavily trafficked segments of the road network, particularly those used by public transportation. The new bicycle paths will make it easier for mainly low-income people to move about. Financing will be provided for: (i) geometric adaptation of the intersection of Paul Harris Street with Anália Franco Avenue, and the intersection of Winston Churchill, Henrique Mansano, and Lucílio de Held Avenues; (ii) construction of three bridges to lend continuity to the road network—over *Córrego Quati* on Oulavo Benato Avenue, over *Ribeirão Lindóia* on Francisco de Melo Palheta Avenue, and over *Córrego Barreiro* on Nereu Mendes Avenue; (iii) around 1.5 kilometers of lane widening on Senador Souza Naves and Presidente Costa e Silva Streets and at least 10 kilometers of asphaltting and lane lengthening on Saul Elkind Avenue, east and west segments; and (iv) at least 24 kilometers of bicycle paths in different parts of the city. The economic viability study contains a detailed description of the urban mobility actions under this component ([optional electronic link 4](#)).
- 1.22 **Component 3. Modernization of municipal management (US\$11.84 million).** This component seeks to contribute to improving the município's fiscal performance and urban and sector-level management and planning capacity (urban macrodrainage and mobility). Actions will also be undertaken at the public archive to simplify and enhance the efficiency of document management. Financing will be provided specifically for: (i) integration of the cadastres of the different taxes administered by the Department of Finance (IPTU, ISS, ITBI); (ii) expansion of the municipal real estate tax base; (iii) implementation of a geographic information system (SIGLON), including modernization of the municipal and data network; (iv) preparation of two sector master plans, one for urban drainage, and the other for transportation and urban mobility; and (v) modernization of the municipal public archive.
- 1.23 **Program management (US\$2.12 million).** This component will finance program management activities, such as: (i) contracting of consulting services to support monitoring and evaluation; and (ii) administration and engineering, consisting of: (a) preparation of final designs and works supervision; (b) commissioning of consulting engagements; (c) training; and (d) expenditures for administration and purchase of equipment and vehicles for the Program Management Unit (PMU).

## J. Cost and financing

- 1.24 The total cost of the proposed program is US\$42.9 million, distributed by sources and investment categories as shown in table 1.

**Table 1. Summary of Program Costs (US\$000s)**

Categories	IDB	Local	Total	%
<b>I. Investment components</b>	<b>19,675</b>	<b>21,104</b>	<b>40,779</b>	<b>95.06</b>
1.1 Environmental reclamation and redevelopment	9,965	7,123	17,088	39.83
1.2 Urban mobility	3,966	7,887	11,853	27.63
1.3 Modernization of municipal management	5,744	6,094	11,838	27.59
<b>II. Program management</b>	<b>1,775</b>	<b>346</b>	<b>2,121</b>	<b>4.94</b>
2.1 Monitoring and evaluation	173	0	173	0.40
2.2 Administration and engineering	1,602	346	1,984	4.54
<b>Total</b>	<b>21,450</b>	<b>21,450</b>	<b>42,900</b>	<b>100</b>

## K. Results framework and indicators

- 1.25 The following results indicators were identified in conjunction with the Londrina Municipal Government: (i) increase in property values in the area targeted by the projects, resulting from the environmental and transportation improvements in the program areas; (ii) increase in greenspace per inhabitant in the city; (iii) increase in the number of people using the revitalized valley bottom areas; (iv) increase in average speeds on urban roads; and (v) real increase in IPTU revenue. More details on the indicators and their baselines and annual targets are shown in the Results Matrix ([Annex II](#)) and in the monitoring and evaluation plan ([required electronic link 4](#)).

## L. Technical and economic viability

- 1.26 To establish the program's economic viability, cost-benefit analyses using a 12% annual discount rate and least-cost analyses were conducted for the following representative actions for each component:
- 1.27 **Environmental reclamation and redevelopment component.** The environmental reclamation of valley bottoms yields an internal rate of return (IRR) of 22.8%, and a benefit/cost (B/C) ratio of 1.09. A least-cost analysis of the housing units yielded a value of R\$1,021 per square meter, which is reasonable for this type of work according to data on current values in the region. The environmental reclamation of the *Ribeirão Cambé* park strip yields an IRR of 64.4%, and a B/C ratio of 1.56. A least-cost analysis was also performed, yielding a value of R\$16.33 per square meter, which is considered reasonable for this type of work ([optional electronic link 3](#)).
- 1.28 **Urban mobility component.** Technical suitability and functional sufficiency were evaluated for all interventions. The improvement of the intersection of Winston Churchill, Henrique Mansano, and Lucílio de Held Avenues was selected as part of the representative sample to establish its economic feasibility over a 20-year

horizon. The analysis yielded an IRR of 33.9%; a sensitivity analysis showed that a 20% increase in investment costs reduces the IRR to 28.3%, while a 20% reduction in the incremental benefits reduces the IRR to 27.1%. A scenario involving a simultaneous combination of these two effects, with a 10% increase in costs and a 10% reduction in the benefits, was also applied, yielding an IRR of 22.3%. These sensitivity analysis results show that the intervention maintains its economic return within the evaluated ranges ([optional electronic link 4](#)).

- 1.29 **Institution-strengthening component.** A B/C analysis was done for this component, and an investment recovery indicator was calculated. The project to implement the SIGLON and upgrade the data network obtained a B/C ratio of 1.37, with an 18-month cost-recovery period. The project to institute the operation and management system at the public archive obtained a B/C of 1.13, with costs being recovered over a 22-month period. These results confirm the economic viability of the interventions.

