

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BOLIVIA

TERRITORIAL CONNECTIVITY AND DEVELOPMENT PROGRAM FOR BOLIVIA

(BO-L1225)

LOAN PROPOSAL

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ANNEXES	
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Annex II	Results Matrix
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LINKS
REQUIRED
1. Multiyear execution plan / Annual work plan
2. Monitoring and evaluation plan
3. Environmental and social review summary
4. Procurement plan
OPTIONAL
1. Project technical note
2. Economic evaluation
3. Road safety annex
4. Gender annex
5. Diversity and inclusion annex
6. Climate change annex
7. Integration, value chain, and MSME annex
8. Digital transformation annex
9. Program Operating Regulations
10. Execution planning annex
11. Environmental and social impact study and environmental and social management plan
12. Maintenance microenterprise annex

ABBREVIATIONS

ABC	Administradora Boliviana de Carreteras [Bolivian Highway Administration]
EIRR	Economic internal rate of return
ICB	International competitive bidding
INE	Instituto Nacional de Estadísticas [National Statistics and Census Institute]
ITS	Intelligent Transportation Systems
MRRVF	Modelo de Resiliencia de la Red Vial Fundamental [Primary Road Network Resilience Model]
MSMEs	Micro, small, and medium-sized enterprises
NPV	Net present value
ProVial	Road Network Conservation Program with Microenterprises
QCBS	Quality- and cost-based selection
RVF	Red Vial Fundamental [primary road network]
UPC	Unidad de Planificación Calidad y Gestión de Financiamiento Externo [External Financing Planning, Quality, and Management Unit]

PROJECT SUMMARY

BOLIVIA TERRITORIAL CONNECTIVITY AND DEVELOPMENT PROGRAM FOR BOLIVIA (BO-L1225)

Financial Terms and Conditions				
Borrower:			Flexible Financing Facility^(a)	
The Plurinational State of Bolivia			Amortization period:	20 years
Executing agency:			Disbursement period:	5 years
Bolivian Highway Administration			Grace period:	10.5 years ^(b)
			Interest rate:	SOFR-based
Source	Amount (US\$)	%	Credit fee:	^(c)
IDB (Ordinary Capital):^(d)	50,000,000	86.20	Inspection and supervision fee:	^(c)
Local:	8,000,000	13.80	Weighted average life:	15.06 years
Total:	58,000,000	100.00	Approval currency:	U.S. dollar
Project at a Glance				
Project objective: The program's general objective is to support connectivity improvements in the department of La Paz, with a focus on safety, sustainability, and inclusion. The specific objective is to improve traffic conditions on the targeted highway.				
Special contractual conditions precedent to the first disbursement of the loan: As special contractual conditions precedent to the first disbursement, the borrower, through the executing agency, will submit evidence to the Bank's satisfaction of (i) the approval and entry into force of the program Operating Regulations , in accordance with the terms and conditions previously agreed with the Bank; and (ii) appointment of a project execution team within the executing agency, with the following staff, at a minimum: a coordinator, procurement specialist, social specialist, environmental specialist, financial specialist, and monitoring and planning specialist (paragraph 3.7). See the additional special contractual conditions precedent to the first disbursement in Annex B of the Environmental and Social Review Summary (required link 3) and in Annex III, Section IV of the loan proposal.				
Special contractual conditions for execution: As a special contractual condition for execution, prior to the physical start of each of the works under Component 1, the borrower, through the executing agency, will submit evidence, to the Bank's satisfaction, of the release of the rights of way for the corresponding subsegments (paragraph 3.8). For special social and environmental contractual conditions for execution, see Annex B of the Environmental and Social Review Summary (required link 3).				
Exceptions to Bank policies: None.				
Strategic Alignment				
Challenges:^(e)	SI <input checked="" type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input checked="" type="checkbox"/>	
Crosscutting themes:^(f)	GE <input checked="" type="checkbox"/> and DI <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/> and ES <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>	

- (a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.
- (b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.
- (c) The credit fee and the 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 applicable policies.
- (d) Pursuant to "Enhancing Macroeconomic Safeguards at the Inter-American Development Bank" (document AB-2990), the disbursement of loan proceeds will be subject to the following limits: (i) a maximum of 15% in the first 12 months; (ii) a maximum of 30% in the first 24 months; and (iii) a maximum of 50% in the first 36 months, all of which will be counted from the date the loan is approved by the Bank's Board of Executive Directors (paragraph 0).
- (e) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).
- (f) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **Macroeconomic context.** Bolivia has a population of 12.01 million,¹ and its GDP in 2021 was US\$40.118 billion.² GDP grew by an average of 5% each year over the 2011 to 2018 period and by 2.8% in 2019.³ The COVID-19 pandemic led to a drop of 8.7% in the country's GDP in 2020,⁴ while unemployment rose 11.6%.⁵ The pandemic caused a deterioration in socioeconomic conditions and the population's well-being, leading to increased poverty and informality rates, particularly in strategic sectors such as transportation.⁶ In 2021, the economy expanded 6.1%, driven primarily by the transportation and warehousing sector and the agriculture, forestry, hunting, and fishing sector, which account for 10.8% and 13.9% of GDP, respectively. These sectors generated 33% of employment countrywide that year.⁷ GDP is expected to grow around 4% in 2022.⁸
- 1.2 **Socioeconomic context in the program's target region.** The department of La Paz is one of Bolivia's socioeconomic powerhouses, accounting for around 25% of both the country's GDP and its population,⁹ second only to the department of Santa Cruz in these categories. GDP per capita has risen by 6% on average over the last five years.¹⁰ The main sectors driving the department's economy are construction, transportation, mining, and trade. Although the department's economy expanded by 5.29% in 2021 relative to 2020, La Paz continues to face significant socioeconomic gaps. For example, 27.2% of the population is on the poverty line, 35.3% is experiencing moderate poverty, and 10.6% is indigent. The illiteracy rate in the department's rural areas is 8.65%¹¹ (3.56% for men and 14.12% for women), which is above both the rate in the department's urban areas (2.59%) and the national rate (5.09%).
- 1.3 **The importance of connectivity in the road sector.** In Bolivia, 78% of exports and 86% of imports, by volume, are transported by road (excluding pipeline exports, mainly of gas). Building, repairing, and maintaining road infrastructure in good condition is therefore essential for the economy and its diversification (paragraph 1.12). In interurban and rural areas, where roads are the only physical means of accessing goods and services, safe, reliable road connectivity is essential for closing socioeconomic gaps (paragraph 1.16). In 2020, the pandemic

¹ National Statistics and Census Institute ([INE](#)), 2021.

² [INE](#).

³ [World Bank](#), 2018.

⁴ [INE](#), 2022.

⁵ [INE](#), 2022.

⁶ [IDB](#), 2021.

⁷ [INE](#), 2022.

⁸ International Monetary Fund and World Bank ([Semiannual Report](#)).

⁹ [INE](#), 2022.

¹⁰ [Ministry of the Economy and Public Finance](#), 2022. Calculations do not include 2020.

¹¹ [INE](#), 2012.

brought 76.9% of all works in the transportation sector to a halt, slowing Bolivia's efforts to invest in road infrastructure improvements.

- 1.4 **Bolivia's primary road network.** The primary road network (RVF) is the country's conduit for domestic and international ground connectivity. The RVF should link the political capitals of the country's departments, serving as the backbone of the country's territory and supporting its connections with neighboring countries.¹² However, the RVF offers poor levels of service, mainly with respect to road standards and conditions, which undermine the network's core goal of providing connectivity. Of the 16,236 km of roads comprising the RVF, less than half (7,579 km) are paved.¹³ Approximately 45% of the paved network is in an unsatisfactory state of repair (32% fair and 13% poor),¹⁴ which affects safety conditions on these roads. The RVF accounts for around 30% of traffic accident fatalities recorded in the country each year.¹⁵ A high proportion of the RVF is unpaved and has precarious drainage systems, which reduces the useful life of roads and increases maintenance and repair needs. Poor road surfaces due to lack of pavement increases fuel consumption, thereby increasing emissions and noise pollution.¹⁶ In addition, when considering paved road density as a proxy for infrastructure accessibility and development, the national average in Bolivia is 0.17 km/km². Road density drops to 0.014 km/km² when taking into account only regional and international highways (mostly part of the RVF) and to around 0.007 km/km² when taking into account only paved roads. These values are significantly below the already low average for Latin America and the Caribbean (0.18 km/km²). Therefore, the country needs to invest in upgrading and expanding its paved RVF.
- 1.5 The Bolivian Highway Administration (ABC) is responsible for comprehensive management of the RVF. All told, 77% of its annual budget¹⁷ goes toward new construction, while 10.4% is spent on repairs and 7.2% on maintenance. The maintenance heading is partially financed by tolls collected by the public toll system¹⁸ (paragraph 2.10) and fines from violations of the Vehicle Weight and Size Act.¹⁹
- 1.6 **Drivers of the problem.** Though deficiencies in the RVF are reported nationwide (paragraph 1.4), the problem is greater in the department of La Paz, where 17% of the RVF is located. Of the 2,667 km of the network in the department, over 61% (1,640 km) is unpaved and lacks adequate drainage and road safety standards, which adversely affects road service levels and makes the network more vulnerable to climate risks.

¹² Executive Order 25,134.

¹³ [INE, 2021](#).

¹⁴ RVF diagnostic assessment. *Informe de Plan Vial Preliminar de la RVF*, December 2018.

¹⁵ ABC and World Health Organization, 2018.

¹⁶ [Fundación Laboral de la Construcción, 2017](#).

¹⁷ US\$1.118 billion (2021). Office of the Deputy Minister for Budget and Accounting's Public Management System.

¹⁸ US\$73 million in 2021.

¹⁹ Law 441.

