

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**PERU**

**ROAD INFRASTRUCTURE FOR REGIONAL COMPETITIVENESS PROGRAM  
(PROREGIÓN 1)**

**(PE-L1252)**

**LOAN PROPOSAL**

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1. <a href="#">Multiyear execution plan</a>
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3. <a href="#">Environmental and social management report</a>
4. <a href="#">Procurement plan</a>
<b>OPTIONAL</b>
1. <a href="#">Social evaluation of the program</a>
2. <a href="#">National Infrastructure Plan for Competitiveness (PNIC)</a>
3. <a href="#">Gender annex</a>
4. <a href="#">Climate change annex</a>
5. <a href="#">Inclusion of persons with disabilities annex</a>
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8. <a href="#">Program Operations Manual - Preliminary version</a>
9. <a href="#">Proregión program - maps</a>
10. <a href="#">Road safety annex</a>

## **ABBREVIATIONS**

CGR	Comptroller General of the Republic
EIRR	Economic internal rate of return
ENPV	Economic net present value
GDP	Gross domestic product
ITS	Intelligent transportation system
km	Kilometers
LIBOR	London Interbank Offered Rate
MEF	Ministry of Economy and Finance
MTC	Ministry of Transportation and Communications
OECD	Organisation for Economic Co-operation and Development
PNIC	National Infrastructure Plan for Competitiveness
PVD	Provias Descentralizado
SIAF	Integrated Financial Management System
SFD	Sector Framework Document

## PROJECT SUMMARY

### PERU ROAD INFRASTRUCTURE FOR REGIONAL COMPETITIVENESS PROGRAM (PROREGIÓN 1) (PE-L1252)

Financial Terms and Conditions				
<b>Borrower:</b>			<b>Flexible Financing Facility<sup>(a)</sup></b>	
Republic of Peru			<b>Amortization period:</b>	15 years
<b>Executing agency:</b>			<b>Disbursement period:</b>	5 years
Ministry of Transportation and Communications, through Provias Descentralizado			<b>Grace period:</b>	6.5 years <sup>(b)</sup>
<b>Source</b>	<b>Amount (US\$)</b>	<b>%</b>	<b>Interest rate:</b>	LIBOR-based
<b>IDB (Ordinary Capital):</b>	114,300,000	13	<b>Credit fee:</b>	<sup>(c)</sup>
			<b>Inspection and supervision fee:</b>	<sup>(c)</sup>
<b>Local counterpart:<sup>1</sup></b>	747,300,000	87	<b>Weighted average life:</b>	10.75 years
<b>Total:</b>	861,600,000	100	<b>Approval currency:</b>	U.S. dollar
Project at a Glance				
<b>Project objective/description:</b> The general objective is to help improve the country's competitiveness by reducing logistics costs. The specific objectives are to: (i) reduce vehicle operating costs on the targeted roads; and (ii) reduce travel time costs on the targeted roads.				
<b>Special contractual conditions precedent to the first disbursement of the loan proceeds:</b> The borrower, through the executing agency, will have submitted evidence that the program operations manual has been approved and has entered into effect, including, as annexes, the environmental and social analyses, with the environmental and social management plans for the sample, the environmental and social management framework, and a chapter on the program's environmental and social requirements and procedures (paragraph 3.5).				
<b>Special contractual conditions for execution:</b> See other socioenvironmental contractual conditions in Annex B of the environmental and social management report ( <a href="#">required link 3</a> ).				
<b>Exceptions to Bank policies:</b> None.				
Strategic Alignment				
<b>Challenges:<sup>(d)</sup></b>	SI	<input checked="" type="checkbox"/>	PI	<input checked="" type="checkbox"/>
<b>Crosscutting themes:<sup>(e)</sup></b>	GD	<input checked="" type="checkbox"/>	CC	<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, and commodity 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 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) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

(e) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

<sup>1</sup> The local counterpart may include external financing from the Andean Development Corporation (CAF). This will not increase the total cost of the program.

## I. PROJECT DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 **Macroeconomic context.** The Peruvian economy has been slowing, with its average growth rate dropping from 5.5% in the 2000-2013 period to 3.1% in 2014-2019, due to the depletion of the main sources of growth from the prior decade (accumulation of physical capital) and the stagnation of productivity. The average annual growth of private investment, a key driver of the country's robust growth in the past, fell from 9.4% annual between 2000 and 2013 to an annual 0.5% between 2014 and 2019. Total factor productivity contributed 1.3 percentage points to growth from 2000 to 2013, but nearly nothing from 2014 to 2019 (-0.2%). Therefore, achieving sustained growth and development in the medium and long terms will require fostering productivity as an engine of the economy. Accordingly, progress must be made on closing the gaps in economic and social infrastructure access and quality, estimated at around 50% of the gross domestic product (GDP).<sup>2</sup>
- 1.2 **Planning.** To strengthen the significant role of investments in infrastructure in the country's productive system, the Government of Peru published several plans for the transportation and logistics sector during the 2010s: (i) the Transportation Logistics Services Development Plan, which analyzes logistics services infrastructure and supply nationwide; (ii) the Plan for the Subnational Development of Transportation Infrastructure, Services, and Logistics (Proregión), which identifies freight logistics services management and delivery components in the subnational logistics chain; (iii) the National Competitiveness and Productivity Plan,<sup>3</sup> which sets the foundation for sustainable economic growth with a decentralized approach; and (iv) the National Infrastructure Plan for Competitiveness (PNIC) ([optional link 2](#)), which identifies and prioritizes infrastructure projects to reduce gaps in basic access and promote the modernization of public management. The PNIC was developed by the Ministry of Economy and Finance (MEF) with technical support from the IDB and the British government, and it sets out the roadmap for investments in infrastructure for the next few years.
- 1.3 One of the priority measures in the PNIC was Proregión, which targets feeder road corridors to improve the connections between production centers and national logistics corridors and bulking centers, thereby supporting the country's efforts to improve its infrastructure and develop nontraditional economic products.<sup>4</sup>
- 1.4 **Productivity.** One of the challenges for Peru in promoting economic diversification is the difficulty of boosting productivity levels in the agricultural sector, which are associated with the precarious conditions of the road infrastructure, among other factors (Galarza and Diaz, 2016).<sup>5</sup> An estimated 70%

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<sup>2</sup> [IDB, 2020](#).

<sup>3</sup> [Executive Order 345-2018](#).

<sup>4</sup> Including agricultural and chemical products. Source: [Ministry of Foreign Trade and Tourism, 2019](#).

<sup>5</sup> [The use of improved roads is associated with 9% to 20% higher productivity in the agricultural regions studied](#).

- of rural roads used for transporting agricultural products from production centers to bulking centers are in poor or very poor condition.<sup>6</sup>
- 1.5 This has implications for the country's productivity and competitiveness, as poor rural road conditions adversely affect logistics costs,<sup>7</sup> the development of production chains<sup>8</sup> and exports,<sup>9</sup> and the population's access to social services and employment. This situation is reflected in international logistics performance indicators, such as the World Economic Forum<sup>10</sup> infrastructure quality index, which ranks Peru 88 out of 141 countries.
  - 1.6 **COVID-19.** In addition to the above, the COVID-19 crisis is hitting the country hard. The lockdown measures that have been instituted have significantly impacted the economy, and GDP is expected to fall around 12% in 2020.<sup>11</sup>
  - 1.7 **The crisis as an opportunity.** To respond to the economic crisis caused by the COVID-19 pandemic, governments have been taking economic policy actions to achieve multiple objectives. Investment in sustainable infrastructure is an attractive policy option, since it simultaneously tackles a number of problems: it strengthens economic growth by driving demand, increases the productivity of the factors of production, boosts economic competitiveness, creates sustainable jobs, and improves income distribution ([optional link 6](#)).
  - 1.8 **Job creation.** The construction of infrastructure can create thousands of direct and indirect jobs, and there is even more employment potential in the operation and maintenance of the infrastructure built. In the United States, only 15% of infrastructure jobs are in construction; the other 85% are in infrastructure operations or design (84%) or in governments (1%).<sup>12</sup>
  - 1.9 The 2020 Development in the Americas report, "[From Structures to Services: The Path to Better Infrastructure in Latin America and the Caribbean](#),"<sup>13</sup> underscores the need for Latin America and the Caribbean to implement policy measures to improve the efficiency of the infrastructure-investment process and the regulation of infrastructure services. Schwartz et al. (2009) found that in Latin America and the Caribbean, investment in infrastructure has the potential to create 40,000 direct and indirect jobs each year for every US\$1 billion invested. This helps reduce social inequalities, by providing the population with better, decent livelihoods.<sup>14</sup>

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<sup>6</sup> [World Bank, 2016](#).