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 **Program resources and disbursement schedule.** The program has a total cost of US\$42.9 million, 50% of which will be financed by the Bank, chargeable against the resources of Single Currency Facility (SFC) of the Ordinary Capital (OC), and the other 50% will be provided by the Município of Londrina (ML). The execution period is four years, running from the effective date of the loan contract. The disbursement schedule summarized in Table 2.

Table 2. Disbursement Schedule (US\$ millions)

Financing source	Year 1	Year 2	Year 3	Year 4	Total
<b>IDB</b>	1.518	8.413	9.467	2.052	21.45
<b>Município of Londrina</b>	11.571	1.799	3.402	4.678	21.45
<b>Annual total</b>	13.089	10.212	12.869	6.730	42.90
<b>%</b>	30.5	23.8	30.0	15.7	100

- 2.2 **Recognition of expenditures against the counterpart.** The Bank may recognize eligible expenditures against the local counterpart, provided that they were incurred within 18 months prior to the date of project approval by the Bank's Board of Executive Directors. The expenditures related to the local counterpart will be for up to US\$7.9 million (18% of the total operation) for road works, bicycle paths, and paving. These expenditures will be eligible for recognition if compatible with the Bank's procurement policies or substantially similar procedures.
- 2.3 **Financial analysis.** The município of Londrina currently satisfies all the limits set by the Fiscal Responsibility Law (Law 101 of 4 May 2000). In 2008-2009 and 2010, it exceeded the threshold for guarantees granted, as shown in Table 3. Projections of income and expenditure for the next 10 years show that, even with

the expenses arising from the program, there will be no deficit in the Londrina Municipal Government (PML) accounts, and the primary balance throughout the period will be positive and sufficient to guarantee the debt service payments. The PML's income and expenditure in the period 2008-2012 displayed results compatible with generation of a primary balance that, in millions of reais at 2012 prices, was R\$16.31 in 2008; R\$77.20 in 2009; R\$44.41 in 2010; R\$-4.86 in 2011; and R\$109.83 en 2012.

**Table 3. Threshold of Guarantees Granted, as percentage (2008-2012)**

<b>Legal threshold and rule *</b>	<b>Legal threshold</b>	<b>Jan-Dec 2008</b>	<b>Jan-Dec 2009</b>	<b>Jan-Dec 2010</b>	<b>Jan-Dec 2011</b>	<b>Jan-Dec 2012</b>
1. Payroll expenses/NCI*	<b>60.00</b>	50.29	49.98	48.66	37.72	43.99
2. Domestic and external credit operations/NCI	<b>16.00</b>	12.25	3.31	3.35	2.28	0.00
3. Credit operations in anticipation of budgetary revenues/NCI	<b>7.00</b>	0.00	0.00	0.00	0.00	0.00
4. Total guarantees granted/NCI	<b>22.00</b>	28.86	28.03	24.43	14.99	11.98
5. Expenditure with debt service (interest, other, and repayments)	<b>11.50</b>	5.49	7.60	6.21	4.52	4.13
6. Net consolidated debt/net income	<b>120.00</b>	50.54	49.05	33.98	20.61	12.33

\* NCI = Net current income.

- 2.4 The financial analyses performed show that the PML has the capacity to assume the commitments associated with the financing. The actions to strengthen its tax base (component 3) will help ensure the sustainability and proper maintenance of the projects financed by the program.

**B. Environmental and social risks**

- 2.5 In general terms, the actions envisaged in the program: (i) will have a temporary adverse environmental impact during the construction phase; and; (ii) will improve the environmental quality of the valley bottoms and watercourses. The program was classified as category “B” under the Bank’s Environment and Safeguards Compliance Policy (Operational Policy OP-703). To comply with that policy, during preparation of the operation the PML produced an environmental assessment report that identified the main impacts and potential socioenvironmental risks, emphasizing the actions under its two infrastructure components, along with the corresponding prevention and mitigation measures, and environmental control of such impacts. Pursuant to the Bank’s Access to Information Policy (document [GN-1831](#)), the environmental assessment report was posted on the PML website for consultation and contributions from the population, and it was presented and discussed at a public meeting organized by the Londrina Urban Planning and Research Institute (IPPUL).
- 2.6 The program will produce: (i) positive impacts, seen directly or indirectly in all the areas/communities covered by the program, particularly those where valley bottoms with squatting on existing park strips will be reclaimed and revitalized, offering

better living conditions for the most vulnerable population groups. It will also introduce environmental services related to the preservation of flora and fauna, and protection of natural areas along the banks of watercourses and neighboring recreation areas, among other things. In conjunction with better urban mobility, these will benefit the city as a whole, guaranteeing its sustainability; (ii) temporary adverse impacts related to changes in the physical and socioeconomic environment during the works construction phase, projected to be of small to moderate scale; and (iii) permanent social impacts resulting from family resettlement.

- 2.7 The environmental assessment report includes an environmental and social management plan (ESMP) and an involuntary resettlement plan ([optional electronic link 7](#)), in compliance with OP-703 and the Involuntary Resettlement Policy (OP-710). The precautions and measures adopted to control, prevent, and mitigate the potential adverse impacts are described in the ESMP, included in the environmental and social management report (ESMR). The ESMP identifies the procedures, actions, and responsibilities for proper socioenvironmental management of the program ([optional electronic link 5](#)).

### C. Institutional capacity and fiduciary risks

- 2.8 **Analysis of institutional capacity and fiduciary risks.** The studies undertaken during program preparation included assessments of the institutional capacity of the PML and IPPUL ([optional electronic link 1](#)). The main fiduciary risk was identified as a lack of knowledge of the Bank's financial management and procurement policies and procedures. Mitigation actions: (i) creation of a Special Bidding Committee (SBC) within the Bidding and Contracts Office of the Department of Public Management; (ii) appointment of a special government attorney to review the program processes; (iii) training for the execution team; and (iv) implementation of a program management system to generate the necessary reports and perform financial management of the program **As a special contractual condition precedent to the first disbursement, the borrower will provide evidence, to the Bank's satisfaction, of the start of the bidding process for procurement of the management and financial/accounting control system with the features and capacity agreed upon with the Bank.** In addition, as a special execution condition, the Município of Londrina will demonstrate to the Bank that the management and financial/accounting control system with the features and capacity agreed upon with the Bank has been implemented within 180 days after the loan contract signature date.

