



Board of Executive Directors

For consideration

On or after 23 September 2015

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Simultaneous Disclosure

To: The Executive Directors
From: The Secretary
Subject: Bolivia. Proposal for a loan for the "Road Infrastructure Program to Support Development and Management of the Primary Road Network II"

Basic Information: Loan typeGlobal Multiple Works Operation (GOM)
BorrowerPlurinational State of Bolivia
Amount up to US\$142,856,000
SourceSingle Currency Facility of the Ordinary Capital
Amount up to US\$35,714,000
SourceFund for Special Operations

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Remarks: This operation is included in Annex III of document GN-2805, "2015 Operational Program Report", approved by the Board of Executive Directors on 15 April 2015. However, the loan amount exceeds the ceiling established for Group D countries. Therefore, the operation does not qualify for approval by Simplified Procedure.

The financing for this operation corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank.

Reference: GN-1838-1(7/94), DR-398-17(1/15), GN 2805(4/15), AB-2504(11/06), AG-9/06, PR-4242(11/14), DE-197/14, DE-198/14

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BOLIVIA

**ROAD INFRASTRUCTURE PROGRAM TO SUPPORT DEVELOPMENT AND
MANAGEMENT OF THE PRIMARY ROAD NETWORK II**

(BO-L1102)

LOAN PROPOSAL

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CONTENTS

PROJECT SUMMARY

I.	DESCRIPTION AND RESULTS MONITORING	1
A.	Background, problem, and rationale	1
B.	Objectives, components, and cost	7
C.	Results framework and key indicators	11
II.	FINANCING STRUCTURE AND MAIN RISKS	12
A.	Financing instruments	12
B.	Environmental and social risks	12
C.	Fiduciary risks	13
D.	Other project risks	13
III.	IMPLEMENTATION AND MANAGEMENT PLAN	14
A.	Summary of implementation arrangements	14
B.	Summary of arrangements for monitoring results	16

ANNEXES	
Annex I	Summary Development Effectiveness Matrix (DEM)
Annex II	Results Matrix
Annex III	Fiduciary Agreements and Requirements

ELECTRONIC LINKS	
REQUIRED	
1.	Multiyear program execution plan (PEP)
2.	Annual work plan (AWP)
3.	Monitoring and evaluation plan
4.	Environmental and social management report (ESMR)
5.	Procurement plan
OPTIONAL	
1.	Freight Logistics Statistics Yearbook for Latin America and the Caribbean
2.	Analysis of the importance of the highway transportation sector in Bolivia
3.	Gender and transportation annex
4.	Analysis of the operation in the framework of the Regional Integration Policy
5.	Institutional capacity building
6.	Primary Road Network Conservation Program
7.	Analysis of adaptation to climate change in Bolivia
8.	Project economic assessment
9.	TESA study for construction of the Santiago de Machaca - Milestone IV segment
10.	Study estimating the probability of additional costs
11.	Program Operating Regulations
12.	Location map of segments and map of Primary Road Network (RVF)
13.	2015-2020 National Government Plan
14.	Diagnostic assessment and work plan for toll collection
15.	Rural Access Index: a Key Development Indicator

ABBREVIATIONS

AADT	Annual average daily traffic
ABC	Administradora Boliviana de Carreteras [Bolivian Highway Administration]
CNC	Cuenta Nacional de Carreteras [National Highways Account]
COSIPLAN/IIRSA	South American Infrastructure and Planning Council of the Initiative for the Integration of South American Regional Infrastructure
EIRR	Economic internal rate of return
ENPV	Economic net present value
FSO	Fund for Special Operations
GDP	Gross domestic product
GNAF	[Gerencia Nacional Administrativa y Financiera] National Finance and Administrative Division
IAU	Internal Audit Unit
INE	Instituto Nacional de Estadísticas [National Statistics Institute]
INE/TSP	Transport Division
IRI	International Roughness Index
LAC	Latin America and the Caribbean
NB-SABS	Normas Básicas del Sistema de Administración de Bienes y Servicios [Basic Standards of the Goods and Services Administration System]
OC	Ordinary Capital
PEP	Multiyear program execution plan
PMR	Progress monitoring report
ProVial	Road Network Conservation Program with Microenterprises
PSE	Program to Support Employment (loan 2365/BL-BO)
RVF	Red Vial Fundamental [Primary Road Network]
SEPA	Procurement Plan Execution System
SGC	Subgerencia de Construcción [Construction Division]
SGCV	Subgerencia Conservación Vial [Road Maintenance Division]
SGSA	Subgerencia Socio Ambiental [Socioenvironmental Division]
SICOES	Sistema de Contrataciones Estatales [Public Procurement System]
SIGMA	Sistema Integrado de Gestión y Modernización Administrativa [Integrated Administrative Management and Modernization System]
SIGEP	Sistema de Gestión Pública [Public Management System]
TESA	Technical, economic, social, and environmental study
VIPFE	Office of the Deputy Minister for Public Investment and External Financing
WEF	World Economic Forum

PROJECT SUMMARY

BOLIVIA ROAD INFRASTRUCTURE PROGRAM TO SUPPORT DEVELOPMENT AND MANAGEMENT OF THE PRIMARY ROAD NETWORK II (BO-L1102)

Financial Terms and Conditions					
Borrower: Plurinational State of Bolivia				OC	FSO
			Amortization period:	30 years	40 years
			Disbursement period:	5 years	5 years
			Grace period:	6 years	40 years
Executing agencies: Administradora Boliviana de Carreteras [Bolivian Highway Administration] (ABC)			Interest rate:	SCF-Fixed ^(a)	0.25%
			Inspection and supervision fee:	^(b)	N/A
Source	Amount		Credit fee:	^(b)	N/A
	US\$	%	Currency:	U.S. dollars from the Ordinary Capital	
IDB (OC)	142,856,000	80			
IDB (FSO)	35,714,000	20			
Total	178,570,000	100			
Project at a Glance					
Objective. The program objective is to continue improving the quality and serviceability, accessibility, and safety conditions of the Primary Road Network (RVF) through an increase in paved road coverage and the rehabilitation and upgrading of road corridors connecting production centers to local and foreign markets. The program will also promote improvements in public expenditure efficiency in the sector by supporting integrated road asset management. This will involve incorporating the works into road maintenance management systems and building capacity at the Bolivian Highway Administration (ABC).					
Special contractual conditions precedent to the first disbursement: (i) approval and entry into effect of the program Operating Regulations (including the environmental and social management framework) (paragraph 2.3); and (ii) signature and entry into force of an interagency agreement between the ABC and Vías Bolivia (approved by the Bank) (paragraph 3.5).					
As special contractual conditions for execution: (i) prior to tendering the construction of each of the works in Component 1, the ABC will submit the following for the Bank's no objection: (a) the final designs for the projects approved by the ABC, including updated costs and timelines for works execution (paragraph 2.8); and (b) the environmental and social analysis of each project, including management and/or action plans to mitigate the direct and indirect impacts, an involuntary resettlement plan (as applicable), and the results of public consultations (as applicable), in accordance with the environmental and social management framework; (ii) prior to the physical start of the works at each location identified by the ABC, the latter will submit the following to the Bank's satisfaction: (a) evidence that rights of way have been acquired to 100% of the work locations; (b) a copy of the relevant environmental certifications and permits and related documents; and (c) the final version of the environmental and social management plan prepared in accordance with the environmental and social management framework, adjusted and supplemented by the supervision firm for the program, and approved by the ABC (paragraph 2.2); (iii) prior to awarding contracts for the construction of works and procurement of goods planned under subcomponent 3.1, the ABC will provide evidence to the Bank's satisfaction that Vías Bolivia has the necessary staff and other resources for the administration and management of such works and goods (paragraph 1.26); and (iv) prior to tendering equipment, gantries, systems, and works for weighing, toll collection, and the electronic toll system, the ABC will submit for the Bank's approval a network analysis for the location of the weigh stations and toll plazas (paragraph 3.6).					
Exceptions to Bank policies: None					
Project qualifies as: ^(c)	SV [x]	PE [x]	CC [x]	CI [x]	

^(a) The borrower will pay interest on outstanding balances on this portion of the Ordinary Capital loan at a LIBOR-based rate. The rate on the outstanding balance will be set whenever such balance reaches 25% of the approved net amount or US\$3 million, whichever is greater.

^(b) 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.

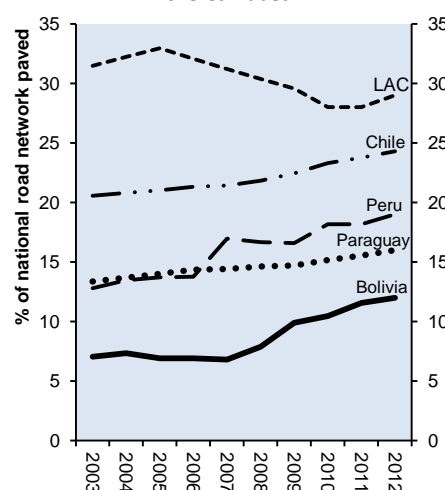
^(c) SV (Small and Vulnerable Countries), PE (Poverty Reduction and Equity Enhancement), CC (Climate Change, Sustainable Energy, and Environmental Sustainability), CI (Regional Cooperation and Integration).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem, and rationale

- 1.1 **Road transportation, productivity, and social inclusion.** The limited availability of transportation infrastructure in middle- and low-income countries such as Bolivia has a significant impact on export costs, given that the international prices at which they import and export goods are usually exogenous. Additionally, given Bolivia's landlocked position, its products have to travel longer distances to reach consumers.¹ In the specific case of imports of intermediate and capital goods, which are vital for domestic production, the higher cost of domestic transport² entails increased production costs. Any factor hindering the efficient and effective distribution of goods or supplies not only causes economic losses, but also tends to spread along the rest of the logistics chain, ultimately affecting the economy's productivity.³
- 1.2 Bolivia's road network⁴ is 89,740 km long, and only 11.7% of the network is paved, making Bolivia one of the countries of Latin America and the Caribbean with the lowest road density. The large share of commodities in the country's foreign trade⁵ makes land transport a structural component in the functioning of value chains and for supplying companies. Its importance for the economy is such that in 2014, Bolivian highways were used to move 61% of the country's exports (excluding piped transport of hydrocarbons) and 83% of its imports.
- 1.3 Bolivia's performance in the road sector is weak, according to the road index developed by the Bank ([optional electronic link 1](#)), which assigns weights to four indicators: (i) road network density; (ii) the percentage of the total road network that is paved; (iii) highway transportation emissions; and (iv) average freight cost. Bolivia ranks 20th out of the 21 countries for which information is available that were considered. According to

Figure 1. Road density in Latin America and the Caribbean



Source: INE, and Freight Logistics Statistics Yearbook, IDB 2014.