<sup>7</sup> The logistics costs of exporting in Peru are up to five times higher than in OECD member countries. Source: [Ministry of Foreign Trade and Tourism, 2016](#).

<sup>8</sup> A [World Bank study from 2016](#) found that for the coffee, cacao, quinoa, grape, and onion chains, logistics costs accounted for between 20% to 50% of the total cost of the products.

<sup>9</sup> [IDB, 2019](#).

<sup>10</sup> [World Economic Forum, 2019](#).

<sup>11</sup> [MEF, 2020](#).

<sup>12</sup> [Brookings, 2014](#).

<sup>13</sup> [IDB, 2020](#). Editors: Eduardo Cavallo, Andrew Powell, and Tomás Serebrisky.

<sup>14</sup> [International Labour Organization, 2013](#).

- 1.10 **Economic recovery.** Productivity in industry, trade, and economic sectors including tourism and agriculture directly hinges on the infrastructure sector.<sup>15</sup> Investments to enhance the efficiency of the infrastructure supply can be an opportunity to drive growth without increasing the fiscal burden,<sup>16</sup> since doing more with less is crucial to the success of stimulus programs.
- 1.11 **Measures to foster economic recovery.** The measures that the government has been taking include distributing allowances to low-income families and dedicating budgetary resources to initiatives that can be implemented quickly and will create many jobs. In July 2020, it implemented the Arranca Perú<sup>17</sup> Program, whose activities include the allocation of US\$1.1 billion<sup>18</sup> to the maintenance of local roads, with the aim of reviving local economies through rapid job creation. The Proregión Program, which focuses on secondary roads (paragraph 1.18), would also help achieve these objectives, as it: (i) will be implemented quickly, since ordinary resources were already used to begin procurements for and execution of several corridors; and (ii) includes low-cost and subsequent maintenance interventions, which will create jobs in construction and consulting services.
- 1.12 **Regional connectivity and trade facilitation.** The pandemic will lead countries to increasingly seek to preserve supply security for their value chains, by diversifying sources and suppliers. This will entail reshaping global production structures in line with nearshoring strategies. In this context, one of the opportunities for Latin America and the Caribbean lies in consolidating key regional value chains to create jobs that will be sustainable over the long term.
- 1.13 To bring this opportunity to fruition, the region must invest in connectivity infrastructure that supports the trade of goods and services; provide complementary infrastructures that facilitate the nearshoring of investments (like industrial parks); improve foreign trade procedures; and create instruments to attract investments and train the workforce. As a region, Latin America and the Caribbean has high logistics costs and a low level of intraregional commercial and physical integration. Investing in infrastructure for connectivity can yield significant benefits. For example, a 1% reduction in transportation costs increases exports by 1.3% to 4.5% (Danielken, 2016). Regional integration will ultimately be essential to fostering regional value chains that create sustainable, high-quality jobs.
- 1.14 Peru is in a strategic position for multimodal transport integration in South America, along four integration and development axes: Amazon, Andean, Central Interoceanic, and Peru-Brazil-Bolivia. The Proregión Program is designed to complement this position through investment in feeder road corridors selected based on production chains that will improve the connectivity of productive zones

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<sup>15</sup> A 1% increase in transportation productivity would increase agricultural productivity by 1.2%. Source: [IDB, 2019](#).

<sup>16</sup> [Ibid.](#)

<sup>17</sup> [MEF, 2020](#).

<sup>18</sup> Exchange rate: S/ 1 = US\$0.28 (09/09/2020).



outside the country's capital with ports, airports, waterways, and border crossings ([optional link 7](#)).

- 1.15 **Transportation sector governance.** Peru's road network is made up of the national, departmental, and local road networks. At the national level, the Ministry of Transportation and Communications (MTC) is the apex agency for the transportation sector. It is in charge of planning, execution, management, and maintenance of the national road network, through its office for special projects in national transportation infrastructure (Provias Nacional). Peru's subnational governments are responsible for building, managing, and maintaining the departmental and local road networks. That said, the MTC may work on these roads through Provias Descentralizado (PVD) under specific intervention agreements between the PVD and the subnational governments.
- 1.16 **Description of the problem and its consequences.** Peru has 173,085 kilometers (km) of roads: 28,856 km in the national road network, 27,506 km in the departmental road network, and 114,665 in the local road network.<sup>19</sup> Although the country's investment in infrastructure did increase over the past few years, reaching 8% of GDP<sup>20</sup> in December 2017, only 15% of the roads in the departmental road network were in good condition, while 43% were in fair condition and 42% were in poor condition.<sup>21</sup> These conditions have ramifications on the country's productivity and exports, directly impacting freight transportation costs.<sup>22</sup>
- 1.17 With regard to the logistics sector, studies have found (paragraph 1.2): (i) poor departmental road network connectivity with the main national logistics corridors and production units; (ii) deficiencies in the secondary road infrastructure, including uneven surface quality and roads that are not suited to heavy freight transportation; (iii) limited development of logistics chains, as seen in significant shortages, high transportation and logistics costs, and reduced profitability for producers; and (iv) vulnerability of roads to natural disasters and the effects of climate change in certain areas of the country.
- 1.18 **Proposal.** The program will intervene on 12 priority feeder road corridors in the departmental road network, with an estimated target of 2,387 km (maps in [optional link 9](#)). The planned interventions will make it possible to improve access to logistics corridors, strengthen resilience to natural disasters and the effects of climate change, increase the coverage of roads suitable for the transit of persons and products, reduce some of the logistics costs for producers who use the targeted roads, and support the reduction of inequality through job creation. The program includes actions to strengthen regional government institutions, which are responsible for the departmental road network, as well as to strengthen the PVD, as the program's executing agency.
- 1.19 **Rationale.** The current state of the departmental road network adversely affects the main production-related activities in the departments. The high transport

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<sup>19</sup> [Provias, 2018](#).

<sup>20</sup> [IDB, 2017](#).

<sup>21</sup> PVD. Georeferenced road inventories, 2016.

<sup>22</sup> [Ministry of Foreign Trade and Tourism, 2015](#).

costs resulting from the road conditions hinder regional trade as well as access to the main consumption and export hubs. Improving and maintaining the roads will help reduce transportation costs for areas with high economic and productive potential. It will also facilitate subnational connectivity and the movement of freight and persons among production and consumption areas.

- 1.20 **Local counterpart.** The PVD is a line execution agency under the MTC and has significant experience with the execution of international loan programs and programs financed solely with government funds. It can execute large-scale programs; for example, it is currently executing a rural road maintenance program financed by approximately US\$1.2 billion in government funds. This program is one of the Peruvian government's priorities, and as such it is aligned with the available fiscal headroom and expected demand for resources to assist with the economic recovery, as the government has allocated budgetary resources for program execution.
- 1.21 **Road safety.** The MTC Road Safety Department is responsible for spearheading and coordinating road safety strategies. Peru needs to ensure that its guidelines for road design are applied on all types of roads. The country does not yet have regulations that would mandate road safety inspections and audits or require subnational bodies to have trained staff members on board to guarantee compliance with road safety requirements ([optional link 10](#)).
- 1.22 This operation will support the planning and implementation of road safety standards, including technological tools, to ensure safe mobility on the targeted corridors. The program requires contractors to analyze road safety conditions and implement and maintain the devices necessary to make certain the roads are safe. The main activities to be implemented include: (i) creation of a road safety inspection program on the feeder road corridors, emphasizing corridors with high levels of traffic;<sup>23</sup> (ii) strengthening of supervision firms with professionals certified in road safety, to verify contractors' use and maintenance of road safety devices; (iii) training of PVD and regional government staff on road safety inspections and audits, to build their capacities for analyzing the factors involved in road safety; and (iv) development of methodologies and guidelines for contractors to implement road safety campaigns in schools and road stewardship campaigns for users.
- 1.23 **Vulnerability of the road infrastructure to natural and climate disasters.** In Peru, hydrometeorological phenomena (droughts, heavy rains, floods, frosts, and hailstorms) increased more than sixfold from 1997 to 2006 and extreme weather events like mudslides, floods, frosts, and El Niño are occurring with ever more frequency and intensity. A 25% increase in climate emergencies was recorded between 2003 and 2014, while the rate of nonclimate emergencies remained stable (National Institute for Civil Defense, 2015). In 2017, economic losses from floods that struck Peru reached US\$3 billion, equivalent to 1.6% of the country's GDP (Macroconsult, 2017). In the transportation sector in particular, natural threats are known to negatively impact the system's availability and performance.