- 2.9 **Other risks and mitigation actions.** The program has a moderate risk level owing to the potential for implementation to be interrupted as a result of changes in municipal administration that could occur in 2017. Risks were also identified in relation to potential delays in family resettlement owing to complications in the expropriation processes or resistance by some families to leaving their current homes. The mitigating measures in this case relate to full application of the involuntary resettlement plan ([optional electronic link 7](#)), which gives details of procedures for communicating with the community and social work with the



families to be resettled, etc. The risk mitigation matrix specifies measures to guarantee effective execution of the program in the specified time frame.

**D. Other special considerations**

- 2.10 The borrower will take the necessary steps to ensure that the works built under the program are maintained according to accepted technical standards. It will also deliver a maintenance report and plan to the Bank in the first quarter of each year of execution and for three years after the last disbursement. If, through the reports or inspection visits, the Bank finds that maintenance is inadequate, the borrower will take the necessary steps to correct the shortcomings.

**III. IMPLEMENTATION AND MANAGEMENT MODEL**

**A. Implementation arrangements**

- 3.1 The borrower will be the Município of Londrina (ML), and the Federative Republic of Brazil will be the guarantor of the borrower's financial obligations. The program executing agency will be the ML, acting through the Program Management Unit (PMU) of the Mayor's Office, in coordination with the Londrina Urban Planning and Research Institute (IPPUL). The PMU will be responsible for coordinating, planning, monitoring, and executing activities related to projects and actions financed with Bank resources. Also supporting program execution will be the municipal departments of (i) the interior, (ii) works and paving, (iii) public management, (iv) finance; (v) planning, budget, and technology; (vi) environment, and others; as well as the Londrina Housing Company (COHAB) and Londrina Municipal Transit and Urban Development Company (CMTU). **As a special contractual condition precedent to the first disbursement, the borrower will provide evidence, to the Bank's satisfaction, of the signature and entry into effect of the agreements between the ML and IPPUL, COHAB, and CMTU, on the terms agreed upon with the Bank.**
- 3.2 The PMU will consist of: (i) a general coordinator from IPPUL; (ii) a subcoordinator of financial management, supported by technical staff in budgetary planning, accounting, and payments; (iii) a subcoordinator of procurement management, supported by the Special Bidding Committee (SBC) and the município's Attorney General's Office; and (iv) a technical subcoordinator of the investment components, supported by technical staff in resettlement and social action, environmental reclamation, mobility and transportation, information technology, record-keeping, sector plans, and environmental and works inspection. **As a special contractual condition precedent to the first disbursement, the borrower will provide evidence, to the Bank's satisfaction, of the publication of decrees creating the PMU and the SBC, including the appointment of their members.**
- 3.3 The PMU will have the following functions: (i) planning of the investments and budgetary coordination with the corresponding departments; (ii) evaluation of the

- final designs for works and the terms of reference for professional services contracts for other program actions; (iii) preparation of terms of reference; (iv) preparation and support of bidding processes for works, and procurement of goods and services; (v) coordination and supervision of the involuntary resettlement plan and social action; (vi) control and support of works supervision and inspection and of professional services contracts; (vii) coordination and supervision of environmental matters; (viii) control of accounting and record-keeping, submission of disbursement requests, and delivery of accounts; (ix) physical/financial control, and preparation of reports on physical and financial progress; (x) coordination of fulfillment of the contractual conditions contained in the loan contract; (xi) monitoring and evaluation of the intermediate outcomes, targets, and indicators defined in the Results Matrix and program monitoring report (PMR); (xii) procurement of the management systems necessary for physical and financial monitoring; (xiii) preparation of the annual work plan (AWP) and procurement plan; (xiv) preparation of all technical and administrative documentation relevant to bidding and contracting processes; and (xv) preparation of other reports as requested by the Bank.
- 3.4 The Special Bidding Committee (SBC) will be responsible for goods, services, and works procurement processes, as well as processes for the selection and contracting of consulting services generated by the program. The SBC will form an integral part of the PML Department of Public Management.
- 3.5 **Advance of funds.** The program will operate on the basis of advances of funds by the Bank to satisfy the project's actual liquidity requirements. The PML will request advances through the PMU by submitting a disbursement request supported by a financial plan reflecting the need for funds for the requested period. The PMU will deliver an initial financial plan to the Bank containing the disbursement schedule for the entire execution period. The first plan covering the first six months of implementation will be based on this initial plan, and used to plan the first advance of funds. For future advances, at least 80% of the funds received must be accounted for, and a new financial plan submitted for the period in question.
- 3.6 **Procurement of works, goods, and services.** These related procurements and the contracting of consulting services will be subject to the "Policies for the procurement of works and goods financed by the Inter-American Development Bank" (document [GN-2349-9](#)) and the "Policies of the selection and contracting of consultants financed by the Inter-American Development Bank" (document [GN-2350-9](#)). The procurements of works, goods, and services are identified in the procurement plan and will be conducted in accordance with the Fiduciary Agreements and Requirements ([Annex III](#)).
- 3.7 **Program supervision.** The risk analysis has rated the operation as moderate risk, which calls for ex post review of procurement procedures and disbursements, to be performed by external auditors. To ensure that the Bank's policies are internalized, it was decided that ex ante review will be used during the first 12 months of execution for all processes conducted with Bank resources. Thereafter, the Bank

will perform another risk analysis, and, depending on the results, may adopt an ex post review modality for the remainder of implementation.