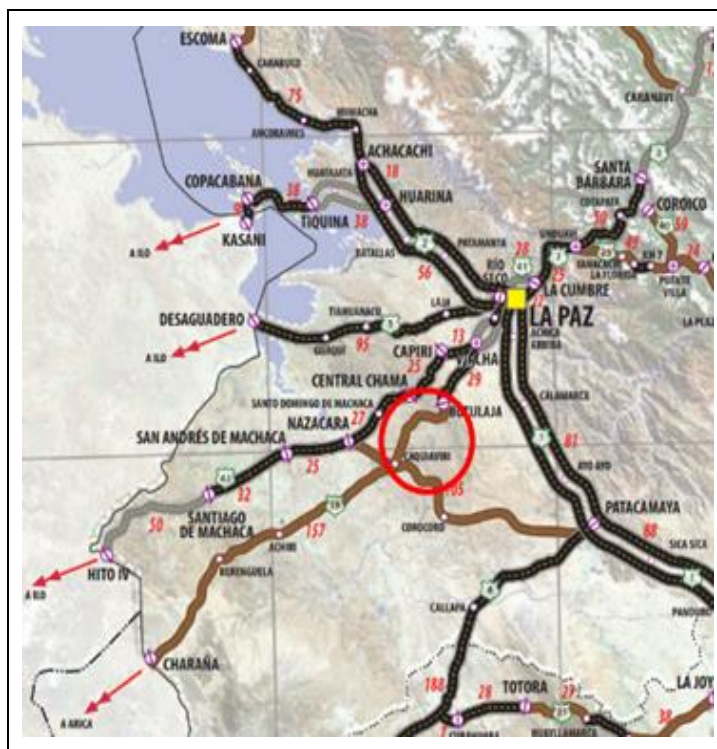
- 1.7 **RVF segment 19, Botijlaca-Caquiaviri (RVF19).** The team has identified a need to pave and upgrade RVF19 as one of the weak points in the RVF in the department of La Paz and in line with the Bolivian government's investment priorities (paragraph 0). This segment connects the cities of La Paz and Caquiaviri (an important connectivity hub for the department of La Paz with respect to its capital city). RVF19 is important for both regional connectivity and national territorial cohesion, as it is part of the Brazil-Bolivia-Peru-Chile Central Bioceanic Corridor and connects this corridor with border crossings in southern Peru and northern Chile (Hito IV and Charaña). It is also one of the main land routes linking this highland region (southwestern La Paz) with the capital, La Paz, and the rest of the country.
- 1.8 RVF19 currently has a number of deficiencies in terms of its design and state of repair. The highway is unpaved, has an inadequate drainage system (undersized, with unlined drainage channels), lacks embankments to prevent erosion from run-off, and has culverts that do not allow for adequate maintenance or removal of accumulated debris. The route lacks adequate road safety standards (e.g., pavement markings and road signs) and does not have basic safety features in populated areas and near educational and public service facilities. There is also an absence of signage warning drivers of the possibility of animals on the road, such as camelids and livestock active in the area.
- 1.9 As a result of these deficiencies, RVF19 has inadequate conditions in terms of safety (paragraph 1.11), climate change resilience (paragraph 1.13), and service, with current maximum traffic speeds of just 40 km per hour—far below the 80 km per hour target for interurban segments of the RVF.

Figure 1. Map of the project location: Bolivia's RVF



Source: ABC, 2020.

**Figure 2. Map of the project location:
RVF19 - Botijlaca-Caquiaviri segment**



Source: ABC, 2020.

- 1.10 **Challenges in road and infrastructure management.** The budget managed by the ABC has increased significantly, from US\$182 million in 2006 to an average of US\$1.028 billion over the 2015-2021 period (paragraph 1.5). However, to close the country's road infrastructure gap (paragraph 1.4), investment will have to increase even further, by approximately 6.5% of GDP per year from now through 2040.²⁰ This boost in investment should be accompanied by digital transformation and capacity-strengthening efforts at the ABC. The ABC still contends with challenges to its internal processes. For example, its use of stand-alone, non-interoperable information technology systems makes for inefficient processes for coordination, collaboration, and communication across the agency's various organizational units.²¹ The ABC requires a centralized digital management system that can handle and consolidate the different facets of road management (including planning, operations, maintenance, and road safety) under one interoperable system. Interactions with roads also need to be improved through the expansion of Intelligent Transportation Systems (ITS) for weighing and tolls, which enable active control of vehicle weights and sizes and facilitate traffic and fleet analysis. In conjunction with integrated digital management systems, ITS are key to improving public toll collection management (paragraph 1.5), operations and

²⁰ More than US\$2.2 billion per year. [Economic Commission for Latin America and the Caribbean, 2021.](#)

²¹ [Plan Estratégico Institucional ABC, 2020.](#)

maintenance planning, and prevention of overweight vehicles on specific routes.²² These features are necessary to prevent premature pavement failure and improve traffic safety.

- 1.11 **Road safety challenges.** Bolivia reported an average of 1,200 deaths from road accidents over the 2016-2020 period, with a mortality rate of 19.9 per 100,000 population (2019), which is above the average for Latin America and the Caribbean (15.6).²³ The road users who bear the brunt of these accidents are pedestrians and passengers, who account for around 70% of total deaths (2017). Professional drivers and motorcyclists accounted for 23% of deaths. The department of La Paz reports the highest number of fatalities (27% of the national total), which are concentrated among pedestrians and passengers (85% of fatalities).²⁴ The deficiencies in the RVF (paragraphs 1.4), as reflected in RVF19 (paragraph 1.8), increase both the risk of accidents and the severity thereof. Investments in upgrading the network should therefore be systematically accompanied by the adoption of safe design standards based on international best practices and by the strengthening of the ABC's capacity for road safety management. This should include the auditing of designs and works, as well as accident recording and analysis as an essential input for the design of corrective measures.
- 1.12 **Economic integration and MSMEs.** The suboptimal service provided by RVF19 (paragraph 1.4) limits domestic and regional connectivity in the department of La Paz, affecting transportation and logistics costs, which in turn constrain the potential development of local economic activities. Improving road connectivity by cutting transportation costs can benefit both transportation service providers and the users of those services, 99.7% of which are micro, small, and medium-sized enterprises (MSMEs).²⁵ MSMEs contend with logistics costs that are up to three times higher than those of large companies.²⁶ In the case of Bolivia, the National Logistics Survey (IDB, 2019) shows that logistics costs are equivalent to 18.1% of sales (14.7% in Latin America and the Caribbean), with transportation and distribution activities accounting for 45.5% of those costs. This is particularly pressing at the local level of RVF19, where the production and sale of goods (mainly agricultural) are carried out primarily by family or communal economic units.²⁷ At the macroeconomic level, Bolivia's exports totaled 5.7 million tons in 2021 (excluding hydrocarbons), with the country's southeastern hub (where RVF19 is located) exporting 3.4 million tons, equivalent to 60% of the country's exports. Bolivia's export goods include soybeans (Santa Cruz, Tarija, Beni), sugar (Santa Cruz, Tarija, La Paz), ceramics (Santa Cruz, La Paz, Cochabamba, Tarija), and pulses and oil crops (Santa Cruz, La Paz, Cochabamba).

²² [IDB, 2017.](#)

²³ [Road Safety in the Region of the Americas: Key Facts \(Pan American Health Organization, 2018\).](#)

²⁴ INE, 2019.

²⁵ Registro de Comercio de Bolivia, 2021. Companies are categorized by: (i) net annual operating revenue from sales and/or services; (ii) net equity; and (iii) the number of employees. [Executive Order 3,564.](#)

²⁶ [IDB, 2015.](#)

²⁷ Preinvestment study for the Botijlaca-Charaña highway ([optional link 1](#)).

RVF19 provides connectivity in the central national logistics zones of La Paz-Cochabamba-Santa Cruz and La Paz-Oruro-Chile-Peru.

- 1.13 **Challenges in adapting the road network to climate impacts.** Bolivia is one of the most vulnerable countries in the Andean region with respect to climate change impacts. According to the Global Climate Risk Index's 2021 report,²⁸ which indicates levels of exposure and vulnerability to extreme weather events, Bolivia ranked 10th, compared to its rank of 25th over the 2000-2019 period. The extreme events that have affected Bolivia the most over the last 100 years are droughts and floods, which have led to losses of US\$1.5 billion and US\$1.7 billion, respectively.²⁹ RVF19 is in the Bolivian highlands, where rainfall is scarce but increasingly more intense and the orography reduces time of concentration, provoking more erosion. The route is also exposed to a high risk of freezing temperatures, hail, droughts, and earthquakes. The route's vulnerability is further aggravated by poor road standards (paragraph 1.8), particularly with respect to protection systems for existing structures and drainage systems ([required link 3](#)).
- 1.14 **Gender gaps.** According to data from 2020, 80.5% of men who were part of Bolivia's economically active population were employed, versus 59.6% of women.³⁰ In rural areas such as the program's area of influence, 0.09% of employed women worked in the construction sector, while 0.19% worked in the transportation and warehousing sector.³¹ The main barriers to obtaining jobs in these sectors are widespread gender stereotypes regarding women's physical abilities.³² At the national level, average monthly earnings in 2020 were 17% lower for women. In 2020, 34% of students enrolled in engineering degree programs were women.³³ At the same time, a survey of the prevalence and characteristics of violence against women showed that 43.6% of women surveyed (15 years and older) had been victims of rape or sexual abuse at some point in their lives.³⁴ Intimate partner violence affected 74.7% of married or cohabiting women, while 54.2% of women surveyed reported having experienced psychological violence in the workplace.
- 1.15 **Diversity gaps.** Persons with disabilities account for 3.3% of the country's population³⁵ and are excluded from some public services (including transportation) and from the workplace. According to the Office of the Ombudsman,³⁶ drivers of this situation include infrastructure barriers (physical, communication, and attitudinal) and discrimination against persons with disabilities. There is also a clear lack of accessible infrastructure in urban settings, as well as an absence of