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<sup>23</sup> This program will review existing national manuals for performing road inspections to evaluate whether the road inspections performed will follow the methodology used by the International Road Assessment Programme (iRAP), which classifies road safety by a star rating.

- 1.24 An estimated 89% of Peru's road infrastructure is considered to be highly vulnerable to weather events. Most recently, the March 2017 coastal El Niño event revealed the infrastructure's lack of resilience: some 400 bridges were affected, as were 2,600 km of the national road network and 7,000 km of the subnational road network. Recovering these losses in the road infrastructure will require an investment of US\$3 billion, according to the Reconstruction Plan.
- 1.25 In accordance with IDB Operational Policy OP-704, a disaster risk analysis (threats, exposure, vulnerability, and criticality) of the feeder road corridors was performed to identify and prioritize the corridors and specific segments that require more in-depth risk assessments, to inform the design of the works and include structural and nonstructural resilience measures ([optional link 4](#)).
- 1.26 The program will therefore help strengthen the planning system, with the aim of improving the efficiency of public spending on transportation infrastructure as well as the sector's resilience to natural and climate disasters, through the: (i) design and implementation of a training program for regional governments and private companies on adapting to natural disaster and climate change risks (identification of threats, vulnerability, and risks) and identifying structural and nonstructural measures; (ii) establishment of an agreement with universities to train professors and include courses on infrastructure resilient to natural disasters and climate change in the curriculum for transportation-sector-related courses of study; and (iii) performance of specific qualitative analyses on certain road segments, which will make it possible to examine the risks of natural disasters and climate change more in depth.<sup>24</sup>
- 1.27 **Productive local development.** Although transportation costs account for a significant share of the production chains' logistics costs, other factors must also be addressed to reduce total logistics costs and some product losses.<sup>25</sup> One study<sup>26</sup> performed an analysis that broke down logistics costs for five production chains, which found that in some cases transportation costs accounted for one-third of total logistics costs and that other main drivers included certification, security, treatment, and loading and unloading processes.
- 1.28 To help address this issue, the program will finance studies to identify potential gaps in production chains. These analyses will allow the MTC to coordinate with other public and private institutions at the national and subnational levels, so they can implement solutions. The MTC has identified its executive sessions (roundtables led by the MEF) as a potential institutional framework for coordinating with other sectors and the private sector.
- 1.29 **Gender.** In Peru, there continues to be a significant gender gap in workforce participation, with occupations strongly segregated by gender:<sup>27</sup> 66.7% of women work in services and the commercial sector, while only 2% work in transportation

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<sup>24</sup> The program will evaluate the possibility of using multisector analysis tools for resilient infrastructure, such as HydroBID Flood.

<sup>25</sup> Due to poor road conditions.

<sup>26</sup> [World Bank, 2016](#).

<sup>27</sup> Occupational segregation by gender is directly associated with wage gaps and job quality ([S. Das and A. Kotikula, 2019](#)).

and communications.<sup>28</sup> This segregation is also reflected in the small percentage of women who have graduated with tertiary education degrees in science, technology, engineering, and mathematics (only 33% of graduates in these fields are women)<sup>29</sup> ([optional link 3](#)).

- 1.30 **Inclusion of persons with disabilities.** Peru has made progress on the issue of inclusion with the approval of such documents as the National Plan on Human Rights, which includes a chapter and crosscutting lines of action on disabilities, and the National Accessibility Plan. However, the country still faces major challenges with regard to the inclusion of persons with disabilities in various areas, like access to employment, where the employment quotas of 3% to 5% established by law have not been met<sup>30</sup> ([optional link 5](#)).
- 1.31 **Transparency.** In the past decade, Latin America and the Caribbean have been affected by a number of corruption scandals (Balan, 2011; Casas Zamora and Carter, 2017), in many cases involving contracting for large infrastructure works (Campos et al. 2019). Inefficiency in the management of infrastructure projects is generally considered to result in significant additional costs. Although it is difficult to quantify and identify what percentage of transaction costs are attributable to corruption, a World Bank study (2009) suggests a range of 5% to 20%. Paterson and Chaudhuri (2007) estimated that annual losses due to corruption in the transportation sector in developing countries could amount to as much as US\$18 billion.
- 1.32 The Bank is currently preparing a framework for transparency and integrity principles in infrastructure that will cover the entire infrastructure cycle, from selection to completion of the work and performance of the contract, and will take into account the multiple stakeholders and interests that interact in those processes. This framework, which will be applied to program-financed works, will complement the MTC's efforts to combat acts of corruption and foster ethical, honest, and transparent actions and behaviors.<sup>31</sup>
- 1.33 **Evidence of the interventions' effectiveness.** There is an inverse relationship between exports and domestic transportation costs, meaning that initiatives designed to reduce such costs can significantly boost exports. This relationship was corroborated for the five countries (Brazil, Chile, Colombia, Mexico, and Peru)<sup>32</sup> analyzed in an IDB study that established that improvements in infrastructure had a significant, positive impact on exports in the countries studied. For Peru, it was estimated that a 1% drop in transportation costs would lead to a 2.9% increase in the number of products exported.

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<sup>28</sup> IDB. Peru: Diagnóstico de la Cadena de Valor de la Provisión de Infraestructura de Transporte, su Operación y Servicios Conexos y Elaboración de un Plan de Acción de Género. Presentation.

<sup>29</sup> [World Bank, 2016.](#)

<sup>30</sup> [Ministry of Development and Social Inclusion.](#)

<sup>31</sup> [MTC, 2019.](#)

<sup>32</sup> IDB. [Too Far to Export: Domestic Transport Costs and Regional Export Disparities in Latin America and the Caribbean](#), 2013. Editors: Mauricio Mesquita Moreira, Juan Blyde, Christian Volpe, and Danielken Molina.

- 1.34 **Bank knowledge of the sector and lessons learned.** The Bank has supported the road sector by participating in the administration, development, and financing of several transportation projects, such as the: (i) Highway Transport Sector Program (loan 2212/OC-PE); (ii) Lima-Canta-La Viuda-Unish Highway Rehabilitation and Improvement Project (loan 2769/OC-PE); (iii) Construction of Line 2 and the Avenida Faucett-Gambeta Section of the Lima and Callao Metro Basic Network, Provinces of Lima and Callao, Department of Lima (loan 3373/OC-PE); (iv) Subnational Transportation Support Program (loan 3587/OC-PE); and (v) Project for Improvement of the Huánuco-Conococha Highway Huánuco-La Unión-Huallanca Segment (Route PE-3N) (loan 3881/OC-PE). The lessons learned incorporated into this program include the following: (i) support the institutional strengthening of road sector agencies to ensure effective coordination in project execution; (ii) make available intelligent transportation system (ITS) tools for infrastructure maintenance and operations management; (iii) strengthen road safety components; and (iv) incorporate natural disaster risk management, taking the effects of climate change into account and including resilience measures in the design of the works. The program will also aim to further good practices, such as the ones used in the aforementioned projects, in rehabilitation, improvement, and maintenance contracts to improve the sector's road management and include more detailed stipulations on potential delays in the execution of the works and their impact on maintenance costs, the availability of materials for the works, etc.
- 1.35 **Government and Bank strategies with the country.** The program is aligned with: (i) Proregión and the PNIC (paragraphs 1.2 and 1.3); and (ii) the IDB Group Country Strategy with Peru 2017-2021 (document GN-2889), with regard to improving the availability of infrastructure, by promoting improvements in the departmental road network. The operation is included in the Update of the Annex III of the 2020 Operational Program Report (document GN-2991-3).
- 1.36 **Strategic alignment.** The operation is also consistent with the second Update to the Institutional Strategy 2020-2024 (document AB-3190-2) and aligns with the development challenges of: (i) productivity and innovation, by improving the conditions for bringing products to the country's logistics corridors; (ii) economic integration, by providing transportation infrastructure to help integrate the country's regions and facilitate regional and global trade; and (iii) social inclusion and equality, by promoting measures that will foster job creation and the integration of social groups into the labor market. The program also aligns with the crosscutting areas of: (i) gender equality and diversity, by seeking to incorporate women into traditional and nontraditional economic activities; (ii) institutional capacity and the rule of law, through the institutional strengthening of national and subnational bodies with regard to infrastructure matters; and (iii) climate change and environmental sustainability, by providing for adjustments to project designs to reduce the impacts of extreme weather events on infrastructure. Approximately 1% of the operation's resources will be invested in climate change mitigation and adaptation activities, according to [the joint methodology of the multilateral development banks for tracking climate](#)