- 3.8 **Audit.** The PMU will deliver audited financial statements for the program annually during execution. The external audit will be performed by the State of Paraná Audit Office (TCE/PR), which works on a sampling basis, in accordance with the annual external audit plans.

**B. Monitoring and evaluation arrangements**

- 3.9 **Monitoring and supervision system.** Program execution will be monitored using the physical and financial schedule, the AWP, procurement plan, and Results Matrix. In addition, the PMU will produce six-monthly status reports containing the information necessary to complete the PMR based on the Results Matrix indicators. The PMU will have a management system (see paragraph 2.8) containing the information for program monitoring and supervision.

- 3.10 **Evaluation of program outcomes.** The outcome and output indicators defined for this program will be evaluated on the basis of information available at the PMU and Municipal Department of Finance, and specific surveys commissioned from specialized firms. Outcomes and indicators will be evaluated at three points in time: at the start of the program, midway through the implementation period, and at the end of execution. A reflexive evaluation methodology will be used, comparing the outcome indicators before and after the interventions, such as property values in the target areas of the projects ([optional electronic link 3, pages 5-7](#)); greenspace per inhabitant; the number of people using the areas in the revitalized valley bottoms; the average speed on urban roads; and IPTU revenue intake. The objective of the evaluation is to judge whether the program is achieving the expected outcomes, including the socioeconomic and environmental benefits projected at the time of approval. A sum of R\$255,000 has been earmarked for the evaluation, for which the evaluation methodology, work plan, and budget were agreed upon with the PML and are described in detail in the monitoring and evaluation plan.

Development Effectiveness Matrix			
Summary			
<i>I. Strategic Alignment</i>			
<b>1. IDB Strategic Development Objectives</b>		<b>Aligned</b>	
Lending Program		i) Lending for poverty reduction and equity enhancement; and ii) Lending to support climate change initiatives.	
Regional Development Goals		i) Paved road coverage (Km/Km2); ii) Proportion of urban population living in dwellings with hard floor; and iii) Ratio of actual to potential tax revenue.	
Bank Output Contribution (as defined in Results Framework of IDB-9)		i) Households with new or upgraded water supply; ii) Households with new or upgraded sanitary connections; iii) Number of households with new or upgraded dwellings; iv) Public financial systems implemented or upgraded (budgeted, treasury, accounting, debt, and revenues); v) Municipal or other sub-national governments supported; vi) Number of people given access to improved public low-carbon transportation systems.	
<b>2. Country Strategy Development Objectives</b>		<b>Aligned</b>	
Country Strategy Results Matrix	GN 2662-1	i) Support large and medium-sized Brazilian cities in improving urban transportation; ii) Implement collaborative and efficient urban management mechanisms in metropolitan areas, to ensure a better return on investments; iii) Increase capacities for urban management and the provision of municipal services/infrastructure in medium-sized cities and metropolitan regions; and iv) Improve the urban habitat giving priority to the poorest areas.	
Country Program Results Matrix	GN-2756-2	The intervention is included in the 2014 Operation Program.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
<i>II. Development Outcomes - Evaluability</i>			
	<b>Evaluable</b>	<b>Weight</b>	<b>Maximum Score</b>
	8.5		10
<b>3. Evidence-based Assessment &amp; Solution</b>	8.4	33.33%	10
3.1 Program Diagnosis	3.0		
3.2 Proposed Interventions or Solutions	2.4		
3.3 Results Matrix Quality	3.0		
<b>4. Ex ante Economic Analysis</b>	10.0	33.33%	10
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0		
4.2 Identified and Quantified Benefits	1.5		
4.3 Identified and Quantified Costs	1.5		
4.4 Reasonable Assumptions	1.5		
4.5 Sensitivity Analysis	1.5		
<b>5. Monitoring and Evaluation</b>	7.1	33.33%	10
5.1 Monitoring Mechanisms	2.5		
5.2 Evaluation Plan	4.6		
<i>III. Risks &amp; Mitigation Monitoring Matrix</i>			
Overall risks rate = magnitude of risks*likelihood		Medium	
Identified risks have been rated for magnitude and likelihood		Yes	
Mitigation measures have been identified for major risks		Yes	
Mitigation measures have indicators for tracking their implementation		Yes	
Environmental & social risk classification		B	
<i>IV. IDB's Role - Additionality</i>			
The project relies on the use of country systems			
Fiduciary (VPC/PDP Criteria)	Yes	Financial Management (Budget, Treasury, Accounting and Reporting, External control, Internal Audit). Procurement (Shopping Method, Contracting individual consultant, National Public Bidding Use of some National Sub-System).	
Non-Fiduciary	Yes	Strategic Planning National System( Use of some Sectorial or Sub-national system).	
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project			
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan			

The Program for Sustainable Urban Development in the Municipality of Londrina aims to promote the sustainable urban development of Londrina through the environmental recovery of degraded areas on the margins of rivers and streams, improving urban mobility and strengthening fiscal and urban management in the local government. To achieve this objective, the program supports the environmental recovery of areas of fundos de vale, which requires resettlement of low-income families, eliminating traffic bottlenecks and expansion of bike paths and strengthening government's management and planning functions. The prioritized activities are part of the Londrina Municipal Management Plan (PDML).

