

# Board of Executive Directors **No-Objection Procedure**

Expires on 22 October 2021

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**Public** 

**Simultaneous Disclosure** 

**To:** The Executive Directors

From: The Secretary

Subject: Argentina. Individual loan proposal for the "Program for Productive Road

Infrastructure - Phase III"

Basic Loan type .......Global Multiple Works Operation (GOM)

Source ......Ordinary Capital

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Remarks: This is the third individual operation financed with resources from the Conditional

Credit Line for Investment Projects (CCLIP) for the "Program for Productive Road

Infrastructure" (document PR-3427), approved pursuant Resolution DE-102/09.

The Executive Directors are requested to inform the Secretary in writing with copy to "SEC-EXE", no later than 22 October 2021, if they wish to interrupt this procedure. If no such communication is received by that date, the attached resolution will be considered adopted by the Board of Executive Directors and a record to that effect

will be made in the minutes of a forthcoming meeting.

**Reference:** DR-398-19(5/20), GN-2246-1(7/03), DE-58/03, GN-2246-4(12/06), DE 10/07,

GN-2246-7(11/07), DE-164/07, GN-2246-9(9/16), DE-86/16, GN-2246-11(8/17), GN-2246-13(10/19), DE-98/19, GN-1838-3(6/18), GN-3034(2/21), GN-3034-2(8/21),

PR-3427(9/09), DE-102/09, PR-3808(11/11), DE-186/11

#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

#### **A**RGENTINA

## PROGRAM FOR PRODUCTIVE ROAD INFRASTRUCTURE, PHASE III

(AR-L1339)

## THIRD INDIVIDUAL OPERATION UNDER THE CONDITIONAL CREDIT LINE FOR ROAD INFRASTRUCTURE PROJECTS—CCLIP AR-X1016

#### LOAN PROPOSAL

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This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. This document has not been approved by the Board. Should the Board approve the document with amendments, a revised version will be made available to the public, thus superseding and replacing the original version.

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2	Monitoring and evaluation plan
3	Environmental and social management report
4	Procurement plan

	OPTIONAL LINKS
1	Summary - Projects in the sample
2	Economic evaluation
3	Framework agreement and specific program participation agreement between the DNV and beneficiary provinces and municipios
4	AR-X1016 conditional credit line agreement
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#### **ABBREVIATIONS**

AGN Auditoría General de la Nación [Office of the Auditor General]

Al Artificial intelligence

ANDIS Agencia Nacional de Discapacidad [National Agency for Persons with

Disabilities]

CCLIP Conditional credit line for investment projects

CGPEFE Coordinación General de Programas y Proyectos Especiales con

Financiamiento Externo [General coordination unit for externally

financed special programs and projects]

COVID-19 Coronavirus disease caused by the SARS-CoV-2 virus, first detected in

2019

CREMA Contrato de Rehabilitación y Mantenimiento [rehabilitation and

maintenance contract]

DNV Dirección Nacional Vialidad [National Roadway Administration]
DPV Dirección Provincial de Vialidad [Provincial Roadway Administration]

ESMR Environmental and social management report

EVIM Estación vial inteligente multipropósito [Multipurpose intelligent road

station]

GDP Gross domestic product

HDM-4 Highway Design and Maintenance Standards Model version 4 INDEC Instituto Nacional de Estadística y Censos [National Statistics and

Census Institute]

MOP Ministry of Public Works

PEFATTPcD Programa Especial de Formación y Asistencia Técnica para Trabajo

para Personas con Discapacidad

REGICE Registro de Instituciones de Capacitación y Empleo [Register of training

and employment institutions]

RVM Red Vial Municipal [Municipal road network]
RVN Red Vial Nacional [National highway system]
RVP Red Vial Provincial [Provincial road network]

SAE Secretariat for Strategic Affairs of the Office of the President
SIGEN Sindicatura General de la Nación [National Auditing Commission]

UEPEX Sistema de Unidades Ejecutoras de Préstamos Externos [External loan

executing unit system]

## PROJECT SUMMARY ARGENTINA

# PROGRAM FOR PRODUCTIVE ROAD INFRASTRUCTURE, PHASE III (AR-L1339) THIRD INDIVIDUAL OPERATION UNDER THE CONDITIONAL CREDIT LINE FOR ROAD INFRASTRUCTURE PROJECTS—CCLIP AR-X1016

F	inancial T	erms and Conditions  Flexible Financin	g Facility <sup>(a)</sup>
			g Facility <sup>(a)</sup>
		Amortization period:	25 years
		Disbursement period:	5 years
The borrower, through the Ministry of Public Works (MOP), through the National Roadway Administration (DNV)		Grace period:	5.5 <sup>(b)</sup> years
Amount (US\$)	%	Interest rate:	LIBOR-based <sup>(c)</sup>
DB (Ordinary Capital): (g) 150 million		Credit fee:	(d)
150 million	76.8	Inspection and supervision fee:	(d)
Local: 45.4 million		Original weighted average life:	15.25 years
45.4 million	23.2		11 % 100 / 1 11
195.4 million	100	Approval currency:	United States dollar
	Amount (US\$)  150 million  45.4 million	Amount (US\$)         %           150 million         76.8           45.4 million         23.2           195.4 million         100	Roadway Administration  Grace period:  Interest rate:  Credit fee: Inspection and supervision fee:  Original weighted average life:  Approval currency:

Project at a Glance

**Project objectives/description:** The general objective is to improve road quality and safety for users and promote an inclusive future employability model associated with the works (paragraph 1.32). This operation's specific objectives are to: (i) improve road quality in the targeted networks under rehabilitation and maintenance (CREMA) contracts so as to reduce transportation costs and travel times; and (ii) help ensure year-round serviceability of targeted rural roads linked to integration corridors with the paved provincial road network (RVP) and national highway system (RVN) (paragraph 1.32).

**Special contractual conditions precedent to the first disbursement:** The borrower, through the DNV, will present evidence, to the Bank's satisfaction, of: (i) the signature and entry into force of an agreement between the MOP and the DNV for the transfer of the loan proceeds and execution of the program activities; and (ii) the approval and entry into force of the <u>program Operating Regulations</u>, under the terms and conditions previously agreed upon with the Bank (paragraph 3.7).

**Special contractual conditions for execution:** Prior to the no objection of the Bank to each detailed project design for a province or municipio in Subcomponent 1.2 of the program, the borrower, through the DNV, will submit evidence, to the Bank's satisfaction, of the signature and entry into force of the participation agreement between the DNV and the respective province or municipio (paragraph 3.8). See the environmental and social special contractual conditions for execution in Annex B of the ESMR (required link 3).

<b>Exceptions to Bank policies:</b>	None.						
Strategic Alignment							
Challenges:(e)	SI ⊠	PI ⊠	EI 🗆				
Crosscutting issues:(f)	GE ⊠ and DI □	CC ⊠ and ES □	IC ⊠				

- 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.
- In keeping with document FN-729 (Strategy and Operational Readiness for the Execution of the LIBOR Transition for the IDB Balance Sheet) and document CF-257-1 (Base Rate Replacement for Sovereign Guaranteed LIBOR-based Loans), this loan will be subject to the SOFR-based interest rate, based on the Bank's notification to the borrower, pursuant to the provisions of the loan contract.
- (d) 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.
- (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).
- (g) In accordance with document AB-2990, disbursement of the loan proceeds will be subject to the following maximum limits: (i) up to 15% during the first 12 months; (ii) up to 30% during the first 24 months; and (iii) up to 50% in the first 36 months, in all cases as of the date of loan approval by the Bank's Board of Executive Directors (paragraph 2.7).

#### I. DESCRIPTION AND RESULTS MONITORING

## A. Background, problem addressed, and rationale

- 1.1 **Economic and social context.** The Argentine economy is at a complex and fragile macroeconomic and social juncture. According to the National Statistics and Census Institute (INDEC), annual inflation dropped to 36.1% in 2020, while the market is expecting a rate of 46% in 2021. In turn, gross domestic product (GDP) contracted by 9.9% in 2020 owing to the impact of the pandemic and the lockdown measures taken. The government stepped up public spending to contain the impact of the crisis, and the primary deficit reached 6.5% of GDP in 2020. A primary deficit of 4.5% of GDP and economic growth of 6.2% are projected for 2021.
- 1.2 Importance of road infrastructure for regional competitiveness and accessibility. The road transportation sector carries almost 90% of Argentina's total cargo by volume and is key to the country's productive sector as the cornerstone of regional integration and market access. The paved national highway system (RVN) and provincial road network (RVP) account for 70% of the volume. Between 1992 and 2017, grain production (around 75% of the volume transported), rose from 37 million to 125 million tons per annum, resulting in an increase in road traffic and pressure on infrastructure quality, capacity, and availability. Appropriate development and conservation of rural roads stimulates economic activity, creating opportunities for employment, improved income levels, and business diversification, by facilitating the installation and development of trade and new industries. It also allows the rural population to access essential services such as health and education, as well as enabling social interaction.
- 1.3 Quality and conservation of the road network.¹ The road condition index for the national highway system, inventoried by the National Roadway Administration (DNV), indicates that 34% of the network is in good condition, 31% fair, and 35% poor (2018). The standard of conservation of the provincial road network varies by province but also requires improvement.² The municipal road network (RVM) is not fully inventoried and one enduring problem is that not all roads are serviceable all year round.³ This causes a high degree of uncertainty when dispatching perishable goods and adversely affects the population's year-round access to basic services.
- 1.4 The country's large size results in long distances,<sup>4</sup> which, in conjunction with the poor quality of the road network (paragraph 1.3), increases vehicle operating costs and travel times. This hampers local competitiveness through the limitations it places on cargo mobility, the development of services, and connectivity of remote areas. In general, the budgets devoted to road conservation in the provincial and

According to the <u>World Economic Forum (2018)</u>, Argentina ranks 78th out of 141 countries on quality and availability of infrastructure and 92nd on quality of highways. It is also 62nd out of 160 countries according to the World Bank (2018), (optional link 7).