[change adaptation finance](#).<sup>33</sup> These resources contribute toward the IDB's climate financing target (30% of the approved volume each year).

- 1.37 The program is consistent with: (i) IDB Infrastructure Strategy. Sustainable Infrastructure for Competitiveness and Inclusive Growth (document GN-2710-5), through its support for the delivery of infrastructure services for regional and global integration; and (ii) the following sector framework documents (SFDs): (a) the Integration and Trade SFD (document GN-2715-11), in seeking to reduce logistics costs and facilitate trade; (b) the Transportation SFD (document GN-2740-12), in providing support to improve the connectivity of isolated communities; (c) the Gender and Diversity SFD (document GN-2800-8); and (d) the Climate Change SFD (document GN-2835-8), as discussed in paragraph 1.36. The operation will contribute to the Corporate Results Framework 2020-2023 (document GN-2727-12) indicator of “roads built or upgraded (km).”
- 1.38 With a view to helping improve opportunities for women, the program includes the: (i) design and implementation of a training program for women in nontraditional sectors (topography, drone operation, mechanics, and skilled labor); (ii) design and implementation of a pilot for the inclusion of women in transportation infrastructure construction services; (iii) implementation of measures to prevent and mitigate gender violence, including support to help contractor companies develop and implement codes of conduct and coexistence, and workshops on harassment and violence against women for the contractor companies; and (iv) design and implementation of a mentorship program with paid internships for women who are students or graduates of higher-education programs in subjects associated with the transportation sector. This last measure will be an **innovative action** fostered in the country's transportation sector.
- 1.39 The operation will provide support for the inclusion of persons with disabilities through a strategic plan to assess current conditions and develop strategies for training and integrating persons with disabilities into local production chains, to be financed with funds from technical cooperation operation ATN/OC-18062-PE.

## **B. Objectives, components, and cost**

- 1.40 **Objectives.** The objective of the program is to help improve the country's competitiveness by reducing logistics costs. The specific objectives are to: (i) reduce vehicle operating costs on the targeted roads; and (ii) reduce travel time costs for users on the targeted roads.
- 1.41 **Component 1. Investments and service-level maintenance (US\$815.3 million, of which the IDB will finance US\$107.71 million).** This component will finance: (i) rehabilitation of 2,387 km of the departmental road network with basic solutions for roads with low traffic volumes,<sup>34</sup> through a

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<sup>33</sup> The calculation figures in road drainage features and more modest features for secondary roads (see [optional link 4](#)).

<sup>34</sup> According to the technical document on basic solutions for unpaved roads and the MTC National Regulations on Road Infrastructure Management, roads with fewer than 100,000 equivalent axle loads are considered to be low traffic.



- comprehensive contract that will cover design, works,<sup>35</sup> and maintenance. The interventions will use the existing road geometry and platform and may include improvements to curves as needed to improve road safety; installation of minor structures, drainage, and signage and road safety devices;<sup>36</sup> as well as climate change adaptation and universal accessibility features; (ii) service-level maintenance of 3,255 km of roads, including serviceability actions and regular bridge maintenance; (iii) outsourced supervision activities for road rehabilitation, upgrading, and maintenance; and (iv) engineering studies for roads whose traffic flows exceed 1,000,000 equivalent axle loads.
- 1.42 All of the targeted roads connect production centers with bulking centers or with a national logistics corridor. The roads are selected based on the analyses performed for the country's logistics plans (paragraph 1.2). The following additional criteria were also used to prioritize the program's target roads: (i) importance of the national corridor to which they connect; (ii) the regional competitiveness index; (iii) crossborder trade integration; (iv) the logistics chain to be mobilized; and (v) degree of completion of studies. The roads are currently unpaved or in poor condition, and the work on them will improve transportation conditions for the 17 logistics chains<sup>37</sup> identified as the main users of these roads. The program aim is to reduce logistics costs for these priority chains.
- 1.43 **Component 2. Follow-up and monitoring of program impacts (US\$23.2 million, of which the IDB will finance US\$3.82 million).** This component will finance: (i) the design and implementation of an integrated information system for monitoring and evaluating transportation management; and (ii) a program impact assessment. The component also includes financing for the development of specific georeferenced monitoring modules for program monitoring. Likewise, as part of system development, an ongoing survey of traffic levels on the various targeted stretches will be conducted, as well as road inventory surveys that take ITS into account. The impact assessment will include determination of a baseline, monitoring of variables during execution, and data collection to assess the program's impacts and after program end.
- 1.44 **Component 3. Institutional strengthening for integrated transportation and competitiveness management (US\$4.9 million, of which the IDB will finance US\$2.4 million).** This component will finance: (i) institution-strengthening activities for regional governments, with particular focus on technology and ITS so those elements can be incorporated into the various phases of the project cycle, from planning to operation; (ii) road safety auditor and inspector training and professional development at subnational levels; (iii) an analysis of active value chains and the identification of additional chains with export potential that use program roads; (iv) the development of institutional training sessions for the

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<sup>35</sup> Pursuant to the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-15), the term "works" refers to "management service" under Peruvian law.

<sup>36</sup> Warning, regulatory, and guidance signs; pavement markings; reflective road studs; and speed reduction devices.

<sup>37</sup> Olives, alfalfa, onions, passion fruit, avocados, grapes, legumes, grains, peppers, tubers, coffee, mangos, bananas, tomatoes, dairy products, sugar and sugar byproducts, and cacao.

regional governments, private companies, and other private entities on climate change adaptation; and (v) promotion of women's access to job opportunities in the transport chains.<sup>38</sup>

- 1.45 **Other expenses (US\$18.2 million, of which the IDB will finance US\$0.38 million).** The program includes financing for program management activities: (i) executing agency operating and administrative expenses for program implementation; (ii) actions for the institutional strengthening of the executing agency, at headquarters and deconcentrated offices, to include the design and implementation of a digitization plan for the executing agency; (iii) launch of an internal project management office to modernize all processes; this office will support the executing agency's management at the central level, area offices, and liaison agencies; and (iv) external financial audits. The audits will be financed with loan proceeds.
- 1.46 **Beneficiaries.** The direct program beneficiaries will be the populations of the 39 provinces surrounding the feeder road corridors, estimated at 4,190,503 people, of whom 51% are women, 11% have some type of disability, and 52% are of indigenous origin.<sup>39</sup> The program will also benefit the producers, exporters, and carriers who will use the departmental road network, as well as Peru's productive framework in general.