²⁸ [Global Climate Risk Index, Germanwatch.](#)

²⁹ According to [the Emergency Events Database.](#)

³⁰ [World Bank, 2020.](#)

³¹ [INE, 2022.](#)

³² [INE, 2011-2020.](#)

³³ [Comité Ejecutivo de la Universidad Boliviana, 2020.](#) *Matrícula general del Sistema de la Universidad Boliviana.*

³⁴ [INE, 2016.](#)

³⁵ [Bolivian Census, 2012.](#)

³⁶ [Transporte Público Inclusivo para PcD 2019-2020.](#)

planning tools to strengthen the inclusion of persons with disabilities in labor markets and service delivery. With respect to exclusion from the workplace, the Office of the Ombudsman has reported that only 14 public sector entities are compliant with Law 977 of 2017, which requires 4% of government positions to be filled by persons with disabilities.³⁷

- 1.16 **Program rationale.** Upgrading the RVF—and RVF19 in particular—will help to reduce logistics costs and facilitate access to new domestic and regional markets, thus creating inclusive economic opportunities for social agents.³⁸ Specifically, the program will help to improve productivity and economic integration in the department of La Paz (paragraph 1.7) and, through a reduction in transportation costs, will support the activation of the productive fabric, which consists primarily of MSMEs (paragraph 1.12). The intervention will also provide benefits for the mostly rural local population, which will benefit directly from increased and safer access to goods and services. It will foster job creation, entrepreneurship, the creation of new businesses, and the strengthening of existing ones, while also undoubtedly helping to close socioeconomic gaps in the department (paragraph 1.2). In addition, the ABC's institutional capacity and management and maintenance capabilities will be strengthened, which will contribute to greater sustainability of upgraded road assets over time.
- 1.17 **Empirical evidence.** Infrastructure and transportation services are essential for building more inclusive and sustainable societies,³⁹ as they facilitate the movement of people, goods, and services and are a means of accessing markets and employment, health, and education opportunities. Reducing travel costs and times by improving transportation infrastructure therefore helps to reduce poverty and inequality and improve the quality of life and productivity in Latin America and the Caribbean. Cost and time savings in transportation also facilitate producer access to new markets and foster economic competitiveness.⁴⁰ IDB studies demonstrate that a 10% reduction in transportation costs can increase exports by 20%-30%,⁴¹ and for every US\$1 million invested in infrastructure in Latin America and the Caribbean, around 40,000 direct jobs can be created each year.⁴² This intervention will reduce vehicle operating costs and travel times (paragraph 1.36), thereby lowering logistics costs for the production chains that use these roads.
- 1.18 IDB estimates for Bolivia show that investments to improve connectivity and the service provided by unpaved RVF segments have led to reductions in average travel times, lower annual vehicle operating costs, and improvements in road safety. This has occurred in operations similar to the RVF proposal, for example:

³⁷ The same law requires that persons with disabilities fill at least 2% of positions at private companies.

³⁸ [Molina et al., 2016](#) and [Volpe Martincus et al., 2017](#).

³⁹ [World Economic Forum, 2020](#) and [IDB, 2020](#).

⁴⁰ For a review of the literature regarding: (i) the impact on poverty reduction, see [Provias descentralizado, 2014](#); (ii) the impact of a new radial road network in Brazil on improvements in economic activity and road access for the population, see [Bird and Straub, 2014](#); and (iii) the contribution of transportation infrastructure to productivity and economic growth, see [Taotao, 2013](#).

⁴¹ [IDB, 2018](#).

⁴² [Development in the Americas 2020. From Structures to Services: The Path to Better Infrastructure in Latin America and the Caribbean](#).

(i) operation BO-L1093, which shortened travel times on the La Paz-El Alto highway by 69% and produced an estimated savings of 9% through a US\$28.3 million reduction in operating costs; and (ii) operation BO-L1079, which targeted the Montero-Yapacaní dual carriageway (a segment of the RVF) and decreased travel times by 33%, vehicle operating costs by 90%, and road fatality rates by 30%.

1.19 **Proposed intervention.** The proposed program would finance the upgrading and paving of the Botijlaca-Caquiaviri segment of RVF19 (33.1 km), using appropriate design and road safety standards (paragraph 1.27) and climate and natural hazard resilience criteria. Specifically, the engineering works will include a drainage system and bridges designed to improve performance in their topographic settings, based on rainfall scenarios with above-average return periods. Given the projected increase in water flow and debris-induced erosion, erosion protections will also be included for bridge piles, culverts, drains, and embankments to prevent landslides. The operation also includes a conservation program for sensitive natural areas such as wetlands and high-altitude Andean peatlands (bofedales), as well as revegetation of the areas targeted under the program. Four toll and vehicle weighing ITS will be implemented on the targeted highway and other RVF roads with the aim of controlling cargo transportation. This will extend the useful life of the road pavement, reduce emissions (paragraph 1.10), and create incentives for more efficient vehicle use ([optional link 8](#)). Works will be combined with financing for institutional strengthening activities, the strengthening of road maintenance microenterprises, and outputs aimed at alleviating the gaps and issues identified above (paragraphs 1.10 and 1.15).

1.20 **Bank knowledge of the sector and lessons learned.** Over the last 30 years, the Bank has approved 16 operations for more than US\$1.5 billion in Bolivia, including five transportation sector operations totaling US\$585 million,⁴³ which the ABC has been responsible for executing. Since 2013, the Bank has been a strategic partner for the ABC in the promotion of technical capacity-building in the road sector. This work has been focused on four key lines of action: (i) integrated environmental safeguards management during the project cycle (the ABC is the first executing agency in Bolivia to set up an environmental and social management system); (ii) institutional strengthening for road management through technical resources and trainings; (iii) adoption of new techniques for construction of long-life pavements; and (iv) expansion of the use of maintenance microenterprises (paragraph 1.26). From this experience and an analysis of project completion reports, the project team has identified the following lessons learned, which will be taken into account in this program:

⁴³ Active operations: loans [3385/BL-BO](#), [3540/BL-BO](#), and [4376/BL-BO](#). Completed operations: loans [2786/BL-BO](#) and [2981/BL-BO](#).

Table 1. IDB sector knowledge and lessons learned

Lesson learned	Actions included in the operation
Tapping maintenance microenterprises ⁴⁴ to perform routine maintenance work on rehabilitated segments is an effective measure that promotes local employment and training (operations BO-L1102 and BO-L1095 include microenterprise programs).	Component 2 will provide resources to ensure continuity in the maintenance microenterprise program (paragraph 1.26), encouraging the employment of women. The responsibilities of these microenterprises will be expanded to include basic road management tasks through the use of digital media (paragraph 1.29).
Efforts to improve program efficiency and effectiveness are needed. Program design and execution mechanisms need to be adequately defined to optimize time frames for bidding processes and project execution (crosscutting issue for the transportation portfolio in Bolivia).	(i) The project has full engineering studies and designs that include a price reasonability analysis that considers scenarios in which prices rise; (ii) budgets will be updated before bidding processes are launched for the works; (iii) loan proceeds will be used to hire a supervision firm to support execution and the release of rights of way; and (iv) efforts will be made to strengthen the direct attribution of the expected specific results to the financed interventions.
Project planning and administration mechanisms should be strengthened to improve the efficiency and sustainability of investments (experience from operations currently in execution).	(i) Creation or appointment of the project execution team will include the full-time staff required to serve all areas of execution (paragraph 3.3); and (ii) an integrated digital management system will be developed to modernize and optimize general management systems, including project planning and execution (paragraph 1.25).
Investments should be combined with institutional strengthening to ensure a correct and sustainable adoption of road safety, gender, diversity, and climate change additionalities (operations BO-L1075, BO-L1102, and BO-L1095).	The program includes resources for administration and institutional strengthening that will finance specialized consultancies, support staff, management tools, and training (paragraphs 1.34 and 1.35).

1.21 The country's strategy in the roads sector. Goal 3.3 of the Bolivian government's Economic and Social Development Plan is to “foster national and international integration to strengthen production centers through road, air, rail, water, and urban transportation systems.” To this end, the government has identified the need to build and rehabilitate additional road infrastructure and improve logistics and road usability for people and productive activities. To achieve this goal, the country needs to rehabilitate and/or build new segments of highway linked to the RVF that support the country's integration and interconnectedness and promote productive development. It also needs to

⁴⁴ Maintenance microenterprise activities under the Road Network Conservation Program with Microenterprises (ProVial) were previously financed under loan [3385/BL-BO](#) (Component 3) and loan [3540/BL-BO](#) (Component 2).

implement road maintenance plans. RVF19 in the department of La Paz has been identified as a priority route under this framework.