<sup>&</sup>lt;sup>2</sup> The provinces do not have systematic measurements of provincial road network conditions.

<sup>&</sup>lt;sup>3</sup> Average of 25 days of unserviceability per year (outcome indicator "Days per year of unserviceability" of the Federal Program for Regional Transportation Infrastructure (loan 4841/OC-AR)).

Muller et al. (2014), almost a third of the cargo transported in Argentina by weight covers distances of 300 km to 800 km.

municipal networks are limited,<sup>5</sup> and climatic factors cause impacts in terms of loss of serviceability due to poor road condition. There is limited investment<sup>6</sup> in improvements to traffic services and road safety as being the result of budgetary constraints, these are also areas for improvement to strengthen institutional capacity at the provincial level. It is therefore necessary to consolidate a comprehensive strategy for the development and conservation of these networks, so they can enable access to basic social services and new employment opportunities, facilitate the dispatch of production to domestic centers of consumption and to ports for export, and contribute to the development of tourism.

- 1.5 **Impact of climate change on infrastructure.** Changes in climate trends have been observed throughout most of Argentina over the past 30 to 40 years. The impacts of climate change have resulted in losses in the productive sector due to the destruction of infrastructure, with heavy rain cutting off roads, making it impossible to transport goods. Between 1970 and 2015, the country was struck by 97 large-scale disasters (93% were hydrometeorological in origin), affecting 14 million people, and causing losses of US\$10 billion. The climate is increasingly variable, with more frequent and more intense extreme events. This will damage vulnerable road infrastructure, impacting its levels of reliability, connectivity, and efficiency. On the climate trends have been observed throughout the past of the pas
- Institutional capacity in the sector. Planning and asset management processes, institutional structure, governance, and systems that follow good practices lead to improvements in the efficiency of public spending.<sup>11</sup> Opportunities for improvements exist in the institutional structure and governance of Argentina's road sector, particularly in areas such as establishing systematic infrastructure and transportation service planning processes and the scope of asset management systems.<sup>12</sup> Weaknesses in the preinvestment process<sup>13</sup> result in interruptions in the investment process, with negative impacts on competition in the sector and consequently also making the use of public resources less efficient. At the institutional level, local agencies' lack technical capabilities for design, planning, and management to enable them to improve the quality of projects and conservation strategies for the provincial and municipal road networks. Together

The closing report on the Norte Grande Road Infrastructure Program (7991-AR, financed by the World Bank, ICR 2019), concluded that in 2018 the resources devoted to maintenance and capital investments in the provinces by the revenue-sharing funds for roads, in the case of the nine provinces of Norte Grande, were only sufficient to cover routine maintenance of the paved network. Over the period 2011-2018, there were only sufficient resources for routine maintenance of 100% of paved roads and 60% of gravel roads, with no resources for capital investments (rehabilitation works). In optional link 5 it is concluded that it would be necessary to approximately quadruple the revenue-sharing funds for roads for the provinces to support routine maintenance policies, assuming the road network was rehabilitated every 10 years with investment policies for periodic maintenance. See paragraph 3.19 of the country strategy.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> IDB (2012).

<sup>&</sup>lt;sup>8</sup> Floods in the province of Buenos Aires in 2013 caused losses of around US\$1.3 billion.

<sup>9</sup> IDB Group Country Strategy 2016-2019.

Optional link 9.

<sup>&</sup>lt;sup>11</sup> IDB (2020) and World Bank (2017).

<sup>&</sup>lt;sup>12</sup> IDB (2016).

<sup>&</sup>lt;sup>13</sup> IDB (2015).

- with the shortage of technical staff, this translates into shortcomings in works inspection and quality control.<sup>14</sup>
- 1.7 **Impacts of the pandemic on the sector.** In the first quarter of 2021, the unemployment rate in Argentina stood at 10.2% of the economically active population, averaging 11.55% in 2020, and peaking at 13.1% in the second quarter. According to the <u>IDB COVID-19 Labor Market Observatory</u>, between February and May 2021, employment in the Argentine construction industry contracted by 19.9%, making it the third hardest-hit sector after hotels, restaurants, and community, social, and personal services.<sup>15</sup>
- 1.8 Sustainable infrastructure and the crisis as an opportunity. Closing the preexisting development gaps and addressing the socioeconomic crisis caused by COVID-19 requires prioritization of more effective instruments to address multiple economic policy objectives. Implementing a new program of road improvement, paving, rehabilitation, and maintenance represents an opportunity to spur sustainable economic recovery, promote productive and regional development, and implement practices that contribute to growth in inclusive and quality employment (paragraphs 1.1, 1.9, and 1.10). <a href="IDB">IDB</a> (2020) highlights the importance of the region's governments prioritizing strategic infrastructure projects that contribute to economic recovery.
- 1.9 **Productive and regional development.** Transportation infrastructure is an important enabler of economic and regional development. Investment, equipping, and maintenance of infrastructure brings benefits in terms of lower operating costs and transportation times, and improved access to consumer markets. This boosts productivity, business opportunities, and the income of the surrounding population, thereby helping reduce poverty. Improving infrastructure coverage and quality, with a focus on including the most vulnerable population groups, creates opportunities to break the poverty cycle. In Improvements to infrastructure and logistics services can increase the economic activity and exports of the region benefiting from the intervention. In Infrastructure investment creates incentives for investments in productive activities in the now better-connected area, facilitating industrialization and the positive spillovers of economic agglomeration.
- 1.10 Generation of local, inclusive, and sustainable employment. The IDB (2020) calculates that, on average, approximately 35,000 direct jobs are created in Latin America and the Caribbean for each US\$1 billion invested in infrastructure, considering the energy, water and sanitation, and transportation sectors. Although many of the activities associated with construction are temporary and/or subcontracted, it is thought that the systematic and formal recognition of skills, hours worked, and trajectories will raise standards in the industry and enable a route to be identified for training processes in new technologies, for example. The effect of infrastructure jobs disappearing at the end of the construction phase can

<sup>&</sup>lt;sup>14</sup> Optional link 7.

<sup>&</sup>lt;sup>15</sup> Argentina recorded 5.25 million infections and 115,038 deaths (<u>Johns Hopkins University; 2021</u>).

<sup>&</sup>lt;sup>16</sup> K. Lucas, et al. (2016).

<sup>&</sup>lt;sup>17</sup> A road investment program in Peru was found to boost average annual export growth by 3.7%, V. Marinicus (2017).

<sup>&</sup>lt;sup>18</sup> S. Park, et al. (2019).

be mitigated by investment in a system that strengthens individuals' employability.<sup>19</sup>

- 1.11 **Gender.** Rates of female labor-force participation in the construction industry and transportation sector in Argentina are very low, at 3.6% and 9%, respectively.<sup>20</sup> The IDB found that women face barriers in skilled and unskilled areas alike, and that women working in the construction of road infrastructure mainly performed administrative or cleaning tasks.<sup>21</sup> These barriers are linked to the contextual conditions, training opportunities, and sociocultural norms. What is more, the pandemic has disproportionately affected women, who have been more at risk of losing their jobs and incomes than men<sup>22,23</sup> (optional link 8).
- 1.12 **People with disabilities.** According to <a href="INDEC">INDEC</a> (2019), 10.2% of Argentina's population has some form of disability and only 32.2% of persons with disabilities have a job. Barriers to access to infrastructure, particularly for urban journeys or in areas near markets and cultural and social centers, have a negative impact on persons with disabilities and reduced mobility, hindering their access to services and opportunities such as jobs, education, and healthcare. Road designs need to incorporate standards of universal accessibility and design (optional link 6).
- 1.13 The digital transformation of the sector. The sector is undergoing a shift toward a new technical and productive paradigm, based on technologies enabling Construction 4.0. Recent studies highlight that digital infrastructure management would significantly enhance service quality.<sup>24</sup> As regards road infrastructure, the use of technologies such as process digitalization, videodetection, artificial intelligence (AI), the Internet of Things, and cloud computing, can strengthen road asset management. IDB estimates suggest that video analytics and AI can increase the speed of analysis of road infrastructure condition up to threefold, considerably reducing the cost of data acquisition, and creating new niches for business startups.<sup>25</sup> Equipment and systems also need to be upgraded, and it is necessary to bring the sector's workers' knowledge and skills up to date so they can accompany the changing innovations and technologies.
- 1.14 Conditional credit line for investment projects (CCLIP). In September 2009, the Bank approved the CCLIP for Road Infrastructure Projects (operation AR-X1016) (optional link 4) for a total amount of US\$2.5 billion, with a utilization period of 20 years from the date of the signature of the CCLIP agreement (29 March 2010). The objective of the CCLIP is to support the increased competitiveness and economic and social integration of the production system at the provincial level. Interventions were established in the areas of: (i) construction of road infrastructure; (ii) investments in maintenance; (iii) institutional strengthening of the Provincial Roadway Administrations (DPVs) to enhance management for results of the networks under their authority; (iv) support on

<sup>&</sup>lt;sup>19</sup> Ap. Carvenale, et al. (2021).

<sup>&</sup>lt;sup>20</sup> Ministry of Labor, Employment, and Social Security (2017) and Permanent Household Survey (2017).

<sup>&</sup>lt;sup>21</sup> University College London (2019).

<sup>&</sup>lt;sup>22</sup> International Labour Organization (2021).

<sup>&</sup>lt;sup>23</sup> McKinsey (2020).