¹ One of the main production centers, the department of Santa Cruz, is 1,171 km from the port at Arica, Chile, 2,153 km from the port at Santos, Brazil, and 2,261 km from the port of Rosario, Argentina, by road, or 3,442 km by river (Paraguay-Paraná).

² The estimated cost of freight is 0.1337 US\$/MT-km, which is higher than the Andean countries' average of 0.091. [Freight Logistics Statistics Yearbook](#), IDB 2014.

³ The World Economic Forum (WEF) Global Competitiveness Index ranks Bolivia 109th out of 144 countries in the infrastructure category, making it one of the lowest-ranking countries in the region.

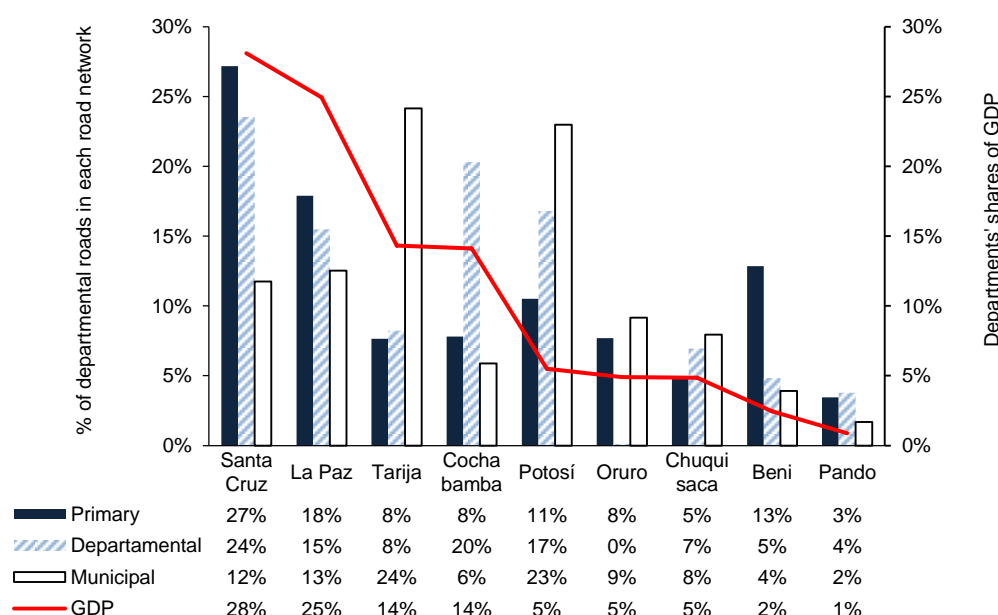
⁴ The network has three functional levels: (i) the Primary Road Network (RVF) under the jurisdiction of the national government (~16,000 km); (ii) the departmental road network (~24,500 km); and (iii) the municipal road network (~40,500 km).

⁵ Transport-intensive commodities, such as gold, silver, zinc, and tin ore, chemical products, and soybeans, which, together with hydrocarbons account for 80% of the country's exports by value ([optional electronic link 2](#)).

this analysis, the small percentage of paved roads and the low road density are the two factors most strongly influencing its low position in the ranking.

- 1.4 The limited coverage and lack of accessibility to the paved road network not only affects Bolivia's international competitiveness (paragraph 1.1) but also its economic activity: departments with more paved roads account for a significant share of Bolivia's GDP (see Figure 2). Low road coverage also restricts access to transport, and consequently to basic services and good-paying quality jobs. In the countryside, most of the population makes a living from farming, hunting, or fishing, activities that net a low income and provide no access to social security, such that two in three people live in moderate poverty and one in five in extreme poverty⁶ (see paragraph 1.35 and footnote 26).

Figure 2. Road network and share of Bolivia's GDP



Source: INE, Departmental Governments, and ABC.

- 1.5 Although the female workforce participation rate is higher in Bolivia than the regional average (44.8% compared with 41.7% in the rest of Latin America and the Caribbean), this participation rate is not seen in rural areas or sectors such as infrastructure construction, in which women make up less than 1% of the workforce. Since public investment in infrastructure is a major source of rural jobs, the bias towards hiring women for traditional jobs—excluding them from better paid positions⁷—contributes to a persistent gender-based income gap in rural areas (paragraphs 1.37 to 1.39).

⁶ Source: Unidad de Análisis de Políticas Sociales y Económicas [Unit for Social and Economic Policy Analysis], 2012.

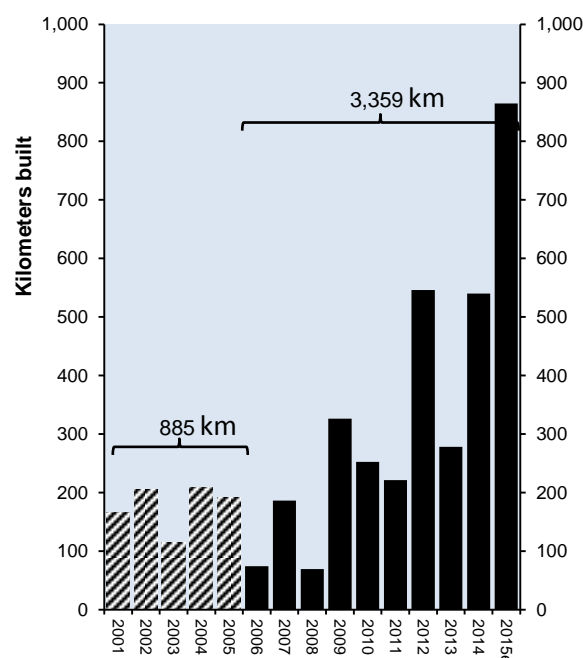
⁷ See optional electronic link 3.

- 1.6 **2025 Patriotic Agenda.** The Plurinational State of Bolivia is promoting the Agenda 2025, which envisions the paving of the entire RVF by 2025. This means continuing its annual investment efforts, which have risen from US\$111.3 million between 2001 and 2005 to US\$261.5 million between 2006 and 2010 and to US\$543.2 million between 2011 and 2014. The effects of this cumulative investment in improving road infrastructure in production areas, integrating department capitals via paved access, and developing integration corridors with neighboring countries⁸ are starting to be seen in international indicators such as the Global Competitiveness Index.⁹

- 1.7 The empirical evidence underscores the positive relationship between investments in roads competitiveness, reduction in economic inequality, and economic development that is primarily seen in lower transport costs and shorter transport times for goods, increased reliability of services, and accessibility of farming regions, thus improving private sector productivity. In particular, a better quality road network increases consumption and income for the beneficiary population, incentivizes job creation, and drives the adoption of new technologies in the agriculture sector.¹⁰

- 1.8 **The challenges of managing the Primary Road Network (RVF).** The RVF comes under

Figure 3. Progress of RVF construction



Source: ABC, Current expenditure budget execution.

the jurisdiction of the Plurinational State of Bolivia and is the responsibility of the Bolivian Highway Administration (ABC). The RVF connects department capitals and is vital to the country's physical integration as it links Bolivia with neighboring

⁸ The portfolio of the South American Infrastructure and Planning Council of the Initiative for the Integration of South American Regional Infrastructure (COSIPLAN/IIRSA) includes 23 projects in Bolivia for the RVF, with a value of over US\$3 billion (<http://www.iirsa.org/proyectos/>).

⁹ Bolivia has moved up the WEF ranking from 118th place in 2009 to 105th in 2015, and from 128th to 109th place in infrastructure quality.

¹⁰ The Transportation Sector Framework Document points up a relationship between infrastructure and transportation services, competitiveness, and the comparative advantages of economies. Chacón, Godin, and Stucchi (*mimeo*), Ascauher (1989), and Barro (1990) demonstrate that public investment in infrastructure boosts economic growth, reduces production costs, and helps raise private sector output. Gertler, et al. (2014), Dercon et al. (2008), and S. Aggarwal (2013) demonstrate the relationship between accessibility in rural and agricultural settings and the economic and social development of the beneficiary population. A review of the available assessments and studies demonstrates the validity of the proposed interventions in the Bolivian context.

countries. It measures 15,986 km in length, around 42% of which is paved, and comprises five corridors: East-West, North-South, West-North, West-South, and Central-South. One of the main corridors is the East-West corridor linking the department of Santa Cruz with neighboring countries and the departments of La Paz and Cochabamba (see [optional electronic link 4](#)).

- 1.9 The ABC has a central headquarters and nine regional offices with deconcentrated operational functions, whereby they are responsible for tendering, supervision and oversight, and environmental and social considerations, as regards both maintenance and investment contracts. Regional offices have between 16 and 34 staff and account for 57.5% of the ABC's total headcount. The planned increase in investment¹¹ and the institution's deconcentrated functional model impose challenges on regional offices, such as the expansion and training of staff,¹² improved local infrastructure, standardization of information collection, and coordination at the operational level between regional offices and central headquarters.¹³
- 1.10 Maintenance and rehabilitation of the RVF is carried out by private firms contracted for this purpose. To finance RVF investments and maintenance,¹⁴ the ABC uses funds from various sources: (i) the National Highways Account (CNC), which takes in revenue from tolls and the excise tax on hydrocarbons and derivatives; (ii) the National Treasury; and (iii) external financing.¹⁵
- 1.11 The Road Maintenance Program with microenterprises (ProVial) involves around 500 legally incorporated road maintenance microenterprises throughout the RVF. These microenterprises are dedicated to routine maintenance activities such as drainage, road surfacing, patching, road signs and pavement markings, building walls, controlling vegetation, and administrative activities (road monitoring, counting vehicles, and recording accidents).
- 1.12 Under the supervision of the ABC, Vías Bolivia is responsible for managing toll collection and vehicle weight inspection systems on the RVF and transfers part of

¹¹ An increase of 600% compared with a change in headcount of 13% between 2005 and 2013 (paragraph 1.6).

¹² Considering the plans for future road construction and the standard set for the number of contracts to be negotiated per staff member at the technical and administrative level ([optional electronic link 5](#)), the ABC's regional offices are falling short of the minimum requirement. For example, Santa Cruz has 10.8 road contracts per technician, compared with the standard requirement of 8 contracts. There is a need to build institutional capacity in all the regional offices and to strengthen know-how on performance-based contracts, planning, maintenance, road safety, communication with the public, and road-surface management.