The vertical logic presented in the POD is consistent for each sub-component and contributes to the overall objectives of the PDML. The results matrix includes output and outcome indicators; however no impact level indicators are presented. The indicators in the results matrix meet SMART criteria and include baseline values. The Program Management Unit (PMU) will be responsible for monitoring and evaluation, and will measure results in coordination with organizations such as the Institute for Research and Urban Planning of Londrina (IPPUL) and the Housing Company of Londrina (COHAP). Monitoring and Evaluation activities have been budgeted and planned. The program proposes a reflexive evaluation of results with no causal attribution.

## RESULTS MATRIX

<b>Program general objective</b>	The program's general objective is to promote Londrina's sustainable urban development through environmental reclamation of degraded areas along the banks of its rivers and streams, improvement of urban mobility, and strengthening of the local government's fiscal and urban management.
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<b>Component 1 objective</b>	Support the environmental reclamation of degraded "valley bottom" areas in the north and east parts of the city, where there are hazard-prone unregulated settlements, as well as environmental reclamation of other degraded permanent conservation areas (APPs) threatened by squatting.			
<b>Outcome indicators</b>	<b>Unit of measure</b>	<b>Baseline 2013</b>	<b>Target 2017</b>	<b>Comments</b>
Increase in property values	R\$/m <sup>2</sup>	76.63 (parcels)	84.30	The 10% rise in property values applies to the valley bottom projects and the <i>Ribeirão Cambé</i> park strip. Source: Program final evaluation.
		433.42 (construction)	476.42	
Greenspace per inhabitant in the city	m <sup>2</sup> /inhabitant	3.90	4.90	An analysis will be done of greenspace per inhabitant for the entire município. The population is as defined in the population census of the Brazilian Institute of Geography and Statistics (IBGE). The information will be taken from the final program report. Source: Parks Office of the Municipal Government of Londrina (PML).
Number of people using the revitalized valley bottom areas	Users	0	18,000	Total number of users in 2017. Source: Report on users compiled by the PML Parks Office. To be included in the final program report.

Component 1 outputs	Unit of measure	Baseline 2013	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017	Target 2017	Comments
Area of the <i>Ribeirão Cambé</i> park strip reclaimed	m <sup>2</sup>	0	-	221,112	274,830	566,520	1,062,463	Areas are considered “reclaimed” if all facilities have been installed (pedestrian walkways, planting of native species, installation of park furniture—garbage bins, benches, playground equipment, sports fields—lighting, signposting). Source: Works progress reports. PML/Program Execution Unit (PEU)/Program Management Unit (PMU).
Hazard-prone valley bottom areas reclaimed	m <sup>2</sup>	432,129	-	-	507,133	-	939,262	See definition of “reclaimed” area in the previous indicator. Source: Works progress reports and six-monthly program report, PMU/PEU/Department of the Environment (SEMA).
Families resettled from hazard-prone valley bottom areas	Families	0	-	110	121	95	326	Source: Legal declaration of occupancy of dwellings, supplied by the Londrina Housing Company (COHAB). To be included in the six-monthly program report.
Resettled families headed by women	Families	0	-	40	53	50	143	Source: Legal declaration of occupancy of dwellings, supplied by COHAB. To be included in the six-monthly program report.

<b>Component 2 objective</b>		Improve mobility in Londrina by eliminating critical points of heavy traffic congestion and promote bicycle use by expanding the city's bicycle path network ("bici sendas")						
<b>Outcome indicators</b>	<b>Unit of measure</b>	<b>Baseline 2013</b>			<b>Target 2017</b>			<b>Comments</b>
Average speed on urban roads (Winston Churchill Avenue)	km/h	15.5			20.0			Average speed of mixed-mode transit measured using the floating car data method. Source: Six-monthly program report, PMU.
<b>Output indicators</b>	<b>Unit of measure</b>	<b>Baseline 2013</b>	<b>Year 1 2014</b>	<b>Year 2 2015</b>	<b>Year 3 2016</b>	<b>Year 4 2017</b>	<b>Target 2017</b>	<b>Source/Mean of verification/Comments</b>
Bicycle paths built	Linear m	11,500	14,250	-	6,450	3,600	35.8	Source: Works report/six-monthly program report, PMU.
Asphalting and lane lengthening on Saul Elkind Avenue, east and west segments	Km	0	10.6	-	-	-	10.6	Source: Works report/six-monthly program report, PMU.
Bridge over the river in the north-south direction	Bridge/viaduct	0	3	-	-	-	3	Source: Works report/six-monthly program report, PMU.
Intersection of Winston Churchill Avenue. Crossroads of Winston Churchill/Ouro Verde Terminal/Lucílio de Held Avenue	Intersection	0	-	1	-	-	1	Source: Works report/six-monthly program report, PMU.
Roundabout at Paul Harris and Anália Franco Streets	Round-about	0	-	-	-	1	1	Source: Works report/six-monthly program report, PMU.
Widening of Senador Souza Naves and Presidente Costa e Silva Streets	Linear m	0		1,500			1,500	Source: Works report/six-monthly program report, PMU.

<b>Component 3 objective</b>		To improve the município's fiscal management through the use of computerized tools, and urban management through the development of a macrodrainage and urban mobility plan.						
<b>Outcome indicators</b>	<b>Unit of measure</b>	<b>Baseline 2013</b>			<b>Target 2017</b>			<b>Comments</b>
IPTU revenue intake <sup>1</sup>	R\$ million	142,231			165,650			Source: National Treasury Department (STN), PML.
Process search time in municipal administration	Days	31			15			Source: Outcome evaluation/final program report, PMU.
<b>Output indicators</b>	<b>Unit of measure</b>	<b>Baseline 2013</b>	<b>Year 1 2014</b>	<b>Year 2 2015</b>	<b>Year 3 2016</b>	<b>Year 4 2017</b>	<b>Target 2017</b>	<b>Source/Mean of verification/Comment</b>
Cadastrés integrated at the Department of Finance (Taxation x Integrated Process System)	Cadastrés	0	-	-	-	1	1	The final output is an integrated cadastre. Source: Department of Finance, PML.
Area cadastred to calculate the IPTU tax base	m <sup>2</sup> (million)	24	-	-	-	2	26	Refers to the area in m <sup>2</sup> to be added to the urban real estate cadastre. Source: Department of Finance, PML.
Sector-level plans for drainage and mobility	Plan	0	-	-	2	-	2	Source: Six-monthly program report, PMU.
Corporate geographic information system (SIGLON)	System	0	-	-	-	1	1	Source: Six-monthly program report, PMU.
Municipal public archive computerized	System	0	-	1	-	-	1	Implementation of document management system. Source: Six-monthly program report, PMU.