### C. Key results indicators

- 1.47 The program has been designed to achieve the following main outcomes, which will be assessed based on the indicators proposed in the results matrix (Annex II): (i) reduction of annual vehicle operating costs; (ii) reduction of the cost of travel time; and (iii) average daily index reflecting the level of traffic on the road. The indicators for the general and specific development objectives and the output indicators will be verified directly and compared to the values set forth in the results matrix.
- 1.48 **Technical and economic viability.** A social assessment was performed ([optional link 1](#)) for the program's sample projects (paragraph 2.2). This assessment yielded an estimated economic net present value (ENPV) of US\$67.69 million and an economic internal rate of return (EIRR) of 18.6%.<sup>40</sup> The MEF has already declared the project to be viable.<sup>41</sup>

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 The operation will be executed as an investment loan under the multiple works program modality since the projects are physically similar but independent. The

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<sup>38</sup> [Optional link 3.](#)

<sup>39</sup> [National Institute of Statistics and Informatics, 2017.](#)

<sup>40</sup> For the program as a whole, the EIRR is estimated to be 24.3% and the ENPV, US\$179.07 million. [The social discount rate established by Peru's Invierte system is 8%.](#)

<sup>41</sup> [The program, with code 2472672, was declared viable on 16 June 2020.](#)



preliminary time frames for this program are three years to start and five years to execute the included works.

- 2.2 **Sample and eligibility criteria.** The program has a representative sample of projects for US\$465 million, or 54% of the total program value, covering the following corridors: (i) Tacna 1; (ii) Moquegua/Arequipa 1; (iii) Apurímac; (iv) Cuzco/Madre de Dios 1; (v) Huancavelica/Ayacucho; and (vi) Tumbes. These corridors have similar characteristics, given that they connect production centers with national logistics corridors. They were selected based on the application of standard prioritization criteria to a broader group of roads,<sup>42</sup> pursuant to the requirements established for the program. The following eligibility criteria were used for the sample projects and must be met by all program projects: (i) the road must be identified in Proregión or be a feeder road corridor connecting production zones with bulking centers or national logistics corridors; (ii) the project's socioenvironmental classification must not be Category "A;" (iii) the project must have approved preinvestment studies; and (iv) the social return must be positive.
- 2.3 **Cost and financing modality.** The program's total cost will be US\$861.6 million, of which US\$114.3 million will be financed from the Bank's ordinary capital and US\$747.3 million will be financed by the borrower as counterpart financing. The summary of costs is presented below.

**Table 1. Estimated program costs (US\$ millions)**

Components	IDB	Local	Total	%
Component 1. Investments and service-level maintenance	107.7	707.6	<b>815.3</b>	94.7
Component 2. Follow-up and monitoring of program impacts	3.82	19.38	<b>23.2</b>	2.7
Component 3. Institutional strengthening for integrated transportation and competitiveness management	2.4	2.5	<b>4.9</b>	0.6
Other expenses	0.38 <sup>43</sup>	17.82	<b>18.2</b>	2.0
<b>Total</b>	<b>114.3</b>	<b>747.3</b>	<b>861.6</b>	<b>100.0</b>

**Table 2. Planned disbursements (US\$ thousands)**

Source	Year					Total
	1	2	3	4	5	
IDB	10,500	25,500	55,500	15,300	7,500	114,300
Local	68,752	166,648	363,188	100,138	48,574	747,300
<b>Total</b>	<b>79,252</b>	<b>192,148</b>	<b>418,688</b>	<b>115,438</b>	<b>56,074</b>	<b>861,600</b>
Disbursement %	9.2	22.3	48.6	13.4	6.6	100.0

<sup>42</sup> See [optional link 2](#).

<sup>43</sup> Loan proceeds under the other expenses heading will solely be used to finance the financial audits.

## **B. Environmental and social safeguard risks**

- 2.4 Pursuant to the Bank's Environment and Safeguards Compliance Policy (operational policy OP-703), the program has been classified as a Category "B" operation. The program will rehabilitate and maintain the departmental road network with basic solutions and includes the upgrading of the road surface over the existing base, improvement of curves for better road safety, and regular routine maintenance. This work may have local and short-term negative environmental and social impacts that can be mitigated with standard measures.
- 2.5 The potential socioenvironmental impacts and risks are typical for the scale of the maintenance services to be performed on the roads: generation of dust, noise, debris, greenhouse gas emissions, accidental fuel spills, temporary disturbance of wildlife, traffic disruptions, risk of accidents, spread of COVID-19, and complaints from residents. These impacts and risks can be prevented, mitigated, and controlled through effective management actions and measures, readily available in the sector, which have been included in the sample projects' environmental and social management plans and in the environmental and social management framework for the projects that have not yet been evaluated. COVID-19 prevention and response plans are included, as are mechanisms for handling complaints and claims.
- 2.6 The program activities will not entail involuntary resettlements, economic displacement, significant negative effects on indigenous populations, or significant adverse impact on protected natural areas or critical habitats.
- 2.7 The PVD had initially performed preliminary environmental assessments on these works. However, gaps were identified and then addressed by preparing environmental and social analyses and their respective environmental and social management plans for the six sample projects. This furnished environmental and social management instruments and assessments that complied with the IDB's safeguards policies and activated their guidelines for this program. For future projects, an environmental and social management framework was prepared. It establishes the type of management to be used by the PVD to prevent and mitigate the operation's potential environmental and social risks, pursuant to the IDB's safeguards.
- 2.8 The significant public consultation for the sample projects was held online on 5 October 2020. The main outcome of the significant consultation process was that the participating groups indicated their acceptance of the project. Their concerns involved job opportunities, the effects of temporary road closures, and the handling of local suppliers. All of the queries were answered by PVD staff.<sup>44</sup> The versions of the environmental and social documents eligible for publication (including the consultation plan) have been available on the Bank website since 15 September 2020.
- 2.9 The risk of natural disasters is classified as Type 1 moderate, since the works will be implemented in areas exposed to landslides, rockfalls, flows, mass movements, frosts, mudslides, and river floods.

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<sup>44</sup> [Consultation reports.](#)

**C. Fiduciary risks**

- 2.10 For procurements, all policies in force for the procurement of works, goods, and consulting services will be used.<sup>45</sup> Since the executing agency has extensive knowledge of and experience in implementing Bank-financed projects and it also understands the Bank's financial and operational management policies, no significant fiduciary risks are anticipated. Nevertheless, actions to strengthen the executing agency through training, assistance, and supervision on fiduciary matters from the fiduciary team will be considered.

**D. Other key issues and risks**

- 2.11 **Government priorities.** This program is a priority in the PNIC (paragraph 1.2). However, given the limited fiscal headroom and increased fiscal spending as a result of COVID-19 and the economic recovery plan, there is a medium to high risk of cuts to the resources budgeted to the program by the government. To mitigate this risk, the program provides for: (i) technical support for the MTC and MEF authorities, to ensure they have adequate information on the program's expected economic and development benefits; and (ii) monitoring of the contributions of local counterpart resources and the prioritization of projects in the PNIC.

### **III. IMPLEMENTATION AND MANAGEMENT PLAN**

**A. Summary of implementation arrangements**

- 3.1 **Responsibility for project execution.** The MTC will coordinate and administer program execution, including fiduciary execution actions, the supervision of works and social and environmental issues, and institutional strengthening for integrated transportation and competitiveness management, through the executing agency, the PVD. Although the departmental road network is the responsibility of the regional governments, the PVD has specific agreements with each regional government to intervene on those roads.
- 3.2 The PVD's functions include: (i) planning, coordinating, directing, and evaluating the execution of works; (ii) preparing the annual budget and work plan; (iii) coordinating with the MEF to administer national counterpart and disbursement resources; (iv) verifying budgets; (v) reviewing and approving studies and files; and (vi) proposing and preparing the terms of bidding processes and competitions.
- 3.3 The PVD's program execution responsibilities include: (i) contracting the execution and supervision of the works; (ii) scheduling and monitoring the physical and financial execution of contracts; (iii) implementing and conducting monitoring and supervision activities for the program; (iv) maintaining effective accounting and financial controls and records for verification by the Bank and external auditors; (v) preparing and submitting disbursement requests to the Bank; and (vi) preparing and submitting financial and program execution reports and audited financial statements to the Bank.

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<sup>45</sup> [Pursuant to Bank policies](#), the core procurement principles are value for money, economy, efficiency, equal opportunity, transparency, and integrity.