¹³ The computer systems in some regional offices are inadequate. Other shortcomings detected include the lack of an integrated communications system with central headquarters, as well as a lack of integration between the road management systems for tracking data and inventory and the works control instrument.

¹⁴ Government policy is for the first level of intervention (routine and periodic maintenance) to be financed with own resources. The improvement and expansion program seeks to rebuild roads where the pavement has deteriorated to the point that it cannot be restored through rehabilitation activities, as well as to extend the useful life of roads as long as possible before the road surface needs to be changed (from dirt or surfaced to paved roads). It also includes paving and capacity expansion for critical segments.

¹⁵ According to the Framework Plan for Road Maintenance, an annual budget of US\$86 million is required to properly maintain the RVF ([optional electronic link 6](#)).

the revenues to the CNC.¹⁶ Vías Bolivia has developed various systems for managing and recording toll collections. However, it does not have systems enabling it to oversee revenues and measure the flow of vehicles in collection lanes or classify vehicle types. This results in lower revenues than it ought to obtain on a per-axle basis.

- 1.13 **Road safety.** Traffic accidents over the 2009-2013 period in Bolivia caused 22.1 fatalities per 100,000 inhabitants, above the regional average of 17.2.¹⁷ The Office of the Deputy Minister for Citizen Security is taking some first steps to address the problem of road safety and led the efforts to prepare the National Road Safety Plan. The ABC has responded by developing a traffic accident monitoring system for the network.
- 1.14 **Adaptation to climate change.** As the program aims to improve and rehabilitate highways throughout the country, an assessment was conducted of the vulnerability of the highway infrastructure to climate-related stress factors such as rain and the increase in the number of days with temperatures over 35° Celsius ([optional electronic link](#) 7). The results are available in a geographical information system that helps identify the vulnerability and exposure of the sections to receive financing (paragraph 1.35).
- 1.15 The following activities will reduce the potential vulnerability of the works: (i) review of the technical, economic, social, and environmental (TESA) study and other documentation from the representative sample to identify vulnerable geographic areas; (ii) analysis of vulnerability of infrastructure based on climate modeling with a resolution of 0.25 degrees (25 km) for the whole country; and (iii) review of ABC manuals and guides and their application to studies in the sample, to ensure the design parameters are applied in the case of slope stabilization, raising embankments, and width of drains, taking the rainfall recurrence interval into account.¹⁸
- 1.16 **Identification of the problem.** Despite the recent increase in investment in Bolivia's road sector, a number of problems persist: (i) low density and availability of road infrastructure in good condition¹⁹ and limited land connections with neighboring countries, which affects access to/from the various production centers, and raises transport costs; (ii) limited institutional capacity to coordinate the growing project portfolio, particularly in ABC regional offices; (iii) challenges intrinsic to comprehensive management of road assets, including the development of multiyear service-level maintenance contracts;²⁰ and (iv) budgetary challenges

¹⁶ Vías Bolivia administers 123 toll plazas and 17 vehicle weight and size inspection stations on the RVF, only 7 of which are certified to impose fines. In 2013, Vías Bolivia transferred US\$47.3 million to the CNC, equivalent to 83% of its revenue intake.

¹⁷ *Avances en seguridad vial en América Latina y el Caribe 2010-2012* [Progress in road safety in Latin America and the Caribbean 2010-2012].

¹⁸ The ABC's design manuals require that design flows be obtained for floods with return periods of 25, 50, 100, and 150 years for basins of less than 25 km² and 150, 200, and 300 years for basins with areas of over 25 km². For storm drainage, 50-year parameters were used, with a 100-year verification. For bridges, the parameters are 200 years with verification at 300 years.

¹⁹ Only 24% of the paved RVF can be classified as being in good condition, while 51% is in average condition, and 25% in poor condition.

²⁰ The ABC tenders 55 periodic maintenance contracts a year for maintenance of the RVF.

- for road maintenance and limited capacity to check weights and sizes of vehicles throughout the RVF.
- 1.17 **The Bank's know-how and experience.** For the ABC, implementation of Agenda 2025 (paragraph 1.6) entails an increase in annual budget execution, from 783 km intervened in 2014 to 1,073 km in 2020, requiring annual investment resources of up to US\$800 million. The current program will help with an increase in net investment for the paving and maintenance of the RVF and the resources for project management, taking further the work of the Road Infrastructure Program to Support Development and Management of the Primary Road Network I (3385/BL-BO) approved by the Bank in December 2014, allowing the ABC to increase the number of areas in which it is working. Moreover, given the increase in road investment over the last eight years, the program also plans to continue the effort begun in 2014 to implement the Capacity Building Plan ([optional electronic link 5](#)), which identifies the minimum, optimum, and ideal levels of development of the institution and will enable the ABC to undertake the management of new projects (paragraphs 1.31 and 1.32).
- 1.18 Between 2006 and 2014 the Bank approved eight operations in the transportation sector in Bolivia for a value of US\$642.7 million, of which US\$556 million will be used to improve the RVF, by supporting paving, maintenance, environmental and social management, and investment planning measures. The Bank's involvement has enabled the following lessons learned to be identified: (i) the importance of having complete engineering studies and updated designs; (ii) the importance of considering the acquisition of rights of way (paragraph 3.7) and compensation for losses in cases of involuntary resettlement (paragraph 2.2); (iii) the need to support institutionalization processes at sector entities; (iv) the need to prioritize investment in road maintenance and enhance its management; and (v) the need to define precise targets and results indicators. These lessons have been fully integrated into the design of this operation.
- 1.19 **Strategic alignment.** The program will contribute to two of the financing targets of the Ninth General Increase in the Resources of the Inter-American Development Bank (document AB-2764): (i) lending to small and vulnerable countries; (ii) poverty reduction and equity enhancement under the geographic targeting criterion; (iii) support for initiatives on climate change, renewable energy, and environmental sustainability, as it includes measures to adapt road infrastructure to periods of extreme rainfall and other climate-related stress factors; and (iv) financing for regional cooperation and integration focusing on multinational and national subsidiarity, to improve essential routes for Bolivia's international trade. It will also contribute to the regional target of paved-road coverage (km/km²) as it finances works to build, improve and/or widen, and rehabilitate 185 km of road.
- 1.20 The program is aligned with the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5), as it supports: (i) infrastructure for regional and global integration; and (ii) the construction and maintenance of environmentally and socially sustainable infrastructure. The program is aligned with the Transportation Sector Framework Document (document GN-2740-3) as it contributes to the following dimensions of success: (i) having broad coverage of quality transportation infrastructure and services; (ii) giving priority to the establishment of sustainable corridors for trade integration; and (iii) having

institutions with the capacity to generate and implement sector policies and execute and monitor projects. By supporting the integration of women into nontraditional employment activities (paragraph 1.5), the program is also aligned with the Strategy on Social Policy for Equity and Productivity (document GN-2588-4). It is also aligned with the Labor Sector Framework Document (document GN-2741-3), as it supports unemployed, underemployed, or difficult-to-employ workers by offering them a faster and more effective transition into work, with better pay expectations.

B. Objectives, components, and cost

- 1.21 The program objective is to continue improving the quality and serviceability, accessibility, and safety conditions of the Primary Road Network (RVF) through an increase in paved road coverage and the rehabilitation and upgrading of road corridors connecting production centers to local and foreign markets. In addition, the program will promote improvements in public expenditure efficiency in the sector by supporting integrated road asset management. This will involve incorporating the works into road maintenance management systems as well as building capacity at the ABC.
- 1.22 To address the problems identified (paragraphs 1.1 to 1.15), actions under the program are structured into three specific components: (i) improving the physical condition of road infrastructure; (ii) improving integrated road asset management; and (iii) building capacity at both the ABC central headquarters and the regional offices to manage a growing project portfolio.
- 1.23 **Component 1. Civil works and road safety (US\$137.49 million).** This component will finance the construction, upgrading, rehabilitation, and/or maintenance of approximately 185 km of the RVF. All sections targeted by this subcomponent are expected to be included in the ABC's Road Maintenance Program (paragraph 2.7). Maintenance of road assets by indicators includes works (routine, periodic, and/or exceptional) and the rehabilitation necessary to achieve and maintain predetermined conditions, by including them in multiyear service-level maintenance contracts.
- 1.24 This component will also finance investment in road security features on the targeted segments, including road signs and pavement markings, upgrading of pedestrian crossings, and installation of speed-reduction features on municipal access roads and near schools. It also includes community relations and education of communities benefiting from paving works. A road safety education plan will therefore be designed to raise awareness in the community. This will include defining and implementing measures to bolster safety in communities close to the project, identifying risks deriving from paving, such as increased traffic speeds, and promote awareness and good practices in road safety.
- 1.25 **Component 2. Engineering and socioenvironmental management (US\$9.66 million).** This component includes costs of supervision, inspection, and the Loss Compensation Program, as well as the team acquiring rights of way.
- 1.26 **Component 3. Integrated management of road assets (US\$19.75 million).** This component will finance the development and consolidation of an efficient and sustainable management system for operation and maintenance of the RVF, including: (i) procurement of scales, devices, and equipment for electronic tolls and

weight and size control, and improvement of control stations; (ii) support for Vías Bolivia to improve its technical capabilities and optimize revenue collection (paragraph 1.12); and (iii) support for ProVial.