<sup>&</sup>lt;sup>24</sup> IDB (2020).

<sup>&</sup>lt;sup>25</sup> Pavimenta2 Brasil.

crosscutting themes such as road safety, and controlling weight, size, and hazardous cargoes; (v) preparation of projects for future phases of the CCLIP; and (vi) direct implementation support.

- First individual loan operation under the CCLIP (loan 2185/OC-AR). Approved 1.15 in September 2009, the loan contract was signed in March 2010, declared eligible in November 2010, and ended on 29 March 2017. The project completion report (optional link 5) was approved in 2019, and the program was judged to be partially successful (in terms of the high degree of execution of its targets and the positive impact observed on the respective indicators) by both Management and the Bank's Office of Evaluation and Oversight. The total amount was US\$172.6 million, of which US\$120 million was IDB financing and US\$52.6 million the local counterpart contribution. Paving, rehabilitation, capacity increase, and road safety works were carried out on more than 160.7 kilometers (km) of roads in the provincial road network, and management strengthening activities were carried out at the DPVs. achieving the targets for most indicators. Particularly, reductions in vehicle operating costs on targeted segments of 39% on provincial road RP-23 and 22% on RP-26, were achieved and days of unserviceability were reduced to zero on both routes.
- 1.16 Second individual loan operation under the CCLIP (loan 2655/OC-AR). Approved in November 2011, the loan contract was signed in July 2012, and declared eligible in March 2013. The total amount was US\$210.5 million, of which US\$200 million was IDB financing and US\$10.5 million the local counterpart contribution. The program was closed in March 2021, ending with satisfactory results (project completion report in preparation). The investment works aimed to improve and rehabilitate the selected segments of the provincial road network and national highway system, increasing their accessibility, efficiency, and safety. Conservation and improvement works were carried out on 876.12 km of provincial and national roads, with 187 km of road markings to improve aspects of road safety.
- 1.17 The CCLIP arrangement was an appropriate way to promote the sector dialogue. and the progressive approach taken to implementing the individual operations allowed each of them to be coordinated with the current government strategy as well as laying the groundwork for the sector's consolidation over the medium and long term. The two programs enabled improvements to road quality and user safety through investments in conserving paved roads, new paving, and road widening works on a total of 1,036.82 km of the national and provincial road network (optional link 13) and over 187 km of road markings, improving serviceability and reducing vehicle operating costs and travel times. The process of strengthening the DPVs has helped improve indexes of accessibility and lower the fatality rate on the respective provincial road networks. Although progress has been made in connectivity, efficiency, serviceability, and road safety thanks to the two projects mentioned (paragraphs 1.15 and 1.16), the size of the country and the general condition of the road networks (paragraphs 1.3 and 1.4) represent challenges to implementing programs to improve and conserve productive road infrastructure that maximize benefits for society by reducing vehicle operating costs and travel times.

- Third individual loan operation under the CCLIP. This operation is structured similarly to the previous two and is aligned with the initial objectives of the CCLIP and again incorporating the lessons learned. As in the second operation, the investment and maintenance works will seek to improve and rehabilitate selected sections of the national, provincial, and municipal road networks, increasing their serviceability, connectivity, accessibility, efficiency, and safety. The investments will be accompanied by strengthening of institutional capacity at the national, provincial, and municipal levels. This operation is relevant in the context of the nationwide economic recovery following the health and economic crisis caused by COVID-19 (paragraph 1.8).
- 1.19 Bank experience and lessons learned. The Bank has extensive experience in financing improvements and rehabilitation of Argentina's national and provincial road network. Over the past 15 years it has approved nine<sup>26</sup> operations for over US\$2.8 billion, covering 1,600 km. The main lessons learned, including those from the project completion report from the first operation (paragraph 1.15), incorporated into the design of the operation include: (i) strengthening mechanisms for the planning, inspection, and supervision of works to support improvements in implementation efficiency; (ii) supporting training on road project design and management, as well as infrastructure sustainability issues, to strengthen the technical capabilities of the provincial sector agencies; and (iii) ensuring sound engineering designs so as to avoid delays in calls for tender and modifications to projects during works execution. The Bank has applied these lessons through: (i) adoption by provincial agencies of standard works management guidelines and establishment of profiles of inspection teams; (ii) agreement on works supervision protocols of provincial roadway administrations (DPVs) and the national roadway administration (DNV); (iii) design and execution of training modules for provincial agencies in parallel with investments (including road education activities in beneficiary rural communities) and ad hoc institutional strengthening activities, such as implementation of investment monitoring indicator dashboards and methodologies for monitoring and estimating works impacts; (iv) financing of preinvestment studies within the civil works component; and (v) detailed technical review of the projects to be financed.
- 1.20 Coordination with other Bank projects. The Bank is financing the following projects in execution with the DNV: (i) Program to Expand Capacity and Enhance Road Safety on Integration Road Corridors (loan 3836/OC-AR) for US\$300 million; (ii) First Operation of the Program to Build Capacity and Improve Safety on the Accesses to the Cristo Redentor Border Crossing (loan 4418/OC-AR) for US\$200 million; and (iii) Phase 2 of the Program to Build Capacity and Improve

Norte Grande Road Infrastructure Program (Ioan 1851/OC-AR), US\$1.5 billion; Multiphase Program for the Development of Production Support Infrastructure in Entre Ríos I (Ioan 1914/OC-AR), US\$125 million; First Program for Productive Road Infrastructure (Ioan 2185/OC-AR), US\$150 million; Productive and Tourism Infrastructure Program for the Province of Río Negro (Ioan 2491/OC-AR), US\$37.5 million; Second Program for Productive Road Infrastructure (Ioan 2655/OC-AR), US\$210.5 million; Norte Grande Road Infrastructure Program II (Ioan 2698/OC-AR), US\$333.5 million; Norte Grande Road Infrastructure Program III (Ioan 3050/OC-AR), US\$333.5 million; Project to Improve the Provincial Route 82 Corridor in the Province of Mendoza (Ioan 4779/OC-AR), US\$80 million; and the Federal Program for Regional Transportation Infrastructure (Ioan 4841/OC-AR), US\$300 million.

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- Safety on the Accesses to the Cristo Redentor Border Crossing (loan 4652/OC-AR) for US\$324.3 million.
- 1.21 The Bank is also supporting road projects with the provinces through the Federal Regional Infrastructure Trust Fund (Federal Program for Regional Transportation Infrastructure (loan 4841/OC-AR)), for US\$300 million; with the province of Buenos Aires (Connectivity and Safety Program for Road Corridors in the Province of Buenos Aires (loan 4416/OC-AR), for US\$200 million; with the province of Mendoza (Project to Improve the Provincial Route 82 Corridor in the Province of Mendoza (loan 4779/OC-AR)), for US\$50 million; and, through the Provincial Agricultural Services Program (PROSAP) (loan 3806/OC-AR), managed by the Ministry of Agriculture, Livestock, and Fisheries, which has led the development of rural economies over the past 24 years, execution being launched in response to the prevailing shortcomings in order to support the modernization of production in irrigated areas, connectivity, and rural logistics, reliable access to energy sources, and public services for competitiveness. In all cases, appropriate coordination has been ensured to avoid duplication of funding efforts and to achieve adequate linkage between activities to consolidate integrated road corridors and to generate synergies. The objectives and scope of this operation are also coordinated with other sector operations currently under preparation (operations AR-L1332 and AR-L1338).
- 1.22 Strategic alignment. The program is consistent with the second Update to the Institutional Strategy 2020-2024 (document AB-3190-2) and is aligned with the development challenges of: (i) Social Inclusion and Equality, by promoting direct job creation and implementing practices that contribute to the generation of new inclusive and quality jobs; and (ii) Productivity and Innovation, by providing adequate, reliable, and safe road infrastructure and services that help bring down transportation costs. Additionally, the program is aligned with the following crosscutting themes: (i) Gender Equality, by promoting and expanding opportunities for female labor-force participation in traditional and nontraditional activities in the infrastructure sector; (ii) Institutional Capacity and Rule of Law, given that it will train provincial and national officials on topics linked to the management of road infrastructure; and (iii) Climate Change, as it envisages fine-tuning the design of the concrete structures, embankments, and road surfaces in the projects to be financed to adapt them to risks associated with climate change and reduce the impact of extreme events on infrastructure. Additionally, capacity building activities will be financed in the development of Blue Spot analytical studies to identify vulnerable road infrastructure in the national (RNV) and/or provincial road networks (RVPs) at an early stage of the planning process. This will be used to identify investment priorities and the necessary adaptation measures to ensure roads remain passable even during floods and other events. According to the multilateral development banks' joint methodology, an estimated 15% of the IDB proceeds will be invested in improving the resilience of rural road infrastructure against climate impacts and in institutional strengthening, applying the methodology for the identification and prioritization of the necessary adaptation measures in the transportation sector. These resources contribute to the Bank's climate finance goal of 30% of the volume of annual approvals. The operation will contribute Corporate the Results Framework (document GN-2727-12) through the "roads built or upgraded (km)" indicator.