- 3.4 **Project implementation mechanism.** The intervention on each feeder road corridor will be executed through a comprehensive contract, under which a single contractor will be responsible for execution of a feeder road. The main actions to be completed by each contractor for the feeder road corridor are the execution of the road management program and the upgrading and maintenance works, including emergency response services. There will also be a comprehensive supervision contract for each feeder road corridor.
- 3.5 **The following will be special contractual conditions precedent to the first disbursement: The borrower, through the executing agency, will have submitted evidence that the program Operations Manual has been approved and has entered into effect, including, as annexes, the environmental and social analyses, with the environmental and social management plans for the sample, the environmental and social management framework, and a chapter on the program's environmental and social requirements and procedures.** This measure is necessary because the Bank's experience in the region shows that approval of the program Operations Manual<sup>46</sup> prior to the first disbursement facilitates in-house organization for operation implementation at the executing agency.
- 3.6 At a minimum, the program Operations Manual will include: (i) the technical and fiduciary procedures required for project implementation; and (ii) the program's environmental and social requirements ([optional link 8](#)).
- 3.7 **Procurement of works, goods, and services.** The procurement of works, goods, and services will be governed by the conditions set forth in the Policies for the Procurement of Works and Goods 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).<sup>47</sup> The procurement processes will follow the specifications of the procurement plan, which will define the procurement strategy, including the appropriate methods, the modality for supervising and monitoring program procurements, and the cases in which the country procurement systems will be used, all pursuant to the fiduciary agreements and requirements annex (Annex III).
- 3.8 **Fiduciary agreements and requirements.** The fiduciary agreements and requirements establish the framework for the financial management, planning, supervision, and execution of procurements involved in program execution. The loan proceeds may be disbursed through the advance of funds and direct payment to the supplier modalities. Under the advance of funds modality, the loan proceeds will be disbursed based on projected expenses for up to 180 days. A new advance of funds may be made once a minimum of 80% of the funds previously disbursed as advances are accounted for. The executing agency will submit the program's annual and final audited financial statements in the terms and by the deadlines required by Bank policies. To that end, the executing

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<sup>46</sup> There will be only one program Operations Manual, which will apply for all financing sources.

<sup>47</sup> Since Component 1 includes the work, design, and maintenance in a single contract, design-build specifications will be used.

agency commits to selecting and engaging the services of an independent auditing firm acceptable to the Bank for the duration of the program.

- 3.9 **Recognition of expenditures.** The Bank may recognize, against the local contribution, up to US\$204,107,915.70 (27% of the estimated local contribution amount) in eligible expenses incurred by the borrower before the loan approval date, for expenses on works, services, and consulting services included in the program components, provided that requirements substantially similar to those established in the loan contract have been met. These expenditures will have been incurred no earlier than 31 January 2020 (date on which the project profile was approved), and under no circumstances will include expenditures made more than 18 months before the loan approval date. Likewise, since the executing agency has been conducting bidding processes for the selection of contractors for executing the works on the feeder road corridors, advance procurement may be considered at the executing agency's request; each process conducted will be evaluated to verify that it complies with the principles established in Bank procurement policies (see documents GN-2349-15 and GN-2350-15) and the Bank Policy on Recognition of Expenditures, Retroactive Financing, and Advance Procurement (document GN-2259-1).
- 3.10 **Auditing.** During the loan disbursement period, the executing agency will submit the program's annual audited financial statements to the Bank within 180 days of the close of the fiscal year. The audit will be performed by independent auditors acceptable to the Bank. The determination of the scope and other related aspects will be governed by the Financial Management Policy for IDB-financed Projects (document OP-273-12) and the guidelines on financial statements and external audits. The audit will be paid for with program funds. The executing agency will be responsible for engaging the services of the auditing firm.

**B. Summary of arrangements for monitoring results**

- 3.11 The monitoring and evaluation plan ([required link 2](#)) will support execution of the operation pursuant to the indicators and targets set out in the results matrix (Annex II). The following instruments will be used for monitoring: (i) semiannual reports, indicating progress on the overall performance of the project based on the results matrix indicators, monitoring of physical and financial execution based on the annual work plan, multiyear execution plan, and procurement plan, projected disbursements, and compliance with the recommendations made by the external auditing firm; (ii) environmental and social compliance reports within 40 days after the end of every calendar six-month period; (iii) audited financial statements; and (iv) program completion report. The Bank will monitor the program through administrative missions and inspection visits.
- 3.12 **Evaluation arrangements.** To evaluate the expected program outcomes, an impact assessment comparing the trends in certain indicators for target and control areas will be prepared. An ex post economic evaluation will also be completed based on the model developed for the ex ante economic evaluation. The latter will be prepared during the final six months of the original disbursement period or any extension thereto ([required link 2](#)).

- 3.13 **Impact assessment.** An impact assessment will be prepared under the program, with the aim of quantifying the intervention's causal effects on socioeconomic variables, transportation indicators, companies, prices, and trade. The difference-in-differences methodology will be used to evaluate the program's impacts. To that end, the assessment will observe the variation of the variables on the targeted road over time, in comparison with the control roads.

Development Effectiveness Matrix		
Summary		PE-L1252
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	-Roads built or upgraded (km)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-2889	1.4 Improve the available infrastructure
Country Program Results Matrix		The intervention is not included in the 2021 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		9.5
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium Low
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. Procurement: Information System, Price Comparison.
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		

The operation PE-L1252, in the amount of US\$114,300,000, has the general objective of contributing to improve the country's competitiveness by reducing logistics costs. The specific objectives are: (i) the reduction of vehicle operating costs on the intervened roads; and (ii) the reduction of travel time costs on the intervened roads. The local contribution is US\$747,300,000.

The loan proposal presents a solid diagnosis of the problem. The proposed solutions are appropriate to respond to the identified problems and their contributing factors. The results matrix is cohesive with the vertical logic of the project, presenting adequate indicators at the level of outcomes and impacts. Outcome indicators are appropriately defined to measure the achievements of the program and the fulfillment of its specific objectives. The impact indicators reflect the contribution to the economic objectives consistent with reducing the logistic cost among benefitted firms and increasing gross agricultural-value-added in the project's area of influence.

The economic evaluation reports an internal rate of return of 18.6%, higher than the discount rate of 8% used by the Peruvian government. The sensitivity analysis shows that the project is still profitable in the face of decreases of 10% in expected benefits or increases of 10% in estimated costs.

The monitoring and evaluation plan proposes to carry out an impact evaluation of the outcome indicators included in the result matrix. The evaluation design is clear in defining the evaluation questions and the methodology to be used. Monitoring and evaluation activities will be carried out by the executing agency, the Ministry of Transportation and Communications, through Provias Descentralizado, in coordination with the Bank.

## RESULTS MATRIX

<b>Project objective:</b>	The general objective is to help improve the country's competitiveness by reducing logistics costs. The specific objectives are to: (i) reduce vehicle operating costs on the targeted roads; and (ii) reduce travel time costs on the targeted roads.
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### GENERAL DEVELOPMENT OBJECTIVE

Indicator	Unit of measure	Baseline value	Baseline year	Expected year of achievement	Target	Means of verification	Comments
<b>General development objective: Help improve the country's competitiveness by reducing logistics costs</b>							
Reduction in total logistics costs as a percentage of companies' sales	%	0	2019	2025	15%	"[...] total logistics costs as a % of sales of your company?" question on the National Logistics Survey of the Ministry of Transportation and Communications/IDB	To be observed at project end
Gross value added per year by economic activity "Agriculture, Ranching, Hunting, and Forestry," by department	In soles in constant 2007 prices	Apurímac - 465,322,000	2019	2025	Apurímac - 535,120,000	Statistic of gross value added per year, by economic activity, National Institute of Statistics and Informatics	Target is 15% growth over the baseline value To be observed at project end
		Cuzco - 1,080,753,000			Cuzco - 1,242,866,000		
		Huancavelica - 301,454,000			Huancavelica - 346,672,000		
		Moquegua - 100,000,000			Moquegua - 115,000,000		
		Tacna - 511,053,000			Tacna - 587,711,000		
		Tumbes - 192,294,000			Tumbes - 221,138,000		