<sup>1</sup> IPTU: Urban land and property tax.



## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

**Country:** Brazil  
**Project number:** BR-L1094  
**Name:** Londrina Sustainable Urban Development Program  
(PROCIDADES – Londrina)  
**Prepared by:** Mónica Merlo (Financial Management Specialist)  
Marilia Santos (Procurement Specialist)

### **I. EXECUTIVE SUMMARY**

- 1.1 Fiduciary management was assessed on the basis of meetings held with the Bank's project team and the executing agency. Also taken into account were the preparation documents for the operation, the discussions and outcome of the analysis mission, and the Bank's experience working with similar projects at the federal, state, and municipal government levels.
- 1.2 The fiduciary agreements for procurement and financial administration to be applied for program execution have been prepared on the basis of the assessment of the executing agency.
- 1.3 In addition, the fiduciary context of the country and of the executing agency have been taken into account for the establishment of the fiduciary agreements, the principal points of which are summarized in the following paragraphs.

### **II. FIDUCIARY CONTEXT**

#### **A. Fiduciary context of the country**

- 2.1 Brazil has robust country fiduciary systems that allow and enable sound management of administrative, financial, control, and procurement processes, adhering to the principles of transparency, economy, and efficiency. Those systems require further strengthening to address new fiduciary needs. Accordingly, the Bank's fiduciary strategy for Brazil is geared toward progressive and sustainable use of the country's fiduciary systems.
- 2.2 The Bank has been working with the federal government to make it possible for the SIAFI integrated financial management system to be used as an integrated tool for financial and accounting management and for generating reports on operations with the Bank. Also important is the fact that the control function is exercised by the Federal Department of Internal Control (SFCI) in all credit operations undertaken with federal public administration; at the state level, the following are considered eligible by the Bank: the Audit Offices of Bahía, the Federal District, Minas Gerais, Paraná, and Santa Catarina; eligibility of the Audit Offices of

Rio Grande do Sul and São Paulo is in process. Lastly, the Bank has been gradually increasing use of country public procurement systems, particularly ComprasNet (the electronic reverse auction system administered by the federal government), and Banco do Brazil's "Licitações-e" e-bidding system.

**B. Fiduciary context of the executing agency**

- 2.3 The program executing agency will be the Município of Londrina (ML), acting through the Program Management Unit (PMU) of the Mayor's Office, in coordination with the Londrina Urban Planning and Research Institute (IPPUL). The PMU will be responsible for coordinating, planning, monitoring, and executing activities related to projects and actions financed with Bank resources. Also supporting program execution will be the municipal departments of (i) the interior, (ii) works and paving, (iii) public management, (iv) finance (v) planning, budget, and technology, (vi) environment, and others; as well as the Londrina Housing Company (COHAB) and Londrina Municipal Transit and Urban Development Company (CMTU).
- 2.4 Since this is a municipal project, it is subject to the national laws governing the public administration, including the Fiscal Responsibility Law. Procurement and contracting are governed by Law 8666/93.
- 2.5 Since the ML will be required to comply with Bank policies for program procurement, it would be desirable to establish/institute a Special Bidding Committee (SBC) within the Bidding and Contracts Office of the Department of Public Management. To execute the planned actions, the team will need to be strengthened and trained in Bank fiduciary policies, rules, and procedures; and a computerized system will need to be developed, upgraded, and/or purchased to perform the controls and generate the reports required by the Bank.
- 2.6 The PMU will be responsible for coordination with the other agencies and institutions involved and for fiduciary administration of the operation, including budget formulation, processing of authorization and recognition of expenditures and respective payments.

**III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES**

- 3.1 The assessment of the risks inherent in program execution identified the following fiduciary risks: delays in execution owing to the unsuitability of the structure proposed for the PMU and a lack of familiarity with the Bank's procurement and financial management policies.
- 3.2 **Mitigation actions:** (i) restructuring of the PMU; (ii) creation of an SBC within the Bidding and Contracts Office of the Department of Public Management; (iii) appointment of a special government attorney to review the program processes; (iv) training for members of the execution team; and (v) the development of a module in the EQUIPLANO public sector management system to keep records and generate the reports required by the Bank, or procurement of

a management and financial/accounting control system with the features and capacity agreed upon with the Bank.

#### **IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE CONTRACT**

- 4.1 **Special contractual conditions precedent to the first disbursement.** The borrower will provide evidence of the following to the Bank's satisfaction: (i) the publication of decrees creating the Program Management Unit (PMU) and the Special Bidding Committee (SBC), including the appointment of their members; (ii) the start of the bidding process for procurement of the management and financial/accounting control system with the features and capacity agreed upon with the Bank; and (iii) the signature and entry into effect of the agreements between the Município of Londrina and IPPUL, COHAB, and CMTU, on the terms agreed upon with the Bank.
- 4.2 **Special execution condition.** The Município of Londrina will demonstrate to the Bank that the management and financial/accounting control system with the features and capacity agreed upon with the Bank has been implemented within 180 days after the loan contract signature date.
- 4.3 **Financial statements of expenditures.** Annual audits of the program will be performed by the State of Paraná Audit Office (TCE/PR).
- 4.4 **Other financial management requirements.** The supporting documentation for expenditures will subject to ex ante review by staff or a consultant designated by the Bank for the first significant procurement processes, until such time as this routine is formally modified to ex post review, whereafter disbursements will be reviewed by external auditors, or as required by the Bank.