- 1.23 The program is aligned with the "IDB Infrastructure Strategy: Sustainable Infrastructure for Competitiveness and Inclusive Growth" (document GN-2710-5), as it supports provision of road infrastructure that is serviceable all year round, increasing accessibility, improving traffic-system quality and road user safety, and contributing to reducing vehicle operating costs and travel times. It is also consistent with: (i) Vision 2025. Reinvest in the Americas: A Decade of Opportunity and the "Employment Action Framework with a Gender Perspective, as it emphasizes the creation of new, quality, inclusive jobs with climate change resilience for sustainable and inclusive growth; and (ii) the Sector Frameworks for: (a) Transportation (document GN-2740-7) by promoting efficient, inclusive, sustainable. and quality interurban mobility: (b) Climate (document GN-2835-8) by incorporating climate action in investments through the preliminary evaluation and characterization of levels of climate risk; (c) Labor (document GN-2741-9) by promoting quality employability and a more inclusive labor market; and (d) Skills Development (document GN-3012) by promoting skills certification and facilitating the creation of individual skills portfolios; (iii) the Gender Action Plan for Operations 2020-2021 (document GN-2531-19); and (iv) Diversity Action Plan for Operations 2019-2021 (document GN-3001), as it envisages actions to promote the incorporation of women and persons with disabilities in nontraditional jobs in the sector (optional link 8 and optional link 6). The program is consistent with the IDB Group Country Strategy with Argentina 2021-2023 (document GN-3051) as it contributes to reducing infrastructure gaps and is included in the Update of the Annex III of the 2021 Operational Program Report (document GN-3034-2). The program will also foster job opportunities for vulnerable, rural, and migrant populations, particularly for the implementation of rural roads, thus contributing to the social inclusion and poverty reduction strategy, generating digital occupational certification for workers through the implementation of a pilot plan and training plans for Provincial Roadway Administrations (DVPs) and municipios<sup>27</sup> and for workers on the rural roads.
- 1.24 **Proposed interventions.** Rehabilitation and conservation works through rehabilitation and maintenance (CREMA) contracts<sup>28</sup> in the national highway system (RVN), with an envisaged duration of six years (two years of rehabilitation works and four years of maintenance),<sup>29</sup> and improvements to rural roads in the provincial (RVP) and municipal (RVM) road networks through new or upgraded paving of the surface of unpaved roads to help ensure year-round serviceability,<sup>30</sup> road safety works, adaptations to large and small concrete structures, and attention to points vulnerable to climate change. Additionally, an institutional strengthening plan will be prepared and a program of technical and operational

<sup>&</sup>lt;sup>27</sup> See footnote 17.

Contracts in which the works contractor also carries out maintenance for the contractually stipulated period, thereby generating incentives for proper execution: An appropriate initial intervention will reduce subsequent maintenance costs and help avoid mismatches between the end of the works and the start of maintenance, World Bank (2011). Research by the IDB (2020) has analyzed the relative efficiency of CREMA contracts and other types of contract used in the region for road maintenance. The results have shown that CREMA contracts have better performance and greater efficiency as regards the main physical paving parameters.

<sup>29</sup> The disbursement period for the operation will be five years. The resources to cover the additional year of the CREMA contracts' duration will come from the local contribution.

<sup>&</sup>lt;sup>30</sup> In rural road projects, the sample averaged 35 days of unserviceability per year.

skills development run at the DPVs and municipios so as to improve investment planning, execution, supervision, and maintenance capabilities. This set of interventions will foster better quality roads, helping reduce transportation costs and shorten travel times, as well as improve road safety (<u>Bock et al., 2021</u>).

- 1.25 Innovation and digitalization measures. With the support of technical cooperation operation RG-T3856, the consolidation of the data capture system for the monitoring of road works (INFRADINÁMICA CaptuData module) and the Pavimenta2 application developed by the IDB will be supported. CaptuData will function as a digital technology platform for monitoring the physical and financial progress of the works and for communication between the DNV, contractors, and the Bank. For its part, Pavimenta2 will support the cost-effective diagnosis of the state of the road network using Al-driven technology.
- 1.26 **Supporting the creation of quality jobs.** The program will include actions to promote employability and the quality of direct jobs linked to road building and maintenance, depending on their types. In coordination with the Ministry of Public Works, the Ministry of Labor, Employment, and Social Security and other stakeholders, a pilot digital certification program will be developed, reflecting the tasks performed by workers during their employment on the works. These certificates will be part of an initial model to foster the creation and recognition of career paths and identify opportunities for upskilling/reskilling<sup>31</sup> the sector's workforce. The disaggregated data will contribute to the possible proposal of a future information system for talent and job opportunities in the sector, potentially bringing together supply and demand in the infrastructure construction sector, helping foster the participation of local labor and promote inclusive employment.
- Gender actions. This program will help narrow the gap in women's participation 1.27 in the sector's labor force, by promoting jobs for women in works construction and maintenance through actions such as: (i) design and implementation of a training program with equal participation of men and women in nontraditional sectors identified from the characterization of the labor force required for road improvement. rehabilitation. and conservation works: (ii) design implementation of a mentoring program with paid internships for a share of the women trained; and (iii) support to the DNV on the process of incorporation in Argentina's Gender Parity Initiative, providing assistance for the diagnostic assessment and design of the Comprehensive Gender Action Plan (optional link 8).
- 1.28 Labor market inclusion actions for persons with disabilities. To support compliance with Law 25,689, training will be provided to public officials of the special training and technical assistance program for work for persons with disabilities (PEFATTPcD), the National Agency for Persons with Disabilities (ANDIS), the Register of Training and Employment Institutions (REGICE), and to employees of private companies. Routes to ensuring the sustainability of these processes of training and hiring persons with disabilities will also be identified. A baseline will be taken of the state of PEFATTPcD and available records of

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<sup>31</sup> Upskilling: strengthening soft skills to take a position with more responsibility. Reskilling: acquisition of skills to switch from one position to another.

- workforce inclusion identified. At project end the workforce inclusion indicators for persons with disabilities will be measured against the baseline (optional link 6).
- 1.29 Sustainable and climate-change resilient infrastructure. The program will adopt the criteria envisaged in the general framework for sustainable infrastructure, whereby financed projects incorporate sustainability standards, including but not limited to considering factors such as disaster risks, climate change resilience, conducting a hydrological/hydraulic analysis using intensity-duration-frequency curves, considering recent levels of precipitation in the region in the design of embankments, storm drains, concrete structures, and verification taking a conservative approach that doubles the recurrence period used, to ensure better adaptation of infrastructure. The training program for the DNV, DPVs, and municipios will present tools and methodologies for the application of these criteria to project design and prioritization, so as to strengthen capacities to identify, formulate, design, finance, execute, monitor, and evaluate sustainable and efficient projects.
- 1.30 Safe infrastructure. It is common practice for the DNV to consider the most up-to-date standards of design and implementation of road safety audits and inspections to ensure countermeasures are implemented in critical points of the road network. However, this is not widespread practice at the level of provinces and municipios, meaning that a culture of road safety needs to be fostered. especially in the construction, upgrade, rehabilitation, and maintenance of roads managed by the DPVs and municipios, and innovative mechanisms need to be implemented to reduce risks and road incidents. The program aims to support improved safety conditions on the RVN, RVP, and RVM with safe road design criteria while ensuring compliance with universal design and safety standards in all new investments. Through the training program for the DNV, DPVs, and municipios (paragraph 1.24), the development of institutional capacities to ensure that safe road projects are designed, built, and operated, and which provide greater benefits to the community and make public spending more efficient, will be supported (optional link 6).
- 1.31 **Universally accessible infrastructure.** Universal design standards will be followed for sidewalks, entrances, and ramps on pedestrian crosswalks in urban areas, benefiting pedestrian mobility and road safety for persons with disabilities and all types of users (optional link 6).

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

- 1.32 The general objective is to improve road quality and safety for users and promote an inclusive future employability model associated with the works.
- 1.33 This operation's specific objectives are to: (i) improve road quality in the targeted networks under rehabilitation and maintenance (CREMA) contracts so as to reduce transportation costs and travel times; and (ii) help ensure year-round serviceability of targeted rural roads linked to integration corridors with the paved provincial road network (RVP) and national highway system (RVN).
- 1.34 Components. The program includes the following components and subcomponents.

- 1.35 Component 1. Road works (US\$139.20 million IDB + US\$40.90 million local counterpart contribution = US\$180.10 million) This includes three subcomponents:
- 1.36 **Subcomponent 1.1. Conservation of road infrastructure (US\$103.9 million).** This will finance rehabilitation and conservation works on the RVN (periodic and routine) through CREMA contracts (paragraphs 1.24 to 1.31).
- 1.37 **Subcomponent 1.2. Upgrading rural roads (US\$72.2 million).**<sup>32</sup> This subcomponent will finance the following in the RVP or RVM: (i) improvements to rural roads through graveling, chemical stabilizers, cement or lime base; and (ii) paving of rural roads applying various technologies such as cobbled paving, asphalt, concrete, surface treatments, etc. (paragraphs 1.24 to 1.31).
- 1.38 Subcomponent 1.3. Inspection, supervision, and preinvestment (US\$4 million). This component will finance consulting services for technical and socioenvironmental inspection of the works to be contracted to control their management and quality, strengthening the resources of the jurisdictions of the DNV where necessary, as well as preinvestment studies on projects to be financed by the program.
- 1.39 Component 2. Institutional strengthening (US\$6.5 million IDB + US\$1 million local counterpart contribution = US\$7.5 million). This component will finance technical assistance, procurement of goods, and training to improve the management of road assets and planning processes of the DPVs, municipios, and institutional strengthening actions in the DNV to complement those already implemented through other programs.<sup>33</sup> It includes three subcomponents:
- 1.40 **Subcomponent 2.1. Strengthening the executing agency (US\$3 million).** This will include: (i) procurement of hardware and software for DNV's general coordination unit for externally financed special programs and projects (CGPPEFE);<sup>34</sup> (ii) hiring of technical consultants in various fields such as highway engineering, environmental engineering, road safety, economics and administration; (iii) digitalization of information and georeferenced works management and monitoring systems (CaptuData), together with other innovations for road management; and (iv) definition of interagency program coordination processes for contracting and preparation of the CGPPEFE's organizational processes, and relationships with various actors and implementers of the portfolio of financing programs.