**SPECIFIC DEVELOPMENT OBJECTIVES**

Indicator	Unit of measure	Baseline value	Baseline year	Project end	Year 5	Means of verification	Comments
Specific development objective 1: Reduction of vehicle operating costs on the targeted roads							
Vehicle operating costs on the targeted roads <sup>1</sup>	Constant US\$ per vehicle/km	Car – 0.369	2019	2025	Car – 0.209	Traffic study. Highway Development and Management (HDM-4)  Responsible party: Provias Descentralizado (PVD)	Ex post program evaluation report
		Bus – 1.010			Bus – 0.873		
		Truck – 1.484			Truck – 1.039		
		Fleet average – 0.954			Fleet average – 0.707		
Specific development objective 2: Reduction of travel time costs for users on the targeted roads							
Travel time costs on the targeted roads <sup>2</sup>	US\$/km	Car – 0.154	2019	2025	Car – 0.094	Traffic study. HDM-4  Responsible party: (PVD)	Ex post program evaluation report
		Bus – 1.450			Bus – 0.819		
		Truck – 0.121			Truck – 0.084		
		Fleet average – 0.575			Fleet average - 0.332		
Average daily traffic index, average from all road segments, for all types of vehicles <sup>3</sup>	Vehicles/day	107	2019	2025	139	Supervision reports Responsible party: (PVD)	This index includes all types of vehicles and measures the average daily traffic for road segments in the representative sample, weighted by the length of each segment.

<sup>1</sup> The following corridors were analyzed: Tacna; Moquegua/Arequipa 1; Apurímac; Cuzco/Madre de Dios 1; Huancavelica/Ayacucho; and Tumbes.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

OUTPUTS

Indicator	Unit of measure	Baseline value	Base-line year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
<b>Component 1: Investments and service-level maintenance</b>											
Upgraded roads <sup>4</sup>	Km	0	2020	0	350	1,200	837	0	2,387	Supervision reports Responsible party: PVD	
Roads with service-level maintenance <sup>5</sup>	Km	0	2020	400	500	950	2,250	3,255	3,255	Supervision reports Responsible party: PVD	
Definitive solution study concluded for roads with traffic of over 1,000,000 equivalent axle loads	Km	0	2020	0	0	0	500	0	500	Supervision report Responsible party: PVD	
<b>Component 2: Follow-up and monitoring of program impacts</b>											
Impact assessment performed	Unit	0	2020	0	0	0	0	1	1	Supervision report Responsible party: PVD	
<b>Component 3: Institutional strengthening for integrated management</b>											
Subnational government employees trained on integrated transportation management	Number of subnational government employees	0	2020	0	80	80	0	0	160	Supervision reports Responsible party: PVD	
Persons trained on road safety	Unit	0	2020	0	50	50	50	30	180	Supervision reports Responsible party: PVD	

<sup>4</sup> Includes improvement of the road with cost-effective pavements on the existing road and widening of the road for safety reasons.

<sup>5</sup> Maintenance is for all the program's road corridors. The annual values are the kilometers to be maintained in a given year and therefore do not add up.

Indicator	Unit of measure	Baseline value	Base-line year	Year 1	Year 2	Year 3	Year 4	Year 5	Project end	Means of verification	Comments
Analysis of gaps in value chains, performed	Unit	0	2020	0	1	0	0	0	1	Progress report Responsible party: PVD	
Training workshops on adaptation to natural disaster and climate change risks in transportation infrastructure, held	Unit	0	2020	0	0	0	7	3	10	Progress report Responsible party: PVD	
Women trained in nontraditional sectors	Unit	0	2020	10	10	10	10	10	50	Progress report Responsible party: PVD	Pro-gender
Internship program to get women involved in the transportation sector, designed	Unit	0	2020	0	1	0	0	0	1	Progress report Responsible party: PVD	Pro-gender
Direct jobs created from program works <sup>6</sup>	Unit	0	2020	3,200	4,000	7,600	18,000	26,040	26,040	Supervision reports Responsible party: PVD	

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<sup>6</sup> Includes all of the program's road corridors. The annual values are jobs created in the specific year and therefore do not add up.

## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

<b>Country:</b>	Republic of Peru
<b>Project number:</b>	PE-L1252
<b>Name:</b>	Road Infrastructure for Regional Competitiveness Program (Proregión 1)
<b>Executing agency:</b>	Ministry of Transportation and Communications (MTC), through Provias Descentralizado (PVD)
<b>Fiduciary team:</b>	Andrés Suárez, Financial Management Specialist, and Freddy Andara, Procurement Specialist (VPC/FMP)

### **I. EXECUTIVE SUMMARY**

- 1.1 The project team assessed the fiduciary conditions and reviewed the institutional capacity of Provias Descentralizado (PVD) based on prior experiences with the executing agency for the Rural Roads Rehabilitation and Maintenance Project (loan 901/OC-PE), the National Rural Transportation Infrastructure Program, Stage Two (loan 1328/OC-PE), and the Decentralized Rural Transportation Program (loan 1810/OC-PE), as well as the Subnational Transportation Support Program (loan 3587/OC-PE), currently in execution. No major fiduciary risks were identified given the executing agency's experience with and knowledge of the fiduciary policies and guidelines for financial management and procurement, as well as the effectiveness of various fiduciary processes. It can be concluded that the PVD has the operational and functional capacity to execute and administer the Road Infrastructure for Regional Competitiveness Program (Proregión 1).

### **II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY**

- 2.1 The executing agency will be the Ministry of Transportation and Communications (MTC), through the PVD. As executing agency, the PVD will be responsible for the overall coordination, fiduciary management, monitoring, follow-up, systematization, and evaluation of the program. The PVD will be in charge of ensuring the program's progress and that the objectives and targets are met. For financial management of the operation, the MTC regulations, procedures, and systems will be supplemented with the Financial Management Guidelines for IDB-financed Projects (document OP-273-12) and other instruments, like the program operations manual.
- 2.2 The PVD's knowledge and experience in applying the Bank's fiduciary policies notwithstanding, actions to strengthen its fiduciary capacity will be identified.

### III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The risk evaluation exercise performed during the program design stage found a low level of fiduciary management risk. Starting in the preparation stage, the program will provide training and advisory support to the staff of the MTC and the PVD as executing agency, in particular on IDB fiduciary policy regulations and management matters, for the staff members who will be directly responsible for these activities.

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

- 4.1 The executing agency will submit the program's annual and final audited financial statements, with specific terms of reference acceptable to the Bank, within 180 days after the close of each of the borrower's fiscal periods during the original disbursement period or any extension thereto. The final audit report will be submitted within 180 days after the end of the original disbursement period or any extension thereto.
- 4.2 For the purposes of financial reporting and justification of eligible expenditures, the exchange rate used to determine the equivalent value (in either the currency of disbursement or currency of approval) of an eligible expenditure in the borrower's local currency will be the rate in effect on the date of the conversion of the currency of approval or disbursement into the local currency of the borrowing member country (Article 4.10, subparagraph (b)(i) of the General Conditions of the loan contract). For the purpose of determining the equivalent value of expenditures incurred in local currency as charges against the local counterpart or for the reimbursement of expenditures chargeable to the loan, the agreed-upon exchange rate will be the exchange rate on the effective date on which the borrower, the executing agency, or any other person or legal entity given the authority to incur expenses, makes the respective payments to the contractor, vendor, or beneficiary.

### V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Procurement execution.** Procurements will be conducted in accordance with the Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (document [GN-2349-15](#)), approved in May 2019, and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document [GN-2350-15](#)), or subsequent updates thereto. The threshold for the use of international competitive bidding will be disclosed to the borrower, through the executing agency, on the [www.iadb.org/procurement](http://www.iadb.org/procurement) web page. Notwithstanding the foregoing, the Bank-approved procurement plan will determine the method and amount of each procurement process based on the complexity thereof, in the interest of the principles of economy and efficiency in program execution, including for the procurement of goods and for the execution of the program works, as well as in the interest of the principle of suitability for the proposal that is applied to the expected results and the procurement agreements, to determine the best approach to meet

the program's objectives and development results, taking into account the context, risk, value, nature, and complexity of the procurement.