- 1.27 **Subcomponent 3.1. Development of an intelligent transport system.** This subcomponent will finance RVF toll plazas and weighing stations, which will be prioritized according to revenues and traffic volumes, including the procurement of scales, devices, and equipment for electronic tolls and weight and size control, construction of new infrastructure, or upgrading of existing infrastructure. It will also include training on the operation of the new systems.
- 1.28 **Subcomponent 3.2. Development of revenue management systems.** This subcomponent will finance the development of technical capacities and comprehensive improvement of Vías Bolivia's toll collection processes, aiming to increase the contributions to the CNC (paragraph 1.12 and footnote 16). It will also finance load classification and source/destination studies.
- 1.29 **Subcomponent 3.3. Support for ProVial.** This subcomponent will finance the procurement of equipment and technical training of staff to: (i) promote processes of mechanization, specialization, and quality of work by road maintenance microenterprises; (ii) institutional management; and (iii) technical training on responding to emergencies, patching and sealing cracks, road signs and pavement markings, recording and responding to accidents, counting vehicles, pavement and shoulder cleaning, and cleaning drainage systems (storm drains, ditches, downspouts, etc.).
- 1.30 To promote the integration of women in better jobs and training at firms in the sector, this component may coordinate the use of funds with the Program to Support Employment (paragraphs 1.38 and 1.39).²¹
- 1.31 **Component 4. Sector capacity-building program (US\$10.5 million).** This component will finance a comprehensive plan to build the capacities that the ABC regional offices and central headquarters need in order to address the challenges associated with the expanding execution and maintenance portfolio (paragraphs 1.8 and 1.9). Capacity-building will be supported through the procurement of services, equipment, goods, and training.
- 1.32 Specifically, the capabilities of the regional offices will be enhanced in areas including: (i) works supervision; (ii) measurements and processing of road networks to ensure the sustainability over time of inventory and pavement management systems; (iii) training and technical assistance in areas such as planning, programming, road design, road safety, and social and environmental management; and (iv) strengthening the information technology, communications, and administration area. The National Finance and Administrative Division (GNAF) at central headquarters will also receive strengthening in the following areas: (i) computer and communications systems of the General Secretariat, through the procurement of goods and training; (ii) the Planning, Quality and External Financing Management Unit; (iii) the ABC's Central Laboratory, within the National Technical Division; and (iv) development of a road-accident management and

²¹ The cost of economic support during training and short courses will be financed through loan 2365/BL-BO. The cost of classroom training associated with job training processes will be eligible under this program.

monitoring system enabling the RVF's critical points to be located, analyzed, and addressed.

- 1.33 **Program administration (US\$1.17 million).** This will finance the operating costs of program management, evaluation, and monitoring, and the corresponding audits: (i) program administration, consisting of technical support for execution and fiduciary management, financial and procurement audits,²² and the results monitoring and evaluation activities included in the project monitoring and evaluation plan; and (ii) procurement of equipment and vehicles, and dissemination and visibility of the ABC.

- 1.34 **Cost and financing.** The total cost of the program is US\$178.57 million.

Table 1. Costs and Financing (in US\$ millions)

Categories		Amount	%
1	Civil works and road safety	137.49	77.0
2	Engineering and socioenvironmental management	9.66	5.40
2.1	Supervision	6.79	3.80
2.2	Inspection	2.49	1.39
2.3	Loss compensation program	0.38	0.21
3	Integrated management of road assets	19.75	11.10
3.1	Intelligent transport system	14.00	7.84
3.2	Revenue management system	1.00	0.56
3.3	Support for ProVial	4.75	2.66
4	Sector capacity-building	10.50	5.9
5	Program administration	1.17	0.7
	Total	178.57	100.0

- 1.35 **Representative sample.** From the list of ABC projects, the 51.7 km Santiago de Machaca - Milestone IV segment,²³ part of the East-West corridor linking Bolivia with Peru via the border crossing at Colpa – Milestone IV²⁴ and corresponding to RVF 43 (US\$64.9 million), were analyzed. The works will include the geometric adjustments and construction of the road surface.²⁵ The sample corresponds to 36% of the total program value.

²² The scope of the external audit will include reviewing procurement processes and financial management of the program.

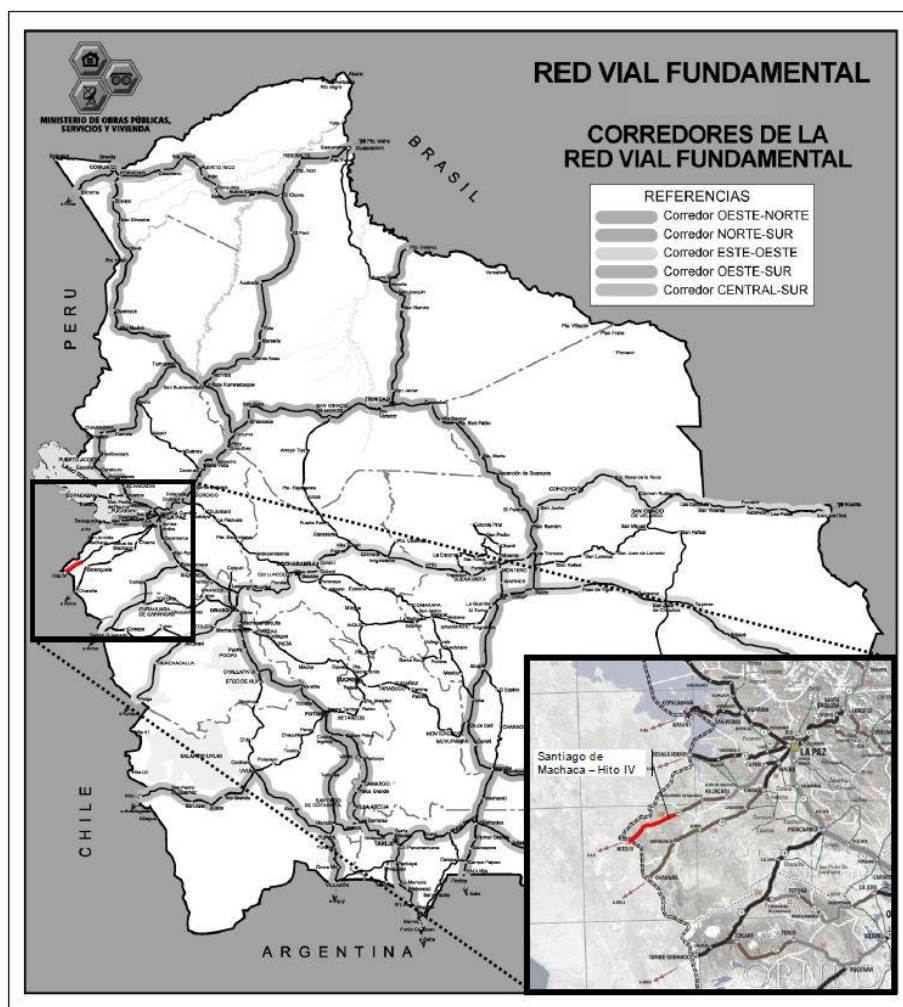
²³ This is part of the Nazacara-Milestone IV road, comprising the following sections: (i) Nazacara – San Andrés de Machaca (financed by FONPLATA, loan approved in 2014); (ii) San Andrés de Machaca – Santiago de Machaca (financed by loan 3385/BL-BO approved in December 2014); and (iii) Santiago de Machaca – Milestone IV.

²⁴ During preparation of the operation, the project team has encouraged Bolivia and Peru to work together to start preparing a regional technical cooperation operation that will finance the preinvestment studies for the Colpa – Milestone IV border crossing. The section is also part of the COSIPLAN/IIRSA Central Inter-oceanic Hub for Integration and Development linking Bolivia, Brazil, Chile, Paraguay, and Peru (paragraph 1.8 and footnote 7).

²⁵ In Peru, the Colpa - Tacna road follows National Route 40 and is 172 km long.

- 1.36 The representative sample benefits rural areas and serves municipios with high poverty rates²⁶ (87.9%), i.e. above the national average (58%). Therefore, based on the criterion of geographic targeting of beneficiaries, the program will contribute to the lending target for poverty reduction and equity enhancement.

Figure 4. Representative sample of the program



Source. ABC.

- 1.37 **Program beneficiaries and gender considerations.** The program beneficiaries will be individuals who use the roads and/or live in neighboring communities, together with users of freight transportation services and other logistics chain operators. Inasmuch as the representative sample serves municipios with high poverty rates (87.9%), the intervention will not only contribute directly to improvements in operating times and costs (making the country's production apparatus more competitive), but also benefit households through access to

²⁶ The representative sample in the department of La Paz includes the municipios of San Andrés de Machaca, Santiago de Machaca, and Catacora. In terms of unmet basic needs, 87.9% of the population is poor. The extreme poverty rate is 58%.

markets and services, as a result of more reliable and predictable overland transport, thus improving their quality of life.

- 1.38 The program will also benefit individuals, particularly women, who gain access to training and workforce integration opportunities promoted by the project²⁷ (paragraphs 1.25 and 1.39), in areas in which there is demand from the road infrastructure construction industry. This will foster human capital development and improve women's access to quality jobs in the sector.²⁸
- 1.39 In coordination with the Labor Markets Unit (LMK) this sector initiative was coordinated with the Program to Support Employment (PSE) (2365/BL-BO), which helps job seekers obtain jobs offering them on-site training and enabling them to acquire the experience they need to become integrated in the workforce.²⁹ Under this multisectoral working arrangement, training programs will be organized targeting the following segments: new heavy machinery operators;³⁰ road maintenance microenterprises through ProVial³¹ (paragraph 1.11); and new toll operators. More than 250 women should benefit from these initiatives, with a high probability that a percentage of them will also be indigenous women (see [optional electronic link 3](#)).

C. Results framework and key indicators

- 1.40 The expected results are: (i) increased access to kilometers of built and rehabilitated integration road network; (ii) shorter travel times; (iii) lower annual vehicle operating costs; (iv) better management and maintenance of road assets; (v) increased toll revenues, and better efficiency and service at toll plazas; (vi) fewer traffic accidents; and (vii) improved sectoral capabilities at the ABC. Results indicators will be measured directly or indirectly based on the methodologies determined in the monitoring and evaluation plan ([required electronic link 3](#)). These measurements and/or estimates will be compared to the projections made in the results matrix of the progress monitoring report (PMR) (Annex II).
- 1.41 The economic aspects of the investments in paving in the representative sample were comprehensively evaluated in the context of the road network using a consumer surplus methodology. The benefits generated were quantified relative to the baseline alternative for a period of 20 years, using the HDM-4 adapted to local conditions. Savings in vehicle operating costs, travel times, and from the reduction

²⁷ To avoid double counting, the beneficiaries at product level will be reported in the PMR for the Program to Support Employment (2365/BL-BO), and the target for access to employment will be reported in this operation.

²⁸ As part of this initiative, with funds from the Program for the Support of Women's Leadership and Representation (PROLEAD), a study was commissioned that sought to identify the impact of road maintenance by microenterprises on the empowerment of women partners in microenterprises, and provide evidence that the inclusion of women in nontraditional jobs not only offers a source of income but also promotes leadership and empowerment.

²⁹ PSE candidates receive economic support for three months and, for their part, firms accepting beneficiaries have to agree to a technical training plan and undertake to employ some of the participants, so that the initiative yields results that are sustainable over time.