- 1.22 **IDB Group strategy with Bolivia.** The program is aligned with the IDB Group Country Strategy with Bolivia 2022-2025 ([document GN-3088](#)) through the “diversification of production” priority area, in that it helps to improve safe transportation infrastructure, thus facilitating logistics competitiveness, productive development, and integration (paragraph 1.17). With respect to the country strategy's Results Matrix, the program will support the “safe kilometers built and/or rehabilitated” indicator, whose baseline as of 2020 stood at 8,401 km of Bolivia's road network.
- 1.23 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2020-2024 (document AB-3190-2) in terms of the development challenges of (i) productivity and innovation and economic integration, given that it improves access to production chains based on a sustainable approach (paragraphs 1.12 and 1.16); and (ii) social inclusion and equality, in that it supports socioeconomic development for the vulnerable population (paragraphs 1.2 and 1.26). It is also aligned with the crosscutting areas of (i) gender equality and diversity (paragraphs 1.29 and 1.30); (ii) climate change and environmental sustainability (paragraph 1.28); and (iii) institutional capacity and rule of law (paragraph 1.25).
- 1.24 In addition, it will contribute to the following indicators in the IDB Group's Corporate Results Framework 2022-2023 (document GN-2727-12): (i) roads built or upgraded (km); and (ii) financing for climate change mitigation actions. According to the [joint methodology of the multilateral development banks for tracking climate change adaptation finance](#), 29.81% of the operation's resources are invested in climate change adaptation activities. These resources contribute to the IDB's climate finance target of 30% of the volume of approvals each year ([optional link 6](#)). The program is also consistent with (i) the Sustainable Infrastructure Strategy for Competitiveness and Inclusive Growth (document GN-2710-5), and (ii) the Sector Framework Documents for (a) Transportation (document GN-2740-12) and (b) Gender and Diversity (document GN-2800-8).
- 1.25 **Actions to improve management through innovation and technology.** Digital transformation of the public sector can improve the quality of service delivery, with positive effects on users' and beneficiaries' quality of life. An IDB study⁴⁵ shows that the adoption and use of digital technologies is key for multiplying the economic impact of investment in infrastructure and improving the performance of associated services. The Digital Transformation Strategy for the Energy and Infrastructure Sector [2021-2025](#) advocates for the strengthening of digital infrastructure with digital technologies and tools, such as cloud computing to facilitate interoperability, virtual one-stop service portals, and cybersecurity. To implement digital transformation among executing agencies, the Bank should foster the development of innovative digital technologies while facilitating access to these technologies and trainings in the use thereof. Along these lines, and to address the challenges identified in the area of road management (paragraph 1.10), the

⁴⁵ [IDB, 2020](#).

program will support digital transformation at the ABC through the design and implementation of an integrated digital road management system that consolidates the different working areas under a single interoperable system that can be used by all stakeholders involved in the ABC's management processes, thus optimizing processes and information flows. The program will also finance the procurement and adoption of the equipment necessary to undertake this digital transformation process, with specialized training to facilitate its use ([optional link 8](#)). Financing will be provided for the construction and launch of toll and vehicle weighing ITS stations (paragraph 1.10) as a means for interactions between the digital system and the highway. Support for digital transformation of the ABC will help to improve the management of road infrastructure and associated transportation services, with a positive impact on the useful life of roads, reductions in emissions, and the creation of incentives for efficient road usage.

- 1.26 **Support for the maintenance microenterprise program.** The program will ensure continuity for the ProVial routine maintenance microenterprise program. Microenterprises established by residents of rural communities adjacent to the highway perform preventive maintenance and care work along the roads. Due to their close relationship with these roads as users and beneficiaries, they are very familiar with the roads, which ensures a swift and reliable response to road incidents and basic maintenance needs. Microenterprise members are trained in road and microenterprise management, which improves their employability and socioeconomic development as they gain access to more stable, better-paid jobs than those offered by the subsistence economies prevalent in rural areas. To date, the ProVial program has 467 microenterprises and 3,032 partners, 500 of whom are women.⁴⁶ This program will finance the procurement of the equipment and supplies needed for microenterprise operations, supporting the creation of 82 new microenterprises during the loan execution period. Financing will also be provided for the necessary training for microenterprises to adopt the integrated digital road management system (paragraph 1.25) through the use of digital devices whereby they can report incidents on the highway. This training will cover such topics as digital skills, pavements, and road safety and will target women in particular, with the objective of ensuring that women are involved in 30% of the newly-created microenterprises.⁴⁷ The identified benefits of the microenterprise program include more effective use of the resources allocated to road maintenance, higher quality routine maintenance, job creation for men and women in the area of influence, the strengthening of communities through their participation in microenterprise selection processes, and the transfer of funds to rural areas and lower-income groups ([optional link 12](#)).
- 1.27 **Road safety actions.** To address the identified road safety challenges (paragraph 1.11) and encourage safe roadworks, the documents for RVF19 bidding processes will be based on the Safe System approach. Accordingly, they will include, at a minimum, the following road safety measures, which are included in the budget for each of the works (paragraph 1.33): (i) the design of

⁴⁶ In all, 126 of the microenterprises' legal representatives are women (ABC, 2022).

⁴⁷ The target for the number of microenterprise partners who are women at program-end is 605, or approximately 18% of the total number of partners.

comprehensive signage (pavement markings and road signs); (ii) reduced speeds at urban crossings, with traffic calming measures that ensure safe passage for all road users; and (iii) vehicle restraint systems tailored to the specific road segment. Road safety audits will also be performed during the subsequent stages of the project (construction and operation), and the execution unit will manage the results of those audits (within the scope of the project) in order to maintain high safety standards. To maintain optimal safety standards in the operation, the program proposes to strengthen capacity at both the ABC and the road maintenance microenterprises, so that these entities can help to report on the condition of road signage and the pavement structure, as well as possible incidents on the road. Road safety training workshops will also be organized for the execution unit (with a more technical focus regarding the collection and analysis of road accident data), public and private stakeholders, and the community. In addition, adoption of the integrated digital road management system will help to optimize road management and data collection processes, which will create opportunities for timely, effective decision-making aimed at maintaining safe mobility conditions.

- 1.28 **Inclusion of climate change adaptation measures in the works and enhanced planning capacity.** The engineering designs include appropriate measures for increasing the RVF19's resilience to the challenges of climate change (paragraphs 1.13 and 1.16), including the design of drainage systems that are able to handle significantly higher threat intensities than those typically used in road projects and that are reasonably sufficient to mitigate the impact of climate change in the medium term. In addition, the program will support the launch of the Primary Road Network Resilience Model (MRRVF), which will identify critical sectors to prepare for climate hazards (Blue Spot Analysis) and will be used in road infrastructure planning in Bolivia. The tool will be used to prepare investment plans and disaster and climate change risk management plans. To ensure effective use of the tool, the program will finance training for ABC staff in the use of the MRRVF, the design of resilient road projects, and/or other necessary applications.
- 1.29 **Gender actions.** To help close the labor gap and combat violence against women (paragraph 1.14), the program will undertake the following activities ([optional link 4](#)): (i) design of gender policies and a gender action plan for the ABC; (ii) implementation of a paid internship program in nontraditional ABC roles that will support job training and placement for women enrolled in technical degree programs; (iii) design and implementation of a high school outreach plan aimed at encouraging women to enroll in university-level engineering degree programs; (iv) identification of incentives in bidding documents for hiring women for nontraditional jobs in the road sector; and (v) incentives for road maintenance microenterprises to partner with women, adopting the new digital skills proposed under the program. Implementation of social safeguards will include the following activities: (i) gender violence prevention workshops for contractors and supervision firms; (ii) development of codes of conduct and coexistence that address sexual harassment and sexual violence; and (iii) training and awareness-building campaigns on gender violence in communities where the program works will take place. Implementation of these activities will be led and monitored by a gender point person appointed by the ABC. This will help to mainstream gender issues and strengthen synergies across the gender activities included in the Bank's portfolio with Bolivia.

- 1.30 **Diversity and inclusion actions.** To promote workplace inclusion for persons with disabilities (paragraph 1.15), the program will include the following activities: (i) awareness-building workshops to support the inclusion of persons with disabilities; (ii) trainings to encourage the ABC to recruit persons with disabilities; (iii) the inclusion of universal accessibility standards in the bidding processes for road designs; (iv) design of an ABC Universal Accessibility Manual for roads in urban and rural settings; and (v) a consultancy to identify and adapt work positions suited to the various skill sets of persons with disabilities in the construction and engineering industries.
- 1.31 **Transparency in public works.** Worldwide, infrastructure projects entail integrity risks due to their high budgets and the nature of certain works and specialized equipment procurements, which are handled by institutions with uneven capacities. The Bolivian government promotes various strategies to manage these risks, including the State Procurement System (SICOES), which is attached to the Office of the Comptroller General and provides public information on works procurement across all levels of government. There is also a registry of authorized companies known as the Single Registry of State Suppliers (RUPE). The ABC has a Transparency and Anti-Corruption Unit that is responsible for identifying, investigating, and reporting any inappropriate practices to ABC leadership. The status of the Unit within the ABC hierarchy gives it independence from the actions of the operational departments. Under this program, the External Financing Planning, Quality, and Management Unit (UPC) will adopt best practices for managing integrity risks, as reflected in the program Operating Regulations (paragraph 3.6). In addition, implementation of the integrated digital management system (paragraph 1.25) will facilitate transparent information management and interactions with the various agents and stakeholders in the road management process.
- 1.32 **Objectives.** The program's general objective is to support connectivity improvements in the department of La Paz, with a focus on safety, sustainability, and inclusion. The specific objective is to improve traffic conditions on the targeted highway.
- 1.33 **Component 1. Road infrastructure (US\$55.02 million).** This component will finance: (i) works to upgrade and pave the RVF19 (Botijlaca-Caquiaviri), including road safety measures (paragraph 1.27) and supervision of the works; (ii) environmental and social compensation measures (paragraph 1.19); and (iii) the implementation of toll and vehicle weighing ITS (paragraphs 1.19 and 1.25).
- 1.34 **Component 2. Institutional strengthening (US\$2.42 million).** This component will finance: (i) development and launch of the initial phase of an integrated digital road management system for the ABC (paragraph 1.25); (ii) road safety audits, trainings, and workshops (paragraph 1.27); (iii) implementation of a planning tool for infrastructure deemed critical with respect to climate change (Blue Spot Analysis) and training in its use (paragraph 1.28); (iv) support for strengthening, sustainability, and digital transformation of the ProVial microenterprise program, including measures to encourage the involvement of women (paragraphs 1.26 and 1.29); (v) institutional strengthening of the ABC in order to mainstream gender and create incentives for hiring women for nontraditional positions (paragraph 1.29);

(vi) training workshops addressing gender and persons with disabilities (paragraphs 1.29 and 1.30); (vii) development of an ABC Universal Accessibility Manual for urban and rural settings; and (viii) a study of accessibility and potential opportunities for workplace inclusion (paragraph 1.30). This component will also finance (i) improvements to the ABC's technical rules and manuals, including the Highway Environmental Manual; (ii) strengthening of project cycle management, including a five-year fiduciary management plan; and (iii) the procurement of equipment and software for the adoption of the new digital management tools.