#### **V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION**

##### **1. Procurement execution**

- 5.1 The fiduciary agreements and requirements for procurement establish the provisions to be applied and observed for the execution of all program procurements.

##### **2. Procurement of works, goods, and nonconsulting services**

- 5.2 Procurements of works, goods, and services to be financed, in whole or part, with the Bank loan proceeds will be conducted in accordance with the "Policies for the procurement of goods and works financed by the Inter-American Development Bank" (document GN-2349-9) of March 2011.
- 5.3 International competitive bidding (ICB) will be used for procurements of works, goods, and services with an estimated cost of US\$25 million or more for works, and US\$5 million or more for goods and services, following the procedures established in Section II of document GN-2349-9. National competitive bidding (NCB) may be used when the estimated cost is less than US\$25 million for works, and US\$5 million for goods and services. The shopping method, following the procedures established in Section III of document GN-2349-9, may be used for

works costing less than US\$500,000, and goods and services costing less than US\$100,000.

- 5.4 The Bank may recognize the methods envisaged in the Electronic Auction Act (Law 10520/2002) when the estimated cost is below the ICB thresholds, per contract, provided that the requirements of the Bank's procurement policies are met, particularly as they relate to: (i) origin of goods; (ii) nationality of suppliers; (iii) alteration of purchase orders; (iv) prohibition of price bands; and (v) publication in a widely circulated national newspaper.
- 5.5 The following thresholds will apply to use of the provisions of Law 10520/2002: (i) electronic auction using systems approved by the Bank for procurements of off-the-shelf goods and services with an estimated cost of US\$5 million or less; (ii) price list for procurements of off-the-shelf goods with an estimated cost of US\$5 million or less, provided that the original price list has been previously accepted by the Bank; and (iii) traditional auction for off-the-shelf goods and services with an estimated cost of US\$100,00 or less. The Bank may cancel the use of one or more of the modalities described in this paragraph at any time during the program.

### **3. Selection and contracting of consulting services**

- 5.6 The selection and contracting of consulting services to be financed, in whole or part, with the loan proceeds will be conducted in accordance with the "Policies for the selection and contracting of consultants financed by the Inter-American Development Bank" (document GN-2350-9).
- 5.7 The selection and contracting of consulting firms will follow the methods established in Section II, "Quality- and cost-based selection (QCBS)," and Section III, "Other methods of selection," of document GN-2350-9, using the guidelines and standards described in Section II as the basis for structuring the processes.
- 5.8 For contracting, the executing agency will prepare shorts lists of six selected firms that satisfy the technical requisites established in the request for expressions of interest.
- 5.9 The short list for processes with an estimated cost of US\$1 million or less, per contract, may comprise entirely national consulting firms. If the estimated cost of the procurement is equal to this amount or more, the short list must comprise six firms, with no more than two firms of the same nationality.
- 5.10 Regardless of the selection method used, when the estimated cost of the procurement is US\$200,000 or more, per procurement/contract, the request for expressions of interest must be published in UNDB Online (international publicity).
- 5.11 The selection and contracting of individual consultants to be financed, in whole or part, with the loan proceeds will be conducted in accordance with Section V of document GN-2350-9, "Selection of individual consultants."

- (a) **Retroactive financing.** Not applicable.
- (b) **Recognition of expenditures.** The PMU reported that expenditures may be presented for recognition against the local counterpart resources. The Bank may recognize such expenditures against the local counterpart, provided that they were incurred within 18 months prior to the date of project approval by the Bank's Board of Executive Directors. The expenditures related to the local counterpart will be for up to US\$7.9 million (18.4% of the total amount of the operation) for road works, bicycle paths, and paving. These expenditures will be eligible for recognition if compatible with the Bank's procurement policies or substantially similar procedures.
- (c) **Domestic preference.** No margins of domestic preference will be applied.

**Table of Threshold Amounts for Brazil (in US\$)**

Works			Goods			Consulting services	
ICB	NCB	Shopping	ICB	NCB	Shopping	International publicity/ Consulting services	Short list 100% national
≥ 25,000,000	< 25,000,000 and ≥ 500,000	< 500,000	≥ 5,000,000	< 500,000 and ≥ 100,000	< 100,000	≥ 200,000	< 1,000,000

**Main Procurements**

Activity	Procurement method	Estimated date	Estimated amount (US\$)
<b>Works</b>			
Construction of housing units for removal of families	NCB	Jan. 2015	5,032,765.51
Construction of bicycle paths	NCB	Jan. 2015	1,209,472.00
<b>Goods</b>			
Procurement of hardware and software and related services for the Geographic Information System (GIS)	Price list	Jan. 2015	960,772.97
Procurement of hardware and software for the municipal government's data center	Electronic auction	Jan. 2015	1,791,351.30
<b>Consulting services (firms)</b>			
Contracting of Urban Drainage Plan.	QCBS	Jul. 2014	927,027.00
Contracting of Transportation and Mobility Plan.	QCBS	Jan. 2015	945,945.94

#### 4. Procurement supervision

- 5.12 Agreement was reached with the team that the first two procurement processes of each type/method to be financed, in whole or part, by the Bank, regardless of their value, and all processes with an estimated cost above the thresholds for ICB and single-source selection, will be subject to ex ante review.