The Government of Argentina promotes different strategies for managing integrity, transparency, and accountability risks associated with public works, including "MapaInversiones," which provides public information on works execution, and a Business Integrity and Transparency Register. This program will support the DNV, to ensure that the program Operating Regulations (optional link 14) reflect best practices in integrity risk management, which should be implemented for the purposes of program management. Moreover, all program bidding will be managed digitally through the DNV portal and its data posted on MapaInversiones.

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<sup>&</sup>lt;sup>32</sup> No expropriations or purchase of land or buildings necessary for construction of the planned works will be financed with program proceeds.

<sup>34</sup> Procurement of hardware and computer equipment with licenses for HDM-4, risk simulation, sensitivity analysis, data visualization, etc.

- 1.41 Subcomponent 2.2. Strengthening of the road network (US\$3.75 million). This will finance actions to improve the management of the road network and enhance its alignment with sustainable and safe productive development objectives. This will include: (i) survey and inventory of road equipment in the targeted municipios, in order to plan road machinery needs for future maintenance of the works; (ii) analysis of infrastructure gaps in production chains; (iii) road safety and intelligent transportation systems, envisaging the provision of multipurpose intelligent road stations and the provision of operation and maintenance of road management and connectivity services from a road management center; and (iv) training in the use of Blue Spot Analysis to support decision-making processes and planning road infrastructure in the context of climate change.
- 1.42 Subcomponent 2.3. Strengthening capacities in terms of gender, employment, workforce inclusion of persons with disabilities, etc. (U\$\$0.75 million). This will include: (i) training of the coordination team, DNV, DPVs, and municipios; (ii) training on the issue of gender in the road construction sector (paragraph 1.27); (iii) training of public officials at PEFATTPcD (and others) and private companies involved in the project on the workforce inclusion of persons with disabilities in infrastructure projects; and (iv) implementation of a pilot digital occupational certification plan, using an application fine-tuned by the IDB for this project, and job training (paragraph 1.25).
- 1.43 Other costs: (US\$4.3 million IDB + US\$3.5 million local counterpart contribution = US\$7.8 million). This covers the following items:
- 1.44 Administration and audits (US\$7 million). Includes financing of DNV activities relating to program coordination and administration, which will include the contracting of the specialists required to strengthen the DNV team on coordination and administration tasks (US\$2.2 million), road surveyors (US\$4.3 million), and commissioning an external financial audit (US\$0.5 million).
- 1.45 **Evaluation expenses (US\$0.8 million).** This will finance activities relating to program strategic evaluation, which will seek to produce evidence on the international financing strategy's contribution to: (i) priority government management guidelines; (ii) achievement of the sustainable development goals; and (iii) gains in terms of institutional strengthening of national government and the jurisdictions.

Table 1.1. Program costs (US\$ million)

Components	IDB	Local	Total	%
Component 1. Road works	139.20	40.90	180.10	92.17
1.1. Road infrastructure conservation	72.30	31.60	103.90	53.17
1.2. Improving rural roads	62.90	9.30	72.20	36.95
1.3. Inspection, supervision, and preinvestment	4.00	-	4.00	2.05
Component 2. Institutional strengthening	6.50	1.00	7.50	3.84
2.1. Strengthening the executing agency	3.00	-	3.00	1.54
2.2. Strengthening the road network	2.95	0.80	3.75	1.92
2.3. Strengthening capacities in terms of gender, workforce inclusion of persons with disabilities, employment, etc.	0.55	0.20	0.75	0.38
Other costs	4.30	3.50	7.80	3.99
Administration and auditing	3.50	3.50	7.00	3.58
Evaluation expenses	0.80	-	0.80	0.41
Total	150.00	45.40	195.40	100.00

#### C. Key results indicators

- 1.46 The program is designed to obtain the main projected outcomes, which will be evaluated based on the indicators proposed in the Results Matrix (Annex II). The outcome indicators are: (i) creation of direct, certified jobs; (ii) average vehicle operating cost; (iii) average travel time; (iv) rural access index; (v) days per year roads are impassable; and (vi) reduction in the accident and injury rate.
- 1.47 **Technical and economic viability.** The Bank reviewed the technical and economic feasibility studies for the projects in the representative sample (paragraph 2.3). The economic analysis (optional link 2) evaluates the annual project costs and benefits in scenarios "with" and "without" the project. For actions in the RVN in Subcomponent 1.1, the economic benefits of the across-the-board transportation cost savings (vehicle operating cost + cost of travel time) and benefits from savings in the cost of road maintenance were quantified using the Highway Design and Maintenance Standards Model version 4 (HDM-4), and in the case of the rural roads in the representative sample, the RED (Road Economic Decision) model was used, considering the consumer surplus and the exogenous benefits of the producer surplus.
- 1.48 The results of the economic analysis of the representative sample yield an economic internal rate of return (EIRR) higher than the discount rate used (12%). The sensitivity analysis indicates its robustness to more adverse scenarios (Table 1.2). Extrapolating the economic analysis of the representative sample to the entire program, the EIRR is estimated at 20.92% and the economic net present value (ENPV) at US\$70.69 million.

Table 1.2. Summary of the economic evaluation of the representative sample

						Se	nsitivity			
Dunings	Length	Investment		e case enario	in inv	increase restment osts	t decrease in A (+		•	15%) + -15%)
Project	(km)	(US\$ - millions)	EIRR (%)	ENPV (US\$ millions)	EIRR (%)	NPV (US\$ millions)	EIRR (%)	ENPV (US\$ millions)	EIRR (%)	ENPV (US\$ millions)
CREMA	418.13	103.86	23.20	63.07	20.10	52.75	17.90	44.90	18.30	38.12
Network 104 - La Pampa	128.74	35.29	20.00	14.80	17.00	10.78	16.40	7.82	15.30	6.55
Network 131 - Neuquén	138.80	28.56	28.00	26.88	24.70	24.58	19.20	23.97	22.70	19.39
Network 513C - Entre Ríos	150.59	40.02	21.60	21.39	18.80	17.39	18.20	13.11	17.10	12.18
Rural roads	49.90	10.98	21.00	3.55	16.00	1.81	14.90	1.10	13.00	0.40
Road 72, Cañuelas	28.10	6.18	12.30	0.06	8.30	-0.86	7.40	-0.87	5.80	-1.33
Cadret - Ordoqui RP 50 Carlos Casares	21.80	4.80	29.60	3.49	23.60	2.67	22.40	1.97	20.10	1.73
Total works in sample	468.03	114.84	22.10	66.62	18.00	54.56	16.40	46.00	15.60	38.52

1.49 **Beneficiaries.** Considering the projects in the representative sample (paragraph 2.3), the direct beneficiaries of the projects are the population of the cities and localities in the direct area of influence, estimated at 671,377 inhabitants.<sup>35</sup> Direct road users, producers, exporters, and freight carriers will also benefit. The number of indirect beneficiaries is estimated at 2,643,711 inhabitants.

#### II. FINANCING STRUCTURE AND MAIN RISKS

#### A. Financing instruments

- 2.1 Under the conditional credit line for investment projects (CCLIP) AR-X1016 (paragraph 1.14), the operation will be implemented as an investment loan under the "Multiple Works Program" modality, given that it will finance technically similar but mutually independent works.
- 2.2 This operation meets all the eligibility criteria set forth in the policy applicable to the CCLIP (document GN-2246-4, as amended by document GN-2246-7),<sup>36</sup> as: (i) it is in one of the sectors and components defined under the CCLIP (paragraph 1.14); (ii) its objectives relate to the country strategy, and it is included in the Operational Program Report 2021 (paragraph 1.23); (iii) the executing agency is the same as for the previous program<sup>37</sup> (the second operation under the

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<sup>&</sup>lt;sup>35</sup> Latest census, National Statistics and Census Institute (INDEC, 2010).

This operation was prepared in accordance with the eligibility criteria established by document GN-2246-4, as amended by GN-2246-7, and in accordance with the terms of the CCLIP agreement for AR-X1016 signed by the Argentine Republic and the IDB on 29 March 2010.

<sup>&</sup>lt;sup>37</sup> In 2019, the ministries were restructured, and the DNV moved under the Ministry of Public Works.

CCLIP, loan 2655/OC-AR), which performed satisfactorily, no deterioration has been observed in the level of performance; (iv) the results obtained in the previous two individual operations under the CCLIP (loan 2185/OC-AR and loan 2655/OC-AR) are satisfactory and supported by the output and outcome indicators reported in the project completion report and the progress monitoring report; (v) as regards the financial execution of the first and second operation, the Bank disbursed 100% of the loan proceeds (paragraphs 1.15 and 1.16); (vi) the borrower and the executing agency fulfilled the contractual conditions of loan contracts 2185/OC-AR and 2655/OC-AR, respectively, as well as those of the Bank's policies on disbursements and the procurement of goods and services; and (vii) the financial and operational reports on the previous programs were submitted on time and have an acceptable level of quality in terms of the projects' financial administration and operational control.