- 1.35 **Program administration (US\$0.55 million).** This will finance (i) program administration, evaluation, and monitoring, and (ii) external financial audits.

B. Key results indicators

- 1.36 **Expected outcomes.** Fulfillment of the program's general development objective will be verified using the following indicators: (i) the road density index for paved roads in La Paz; (ii) the road safety perception index for the targeted segment; (iii) the percentage of women partners in road maintenance microenterprises operating on the RVF; (iv) the percentage of the total direct jobs from the works that are held by persons with disabilities; and (v) the number of vehicles processed at the toll/weighing ITS stations installed by the program.⁴⁸ The specific objective will be analyzed based on the following outcome indicators for the Botijlaca-Caquiaviri segment: (i) annual average daily traffic; (ii) international roughness index; and (iii) vehicle operating costs for the segment (Annex II).

- 1.37 **Technical and economic feasibility.** The Bank has reviewed the technical and economic feasibility studies for the Botijlaca-Caquiaviri segment. The economic evaluation ([optional link 2](#)) compares the monetary value of the economic costs and benefits generated over the life of the project (the “with-project” scenario) with the “without-project” scenario. Specifically, it quantifies the planned investment in paving the road segment, the economic benefits from savings in general transportation costs (vehicle operating costs and the value of travel time), and the benefits from road maintenance cost savings using the Fourth Highway Development and Management (HDM-4) Model. The results of the economic analyses show an economic internal rate of return (EIRR) in excess of the discount rate used (12%), with a net present value (NPV) of US\$5.25 million. The sensitivity analysis indicates that the program is robust with respect to less favorable scenarios (Table 2).

Table 2. EIRR and NPV for the Botijlaca-Caquiaviri segment to be financed

	Indicators				Sensitivity analysis	
	Length (km)	Investment cost ⁴⁹ (US\$ thousands)	NPV (US\$ thousands)	EIRR (%)	Diverted long-distance demand 15% ⁵⁰	Maintenance and investment costs +20%
					EIRR (%)	EIRR (%)
Botijlaca-Caquiaviri segment	33.10	49.42	5.25	13.40	12.67	11.70

Source: Prepared by the authors.

⁴⁸ This will help to control the efficiency of the vehicles weighed, thus reducing emissions of pollutants.

⁴⁹ Includes construction of the road, installation of a toll and vehicle weighing station, supervision, inspection, and socioenvironmental mitigation measures.

⁵⁰ This assumes 15% less long-distance demand diverted in the last 10 years of service.

- 1.38 **Beneficiaries.** Residents and MSMEs in the productive sectors in the project's areas of influence (paragraph 1.26), including 6,552 residents that will potentially benefit in the area of direct influence surrounding the Botijlaca-Caquiaviri segment. The figures for the indirect beneficiary population include approximately 25,907 residents of the first corridor that will connect the municipios of Caquiaviri, Comanche, Charaña, and San Andrés de Machaca, providing access to the border with Peru and creating an access point for the parallel Nazacara-Hito IV corridor.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 **Modality.** The operation will be executed as a specific investment loan, which will finance works that have already been defined by the time the loan is approved.
- 2.2 **Cost, financing, and disbursement period.** The total program cost is US\$58 million, including US\$50 million from the Bank's Ordinary Capital resources and US\$8 million in local counterpart funds. The itemized budget is available in the multiyear execution plan and the annual work plan ([required link 1](#)). The disbursement period will be five years.

Table 3. Estimated program costs (US\$)⁵¹

Component	IDB	Local counterpart	Total	%
Component 1. Road infrastructure	47,210,000	7,813,000	55,023,000	94.87
1.1 Construction and technical supervision costs	38,492,000	7,813,000	46,305,000	79.84
1.1.1 Construction costs	36,227,000	7,813,000	44,040,000	75.93
1.1.2 Technical supervision	2,265,000	0	2,265,000	3.91
1.2 Loss compensation plan	1,466,000	0	1,466,000	2.53
1.3 Implementation of toll and vehicle weighing ITS in the RVF	7,252,000	0	7,252,000	12.5
Component 2. Institutional strengthening	2,236,000	187,000	2,423,000	4.18
2.1 Project awareness and outreach	0	187,000	187,000	0.32
2.2 Microenterprises (ProVial for the RVF)	1,000,000	0	1,000,000	1.72
2.3 Support for mainstreaming additionalities	445,500	0	445,500	0.77
2.3.1 Gender and diversity	115,500	0	115,500	0.20
2.3.2 Climate change	250,000	0	250,000	0.43
2.3.3 Road safety	80,000	0	80,000	0.14
2.4 Support for strengthening ABC management capabilities and adoption of digital tools	790,500	0	790,500	1.36
Program administration	554,000	0	554,000	0.96
Total	50,000,000	8,000,000	58,000,000	100

Source: Prepared by the authors.

- 2.3 **Disbursement schedule.** In accordance with “Enhancing Macroeconomic Safeguards at the Inter-American Development Bank” (document AB-2990) and with the “Operational Guidelines for the Implementation of the Macroeconomic Safeguards in the Inter-American Development Bank” (document GN-2753-7), the disbursement of Bank Ordinary Capital resources will be subject to the following

⁵¹ Subcomponent costs are indicative.

limits: (i) in the first 12 months, a maximum of 15% of the total amount of Bank financing approved may be disbursed; (ii) in the first 24 months, a maximum of 30% of the total amount of Bank financing approved may be disbursed; and (iii) in the first 36 months, a maximum of 50% of the total amount of Bank financing approved may be disbursed. These timeframes will be counted from the date of approval of the loan operation by the Board of Executive Directors. These limits may not apply if the requirements established in the policy have been fulfilled.

Table 4. Estimated annual disbursements and local counterpart funding

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Annual IDB amount (US\$)	7,500,000	7,500,000	10,000,000	12,500,000	12,500,000	50,000,000
Annual local counterpart amount (US\$)	1,200,000	1,200,000	1,600,000	2,000,000	2,000,000	8,000,000
Total (US\$)	8,700,000	8,700,000	11,600,000	14,500,000	14,500,000	58,000,000
IDB annual %	15.00%	15.00%	20.00%	25.00%	25.00%	100.00%
IDB cumulative %	15.00%	30.00%	50.00%	75.00%	100.00%	100.00%

Source: Prepared by the authors.

B. Environmental and social risks

- 2.4 This program has been classified as a Category “B” operation pursuant to the Bank’s Environment and Social Policy Framework, as works to pave the existing Botijlaca-Caquiaviri segment will require the resettlement of 60 campesino families and will affect agricultural lands and community facilities. No impact is expected on critical or noncritical natural habitats or biodiversity as no new road segments will be built and the current road will not be widened. No damage to cultural heritage is anticipated. According to the Bank’s Disaster and Climate Change Risk Assessment Methodology, the program’s disaster and climate change risk is moderate: the works have low exposure to flood and landslide threats and the critical importance of the infrastructure is moderate. The project’s environmental and social risk is substantial due to the extent of its socioenvironmental impacts and the need to strengthen the ABC’s supervision capabilities.
- 2.5 Full socioenvironmental studies were prepared for the Botijlaca-Charaña corridor, of which the Botijlaca-Caquiaviri segment is part. These studies were approved by the environmental authority and in 2019 were opened to consultation with indigenous and municipal authorities and residents of the communities through which the corridor passes. The consultations for the road segment were attended by 374 participants who expressed their general support for the project and their agreement with the proposed socioenvironmental management measures, including the options for compensation for establishing rights of way. Pursuant to the requirements of the Environment and Social Policy Framework, an environmental and social impact assessment and an environmental and social management plan have been prepared for the project based on the existing studies. A preliminary version of the project’s Environmental and Social Management System has also been developed. The consultations that have already taken place meet the meaningful consultation requirements under the Environment and Social Policy Framework, so no additional consultations are required during this preparatory phase of the operation. The environmental and

social impact assessment and the environmental and social management plan, including the consultation reports, are available on the Bank's website.⁵²

- 2.6 **Fiduciary risks.** Based on the institutional capacity analysis performed with the ABC's External Financing Planning, Quality, and Management Unit (UPC), the project team has identified a medium level of fiduciary risk, which will be mitigated with the following program actions: (i) strengthening human resources through the creation or appointment of a project execution team within the ABC, which will work full-time on the execution of this and other IDB projects (paragraphs 1.35, 3.3, and 3.7); (ii) strengthening the UPC's execution processes to streamline program execution,⁵³ through the preparation of flowcharts for the ABC's main integrated project cycle management processes (details to be included in the program Operating Regulations), the strengthening of the project execution team with adequate levels of staffing and appropriate profiles (paragraph 3.7), and proactive securing of rights of way (paragraph 3.8); (iii) performing quarterly technical/operational audits during the project execution period, beginning six months after the loan contract has entered into force (details to be included in the program Operating Regulations). These audits will be performed by an independent audit firm acceptable to the Bank and will be financed with resources from the loan operation; and (iv) timely training in Bank rules and procedures for closing the program. The Bank's fiduciary team will continue to identify and manage risks throughout execution.