³⁰ On 19 August 2015 the project team will hold an event in the city of La Paz to launch a pilot vocational training course for women on operating heavy machinery.

³¹ There are currently 508 women (15%) who are partners in maintenance microenterprises and 281 (34%) work as weighing station operators and toll collectors at Vías Bolivia toll plazas.

in accidents were estimated. The economic returns indicators were determined based on the aforementioned costs and benefits using a discount rate of 12%. Additionally, the sensitivity analysis for the various scenarios showed that even if costs rise by 20% and/or benefits drop by a similar amount, the Santiago - Milestone IV remains in the 9.63% to 14.97% range (see the assumptions and calculation methodologies in [optional electronic link 8](#)).

Table 2. Results of cost-benefit and sensitivity analysis

Section	AADT 2015	Length (km)	Cost (US\$ million)	ENPV (US\$ million)	EIRR (%)			
					Base case	+ 20 % cost	- 20 % benefits	+ 20 % cost; - 20 % benefits
Santiago - Milestone IV	714	51.77	64.95	12.03	14.97	12.46	11.92	9.63

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The multiple works operation involves the financing of similar but independent works. A representative sample has been selected (paragraph 1.35). The physical start of all works must be within two years of the entry into force of the loan contract. The Bank financing will total US\$178.57 million, drawn from the Ordinary Capital (OC) and the Fund for Special Operations (FSO) in a proportion of 80% and 20%, respectively. The planned execution period is five years, running from the entry into force of the loan contract.

Table 3. Execution schedule

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Amount (US\$ thousands)	31,027	40,425	51,112	37,031	18,975	178,570
Percentage	17	22	29	21	11	100%

B. Environmental and social risks

- 2.2 The program complies with Bolivia's environmental regulations and has been classified as a category "B" operation in accordance with the requirements of the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703). Generally, the planned interventions have no socioenvironmental impacts beyond those usual for this type of works. These are mostly temporary and limited to the immediate surroundings, the areas from which materials are sourced, work camps, and asphalt plants, with the exception of specific indirect impacts in the representative sample for which effective mitigation measures have already been identified. As the works target existing routes, most will be executed within existing rights of way. Compensation for losses may be required, but the scale of involuntary resettlement or economic displacement will be limited. The key points of the environmental and social studies and plans are summarized in the Environmental and Social Management Report (ESMR) ([required electronic link 4](#)).
- 2.3 The environmental and social evaluation reports for the project in the representative sample were reviewed, in particular, to confirm that the direct,

indirect, cumulative, and regional impacts had been appropriately identified and analyzed, and that the proposed mitigation and monitoring measures are adequate to comply with the Bank's environmental and social policies, especially as they relate to the quantity and quality of information, implementation capacity, costs, identification of responsible parties, timelines, and quality control, specifically the plans and programs stipulated by Bolivia's environmental authorities. The program made recommendations for supplementing the environmental and social analysis prior to tendering the works. Program execution will be consistent with the Framework for Environmental and Social Management,³² the implementation of which will ensure that the projects are consistent with Bank policies.

C. Fiduciary risks

- 2.4 Given the ABC's experience in the execution of road projects and programs, no significant problems are anticipated at project launch. However, during program preparation certain "medium" risks were identified, for which mitigation actions have been proposed. These actions will be implemented by the ABC, with the support of the project team for their verification and compliance.
- 2.5 Risks were identified associated with difficulties in accessing borrow pits for works construction, and issues related to coordination between participating stakeholders and the impact on management of the operation. To mitigate these risks, there are plans to strengthen the ABC's Socioenvironmental Division, and agreements will be signed between provincial governments and municipios with the ABC (paragraph 3.4). These measures will be supplemented by training and monitoring workshops, and the use of project management tools (PM4R).
- 2.6 Additionally, a process of strengthening regional offices and the central office is being coordinated with the ABC, in order to: (i) identify key procurement processes and the respective courses of action; (ii) improve, update, and train on institutional regulatory procedures and legal procedures for payment processing; (iii) engage consulting services to close on contracts, to ensure improved presentation of physical/financial reports and streamline the balancing of project accounts; and (iv) increase human resources in both procurement and financial management. These actions are aligned with the diagnostic assessments carried out and the action plan drawn up by the ABC to mitigate the risks identified in the project risk matrix.

D. Other project risks

- 2.7 **Sustainability of investments.** Once the improvement, paving, and widening works have been completed, they will be the responsibility of the ABC under its maintenance program. This program has resources from the CNC for maintenance of the RVF and follows the criteria laid down in the ABC's maintenance manual.
- 2.8 To reduce the risk of incremental costs in the representative sample, the TESA study ([optional electronic link 9](#)), prepared by consultants engaged by the ABC, was reviewed. In addition, as a condition precedent to tendering the works, the ABC will submit final designs for the projects to the Bank for acceptance, together with the technical agreements, including the final designs for the Santiago de

³² Including actions to mitigate and manage the indirect impacts of the Santiago de Machaca – Milestone IV segment relating to issues of sustainable agriculture and protection of cultural assets.

Machaca – Milestone IV segment. This will reduce the likelihood of (i) the bids received exceeding the estimated budget; (ii) substantial changes in the works design and/or quantities during construction; and (iii) delays to the construction process due to contractor claims or alterations to the designs and/or increases in quantities, resulting in cost escalation due to extensions of the works and supervision contracts.

- 2.9 A study was also done to estimate the probability of incremental costs, using a Montecarlo simulation ([optional electronic link 10](#)). The results indicate that, with a 90% probability, the incremental costs would be no higher than 15% of the value of the works.³³ This includes a price update prior to tendering, price escalation during construction, and incremental costs of works.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower and executing agency.** The borrower will be the Plurinational State of Bolivia. The executing agency will be the Bolivian Highway Administration (ABC), an administratively autonomous agency under the supervision of the Ministry of Public Works, Services, and Housing. The ABC is supported by three departments: (i) the National Technical Department, which supervises the Construction Division (SGC), the Road Maintenance Division (SGCV), and the Socioenvironmental Division (SGSA); (ii) the National Financial and Administrative Department (GNAF), which consists of the Financial Division and the Administrative Division; and (iii) the National Legal Department, with its Legal Division.
- 3.2 **Execution mechanism.** The project will be executed by the ABC, which will be responsible for: (i) programming of works and services to be contracted; (ii) preparation of bidding documents; (iii) bidding processes; (iv) contracting processes; and (v) inspection and administration of contracts for consulting services, goods, and works (paving, rehabilitation, and maintenance) and verification of compliance with all socioenvironmental specifications and management plans. For international bidding, the ABC will appoint a bid committee at least five days before the date on which bids are due to be received. It will then immediately inform the Bank of the composition of the committee in order to conduct a strengthening session on the application of Bank policies, the standard bidding document, and the conditions applicable to each process.
- 3.3 With respect to the fiduciary control set out in Annex III, the ABC, acting through the GNAF, will be responsible for: (i) implementation and maintenance of effective systems for contract administration, accounting/financial administration, and internal control, consistent with Bank requirements; (ii) presentation of disbursement requests and supporting documentation for eligible expenditures; (iii) preparation of financial reports on funds provided in the form of advances, and any other required reports; (iv) maintenance of an exclusive bank account, and use

³³ Bid tendered (-4%), incremental costs (3%), change in work quantities (3%), extension of deadlines (0%), and adjustment to execution costs (escalation) (13.2%).

of the IDB's integrated financial administration system;³⁴ (v) maintenance of an effective record-keeping system; (vi) timely delivery of the audited financial statements for the program; and (vii) updates to the entity's website to reflect all information of a public nature related to operation execution.

- 3.4 **Program Operating Regulations.** The program Operating Regulations comprise an operational tool that describes the technical procedures and criteria for program execution, the environmental and social management framework, and the eligibility conditions for projects that are to be financed from program funds ([optional electronic link 11](#)). The Operating Regulations will also include the mechanisms needed for coordination with other government entities for project execution and access to borrow pits for materials.
- 3.5 **Eligibility conditions.** For those projects under Component 1 not included in the representative sample, the selection criteria will be as follows: (i) they must be part of the RVF, thus ensuring the development and upgrading of this network; (ii) they must improve both accessibility within the country and international integration by linking departmental capitals, production centers, and border crossings; (iii) they must meet technical, environmental,³⁵ and social feasibility standards; (iv) they must generate an economic return of 12% or more, as shown in the case of the sample projects; and (v) where necessary, evidence must be provided that counterpart resources are available.³⁶
- 3.6 **As special contractual conditions precedent to the first disbursement: (i) the program Operating Regulations will be approved and in force (including the environmental and social management framework) (paragraph 2.3); and (ii) an interagency agreement between the ABC and Vías Bolivia (approved by the Bank) will be signed and in force.**
- 3.7 **As special contractual conditions for execution:** (i) prior to tendering the construction of each of the works in Component 1, the ABC will submit the following for the Bank's no objection: (a) the final designs for the projects approved by the ABC, including updated costs and timelines for works execution (paragraph 2.8); and (b) the environmental and social analysis of each project, including management and/or action plans to mitigate the direct and indirect impacts, an involuntary resettlement plan (as applicable), and the results of public consultations (as applicable), in accordance with the environmental and social management framework; (ii) prior to the physical start of the works at each location identified by the ABC, the latter will submit the following to the Bank's satisfaction: (a) evidence that rights of way have been acquired to 100% of the work locations; (b) a copy of the relevant environmental certifications and permits and related documents; and (c) the final version of the environmental and social management plan prepared in accordance with the environmental and social management

³⁴ The project accounting module of Bolivia's national accounting system is scheduled to come into operation in 2016.

³⁵ Works classified as environmental category "B" or "C" that meet the environmental and social requirements set out in the environmental and social management framework will be eligible for financing under the program.

³⁶ Where counterpart financing by the departments is necessary, the executing agency will provide evidence that an agreement has been signed between the executing agency and the beneficiary department, together with a certificate issued by the relevant authority that the local counterpart resources are available.

framework, adjusted and supplemented by the supervision firm for the program, and approved by the ABC (paragraph 2.2); (iii) prior to awarding contracts for the construction of works and procurement of goods planned under subcomponent 3.1, the ABC will provide evidence to the Bank's satisfaction that Vías Bolivia has the necessary staff and other resources for the administration and management of such works and goods (paragraph 1.26); and (iv) prior to tendering equipment, gantries, systems, and works for weighing, toll collection, and the electronic toll system, the ABC will submit for the Bank's approval a network analysis for the location of the weigh stations and toll plazas.