#### 5. Special provisions

- 5.13 **Procurement plan.** The PMU will submit updates to the 18-month procurement plan (PA-18) to the Bank for review and approval, annually or as needed.

- 5.14 Procurement processes for goods and nonconsulting services under the Electronic Auction Act (Law 10520/2002) must be conducted using systems recognized by the Bank for such purpose, in this case ComprasNet or Banco do Brazil's "Licitações-e" e-bidding system.

## **6. Records and files**

- 5.15 The program records and files must satisfy at least the following conditions:
- (a) Records/processes must contain original documentation, filed in chronological order;
  - (b) Records/files must be kept in a suitable location used exclusively for such purpose, with restricted access and preventive security measures such as a ban on smoking, access restricted to authorized personnel, etc.;
  - (c) A record must be kept of all documentation on file.

## **VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS**

### **A. Financial management agreements and requirements**

- 6.1 Given the features of this program and the fact that the Municipal Government of Londrina has no previous experience in executing the proceeds of external loans, the proposed PMU needed to be restructured with: (i) a general coordinator; (ii) a financial management subcoordination unit; (iii) a procurement management subcoordination unit; and (iv) a technical subcoordination unit, with one person responsible for each program component.
- 6.2 The need was also seen to engage consulting services to support the supervision of program works, targets, and outcomes.
- 6.3 The budget will be duly registered in and operated through the EQUIPLANO system, with a new module being developed to record, monitor, and control budgetary and financial execution of the program's actions.
- 6.4 The budget for program activities will be approved under the proper legal instrument. The Bank will reimburse project expenditures based on the budget items established and executed
- 6.5 **Accounting and information system.** The project's budgetary and financial execution will be processed by the aforementioned EQUIPLANO system module or system purchased for such purpose.

### **B. Disbursements and cash flow**

- 6.6 The program will operate on the basis of advances of funds by the Bank to satisfy the project's actual liquidity requirements. A disbursement request will be submitted, supported by a financial plan reflecting the need for funds for the requested period, as previously agreed upon with the Bank.
- 6.7 The PMU will deliver an initial financial plan to the Bank containing the disbursement schedule for the entire execution period. The annual plan covering

- the first year of implementation will be based on this initial plan, and used to plan the first advance of funds
- 6.8 For future advances, at least 80% of the funds received must be accounted for, and a new financial plan submitted for the period in question.
  - 6.9 The supporting documentation for expenditures will subject to ex ante review by staff or a consultant designated by the Bank for the first two procurement processes of each type/method to be financed, in whole or part, by the Bank, regardless of their value, whereafter the Bank will change to ex post review, to be performed by external auditors, or as required by the Bank. Ex post review will be duly documented in the appropriate report.
  - 6.10 For the purposes of accountability for the loan proceeds and the local contribution, the following exchange rules will be used to convert amounts paid in local currency to the currency of the operation:
    - (a) The same exchange rate used to convert amounts disbursed in United States dollars into the borrowing country's currency.
    - (b) In such case, for reimbursement of expenditures chargeable to the loan and recognition of expenditures against the local counterpart, the exchange rate in effect on the day before the disbursement request is submitted to the Bank.
  - 6.11 Expenditures considered ineligible by the Bank will be repaid with resources from the local contribution or other sources, at the borrower's discretion, depending on the nature of the ineligibility.
  - 6.12 **Internal control and internal audit.** Internal control will be performed by the municipio's Comptroller General's Office and Attorney General's Office.
  - 6.13 **External control and reports.** The State of Paraná Audit Office (TCE/PR) will exercise external control, working annually on a sampling basis, in accordance with the annual external audit plans mandated by regulation.
  - 6.14 The project will deliver annual financial statements to the Bank, duly audited by the TCE/PR.
  - 6.15 The contents of the reports and the opinions to be issued must adhere to the standard set by the Bank for external audits, and be delivered to the Bank by the deadline set in the loan contract.

**C. Financial supervision plan**

Supervision activities	Supervision plan			
	Nature and scope	Frequency	Responsibility	
			Bank	Third party
Operational	Review of physical progress of the actions/activities set out in the components, vis-à-vis disbursements	Six-monthly	Sector and financial specialists	PMU General Coordinator
	Review of disbursement projection	Six-monthly	Sector and financial specialists	PMU General Coordinator
Financial	Ex ante/ex post review of disbursements and procurements	Annual	Fiduciary team	Fiduciary team and TCE/PR
	Financial and operational audit	Annual		TCE/PR
	Review of disbursement requests and accompanying reports	Periodic	Fiduciary team	
	Supervision visit/analysis of internal controls and control environment	Annual	Sector specialist and fiduciary team	
Compliance	Annual budget allocation necessary for execution	Annual	Sector specialist and fiduciary team	Executing agency
	Delivery of audited financial statements and operational audit	Annual	Sector specialist and fiduciary team	Executing agency
	Conditions precedent to the first disbursement	Once	Sector specialist and fiduciary team	Executing agency

6.16 **Execution mechanism.** Given the execution mechanism proposed by the Município of Londrina, a centralized administrative and financial execution mechanism is necessary, acting through the PMU, which will be responsible for annual budget formulation and financial execution of both the local counterpart and the Bank's contribution.



DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/14

Brazil. Loan \_\_\_/OC-BR to the Municipality of Londrina  
Londrina Sustainable Urban Development Program  
PROCIDADES – Londrina

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Municipality of Londrina, as Borrower, and with the Federative Republic of Brazil, as Guarantor, for the purpose of granting the former a financing to cooperate in the execution of Londrina Sustainable Urban Development Program - PROCIDADES – Londrina. Such financing will be for an amount of up to US\$21,450,00, from the resources of the Single Currency Facility of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_ \_\_\_\_\_ 2014)