C. Other key issues and risks

- 2.7 The project team has also identified the following medium-high risks:
- 2.8 **Economic and financial.** There is a medium-high risk that significant inflation-driven cost variations (in U.S. dollars) could occur in the first two years of program execution. This could create cost discrepancies for the main outputs, particularly under Component 1, affecting overall budget availability for the program. The following measures will mitigate this risk: (i) monitoring of financial resources, with the inclusion of parametric formulas for redetermining prices in works contracts; (ii) strengthening monitoring arrangements during execution of the works; and (iii) adding a margin for contingencies to the budgeted unit prices for the items that are most sensitive to inflation.
- 2.9 **Human resources.** There is a medium-high risk of insufficient capacity (human resources and equipment) to perform technical and socioenvironmental administration of the works before they begin. This could lead to delays in execution or jeopardize the quality of the works under Component 1, in turn affecting program performance in terms of quality and/or the timely achievement of outcomes and objectives. To mitigate this risk, a project execution team will be created/appointed to work full-time on execution of this and other IDB projects. The minimum staff complement for this team and their required qualifications will be set out in the program Operating Regulations (paragraph 3.3). Resources will be

⁵² [Territorial Connectivity and Development Program for Bolivia.](#)

⁵³ The average execution period for similar projects and operations, factoring in the historical average, is 6.5 years from the legal effective date.

provided to contract consultants and specialists to support the project execution team.

- 2.10 **Sustainability of investments.** To maintain the program works, the ABC will prepare a five-year maintenance plan to ensure the short-term sustainability of the investments. This plan will include a description (addressing technical, financial, socioenvironmental, and sustainability aspects, etc.) of the maintenance actions for the targeted segment in the medium- and long-term. The ABC, through its Road Maintenance Program, uses central government funding to maintain the RVF, and it follows the criteria in the ABC's maintenance manual. Implementation of the maintenance plan will be the responsibility of the ABC's Road Maintenance Division. Environmental issues will be monitored by the ABC's Socioenvironmental Division. Routine maintenance of the funded works will be performed through the ProVial microenterprise program (paragraph 1.26). Road maintenance and works costs are covered by funds obtained from the legally-established public toll system⁵⁴ in addition to the funds from the National Treasury's public investments (paragraph 1.5).

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 and the executing agency will be the Bolivian Highway Administration (ABC), an administratively autonomous agency with its own legal personality, assets, and open-ended technical, administrative, economic, and financial autonomy. It is under the aegis of the Ministry of Public Works, Services, and Housing and is responsible for planning and management of the RVF.
- 3.2 The loan will be executed by the ABC, which, through the UPC, will ensure adherence to technical, administrative, financial, environmental and social, and monitoring and evaluation procedures in coordination with the following three departments: (i) the National Technical Department, which oversees the Studies and Projects Unit, the Construction Division, the Road Maintenance Division, and the Socioenvironmental Division; (ii) the National Financial and Administrative Department, which comprises the Financial Affairs Division and the Administrative Affairs Division; and (iii) the National Legal Department, with its Legal Affairs Division; as well as other relevant bodies and the ABC's regional offices in each of the country's departments.
- 3.3 The ABC will establish a project execution team dedicated full time to the execution of this and other IDB projects. The minimum staff complement for this team and their required qualifications will be set out in the program Operating Regulations and will be consistent with the condition stipulated in Annex B of the Environmental and Social Review Summary.
- 3.4 **Execution mechanism.** Implementation of the loan program will be the responsibility of the ABC, which, through the UPC and the project execution team

⁵⁴ Executive Decree 28,948 established Vias Bolivia, a public agency that administers and operates the RVF's tolls, weigh stations, and weight and size controls.

and in coordination with the ABC's technical units, will be responsible for (i) programming of the works and services to be procured; (ii) bidding and procurement processes for the works and services financed by the program; and (iii) monitoring and administration of contracts for consulting services, goods, and works, in addition to ensuring fulfillment of specifications and socioenvironmental management plans.

- 3.5 In terms of fiduciary control, the UPC/project execution team, in coordination with the National Financial and Administrative Department, will be responsible for (i) implementation and maintenance of effective information and monitoring systems for accounting and financial administration, and internal control, consistent with Bank requirements; (ii) timely submission of disbursement requests and supporting documentation for eligible expenditures based on an updated financial planning system; (iii) preparation and submission of semiannual financial reports on the status and use of funds provided in the form of advances, and any other required reports; (iv) maintenance of a special account for program execution, through an exclusive ledger subaccount under the Single Treasury Account that is separate from other sources for the management of Bank funds, and use of the SIGEP Public Management System; (v) maintenance of an effective record-keeping system for supporting documentation for eligible expenditures; (vi) timely submission of audited financial statements for the program; and (vii) updates to the entity's website to reflect all information of a public nature relating to program execution.
- 3.6 **Program Operating Regulations.** Program execution will be governed by program Operating Regulations that will set out the operation's technical, environmental, fiduciary, and financial criteria, among other considerations. The program Operating Regulations will include, at a minimum: (i) coordination and reporting arrangements between the ABC and the Bank; (ii) a flowchart of the main processes comprising the ABC's integrated project management cycle for execution, including (a) organizational charts for the participating departments; (b) a list of the departments involved, the positions responsible, and time frames and documents/deliverables; (c) procedures; and (d) a list of bottlenecks; (iii) procedures for the procurement of works, goods, and consulting services; (iv) guidelines for the use of funds and program financial and fiduciary management; (v) disbursement procedures; (vi) the structure of the project execution team, including the duties and required qualifications of key staff; (vii) best practices for promoting transparency and managing integrity risk; (viii) environmental and social requirements, the environmental and social management system, and the environmental and social action plan; and (ix) details of the quarterly technical/operational audits that will take place during the project execution period, beginning six months after the loan contract enters into force.
- 3.7 **As special contractual conditions precedent to the first disbursement of the loan proceeds, the borrower, through the executing agency, will provide evidence to the Bank's satisfaction of (i) approval and entry into force of the [program Operating Regulations](#) in accordance with the terms and conditions previously agreed with the Bank; and (ii) appointment of a project execution team in the executing agency with the following staff, at a minimum: a coordinator, procurement specialist, social specialist, environmental specialist, financial specialist, and monitoring and planning specialist. The**

- first condition is necessary to ensure that the project is properly assigned for effective project coordination and execution, while the second condition is justified because the Bank's experience in the region indicates that approval of the program Operating Regulations prior to the first disbursement is useful for the internal organization of the executing agency for implementation of the operation.
- 3.8 **Special contractual condition for execution.** As a special contractual condition for execution, prior to the physical start of each of the works under Component 1, the borrower, through the executing agency, will submit evidence, to the Bank's satisfaction, of the release in the rights of way for the corresponding subsegments. This condition is necessary to prevent delays in executing the works due to obstacles in the right of way.
- 3.9 **Fiduciary agreements and requirements.** The operation will adhere to the principles and criteria set out in the Financial Management Guidelines for IDB-Financed Projects (document OP-273-12 or the version otherwise in effect at the time of execution). In addition, the use of transparency tools in bidding and works management processes will be encouraged (paragraph 1.31).
- 3.10 **Procurement of works, goods, and services.** Procurements will be conducted in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-15), the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-15), and the provisions of the loan contract, the program Operating Regulations ([optional link 9](#)), and the procurement plan ([required link 4](#)). The Bank will supervise bidding processes using ex ante review as indicated in the procurement plan.
- 3.11 **Disbursements.** Disbursements will be made primarily through the advance of funds modality or any other modality set out in the Financial Management Guidelines for IDB-Financed Projects (document OP-273-12) or the guidelines otherwise in effect at the time of program execution, as described in Annex III. Advances of funds will be based on a financial/cash flow plan covering contracted commitments and will cover actual liquidity needs over a maximum period of 180 days (or other period). With the exception of the first advance of funds, subsequent advances will be processed once documentation has been provided for at least 80% of the cumulative balance pending justification. To manage the funds, the project execution team will use the Single Treasury Account (ledger subaccount for exclusive use). The ABC, through the UPC/project execution team, will submit audited financial statements annually and at the end of the operation, in accordance with the terms and time frames required by the Bank in its policies.
- 3.12 **Audit.** For the duration of the operation, the ABC, through the UPC/project execution team, will submit to the Bank annual financial statements, duly audited by a Bank-acceptable independent audit firm, within 120 days after the close of each fiscal year. The audit scope and related considerations will be governed by document OP-273-12 and the Guide for Financial Reports and Management of External Audits. Audit costs will be financed using loan funds.
- B. Summary of results monitoring arrangements**
- 3.13 **Monitoring.** The monitoring and evaluation plan ([required link 2](#)) will be used to monitor program execution on the basis of the targets and progress indicators set

out in the Results Matrix (Annex II). Tools used for this purpose will include: (i) the multiyear execution plan, annual work plan, procurement plan, financial supervision visits, review of audited financial statements, reviews of disbursement requests, and technical/operational meetings with the project execution team; (ii) semiannual progress reports, including indicators for monitoring the impact, outcomes, and execution of each component and fulfillment of the operational requirements listed in the program Operating Regulations ([optional link 9](#)); and (iii) environmental, social, and occupational health and safety reports, as described in the environmental and social management plan.

- 3.14 **Evaluation.** The ABC will submit a final evaluation report to the Bank within 90 days of the date on which 95% of the project disbursements have been justified. This evaluation will cover the following topics, at a minimum: (i) an ex post cost-benefit analysis that will use the same methodology as the ex ante study and include a results comparison to verify the assumptions and parameters used (in accordance with the details established in the [required link 2](#)); (ii) financial execution results; (iii) achievement of the established targets, consistent with agreed outcome indicators; and (iv) compliance with contractual commitments related to program execution.
- 3.15 **Information for program monitoring and evaluation.** The ABC will be responsible for maintaining data collection and monitoring systems. It will undertake to maintain a system for the monitoring and evaluation of all components, which it will use to prepare the reports and data delivered to the Bank. For the purposes of the evaluation, the ABC will compile, store, and safeguard all information, indicators, and metrics necessary to prepare the project completion report, including annual plans and the final evaluation.