- 2.3 **Representative sample.** Considering the focus on economic recovery, productive development, and job creation, road projects were selected in the RVN, RVP, and RVM for which the estimated cost is equivalent to 60.3% of the operation total (optional link 12). For CREMA interventions, three projects were identified and formulated that are part of the representative sample, with a length of 418.13 km. In the case of rural roads, two projects were identified, with a length of 49.9 km. The characteristics of the projects in the sample cover most of the technical and environmental issues arising in the universe of the program's potential projects; and they have technical, economic, and socioenvironmental feasibility studies already in place (optional link 1, optional link 10, optional link 14).
- Rural road prioritization criteria. Interventions to improve the rural roads selected and included in the program should be consistent with the policy objectives promoted by the borrower in its Federal Road Infrastructure Program for Economic, Social, and Productive Development and prioritized based on a weighting of the following criteria and conditions: (i) be on the main production road corridors in the area or have a strategic tourism link; (ii) serve as a dispatch point for production, connecting to the national provincial, or municipal backbone network; (iii) based on the economic activities or type of production in their area of influence, those whose raw material and/or finished product is perishable and/or needs to be dispatched quickly; (iv) roads that have higher annual flooding with more days per year when they are not passable for production to leave, so as to maximize the benefit of production losses avoided due to lack of serviceability; and (v) the social benefit the improvement brings, giving priority to access to health centers and schools.
- 2.5 **Eligibility criteria for projects.** The eligibility criteria applied to the representative sample (paragraph 2.3), which all projects must meet are that: (i) CREMA interventions are carried out on segments of paved roads belonging to the RVN; (ii) the segments of rural road to be improved belong to the RVP or the RVM and have a connection with the RVP or RVN with levels of service similar or superior to those of the intended project in order to continue a tourism or productive development corridor enabling centers of consumption, marketing, and production to be linked; (iii) they have a detailed design, including road signs and pavement markings and other aspects of the road safety report, with a sufficient level of detail for bidding purposes; (iv) socioeconomic feasibility studies have been conducted and show an internal rate of return of 12% or higher for Subcomponent 1.1 and

10% for Subcomponent 1.2; and (v) they are not classified as Category A projects under the Bank's environmental policies (Operational Policy OP-703) and detailed socioenvironmental studies have been prepared, in accordance with the type of works to be implemented, and they have adequate social and environmental management plans, environmental licenses in accordance with national and provincial legislation, and they comply with the Bank's policies.

- 2.6 Cost and financing. The total cost of the program is US\$195.4 million, of which US\$150 million will be financed from the Bank's Ordinary Capital and US\$45.4 million will be financed by the borrower through the local counterpart contribution. The itemized budget is available in the multiyear program execution plan and in the annual work plan (required link 1). The disbursement period will be five years. For projects in the representative sample, the planned execution time is 72 months, of which 58 months will be executed within the framework of the project. To ensure that the works not included in the representative sample are started early enough for them to be completed during the program's disbursement period, they must be physically started within three years following the loan contract effective date.
- 2.7 Pursuant to documents AB-2990 and GN-2753-7, the rate of disbursements by the Bank of the loan proceeds from the Ordinary Capital will be subject to the following limits: (i) in the first 12 months, up to a maximum of 15% of the total financing approved by the Bank may be disbursed; (ii) in the first 24 months, up to a maximum of 30% of the total financing approved by the Bank may be disbursed; and (iii) in the first 36 months, up to a maximum of 50% of the total financing approved by the Bank may be disbursed. These periods will be counted from the time the loan operation is approved by the Board of Executive Directors. These limits may be rendered inapplicable to the extent that the requirements set forth in the Bank's policy regarding said limitations have been fulfilled, provided that the borrower has been notified of the same in writing.

Table 2.1. - Disbursement projections (US\$ millions)

	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
IDB	22.50	45.00	75.00	112.50	150.00	150.00
Local	26.35	38.87	41.57	43.76	45.40	45.40
TOTAL	48.85	83.87	116.57	156.27	195.40	195.40
IDB	15.00%	30.00%	50.00%	75.00%	100.00%	100.00%
Local	58.00%	86.00%	92.00%	96.00%	100.00%	100.00%

## B. Environmental and social safeguard risks

- 2.8 In accordance with the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703), this is classified as a category B operation, with a moderate socioenvironmental risk indicator given its low to moderate impacts, well-defined mitigation measures, stable context, and the executing agency's solid experience with socioenvironmental issues. This operation also has a moderate natural disaster risk indicator.
- 2.9 **Socioenvironmental impact and mitigation measures.** The direct socioenvironmental impacts and risks of the projects in the representative sample (paragraph 2.3) are those typical of a construction project on this scale (upgrade,

rehabilitation, and maintenance of roads). They will be localized and short term, as the route of the roads will not be modified (excavation of materials, minor impacts on habitats in anthropized areas, erosion, dust, noise, debris, traffic disruption, occupational health and safety). Effective mitigation measures are available. Based on various environmental and social evaluations, it was determined that there would not be any impacts on indigenous peoples or any economic or physical displacement.

- 2.10 During loan preparation the following were prepared: (i) evaluations of socioenvironmental risks/impacts (with their mitigation measures) for the CREMA-104 network in La Pampa and 131 in Neuquén; (ii) an environmental impact assessment (with its mitigation measures) for the CREMA-513C network in Entre Ríos; and (iii) environmental and social evaluation records with socioenvironmental risk/impact evaluations (with their mitigation measures) for the two rural road projects (optional link 10). Meaningful consultations will be held for each project in September 2021 following the consultation plan prepared by the DNV (optional link 11). For each project, the environmental and social impacts, the environmental and social management plan, and the mechanism for filing complaints were presented. No significant adverse environmental or social issues were highlighted; instead there were more positive points, since the works are to improve the different roads.
- 2.11 An environmental and social management report (optional link 3) was prepared to ensure that future works comply with the requirements of the IDB's safeguards policies and those of Argentina's regulatory framework. The financing of category A projects is not permitted under the Bank's environmental policies (Operational Policy OP-703).

## C. Fiduciary risks

2.12 All current procurement policies for works, goods, and consulting services will apply. The executing agency has broad knowledge and experience in the implementation of Bank-financed projects, and is also familiar with its financial and operational management policies, so no significant fiduciary risks are envisaged.

#### D. Other key risks and issues

- 2.13 **Macroeconomic and fiscal sustainability.** The possible impact inflation-driven cost variations (in US\$) could have on the availability of the program's budgetary resources has been identified as a medium-high risk. The following mitigation measures have been defined: (i) permanent monitoring of the financial resources and inclusion in the works contracts of parametric formulas for recalculating prices; (ii) strengthening the monitoring arrangements during works execution; and (iii) the reevaluation of the scope of the physical targets in the event of adjustments to the availability of budgetary resources.
- 2.14 Development. The risk relating to the availability of the resources necessary for maintenance of the rural road works so as to ensure the sustainability of the investments in Component 1.2 has been identified as medium-high. The following mitigation actions have been identified: (i) signature of participation agreements with local governments, including reports on execution of the action plan for annual maintenance over the four years following delivery of the works (optional link 3); (ii) strengthening local governments' works management capacities;

- (iii) strengthening local governments with the road equipment investment plan; (iv) improving DNV information systems and those of jurisdictional districts for road asset management; and (v) surveying of the state of the country's road network in order to prepare an investment plan.
- 2.15 **Monitoring and accountability.** The risk relating to the DNV's capacity in terms of human resources and the equipment necessary for the technical and socioenvironmental supervision of the works has been identified as medium-high, shortcomings may lead to delays in execution or risks to quality. The following mitigation activities have been defined: (i) refining the supervision mechanism to incorporate consultants for the external technical inspection of the works; (ii) introduction of technological tools to support works supervision and monitoring, for use by the DNV and the beneficiary provinces or municipios; and (iii) strengthening and training of local governments in works supervision and management capacities.

## III. IMPLEMENTATION AND MANAGEMENT PLAN

## A. Summary of implementation arrangements

- 3.1 Borrower and executing agency. The borrower will be the Argentine Republic. The executing agency will be the borrower, through the Ministry of Public Works, acting through the National Highway Administration (DNV). The General coordination unit for externally financed special programs and projects (CGPPEFE) will be responsible for program coordination in the DNV. The CGPPEFE will set up a program execution team, within its current framework, that will be strengthened by hiring and/or appointing specialists in management of operation activities. The minimum composition of the program execution team includes a coordinator and two engineers devoted full time to the program. The make-up of the rest of the program execution team will be outlined in the program Operating Regulations. The DNV will be responsible for program management and coordination and, among other tasks, will be in charge of: (i) the program's financial administration, for which it will use the external loan executing unit system (UEPEX) for accounting records and operation management; (ii) coordinating program activities with the DPVs and municipios; (iii) managing and presenting the external audit; (iv) submitting the program's operational plans to the Bank. including the financial plan, procurement plan, and annual work program, etc.; (v) submitting progress reports to the Bank, as well as evaluations, socioenvironmental compliance reports, etc.; (vi) supervising works execution and the studies planned in the operation; (vii) submitting disbursement requests to the Bank; and (viii) acting as the liaison with the Bank.
- 3.2 The SAE will be responsible for technical and methodological execution of the program strategic evaluation and the DNV for its fiduciary execution, including financial management of the corresponding resources. The SAE and the DNV will coordinate closely on those activities.
- 3.3 The DNV will implement the projects and run calls for tenders for the works to be financed in the RVN and will contract the projects for rural roads. It will be responsible for inspecting the works, and may contract consulting services for supervision to support the operational capacity of the DNV (paragraph 1.40).