- 3.8 **Procurement of goods, works, nonconsulting services, and consulting services.** Procurement will be conducted in accordance with the policies set out in documents GN-2349-9 and GN-2350-9. Procurement supervision will be based on the relevant procurement plan. Procurement processes for goods, nonconsulting services, and works in amounts below the thresholds for national competitive bidding will be subject to ex post review, as will contracts with individual consultants or consulting firms below US\$200,000. These thresholds may be raised subsequently based on the updated institutional capacity assessment.

- 3.9 **Disbursements.** The loan will mainly be disbursed under the advance of funds modality. The frequency of advances will be determined as a function of the project's financial programming, which will be updated periodically by the ABC. The Bank may process a new fund advance when at least 80% of the total funds disbursed in the form of advances have been justified. The financial review of disbursement requests will be conducted on an ex post basis.

B. Summary of arrangements for monitoring results

- 3.10 The program's monitoring and evaluation arrangements are based on a "before and after" analysis, which will evaluate the change in output and outcome indicators before and after program implementation. An ex post economic analysis will also be performed. Program monitoring arrangements will involve inspection visits, administration missions, semiannual status reports, annual external audits, and a final evaluation report, as described in the monitoring and evaluation plan ([required electronic link 3](#)).
- 3.11 The program financial statements and eligibility of expenditures will be audited annually by an independent audit firm acceptable to the Bank, which will be engaged by the executing agency, in accordance with the procedures and terms of reference previously agreed upon with the Bank. Auditing services will be financed with the loan proceeds. The program's audited financial statements will be delivered to the Bank no later than four months after the close of each fiscal year of the entity.

Development Effectiveness Matrix				
Summary				
I. Strategic Alignment				
1. IDB Strategic Development Objectives		Aligned		
Lending Program		-Lending to small and vulnerable countries -Lending for poverty reduction and equity enhancement -Lending to support climate change initiatives, renewable energy and environmental sustainability -Lending to support regional cooperation and integration		
Regional Development Goals		-Paved road coverage (Km/Km2)		
Bank Output Contribution (as defined in Results Framework of IDB-9)		-Individuals benefited from programs to promote higher labor market productivity -Km of inter-urban roads built or maintained/upgraded -Regional and sub-regional integration agreements and cooperation initiatives supported -Number of cross border and transnational projects supported (infrastructure and customs, etc.)		
2. Country Strategy Development Objectives		Aligned		
Country Strategy Results Matrix	GN-2631-1	(i) Better coverage of paved roads, and (ii) Improvement of the RVF applying best maintenance standards.		
Country Program Results Matrix	GN-2805	The intervention is included in the 2015 Operational Program.		
Relevance of this project to country development challenges (If not aligned to country strategy or country program)				
II. Development Outcomes - Evaluability		Evaluable	Weight	Maximum Score
		8.9		10
3. Evidence-based Assessment & Solution		10.0	33.33%	10
3.1 Program Diagnosis		3.0		
3.2 Proposed Interventions or Solutions		4.0		
3.3 Results Matrix Quality		3.0		
4. Ex ante Economic Analysis		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		2.4		
4.3 Identified and Quantified Costs		1.5		
4.4 Reasonable Assumptions		1.5		
4.5 Sensitivity Analysis		1.5		
5. Monitoring and Evaluation		6.6	33.33%	10
5.1 Monitoring Mechanisms		2.5		
5.2 Evaluation Plan		4.1		
III. Risks & Mitigation Monitoring Matrix				
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		
IV. IDB's Role - Additionality				
The project relies on the use of country systems				
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury.		
Non-Fiduciary				
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:				
Gender Equality	Yes	The project will seek to particularly benefit women and provide access to the training and job placement opportunities promoted by the program.		
Labor	Yes	This initiative articulates with the Employment Support Program PAE (2365 / BL -BO), which facilitates the insertion of job seekers to jobs that allow them to receive company on-site training and gain the required expertise for labor insertion.		
Environment	Yes	Anticipating that the program will improve and rehabilitate roads throughout the country, a road infrastructure vulnerability assessment to climate stressors, such as rainfall and the increase in the number of days with temperatures above 35° Celsius was developed.		
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	Yes	This project used the technical resources from Technical Cooperations BO- RG- T1228 and T2618 , to hire consultants who conducted technical, social , environmental and economic studies.		
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 diagnosis is clear. The limited road infrastructure network in Bolivia and its low quality, have a significant impact on logistics costs. This situation is reflected by the fact that Bolivia ranks second to last in the Road Index developed by the Bank, which weighs density, paving ratio, emissions and freight rates. The diagnosis indicates that the two major factors that determine this position are the low paving coverage and low road network density.

The document clearly establishes the link between road network, competitiveness, development and inequality. More specifically, it argues that the main problems are associated with (i) low road density and the lack of availability of road infrastructure in good condition; (ii) the limited land links with neighboring countries, which increases transportation costs; (iii) the low institutional capacity to integrate a growing project portfolio, and (iv) the budgetary challenges in order to finance road maintenance and the limited ability to control vehicle weights and dimensions throughout the network.

Consistent with the diagnosis, the project will finance civil works and road safety (construction rehabilitation, safety, signaling), engineering and environmental management, road asset management (intelligent transport systems, collection management, equipment) and local capacity development.

The results matrix has clear vertical logic. The final impact, improved competitiveness, is derived from the achievement of the expected results: (i) reduction of travel time and annual vehicle operating costs; (ii) improved management and preservation of road assets; and (iii) reduction of traffic accidents. The economic analysis is based on an HDM4 cost model simulation of paving and rehabilitation of a sample of projects. The Monitoring & Evaluation Plan proposes an ex post cost-benefit and cost-effectiveness analysis.

RESULTS MATRIX

Project objective	The program objective is to continue improving the quality and serviceability, accessibility, and safety conditions of the Primary Road Network (RVF) through an increase in paved road coverage and the rehabilitation and upgrading of road corridors connecting production centers to local and foreign markets. The program will also promote improvements in public expenditure efficiency in the sector by supporting integrated road asset management. This will involve incorporating the works into road maintenance management systems and building capacity in the regional offices of the Bolivian Highway Administration (ABC).			
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Impact indicator	Unit	Base (2015)	Target (2020)	Observations
Global Competitiveness Index, infrastructure component	Score from 1 to 7	3.0 (109/144)	3.45 ¹	The index can be used to monitor national competitiveness and productivity positioning and trends in 144 countries, on a scale of 1 to 7. The infrastructure component will be monitored and verified annually using the World Economic Forum Global Competitiveness Report.

Outcome indicators	Unit	Base (2015)	Target (2020)	Observations/Mean of verification
Increased accessibility of paved roads				
Index of accessibility to paved road network	kms of paved road per 1,000 km ² of area	4,100	4,483	Verification will be performed at program completion using the accessibility index for RVF paved roads (km of paved roads per 1,000 km ² of area).
Shorter average travel time on the intervened road segment				
Average travel times ²	Hours	1.28	0.73	Three months after the works completion date, speed studies will be carried out on the intervened segments, using the number plate and floating vehicle method. This work will be part of the works supervision closeout report.
Lower annual vehicle operating costs on the intervened highway segment				
Vehicle operating costs ³	US\$/Veh-km	5,228	3,573	Three months after the works completion date, field measurements, estimates, and updates of the costs of vehicle parameters will be prepared. These data will be entered into the HDM model. ⁴
Better management and maintenance of road assets				
Number of km of the intervened segments with an IRI ≤3	km	-	128.84 ⁵	Final works supervision report, or specific studies prepared by the ABC at the end of the interventions.

¹ Details of the target are available in the monitoring and evaluation plan.

² Travel times reported in baseline and target correspond to the Santiago de Machaca – Milestone IV segment. Estimated based on the final design study for the road segment.

³ Average cost reported in baseline and target corresponds to the Santiago de Machaca – Milestone IV segment.

⁴ The baseline parameters will be maintained depending on the economic evaluation of the final design of the section.

⁵ Length corresponding to the rehabilitation of the Santa Cruz – Abapó section. This indicator will be applied to the rehabilitation of paved roads.

Impact indicator	Unit	Base (2015)	Target (2020)	Observations
Value of the country's road assets ⁶	US\$ million	5,965	6,258	The 2015 baseline was determined by a study for the program BO-L1101. The value for 2020 was estimated based on the sums budgeted in the components of the two programs (BO-L1101, BO-L1102). As a means of verification, the RNET model will be updated to 2020.
Average routine maintenance costs on paved roads ⁷	US\$/km-year	10,000	6,500	ABC database, cost per intervened segment in the past compared with projected costs after the project is completed. To be verified from the number of contracts each year and the length of road maintained.
Percentage of trucks traveling on intervened segments reporting overweight each year.	%	17.99	7.0	Vías Bolivia work reports, calculated over a 12-month period, for weigh stations currently in operation.
Increased toll collection and better service at toll plazas				
Increased revenue	Annual revenue (Bolivian bolivianos)	35,314	103,596	The baseline was calculated using the collection value reported in 2014 for Route 09. The value for 2020 is obtained by applying the new charges, with an increase of 50%.
Time spent waiting at toll plazas, or performance of toll collectors	Vehicles/hour	-	298	Before and after implementation, Vías Bolivia will determine the number of vehicles served per hour, using the hour of peak traffic. This will be used as an indicator of the monthly average.
System efficiency				
Percentage of discrepancies between the automatic detection system and what manual toll collectors	%	7.07	5.00	The baseline was calculated using the monthly reliability reports on automatic vehicle detection compared with manual classification by toll collectors. The baseline value comes from the average in the reports from the Guapillo (Cochabamba) and Huayllani (Santa Cruz) toll plazas. This may be modified based on implementation.
Fewer traffic accidents on the intervened highway segments⁸				
10% drop in traffic accidents	%			The baseline will be calculated in a study to be financed by the Bank prior to startup of the operation. Segment considered: Santa Cruz – Abapó.
Improved sector capacity at the ABC				
Number of projects assigned per year to technical staff at regional offices	Unit	8.9	6.1	The baseline was determined from an assessment of the capacities of the La Paz and Santa Cruz regional offices in June 2015. ⁹

⁶ The economic value of building road infrastructure in its current condition.

⁷ Average cost of periodic maintenance reported in the 2015 maintenance plan.

⁸ There is currently no systematized, up-to-date database. The National Police are responsible for recording road accidents.

⁹ Technical staff and long-term consultants.