Development Effectiveness Matrix		
Summary		BO-L1225
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -Economic Integration -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Beneficiaries of employment support initiatives (#) -Enterprises provided with technical assistance (#) -Roads built or upgraded (km) -Women beneficiaries of economic empowerment initiatives (#) -Value of investments in resilient and/or low-carbon infrastructure (\$) -Agencies with strengthened digital technology and managerial capacity (#) -Agencies with strengthened transparency and integrity practices (#)	
2. Country Development Objectives		
Country Strategy Results Matrix		
Country Program Results Matrix		The intervention is not included in the 2022 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution	10.0	
3.1 Program Diagnosis	2.5	
3.2 Proposed Interventions or Solutions	3.5	
3.3 Results Matrix Quality	4.0	
4. Ex ante Economic Analysis	10.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	1.5	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	2.5	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	1.0	
5. Monitoring and Evaluation	9.2	
5.1 Monitoring Mechanisms	4.0	
5.2 Evaluation Plan	5.2	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Specify risk rate on risk tab	
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, Accounting and Reporting, External Control, Internal Audit. Procurement: Information System.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
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	Cooperación para estudios de preinversión (socioambientales, evaluación económica y revision de estudios de ingeniería)

Evaluability Assessment Note:

The TERRITORIAL CONNECTIVITY AND DEVELOPMENT PROGRAM FOR BOLIVIA consists of an investment project encompassing road interventions (improvement and paving) on the Botijaca-Caquiaviri section (31 km) of the RVF-19, and with a total budget equivalent to US\$58 million (US\$50 million from the IDB). The general objective (OG) of the loan proposal is to contribute to the improvement of connectivity in the department of La Paz, with a focus on security, sustainability, and inclusion. The proposal also establishes a specific objective: to improve traffic conditions on the intervened road.

The diagnosis of the project is clear. Interventions will focus on a deficient section of RVF-19, characterized by the lack of asphalt coverage roads and inadequate drainage system. Therefore, the trips made in this section suffer from high costs and time – currently the maximum speed for vehicle circulation is 40km/h. The project also included the implementation of four toll and weigh stations to support the control of cargo transported on the road. The results matrix includes indicators associated with both the OG and the SOs, and its goals are reasonable and evidence-based.

The economic analysis is adequate, with reasonable and standard assumptions and sensitivity analysis. The estimated net present value of the program is US\$3,024 million, which is equivalent to an internal return of 13.4%.

The evaluation plan is adequate. He proposes to carry out a before and after analysis of the indicators of the specific and general objectives, and an ex post economic analysis of the section intervened. However, this exercise will not allow the empirical attribution of the results obtained.

RESULTS MATRIX

Project objective:	The program's general objective is to support connectivity improvements in the department of La Paz, with a focus on safety, sustainability, and inclusion. The specific objective is to improve traffic conditions on the targeted highway.
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GENERAL DEVELOPMENT OBJECTIVES

Indicator	Unit of measure	Baseline year	Baseline value	Target year	Target value	Means of verification	Comments
General objective: The program's general objective is to support connectivity improvements in the department of La Paz, with a focus on safety, sustainability, and inclusion							
Density index for paved roads in La Paz. ¹	Index	2021	30.98	2027	32.20	National Statistics and Census Institute (INE) (length of road networks) and calculation of the index.	See monitoring and evaluation plan for calculation details.
Road safety perception index for the targeted segment.	Index	2022	2	2027	3 ²	Measurement of the road safety perception index for the segment.	See the monitoring and evaluation plan for calculation details.
Percentage of women partners in road maintenance microenterprises operating on the RVF.	Percentage	2022	16%	2027	18% ³	Bolivian Highway Administration (ABC) reports.	See the monitoring and evaluation plan for calculation details.
Percentage of the total direct jobs from the works that are held by persons with disabilities.	Percentage	2022	0	2027	2% ⁴	ABC reports.	See the monitoring and evaluation plan for calculation details.

¹ The paved road density index obtained was for the department of La Paz.

² Baseline and target values are approximations based on an in-house survey carried out by the team. They will be updated based on the results of a preliminary pilot survey that will be carried out before the project begins.

³ Women's participation in the new microenterprises created from 2023 onward is expected to be 30%, equivalent to a 2% increase in the overall number of women relative to the baseline.

⁴ This target is based on compliance with Law 977 of 2017 on workforce integration, which states that private sector companies must ensure that at least 2% of their employees are persons with disabilities. [Informe Defensorial de Seguimiento al Cumplimiento del Artículo 2, Inserción Laboral y Ayuda Económica para PcD.](#)

Indicator	Unit of measure	Baseline year	Baseline value	Target year	Target value	Means of verification	Comments
Number of vehicles processed each month at toll/weighing stations installed by the program along the Botijlaca-Caquiaviri segment.	Number	2022	0	2027	512 ⁵	ABC reports.	See the monitoring and evaluation plan for calculation details.

SPECIFIC DEVELOPMENT OBJECTIVES

Indicator	Unit of measure	Baseline year	Baseline value	Target year	Target value	Means of verification	Comments
Specific objective: improve traffic conditions on the targeted highway							
Annual average daily traffic on the Botijlaca-Caquiaviri segment.	Vehicles / day	2019	308	2026	632	Traffic measurements based on counts, permanent posts, and ABC censuses.	The target includes both normal and diverted traffic flows, based on ABC traffic studies. Annual average daily traffic will be measured at least one year after the date on which the works are completed.
International roughness index for the Botijlaca-Caquiaviri segment.	m/km	2022	14	2026	2	ABC measurements.	The index will be measured after execution of the works.
Vehicle operating costs for the Botijlaca-Caquiaviri segment. ⁶	Index	2022	100	2026	66.88	Highway Development and Management (HDM-4).	This indicator includes total vehicle operating costs and value of travel time, fleet average for all vehicle types, per vehicle per km. See monitoring and evaluation plan for calculation details.

⁵ Law 441 of 25 November 2013 (Law to Control Vehicle Weights and Dimensions on the Primary Road Network, Bolivia).

⁶ The baseline value of 100 is equivalent to 0.9156. See the monitoring and evaluation plan for further details.

OUTPUTS

Indicator	Unit of measure	Base-line	Base-line year	US\$	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of Verification	Comments
Component 1: Road infrastructure												
Kilometers of RVF built.	km	0	2022	47,548,000	0	6.20	12.40	20.77	31.11	31.11	Certificates of satisfactory acceptance of the works.	
Release of right of way.	km	0	2022	223,000	0	31.11	0	0	0	31.11	Administrative act confirming process completion.	
Toll/weighing stations with Intelligent Transportation Systems (ITS), installed.	Station	0	2022	7,252,000	0	0	0	0	4	4	Certificate of satisfactory acceptance of the works.	
Component 2: Institutional strengthening												
Women enrolled in university degree programs in technical disciplines who have completed paid internships with the ABC and/or companies executing projects.	Intern	0	2022	10,500	0	5	5	5	5	20	Executing agency reports.	
High school outreach plan aimed at encouraging women to enroll in university-level engineering degree programs, developed.	Plan	0	2022	15,000	1	0	0	0	0	1	Executing agency reports.	
High school outreach plan aimed at encouraging women to enroll in university-level engineering degree programs, implemented.	Plan	0	2022	20,000	0	1	1	1	1	4	Executing agency reports.	
Gender policies and gender action plan for the ABC, designed.	Plan	0	2022	20,000	0	1	0	0	0	1	Executing agency reports.	
Women partners in microenterprises who have participated in digitalization	Percentage	0	2022	43,000	10	10	15	15	20	70	Executing agency reports.	

Indicator	Unit of measure	Base-line	Base-line year	US\$	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of Verification	Comments
programs.												
Awareness-building workshops and training events to support the inclusion of persons with disabilities, implemented.	Workshops / training events	0	2022	10,000	0	2	0	0	0	2	Executing agency reports.	
Inclusion of universal accessibility standards in bidding processes for road design and construction.	Percentage of bidding documents	0	2022	0	20	40	60	80	100	100%	Review of documents used in bidding processes.	Universal accessibility standards will be used in road designs involving urban crossings and locations with bus stops or pedestrian crossings.
Study of accessibility and potential opportunities for workplace inclusion, prepared.	Study	0	2022	10,000	1	0	0	0	0	1	Executing agency reports.	
ABC Universal Accessibility Manual for roads in urban and rural settings, prepared.	Manual	0	2022	30,000	1	0	0	0	0	1	Executing agency reports.	
ABC integrated road asset management system, developed.	System	0	2022	160,000	0	0	0	0	1	1	Executing agency reports.	
Equipment and software (laptops and desktops), printers and plotters, tablets, high-volume scanners, precision GPS systems and satellite navigation devices, drones, distance meters, and portable monitoring kits for analyzing water and gases, etc. procured for management of the project.	Equipment	0	2022	291,000	0	1	0	0	1	2	Executing agency reports.	
ABC technical rules and manuals, including the Highway Environmental Manual, updated.	Manual	0	2022	227,000	0	0	1	0	0	1	Executing agency reports.	