- Within the CGPPEFE there will be a team of social and environmental specialists, with the same structure as in the DNV.
- In the case of works implemented in the RVP or RVM on a road not under the DNV's jurisdiction, it will sign a participation agreement (<u>optional link 3</u>) with the relevant province or municipio for the works and will be subsequently responsible for its final receipt. These participation agreements with the respective provinces or municipios will be a special execution condition (paragraph 3.8).
- Once the works are completed, their maintenance will be the responsibility of the provinces or municipios, depending on the relevant jurisdiction. The participation agreements will include maintenance commitment clauses and the Bank will be informed, through the DNV, of the maintenance plans for the works over the four years following completion.
- 3.6 **Program Operating Regulations.** Program implementation will follow the program Operating Regulations, which will define operational aspects on technical, environmental, fiduciary, financial, and other matters. The program Operating Regulations will include, at a minimum, the following elements: (i) coordination and reporting mechanisms between the DNV, the Ministry of Public Works, the SAE, the provinces, the municipios, and the Bank; (ii) requirements for project submission and eligibility; (iii) procedures for the procurement of works, goods, and consulting services; (iv) guidelines for the use of resources and the financial and fiduciary management of the program; (v) procedures for disbursements; (vi) the structure of the program execution team, identifying the roles of key personnel; (vii) a chapter referring to the environmental and social management framework; (viii) harmonization with the procedures to follow with the DNV's own funds;<sup>38</sup> and (ix) best practices in the promotion of transparency and management of integrity risk.
- 3.7 As special contractual conditions precedent to the first disbursement, the borrower, through the DNV, will submit evidence, to the Bank's satisfaction, of: (i) the signature and entry into force of an agreement between the MOP and the DNV for the transfer of the loan proceeds and execution of the program activities; and (ii) the approval and entry into force of the program Operating Regulations, under the terms and conditions previously agreed upon with the Bank. The first condition is justified by the need to ensure that the project is duly assigned for adequate project execution and coordination. The second condition is justified by the Bank's experience in the region, which indicates that approval of the program Operating Regulations (optional link 15) prior to the first disbursement supports the internal organization of the executing agency with a view to operation implementation.
- 3.8 It will be a special contractual condition for execution that prior to the Bank's no objection to each detailed design for a province or municipio in Subcomponent 1.2 of the program, the borrower, through the DNV, has submitted evidence to the Bank's satisfaction, of the signature and entry into force of the participation agreement with the respective province or municipio. This condition will enable the obligations and responsibilities of the DNV and municipal governments to be

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<sup>&</sup>lt;sup>38</sup> They have regulations governing their operation with own funds and a procedure manual on providing financial assistance.

- established regarding investments, works supervision, infrastructure maintenance, socioenvironmental topics, etc.
- 3.9 **Maintenance.** The borrower, through the DNV, will present to the Bank, during the original disbursement period or any extensions thereto, and within the first quarter of each calendar year, a status report on program works and equipment and the annual maintenance plan for that year.
- 3.10 **Procurement of works, goods, and services.** Procurements will be executed in accordance with 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), and with the provisions of the loan contract, the program Operating Regulations (optional link 15) and the procurement plan (required link 4). Procurement will be supervised ex ante<sup>39</sup> or ex post, as established in the procurement plan. Ex post review visits will take place every 12 months. Review reports will include at least one physical inspection visit selected from among the processes reviewed.
- 3.11 Disbursements. The loan will be disbursed in the form of funds advances, considering the provisions limiting the pace of disbursements defined in paragraph 2.6. The frequency of disbursements will be determined by the project's financial programming, according to the Financial Management Guidelines for IDB-financed Projects (document GN-2811), described in Annex III. The Bank may advance more funds when at least 80% of the funds disbursed as advances have been justified.
- 3.12 Advanced procurement, contracting, and bidding, and recognition of expenditures. The DNV plans to carry out some advance (bidding/procurement/ contracting) in relation to the sample of works planned under Component 1 of the program. This procurement will be carried out in accordance with the Bank's procurement policies (documents GN-2349-15 and GN-2350-15). The Bank may recognize eligible expenditures incurred prior to the loan approval date against the local contribution, where these expenditures total not more than US\$2 million (4.4% of the estimated local contribution) and were made under conditions substantially similar to those established in the loan contract. Procurement must be of satisfactory quality and compatible with the conditions established in the program, delivered or completed on time, and be of a price that does not adversely affect the economic and financial viability of the program. Such expenditures will have been incurred on or after 8 March 2021 (the date on which the program was officially included in the IDB operation pipeline), but under no circumstances will this include expenditures incurred more than 18 months prior to the date of loan approval.
- 3.13 Audits. The external audit of the program will be performed by an independent firm eligible to audit Bank-financed operations, selected and contracted in accordance with the procedures, terms of reference, and the model contract previously agreed upon with the Bank or by the Office of the Auditor General. During execution, the DNV will submit the audited financial reports to the Bank,

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<sup>&</sup>lt;sup>39</sup> Applicable to works procurement processes with an estimated cost > US\$25 million, for goods and services > US\$1.5 million, consulting firms > US\$1 million, and all direct contracting.

within 120 days after the closing date of each fiscal year for the program, or the original disbursement deadline or any extensions thereto.

## B. Summary of arrangements for monitoring results

- 3.14 **Monitoring.** The program will be monitored by means of semiannual progress reports. These must be submitted by the DNV within 60 days following the end of each six-month period. The reports will be based on the reporting commitments included in the results matrix for each operation, as well as compliance with the eligibility criteria set forth in the loan contract and in the program Operating Regulations (optional link 15).
- 3.15 **Evaluation.** The DNV will submit a final evaluation to the Bank when 90% of project disbursements have been made, including at least: a before and after analysis of the performance of the outcome and impact indicators associated with the specific objectives and general objective; a review of the intervention's theory of change; a review of the evidence in the literature on the effectiveness of similar interventions in comparable contexts; and a qualitative evaluation that provides complementary information on how the results achieved can be attributed to the program. The evaluation's main questions will address whether the investments made helped achieve the program objectives (required link 2).
- 3.16 Information for program monitoring and evaluation. The DNV will be responsible for maintaining data gathering and monitoring systems (required link 2). The DNV will undertake to maintain a system for the monitoring and evaluation of all the subcomponents, which it will use to prepare the reports and data delivered to the Bank. For the purposes of the evaluation, the DNV will compile, store, and safeguard all the information, indicators, and parameters necessary to prepare the project completion report, including the annual plans and the final evaluation.

Development Effectiveness Matrix					
· · · · · · · · · · · · · · · · · · ·					
I. Corporate and Country Priorities	AR-L1339				
Section 1. IDB Group Strategic Priorities and CRF Indicators					
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -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-3051	Reducir las brechas de infraestructura			
Country Program Results Matrix	GN-3034-2 The intervention is included in the 2021 Operati 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		9.7			
3.1 Program Diagnosis		2.5			
3.2 Proposed Interventions or Solutions		3.2			
3.3 Results Matrix Quality		4.0 10.0			
4. Ex ante Economic Analysis	1.5				
4.1 Program has an ERR/NPV, or key outcomes identified for CEA 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  IV. IDB's Role - Additionality		В			
The project relies on the use of country systems					
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Accounting and Reporting.  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 del componente 1.2			
	1				

#### Evaluability Assessment Note:

This USD195.4mm multiple works project is the third individual operation of the CCLIP AR-X1016, for highway infrastructure projects. The loan proposal general development objective is improving the quality of traffic conditions and road safety of users, promoting an inclusive future employability model. It sets two specific objectives: (i) improve the quality of circulation of the intervened CREMA roads, reducing transportation costs and travel times; and (ii) contribute to ensuring the permanent passability in the intervened rural roads linked to the paved Provincial Road Network (RVN) and Network (RVN). The diagnosis is clear. The RVN state index shows 31% of roads in fair condition and 35% in poor condition. The municipal road network (RVM) shows passability problems, with an average of 25 days of impassability per year. Investment in RVP and RVM conservation is low. In the period 2011-2018, it has only been enough for the most routine maintenance of the paved network and for 60% of the maintenance of the gravel network. According to data from 2017, the participation rate of women in the construction industry is very low (3.6%). The project proposes reasonable solutions to these problems, proposing the improvement of more than 400km of the RVN via CREMA contracts, and 200km of rural roads. Additionally, the project proposes a small pilot to evaluate strategies aimed at generating digital labor certification of people employed in the works, and to increase the percentage of women hired in them. The results matrix includes indicators associated with the general objective and specific objectives that are adequate and with reasonable goals.

The economic analysis is appropriate, with reasonable and standard assumptions and sensitivity analyzes. The estimated net present value of the program is USD70.69mm and the internal rate of return is 20.92%. All the works included in the representative sample of the project are economically viable, using the standard discount rate of 12%.

The evaluation plan is appropriate. It proposes to carry out a before and after analysis of the indicators of the specific and general objectives, and a qualitative evaluation of the program. This exercise will not allow the empirical attribution of the results obtained.

#### RESULTS MATRIX

Program
objective

The general objective is to improve road quality and safety for users and promote an inclusive future employability model associated with the works.

This operation's specific objectives are to: (i) improve road quality in the targeted networks under rehabilitation and maintenance (CREMA) contracts so as to reduce transportation costs and travel times; and (ii) help ensure year-round serviceability of targeted rural roads linked to integration corridors with the paved provincial road network (RVP) and national highway system (RVN).

## **General Development Objective**

Indicators	Unit of measure	Baseline value	Baseline year	Expected year achieved	Target	Means of verification	Comments
General development objective: To improve road conditions a	nd safety for us	sers and to pror	note an inclus	ive future emp	loyability i	model associated	with the works.
Indicator 1: State of the paved national highway system (RVN) under CREMA contracts in the targeted provinces.	Road condition index <sup>1</sup>	5.67	2019	2026	6.0		
Indicator 2: Accidents resulting in fatalities or serious injuries in targeted CREMA networks per million vehicle-kilometers per year.	Index	100²	2017-2019 average	2024-2026 <sup>3</sup> average	95	National Roadway Administration	See details in the monitoring and
Indicator 3: Percentage of persons with digital occupational certification <sup>4</sup> (disaggregating men, women and persons with disabilities) out of total direct employment in the works.	Percentage	0%	2020	2026	25%	(DNV) reports.	evaluation plan.
Indicator 4: Percentage of women contracted in works execution as a share of total direct employment.	Percentage	0% <sup>5</sup>	2020	2026	5%		

The evaluation of the state of the RVN will use the condition index measurement defined in the National Roadway Administration (DNV) regulations. A value of between 10 and 7 indicates good pavement condition; between 7 and 5 is fair, such that it would be advisable to carry out a study to determine whether it is appropriate to address the faults promptly with maintenance and/or construction strengthening work in the near term; whereas 5 or less represents an extremely poor condition pavement that requires urgent attention.