Impact indicator	Unit	Base (2015)	Target (2020)	Observations
Number of contract files	Unit	129	179	The baseline comes from the contracts signed as at June 2015, including maintenance contracts and equivalent construction contracts. In 2020 an increase of 39% is projected, corresponding to the minimum standard from the capacity building study.

Outputs	Unit	Base	Year 1	Year 2	Year 3	Year 4	Target	Observations/means of verification
Component 1. Civil works and road safety								
Km of RVF improved or widened	Km	0	-	-	51.3	-	51.3	ABC reports, Santiago de Machaca – Milestone IV (51.3 km). Kilometers of road with multinational targeting corresponding to IIRSA. Project to improve border access Colpa – Milestone IV.
Km of RVF rehabilitated under road maintenance contract	Km	0	-	-	128.84	-	128.84	ABC reports, Santa Cruz – Abapó (128.84 km).
Traffic accident management and control system	Unit	0	-	1	-	-	1	System developed and installed.
Equipment for implementation of the traffic accident control and monitoring system	Unit	0	-	9	10	-	19	Equipment purchased and operating, verified from ProVial team reports.
Component 3 Integrated management of road assets								
New mixed (toll/weigh) stations	Unit	0	1	-	-	-	1	Progress reports prepared by Vías Bolivia and approved by the ABC.
Weigh stations expanded and/or refurbished	Unit	0	4	-	-	--	4	
New toll plazas	Unit	0	4	3	-	-	7	
New weigh stations	Unit	0	2	-	-	-	2	
Toll gantries	Unit	0	2	2	-	-	4	
Training on the operation of new toll collection technology	Unit	0	1	1	-	-	2	
Component 4. Sector capacity-building at the ABC								
Institutional capacity-building								
Regional offices strengthened	Unit	0	2	3	3	-	8	Report from respective regional offices.
ABC central laboratory	Unit	0	-	-	1	-	1	SGCV reports with equipment purchased and in operation.
Contracts with technical staff and social and environmental specialists	Unit	0	10	10	15	10	45	Specialists engaged for a 36-month period. Report from regional offices.
Administrative staff contracts	Unit	0	5	5	5	5	20	Specialists engaged for a 36-month period. Report from regional offices.

Outputs	Unit	Base	Year 1	Year 2	Year 3	Year 4	Target	Observations/means of verification
Training courses	Unit	0	1	2	3	3	9	Regional office reports with details of courses offered.
Road safety								
Milestones								
Road safety specialists engaged	Unit	0	1	2	-	-	3	Specialists engaged for a 36-month period. Report from regional offices.
Training on road safety issues at schools in the area of direct influence of the projects	Unit	0	-	1	2	2	5	Reports and records of attendance prepared by project supervisors. Training will be part of the works supervision and SGSA work.
Meters of safety barrier installed	m	0	-	-	15,295	-	15,295	Works supervision certifications, Santiago de Machaca – Milestone IV.
Gender								
Number of women trained for toll collection and weigh operations	Unit	-	50	50	75	75	250	Vías Bolivia reports. Contracts signed. Baseline of 281 women out of a total staff of 805, i.e. 34.9%. After training 250 women, the target is to increase women's participation to 50.3%.
Number of women partners of microenterprises receiving specialized training.	Unit	-	2	4	4	-	10	Microenterprises trained, verified by attendance lists and regional office reports.
Number of women trained to operate heavy machinery	Unit	-	5	10	10	10	35	PSE report.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Plurinational State of Bolivia
Project:	Road Infrastructure Program to Support Development and Management of the Primary Road Network II (BO-L1102)
Executing agency:	Bolivian Highway Administration (ABC)
Prepared by:	Carolina Escudero, Zoraida Argüello, and Abel Cuba (FMP/CBO)

I. EXECUTIVE SUMMARY

- 1.1 This annex was prepared taking into account the experience and performance of the Bolivian Highway Administration (ABC) as the executing agency for several Bank-financed operations.
- 1.2 Accounting for the operation, as well as budget and cash management, will be carried out using the country system, the Integrated Administrative Management and Modernization System (SIGMA).¹ For execution, the Bank's standard bidding documents will be used, or those agreed upon with the Office of the Deputy Ministry for Public Investment and External Financing (VIPFE) and made available on the Public Procurement System (SICOES),² where calls for tenders and the results of national bidding processes will be published.
- 1.3 The Government of Bolivia and the Bank are currently drafting an agreement under which the partial use of the Basic Standards of the Goods and Services Administration System (NB-SABS) will be adopted for Bank-financed operations in Bolivia. This program may apply this agreement once it has been signed and is in force.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

- 2.1 The ABC is a decentralized public agency, governed by Law 1178 of 20 July 1990 on government administration and control (SAFCO).³ It has an administrative and financial structure designed for the execution of externally and internally financed projects and has regional offices for project supervision and procurement and financial management.

¹ The Ministry of Economy and Public Finances has developed the Public Management System (SIGEP), which will replace SIGMA in the medium term. The new system should come into operation in 2016.

² [Bidding documents](#) authorized by the Bank for application in processes below the ICB thresholds.

³ This law regulates Bolivia's resource administration and control systems and their relationship to national planning and public investment systems.

- 2.2 The ABC's execution of investment expenditure in 2014 came to \$6.24 million bolivianos. Expenditure in 2015 is projected to reach \$8.04 million bolivianos.⁴ The ABC uses NB-SABS, or the system stipulated in the external financing agreement, for procurement execution.
- 2.3 The ABC's volume of resources for 2015 reinforces the need for it to update its manuals, guides, flowcharts, and systems, increase the number and capacity of its human resources, and define performance indicators. With resources from a technical cooperation grant, the Bank will provide technical assistance, with consulting services aimed at mapping internal processes associated with administrative and financial management, in order to identify opportunities for improvement and efficiency gains.
- 2.4 Financial transactions are conducted in the SIGMA system, which ensures that information on budgetary execution is available in a reliable and secure form. This system provides financial information in the country's official currency, classified for accounting purposes by expenditure item. Accounting records for the operation will be kept in accordance with the government's accounting system. Until such time as the SIGEP is up and running, including the accounting module for external resources developed with Bank support, the Bank's LMS⁵ system will be used for preparation of the financial reports required by the Bank.
- 2.5 Contracting and payment activities chargeable to the program will be handled at the ABC central headquarters, ensuring greater fiduciary monitoring and control.

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 3.1 The ABC's performance in the execution of Bank-funded projects has been satisfactory. However, the steady increase in the annual volume of resources for execution has not been accompanied by an increase in its technological, regulatory, and human resource capabilities, jeopardizing its management capacity. The ABC (jointly with the Bank) therefore considers the fiduciary risk associated with this project to be MEDIUM. To address this, a risk mitigation plan has been drawn up as part of the project risk management matrix. This plan will be coordinated by the ABC with Bank support. The areas to be strengthened include contracting, finances, and legal counsel, with two procurement staff, two financial/accounting staff, and a lawyer to ensure that fiduciary processes are carried out on time and to standard.
- 3.2 In relation to the Bank's resources, operation 2981/BL-BO was launched in late 2014, and calls for tender under operation 3385/BL-BO are now underway. The latter includes arrangements for advance procurement.
- 3.3 **Procurement.** In addition to the actions envisaged in the program risk management matrix, during the analysis mission it was agreed that training would be carried out in the following areas:

⁴ The projection breaks down into \$2.74 million bolivianos from the National Treasury and \$5.3 million bolivianos in external financing resources. The breakdown of external financing is: IDB 8.5%, CAF 56%, World Bank 2.2%, FONPLATA 8%, OPEC 1.1%, European Union 1.2%, EXIMBANK 2%, and China 21%.

⁵ Loan Management System, IDB.

- (i) contract processing and application of specific fiduciary arrangements, for the ABC's legal advisers;
 - (ii) application of policies and general features of the Bank's standard bidding documents, for ABC staff who may potentially participate in the bid committees.⁶
- 3.4 Before the bids are opened, strengthening sessions will be held for the appointed bid committees, to ensure that evaluation and selection are in line with the policies, basic contract documents, and fiduciary arrangements. This will also apply in the case of the advance procurements referred to in paragraph 5.5.
- 3.5 To minimize the risk that calls for bids receive no valid bids, the ABC will: (i) draw up qualification requirements in line with the complexity and scale of the contract; (ii) verify that the budgets indicated in the preinvestment studies are up to date and respond to current market conditions; and (iii) ensure that the control bodies are those necessary and that conditions of "substantial compliance", "lowest evaluated bid," etc. are applied correctly.
- 3.6 In the case of works supervision, the ABC will ensure that the timetable for selection and contracting allows sufficient time for necessary revision of the preinvestment study before the works commence.

IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE CONTRACT

- 4.1 **Program Operating Regulations.** The Operating Regulations will include the execution plan, procedures, and information flows, previously agreed upon by the executing agency and the Bank.
- 4.2 Exchange rate agreed upon with the executing agency for financial reporting. The prevailing rate in the borrowing country on the effective date of payment will be used to convert foreign currency resources into local currency in the executing agency's accounts.
- 4.3 Financial statements and other audited reports. Within 120 days from the end of the executing agency's fiscal year for every year during the disbursement period, the executing agency will submit to the Bank the program's audited financial statements, accompanied by the opinion of an independent auditing firm acceptable to the Bank. The last such report will be presented within 120 days after the date stipulated for the last disbursement.
- 4.4 The terms of reference for hiring the independent auditing firm must have the Bank's prior approval. These terms of reference may include products under the International Standards on Auditing and other related works.
- 4.5 **Conditions: (i) prior to tendering the construction of each of the works in Component 1,** the ABC will submit the following for the Bank's no objection: (i) the final designs for the projects (including costs and timelines) approved by the ABC; and (ii) the environmental and social analysis of each project, including management and/or action plans to mitigate the direct and indirect impacts; and

⁶ The ABC has reported that a bid committee is currently appointed two days before bids are received by the person in charge of the procurement process, who in turn is appointed by the Maximum Executive Authority.