Indicator	Unit of measure	Base-line	Base-line year	US\$	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of Verification	Comments
ABC five-year training plan, prepared.	Plan	0	2022	12,500	1	0	0	0	0	1	Executing agency reports.	
ABC integrated project cycle management program, implemented.	Program	0	2022	100,000	0	1	0	0	0	1	Executing agency reports.	
Resilient infrastructure planning tool and Blue Spot Analysis, implemented.	System	0	2022	250,000	0	0	0	0	1	1	Executing agency reports.	
Road safety audits involving road safety inspections and analysis of infrastructure criteria at toll and weighing zones, performed.	Audit	0	2022	30,000	0	0	1	0	1	2	Executing agency reports.	
Road safety workshops to train both individuals and institutions, held.	Workshop	0	2022	50,000	0	1	1	1	0	3	Executing agency reports.	
Project outreach plan, implemented.	Plan	0	2022	187,000	0	1	0	0	0	1	Executing agency reports.	

Country: Bolivia

Division: INE/TSP

Operation: BO-L1225

Year: 2022

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Executing agency: Bolivian Highway Administration

Operation name: Territorial Connectivity and Development Program for Bolivia

I. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

1. Use of country systems in the program

<input checked="" type="checkbox"/> Budget	<input type="checkbox"/> Reporting	<input checked="" type="checkbox"/> Information system	<input type="checkbox"/> National competitive bidding
<input checked="" type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Accounting	<input type="checkbox"/> External control	<input type="checkbox"/> Individual consultants	

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Special features of fiduciary execution	The borrower will be the Plurinational State of Bolivia, and the executing agency will be the Bolivian Highway Administration (ABC), acting through its External Financing Planning, Quality, and Management Unit (UPC). The UPC will carry out the program's technical, administrative, legal, fiduciary, environmental, and social activities. IDB funding will be extended in accordance with the program Operating Regulations prepared for this operation.
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3. Fiduciary capacity

Fiduciary capacity of the executing agency	The executing agency's fiduciary capacity has been determined to be medium-high. The results of the institutional capacity assessment indicated that the executing agency's fiduciary capacity needs to be strengthened through the creation of a project execution team within the ABC, dedicated full time to the execution of this and other IDB projects. The team will be responsible for managing program resources, including accounting and financial administration and procurement. The ABC will be responsible for appointing the team's key personnel. The analysis also identified some interventions to strengthen technical and administrative operating capacity, as well as a need to prepare flowcharts for program execution processes and procedures.
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3. Fiduciary risks and risk response

Risk classification	Risk	Risk level	Risk response
Human resources	Technical, fiduciary, and socioenvironmental execution of the project entail additional responsibilities that might exceed existing human resource capacity at the ABC's External Financing Division, leading to delays in project execution. This, in turn, would affect overall program performance in terms of quality and/or the timely achievement of outcomes and objectives.	Medium	To mitigate this risk, a project execution team will be created. That team will include a procurement specialist and a financial specialist, who will both have knowledge of and experience with the fiduciary policies of multilateral institutions (preferably those of the Bank). These specialists will be hired at the beginning of the project, using loan funds. The executing agency will receive training and support from the Bank's fiduciary team, which will also assess mechanisms to allow for expedited processes.

5. Policies and guidelines applicable to the operation: Procurements will be listed in the [procurement plan](#) approved by the Bank and will be conducted in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-15), or the policies otherwise in effect at the time of project execution.
6. Exceptions to policies and guidelines: None.

II. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE LOAN CONTRACT

Exchange rate: For the purposes of Article 4.10 of the general conditions, the Parties agree that the applicable exchange rate will be the one indicated in Article 4.10(b)(i). For the purposes of determining the equivalent value of expenditures incurred in the local currency chargeable against the local counterpart funding or for the reimbursement of expenditures from loan resources, the agreed exchange rate will be the rate in effect on the date that the borrower, executing agency, or other person or legal entity with the delegated authority to incur expenditures makes the respective payment to a contractor, supplier, or beneficiary.

Type of audit: Audited program financial statements. Within 120 days after the close of each of its fiscal years during the original disbursement period or any extensions thereof and within 120 days following the date of the last disbursement of the loan, the executing agency will submit the program's audited financial statements, duly audited by a Bank-acceptable independent audit firm, in accordance with the terms of reference agreed upon by the Bank and the ABC.

III. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

<input checked="" type="checkbox"/>	Bidding documents	For the procurement of works, goods, and nonconsulting services carried out in accordance with Bank policies (document GN-2349-15) and subject to international competitive bidding (ICB), the Bank's standard bidding documents or other documents agreed upon by the executing agency and the Bank for the specific procurement item will be used. Likewise, the selection and contracting of consulting services will be carried out according to the Policies for the Selection of Consultants (document GN-2350-15) using the standard request for proposals issued by the Bank or agreed upon by the executing agency and the Bank for the specific selection process. In the cases of national competitive bidding, shopping, and individual consultants, a procurement document will be developed and agreed between the relevant national authority and the Bank. The project's sector specialist will be responsible for reviewing the technical specifications and terms of reference for procurement during preparation of the selection processes. This technical review may be conducted ex ante and is independent of the procurement review method.
<input checked="" type="checkbox"/>	Recurring expenses	Recurring expenses necessary to start up the project approved by the Project Team Leader will be financed in accordance with the executing agency's administrative procedures. Those procedures will be reviewed and accepted by the Bank, provided they do not contravene the principles of economy, efficiency, and competition.
<input checked="" type="checkbox"/>	Procurement supervision	The Bank's method for overseeing bidding processes will be ex ante supervision. When procurement processes are executed through the country system, they will be overseen by the country supervision system.
<input checked="" type="checkbox"/>	Records and files	The ABC will be responsible for establishing the controls needed to safeguard and protect the integrity of program documentation generated ex post or ex ante. The Bank may, at any time, verify the standards of file organization, control, and security.

Major procurements

Description	Selection method	Estimated date	Estimated amount (US\$)
Works			
Road construction works, Botijlaca-Caquiviri segment	ICB	July 2023	44,040,000
Nonconsulting Services			

Description	Selection method	Estimated date	Estimated amount (US\$)
Implementation of Intelligent Transportation Systems for vehicle weighing and tolls on the RVF	ICB	January 2025	7,252,000
Firms			
Technical supervision services, Botijlaca-Caquiaviri segment	Quality- and cost-based selection (QCBS)	March 2023	2,265,000
Integrated digital road management system	QCBS	January 2025	2,790,500

See [link](#) for procurement plan.

IV. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

<input checked="" type="checkbox"/>	Programming and budget	Since the borrower is the Plurinational State of Bolivia, the operation's funds will be included in the national budget and subsequently transferred to the ABC, which is administratively and financially autonomous and which must also include them in its budget. No delays that could affect budget execution are expected.
<input checked="" type="checkbox"/>	Treasury and disbursement management	<p>As a special fiduciary condition precedent to the first disbursement, a project execution team will be created with a minimum staff complement that includes a full-time financial specialist who must fit the qualifications, experience, and skills required for the position.</p> <p>Fiduciary requirements to be included in the program Operating Regulations: (1) A flowchart of the main processes comprising the ABC's integrated project cycle management for execution, including (i) organizational charts for the participating departments; (ii) a list of the departments involved, the positions responsible, and time frames and documents/deliverables; (iii) flowcharts; (iv) procedures; and (v) a list of bottlenecks (details to be included in the program Operating Regulations); and (2) contract and perform quarterly technical/operational audits during the project execution period, beginning six months after the loan contract has entered into force. These audits will be financed with resources from the loan operation and will be performed by an independent audit firm acceptable to the Bank in accordance with the terms of reference agreed with the ABC.</p> <p>The exchange rate for accounting purposes will be the rate in effect on the date that the borrower, executing agency, or other person or legal entity to whom spending authority has been delegated makes the respective payments or transfers (Article 4.01(b)(i) of the General Conditions).</p>

		<p>The disbursement method will be advances of funds and/or reimbursements.</p> <p>The disbursement mechanism will be through the submission of requests physically and/or online using the Online Disbursements platform.</p> <p>Bank account: The borrower/executing agency will keep the advanced funds in a U.S. dollar bank account exclusively for program use opened at the Central Bank of Bolivia to receive disbursements. This will be controlled/reconciled through the Treasury Single Account ledger subaccount (the designated account).</p> <p>Financial plan: Advances will be for periods of up to six months (180 days), depending on liquidity requirements for adequate project execution based on commitments.</p> <p>The justification percentage will be 80% of the balance of advances pending documentation.</p> <p>Cash flow: The funds will be disbursed to the executing agency's account at the Central Bank of Bolivia, from where they will be transferred as payments for goods and services to contractors/suppliers.</p>
<input checked="" type="checkbox"/>	Accounting, information systems, and reporting	<p>The specific accounting standards for project execution will be those included in the Regulatory Framework of the Plurinational State of Bolivia.</p> <p>The accounting reports will be the statement of cash receipts and disbursements and the statement of cumulative investments, with their respective notes, prepared on the basis of the accounts generated by the public financial information system.</p> <p>Accounting method and currency: Accounts will be kept on an accrual basis, but the financial reports to be submitted to the Bank will be prepared on a cash basis in U.S. dollars.</p>
<input checked="" type="checkbox"/>	Financial supervision of the operation	<p>Financial supervision will take the form of on-site visits to the ABC, working meetings, and desk reviews of reports and audited financial statements, etc. It will be performed by the Bank's financial management team, support consultants, and the firm hired to audit the program's annual financial statements and perform the semiannual technical/operational audits. Supervision may be adjusted based on experience in executing the program.¹</p>

¹ Opinions on the annual audited financial statements and internal control comments/findings, where applicable.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/22

Bolivia. Loan ____/OC-BO to the Plurinational State of Bolivia
Territorial Connectivity and Development Program for Bolivia

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 aimed at cooperating in the execution of the Territorial Connectivity and Development Program for Bolivia. Such financing will be for the amount of up to US\$50,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ____ 2022)