- 5.2 **Procurement of works, goods, and nonconsulting services.** Contracts for works, goods, and nonconsulting services<sup>1</sup> generated under the program and subject to international competitive bidding (ICB) will be conducted using the standard bidding documents issued by the Bank. Contracts subject to national competitive bidding (NCB) will be conducted using country bidding documents agreed upon with the Bank (or satisfactory to the Bank, if not yet agreed). The program team leader is responsible for reviewing the technical specifications.
- 5.3 **Selection and contracting of consultants.** Regardless of the contract amount, contracts for consulting services generated under the program will be executed using the standard request for proposals issued by or agreed upon with the Bank (or satisfactory to the Bank, if not yet agreed). The program team leader/sector specialist is responsible for reviewing the terms of reference.
- 5.4 **Ex ante review of procurements.** The Bank will review the selection, contracting, and procurement processes as established in the procurement plan. At any point during program execution, the Bank may modify the type of review for these processes, upon prior notice to the borrower or executing agency. Changes approved by the Bank will be reflected in the procurement plan.
- 5.5 **Use of the country procurement system.** In light of the Bank Board of Executive Directors' October 2017 approval of the advanced use of Peru's country system for government procurement and contracting, this system may be used once the implementation and monitoring actions included in the approved report for acceptance of the use of Peru's country procurement system have been implemented, and the procurement plan modified accordingly. The electronic reverse auction and framework agreement e-catalogs subsystems may be used after the recommendations prior to their use have been implemented and the procurement plan modified accordingly.
- 5.6 **Initial procurement plan.** See the itemized [procurement plan](#) for the first 18 months. The executing agency will publish the procurement plan in the Procurement Plan Execution System, or another system established by the Bank, and will update it at least every six months or as required by the Bank to reflect the actual program execution needs and the progress achieved.
- 5.7 **Recognition of expenditures.** The Bank may recognize, against the local contribution, up to US\$204,107,915.70 (27% of the estimated local contribution amount) in eligible expenses incurred by the borrower before the loan approval date, for expenditure on works, services, and consulting services included in the program components, provided that requirements substantially similar to those established in the loan contract have been met. These expenditures will have been incurred no earlier than 31 January 2020 (date on which the project profile was approved) and under no circumstances will include expenditures incurred more than 18 months before the loan approval date. Likewise, since the executing agency has been conducting bidding processes for the selection of contractors for executing the works on the feeder road corridors, advance procurement may be

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<sup>1</sup> Under the Bank's procurement policies, nonconsulting services are treated as goods.

- considered at the executing agency's request; to that end, each process conducted will be evaluated to verify that it complies with the principles established in Bank procurement policies (see documents GN-2349-15 and GN-2350-15) and the Bank Policy on Recognition of Expenditures, Retroactive Financing, and Advance Procurement (document GN-2259-1).
- 5.8 **Procurement supervision.** Procurements will be reviewed ex ante, although the Bank may also perform ex post reviews (solely when approved in the procurement plan, which will indicate the selection modality to be used). The Bank's ex post reviews will cover a sample of contracts based on technical and professional criteria and will be conducted by Bank staff, consultants, or external auditors. Once the use of the country procurement system has been implemented, the supervision approach may be updated depending on fiduciary risks.<sup>2</sup>
- 5.9 **Records and files.** Program records and files will be located in the executing agency's offices in conditions that ensure their integrity and security.
- 5.10 **Considerations regarding sustainability in procurements.** The procurement processes may include sustainability criteria (environmental, social, or economic) in the various stages, including: planning; preparation of the standard bidding documents; definition of technical specifications; evaluation criteria and selection of bidders; evaluation and awarding of bids. The guide [Green Procurement: How to Encourage Green Procurement Practices in IDB-funded Projects?](#) offers guidance on the aspects that can be taken into account to design green procurements.

## VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

- 6.1 **Programming and budget.** Expenditures related to program activities must have been declared viable under the framework of Ministry of Economy and Finance (MEF) regulations: The Country System for Multiannual Investment Planning and Management (Invierte.pe). The preparation of the annual programming and budget will be based on the stipulations of the MEF's government budget bureau.
- 6.2 A multiyear execution plan will be prepared and will serve as the basis for preparing the annual budget, which will take into account the disbursement schedule. The budget allocated to the program will be approved by the MEF and the Peruvian Congress and reported annually to the Bank. The budget will be implemented through the Integrated Financial Management System (SIAF).
- 6.3 **Accounting and information systems.** The program will use the project execution module that is integrated into the SIAF for accounting and reports. This module provides transparency and specific controls for budget execution. It can also be used to issue financial reports, including disbursement requests, exchange rate monitoring, program financial statements, and other documentation in accordance with Bank requirements. Program accounts will be prepared on a cash basis in accordance with international accounting standards and the guidelines issued by the Public Accounting Office.

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<sup>2</sup> Once use of the reverse auction and framework agreement systems has commenced as part of the strategy for use of the country system, procurement processes executed will be monitored and supervised in a systemic manner, through monitoring and verification of the stability of Peru's country system.

- 6.4 **Disbursements and cash flow.** The country's treasury system will be used, in compliance with the guidelines issued by the National Borrowing and Treasury Office. Expenditures will be subject to the budgetary and financial execution process, with data being recorded in the SIAF project execution module as the expenditure is formally processed under the regulatory framework applicable to each of its stages: commitment, obligation, warrant, and payment. The PVD will maintain a specific bank account in U.S. dollars and another in soles (monetization) to manage the loan proceeds. The possibility of using the treasury single account for the loan programs will be analyzed with the MEF. Given the ongoing coordination with this entity, this option could be implemented, which would be communicated to the executing agency.
- 6.5 Disbursements will be made in accordance with the program's actual liquidity needs (financial planning). The PVD will submit the disbursement request to the Bank, along with a financial plan that will initially cover projected expenses for up to 180 days. Disbursements will require supporting documentation for at least 80% of the total accumulated balances pending justification, using Bank forms.
- 6.6 The external auditors will conduct the ex post review of the records and supporting documentation for completed activities and transactions. All documents and records must be kept for at least three years from the date of the final disbursement. Any expenses found to be ineligible for Bank funding will be reimbursed using local counterpart funding.
- 6.7 **Internal control and internal auditing.** The executing agency's control environment, control activities, communication and reporting, and monitoring of activities are governed by Peruvian regulations, which are based on the Law on the National Control System and the Office of the Comptroller General of the Republic (CGR).
- 6.8 The MTC's organizational structure includes an Institutional Control Unit, responsible for internal and external control pursuant to the Law Establishing the National Control System and the CGR. This unit will receive a copy of the external audit reports through the government audit system (designed by the CGR), which will allow it to conduct inspections.
- 6.9 **External control and reports.** The CGR, in its regulations and role as the lead entity of the National Control System, outsources the external auditing of projects to independent auditing firms considered eligible by the Bank. These firms are periodically evaluated by the Bank. The CGR authorizes the executing agency to select and engage an independent auditing firm in accordance with Bank policies, for the duration of the program execution period, including any extensions of the disbursement period. The program will require the selection of a Tier I or II independent audit firm.
- 6.10 The program financial statements include: a cash flow statement, statement of accrued investment income, the notes to these financial statements, and certification by the project management team (executing agency). The audit report will include an evaluation of the internal control system. External audits will be financed with loan proceeds, estimated at US\$375,000 over the anticipated five-year loan execution period.



- 6.11 **Financial supervision plan.** The financial supervision plan may be adjusted based on program execution and the external audit reports.

**Table 1. Supervision plan**

Activity	Nature/scope	Frequency
Financial	Portfolio review with the executing agency and the MEF	Two per year
	Financial audit and submission of financial statements	Annual and final
	Review of disbursement requests and accompanying reports	Two per year
	Inspection visit/review of project progress/analysis of the control environment at the executing agency	Annual

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/21

Peru. Loan \_\_\_\_/OC-PE to the Republic of Peru. Road Infrastructure  
for Regional Competitiveness Program - PROREGIÓN 1

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 Republic of Peru, as borrower, for the purpose of granting it a financing to cooperate in the execution of the Road Infrastructure for Regional Competitiveness Program - PROREGIÓN 1. Such financing will be for the amount of up to US\$114,300,000 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 \_\_\_\_ 2021)