- (iii) an involuntary resettlement plan and the results of public consultations (as applicable), in accordance with the environmental and social management framework.
- 4.6 **Conditions: prior to the physical start of the works at each location identified by the executing agency,** the ABC will submit the following to the Bank's satisfaction: (i) evidence that rights of way have been acquired to 100% of the work locations; (ii) a copy of the relevant environmental certifications and permits and related documents; and (iii) the final version of the environmental and social management plan prepared in accordance with the environmental and social management framework, adjusted and supplemented by the supervision firm for the program, and approved by the ABC.
- 4.7 **Conditions: prior to awarding contracts for the construction of works and procurement of goods planned under subcomponent 2.1,** the ABC will provide evidence to the Bank's satisfaction that Vías Bolivia has the necessary staff and other resources for the administration and management of such works and goods.
- 4.8 **Conditions: prior to tendering equipment, gantries, systems, and works for weighing, toll collection, and the electronic toll system,** the ABC will submit for the Bank's approval a network analysis for the location of the weigh stations and toll plazas.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Procurement execution.** Procurement will be detailed in the procurement plan approved by the Bank and will be carried out in accordance with policies GN-2349-9 and GN-2350-9, or in accordance with the partial use of the NB-SABS referred to in paragraph 1.3.
- 5.2 **Procurement of works, goods, and nonconsulting services.** Contracts for works, goods, and nonconsulting services generated under the program and subject to international competitive bidding (ICB) will be procured using the Bank's standard bidding documents. In the case of processes below the ICB threshold, documents agreed upon with the VIPFE and made available via SICOES will apply. Any amendments to these documents will require the Bank's no objection.
- 5.3 **Selection and contracting of consultants.** Consulting services will be contracted taking the following into account:
- (i) **Selection of consulting firms.** The project will use the Standard Request for Proposals issued by the Bank.
 - (ii) **Shortlist of consulting firms.** This list may be comprised entirely (100%) of Bolivian firms for contracts valued below the thresholds set by the Bank for Bolivia, which is US\$200,000.
 - (iii) **Selection of individual consultants.** Individual consultants will be selected according to their qualifications for the work, based on a comparison of the qualifications of at least three candidates, and by rule, interviews will not be conducted.

- 5.4 **Procurement planning.** The ABC will publish the procurement plan in the Procurement Plan Execution System (SEPA) and update it at least annually, or as often as is required.
- 5.5 **Advance procurement:** Subsequent to the approval by the Bank's Board of Executive Directors, and once the Bank has given its no objection to the technical revisions agreed upon for the Santiago de Machaca - Milestone IV segment, or for the procurements in Component 3, it may give clearance for the ABC to conduct advance procurement for certain works, with the corresponding suspension clauses, provided that the Bank's procurement policies, and the applicable special conditions precedent, are followed.
- 5.6 **National preference.** No national preference will be applied in the contracts.
- 5.7 **Terms of reference and technical specifications.** The review of the criteria for the selection of short lists, terms of reference, and/or the technical specifications (including qualification requirements for bidders or consultants) is the responsibility of the Project Team Leader at the Bank, and will in all cases be agreed upon with the executing agency in advance.

Table 1. Thresholds (US\$ thousands)

Works			Goods			Consulting firms	
ICB	NCB	S	ICB	NCB	S	International advertising (shortlist of max. 2 firms of same nationality)	National advertising (shortlist may be 100% national)
Greater than US\$3,000	Less than or equal to US\$3,000	Less than or equal to US\$250	Greater than US\$200	Less than or equal to US\$200	Less than or equal to US\$50	Greater than US\$200	Less than or equal to US\$200

Table 2. Planning of main procurements

Description	Procurement method	Estimated date	Estimated amount (US\$ thousands)
Consulting firms			
Works supervision services (5 contracts)	QCBS	TBD	11,300
Development of information technology and communications systems for General secretariat	QCBS	TBD	1,450
Training of regional offices	QCBS	TBD	1,290
Financial auditing, ex post procurement review	QCBS	TBD	500
Works			
Civil works, construction of Santiago de Machaca - Milestone IV segment	ICB	TBD	56,360
Civil works, multiple works	ICB	TBD	6,000
Civil works for road safety and signage	ICB	TBD	6,410
Civil works for weigh stations (various contracts)	NCB	TBD	5,770
Civil works for toll plazas (various contracts)	NCB	TBD	3,480
Goods			
Weigh station equipment	S	TBD	82
Toll plaza equipment	ICB	TBD	5,670
ProVial equipment	ICB	TBD	4,000
Individual consultants			
Consultants (various contracts) to strengthen the various technical and administrative areas at regional offices	IICQ/NICQ	TBD	4,370
Consultants (various contracts) to strengthen ProVial	IICQ/NICQ	TBD	750
Consultants (various contracts) to provide program management technical support	IICQ/NICQ	TBD	670

* The procurement plan for the first 18 months can be viewed [here](#).

- 5.8 **Procurement supervision.** Annual visits will be made to update the level of procurement management capacity and the level of fiduciary risk associated with operation execution. If applicable, annual ex post review visits will be made.
- 5.9 The thresholds for ex post review are presented in Table 3 (direct contracting and procurement not listed there are subject to ex ante review). The external audit firm will be responsible for carrying out ex post review of procurement.

Table 3. Thresholds for ex post procurement review (US\$ thousands)

Works	Goods and nonconsulting services	Consulting firm services	Individual consulting services
Contracts for amounts less than or equal to US\$3,000	Contracts for amounts less than or equal to US\$200	Contracts for amounts less than or equal to US\$200	No limit

- 5.10 **Operating or recurrent expenses.**⁷ Such expenses will be agreed with the Project Team Leader, entered into the project budget, and included in the procurement plan. These will be contracted following the NB-SABS and/or the executing agency's administrative procedures. The Bank may refrain from financing these expenses if it determines that their application has infringed basic principles of competition, efficiency, and economy. The external audit firm will be responsible for reviewing the supporting documentation for expenses.
- 5.11 **Records and files.** The ABC will be responsible for establishing the supporting documentation, procedures, and controls necessary for the safekeeping of the documentation generated during the ex ante or ex post execution of the program. The Bank may verify the standards of organization, control, and security of the records at any time.

VI. FINANCIAL MANAGEMENT

- 6.1 **Programming and budget.** The ABC's Planning and Budget Department, in coordination with the GNAF, will be responsible for programming and budget formulation based on the annual work plan. The budget will be registered in the SIGMA system. When external resources are involved, under the country's budget laws and regulations, the ABC may modify the budget during the fiscal year. These modifications are approved by the Ministry of Development Planning as they affect the investment budget.
- 6.2 **Accounting and information systems.** The ABC will record program transactions in the SIGMA system. This system integrates the following accounting steps: budget registration, asset registration, and treasury registration. Accounts will be kept on an accrual basis. For program accounting an accounts catalogue will be prepared identifying expenditure per financial year on a cash basis, harmonizing investment categories with the respective budget items and accounts. SIGEP, which will replace SIGMA, is expected to come into operation in 2016. It includes an accounting management module for projects, which will allow the executing agency to issue financial reports in the loan contract currency in accordance with the defined budget.
- 6.3 If SIGEP is delayed, the ABC will adopt the LMS for records and accounting control of program transactions.
- 6.4 **Disbursements and cash flow.** The primary disbursement modalities will be advances of funds and direct payments, determined as a function of the project's financial programming, which will be updated periodically. The Bank will process a new fund advance when at least 80% of the total funds disbursed in the previous advance have been justified. The proceeds of the loan will be deposited in an independent account in U.S. dollars and subsequently transferred to another account in the local currency, both in the CUT.⁸

⁷ Recurrent or operating expenditures are those operating and maintenance expenses required for the functioning of the project. These include rental of premises; print, radio, or television announcements or communications; translations; bank charges; basic office supplies; photocopies; mail services; fuel; maintenance; short courses; and line staff travel expenses.

⁸ Cuenta Única del Tesoro [Treasury Master Account].

- 6.5 The payment reimbursement modality may be used for the recognition of expenditures incurred by the ABC prior to the eligibility date.
- 6.6 **Internal control and internal auditing.** The ABC's financial management is subject to annual reliability reviews by the Internal Audit Unit (IAU). The program is due to be included in reviews of this kind. In turn, as a strategic activity within its mandate, the Bank convenes annual workshops for the IAU to consolidate its know-how on project execution and control and monitoring mechanisms. This activity is coordinated with the Comptroller General's Office. The Bank has been supporting the Comptroller General's Office through technical cooperation to strengthen the internal control system, involving primarily the IAU, which it has equipped with tools with which to conduct reviews and make improvements in the application of its function.
- 6.7 **External control and reports.** In order to comply with the requirements for the presentation of the program's financial statements, the ABC will contract annually an independent auditing firm acceptable to the Bank, in accordance with its policies. This contract will be multiyear (covering at least three fiscal years) to avoid transaction costs and ensure continuity of auditing activities. It will also enable timely interventions allowing preliminary semiannual reviews. In this context, it will be possible for the same independent auditing firm that audits the rest of the ABC's projects to audit this operation.
- 6.8 The Bank's no objection to the terms of reference under which the independent auditing firm is hired will be required. These terms of reference will define the scope of auditing work, considering related tasks⁹ depending on the program's status and level of execution.
- 6.9 **Financial supervision plan.** Supervision activities may be adjusted based on the external audit reports and the annually updated project risk assessment by the fiduciary team in conjunction with the executing agency. Financial supervision of expenditures will be conducted on an ex post basis. However, at least one comprehensive visit (procurement and financial supervision) will be included in the Bank's annual supervision plan.
- 6.10 **Execution mechanisms.** The operation will be executed under the ABC's organizational structure. The ABC will have a multidisciplinary team that includes project coordinators, regional managers, technical/engineering staff, inspectors, the financial/administrative department, legal support, and internal auditing.

⁹ At the Bank's Country Office in Bolivia, the independent auditing firm does assurance work on ex post procurement reviews. However, other tasks may be considered.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/15

Bolivia. Loan ____/BL-BO to the Plurinational State of Bolivia
Road Infrastructure Program to Support Development
and Management of the Primary Road Network II

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 Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a road infrastructure program to support development and management of the Primary Road Network II. Such financing will be for the amount of up to US\$142,856,000 from the resources of the Single Currency Facility of the Bank's Ordinary Capital, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, 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 __ _____ 2015)

BO-L1102
LEG/SGO/IDBDOCS#39715064-15

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/15

Bolivia. Loan ____/BL-BO to the Plurinational State of Bolivia
Road Infrastructure Program to Support Development
and Management of the Primary Road Network II

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 Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a road infrastructure program to support development and management of the Primary Road Network II. Such financing will be for the amount of up to US\$35,714,000 from the resources of the Bank's Fund for Special Operations, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, 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 ____ 2015)

BO-L1102
LEG/SGO/CAN/IDBDOCS#39715036-15