Average annual data for the last three years for targeted CREMA networks. Base 100 taken as the index for accidents per year with fatalities or serious injuries, considering the annual average daily traffic and length of sections and for each 100 million vehicle-kilometers averaged over 2017 to 2019. The baseline = 100 value was 3.65 accidents with fatalities and serious injuries per 100 million vehicle-kilometers in CREMA networks in the sample, as weighted average per kilometer of road.

The annual average number of accidents resulting in fatalities and serious injuries in 2024 to 2026 (inclusive) or the annualized average of the months of the operation phase will be considered, depending on the investment completion date and until program completion.

<sup>4</sup> Achievement of this indicator is part of the digital certification pilot to be financed with complementary technical cooperation resources linked to the investment program.

<sup>&</sup>lt;sup>5</sup> According to interviews with a small sample of construction companies in Argentina, the percentage of women in nontraditional jobs (operating heavy machinery, mechanics, and mobile laboratories) is zero.

#### Specific development objectives

Indicators	Unit of measure	Baseline value	Baseline year	Expected year achieved	Target	Means of verification	Comments
Specific development objective 1: Improve	traffic-system qua	ality on the targ	eted CREMA r	networks, reducing tran	sportation costs	and travel times.	
Indicator 1.1: State of targeted networks with CREMA contracts.	Road condition index (values of 1 to 10)	3.97 <sup>6</sup>	2019	2026 <sup>7</sup>	7.0	Road condition index report (DNV).	
Indicator 1.2: Generalized average cost per trip (vehicle operating costs + cost of travel time) per vehicle-kilometer.	Index	100 <sup>6, 8</sup>	2021	2026 <sup>9</sup>	90	Highway Development and Management Model (HDM-4) ex post (DNV).	See details in the monitoring and evaluation plan.
Specific development objective 2: Help en	sure year-round se	erviceability of	targeted rural r	oads linked to integrati	on corridors wit	h the paved RVP of	or RVN.
Indicator 2.1: Days per year the targeted roads are unserviceable.	Index	100 <sup>10</sup>	2021	202611	012	DNV.	Soo details in
Indicator 2.2: Generalized average cost per trip (vehicle operating costs + cost of travel time) per vehicle-kilometer on the targeted roads. <sup>13</sup>	Index	100 <sup>14</sup>	2021	2026 <sup>11</sup>	65	Simulations with road economic decision (RED) model (DNV).	See details in the monitoring and evaluation plan.

<sup>&</sup>lt;sup>6</sup> The baseline will be calculated based on sections of CREMA networks that have actually undergone works.

Achievement and comparison with the target will be measured in the final year of the program and/or final year of execution of the CREMA in the event of possible extension of the program in order to evaluate the impact of routine maintenance policies following the rehabilitation works.

The baseline came to US\$1.03 per vehicle-kilometer calculated in 2021 based on the Highway Development and Management Model Version 4 (HDM-4) simulations of the CREMA networks in the sample.

<sup>&</sup>lt;sup>9</sup> Will be measured in the final year of program implementation and/or the final year of execution of the CREMA, if applicable.

<sup>&</sup>lt;sup>10</sup> The baseline is an average of 38 days of unserviceability per year for projects in the representative sample.

Will be measured the year following completion of the investment works.

The program outcome objective is to achieve year-round serviceability, such that the technical solutions are linked to achieving this objective.

<sup>&</sup>lt;sup>13</sup> If improvements are made to rural roads with technology solutions that do not include paving, an indicator 2.3 will be added to the representative sample, similar to indicator 2.2 with a baseline of 100 and target of 75.

<sup>&</sup>lt;sup>14</sup> The baseline was US\$0.74 per vehicle-kilometer for the two projects in the representative sample.

## Outputs

Indicators	Unit of measure	Baseline value 2021	2022	2023	2024	2025	2026	Project completion	Means of verification	Comments
Component 1. Works: 1.1. Road Infrastructure	conservation			•		•	•			
Kilometers (km) of RVN roads (under CREMA contracts) with conditions of universal accessibility and road safety implemented.	km	0	0	0	200	418.1	418.1	418.1	Monthly works progress reports. Semiannual progress reports.	
Component 1. Works: 1.2. Upgrading rural road	ls									
Km of rural roads improved, with climate change impact adaptation measures, universal accessibility criteria, and road safety conditions implemented.	km	0	0	50	50	50	70	220.0	As per previous indicator	
Component 1. Works: 1.3. Inspection and supe	rvision									
Technical assistance for inspection and supervision of the works completed.	Contracts	0	5	5	5	0	0	15	Final activity report / semiannual progress report.	
Component 2: Institutional strengthening										
Technical assistance and studies for institutional strengthening of municipios, Provincial Roadway Administrations (DPVs), and DNV completed.	Contracts	0	4	4	4	4	4	20		
Harware or software for municipios, DPVs, and DNV purchased.	Hardware or software	0	5	5	5	5	5	25		
Training courses for staff of DNV, DPVs, and municipios implemented. 15	Courses	0	1	1	2	2	2	8		
Pilot road safety plan and intelligent transportation system initiatives implemented.	Plans	0	0	1	0	0	0	1	Final activity report	
Training program for women on nontraditional occupations implemented	Programs	0	0	0	1	0	0	1	/ semiannual progress report.	
Training of public officials on the special training and technical assistance program for work for persons with disabilities (PEFATTPcD), the National Agency for Persons with Disabilities (ANDIS), the Register of Training and Employment Institutions (REGICE), and private companies contracted through the bidding process.	Training courses	0	0	0	1	0	0	1	progress report.	
Pilot occupational certification plan implemented.	Plans	0	0	0	1	0	0	1		_

<sup>&</sup>lt;sup>15</sup> Among other points, the Blue Spot Analysis will be implemented and employees trained in its use.

Country: Argentina Division: TSP Operation Year: 2021

number: AR-L1339

#### FIDUCIARY AGREEMENTS AND REQUIREMENTS

**Executing agency:** National Roadway Administration (DNV) and Ministry of Public

Works (MOP)

Operation name: Program for Productive Road Infrastructure, Phase III

## I. Executing agency's fiduciary context

#### 1. Use of country systems in the operation

⊠ Budget	⊠ Reports		<ul><li>☑ National competitive bidding (NCB)</li></ul>
☐ Treasury	☐ Internal audit		Others
□ Accounting		☐ Individual consultants	Others

#### 2. Fiduciary execution mechanism

	Specific features of fiduciary execution	Pursuant to Resolution 2021-553-APN-DNV#MPO of 3 May 2021, the DNV under the MOP will be responsible for program implementation. As the executing agency, the DNV will be responsible for the program's financial and procurement management. The program is under the conditional credit line for investment projects that financed: (i) the Program for Productive Road Infrastructure I (loan 2185/OC-AR), which was executed satisfactorily; and (ii) the Program for Productive Road Infrastructure II (loan 2655/OC-AR), which is in the final stages of execution, with satisfactory results.
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## 3. Fiduciary capacity

Fiduciary capacity of the executing agency

An institutional capacity assessment was performed on the DNV, a decentralized agency under the MOP. The program will be coordinated by the General coordination unit for externally financed special programs and projects (CGPPEFE). It is worth noting that it has been executing the two operations mentioned above over the past 10 years.

The executing agency's institutional capacity has been confirmed to have a satisfactory degree of development for program implementation, and specific measures will be deployed to close the gaps identified, such as: (i) the program Operating Regulations will stipulate procedures such that modifications to projects have the no objection of the Bank to ensure that they are on sound technical

and/or fiduciary fundamentals; and (ii) the program Operating Regulations will show the flows and policies applied for the planned procurement and contracting, and the DNV and provincial entities will be provided training that takes Bank policies into account, and delays to works procurement processes are avoided. The executing agency is considered to have the capacity to undertake the actions identified in the evaluation.

## 4. Fiduciary risks and response to risk

Area (financial management/procurement)	Risk	Risk level	Risk response
Procurement and financial management	Limited institutional capacity of the executing agency in terms of administrative and financial management, given the additional operational load entailed by the program.	Medium low	<ul> <li>a) Contracting support for technical assistance on the works.</li> <li>b) Training and specific courses for project coordination and DNV personnel.</li> <li>c) Incremental personnel hired to strengthen the project coordination team.</li> </ul>

## 5. Policies and guidelines applicable to the operation

Program financial management will comply with the Financial Management Guidelines for IDB-financed Projects (documents GN-2811 and OP-273-12).

The policies set forth in document GN-2349-15 will apply to the procurement of goods and contracting of works and nonconsulting services and those in document GN-2350-15 to processes for the selection and contracting of consulting services, both documents having been approved by the Bank on 2 July 2019.

## 6. Exceptions to policies and guidelines: None.

## II. Considerations for the special conditions of the loan contract

- 1. Special conditions precedent to the first disbursement. N/A.
- 2. To render accounts for program resources, the effective exchange rate on the date the approval currency or disbursement currency is converted to the borrower's local currency will be used, pursuant to Article 4.10 (b)(i) of the General Conditions. To determine the equivalence of expenses incurred in local currency chargeable to the local contribution or the reimbursement of expenditures from the program, the agreed exchange rate will be the rate in effect on the first working day of the payment month. In view of the limitations of the system for managing execution units of external loans (UEPEX), the exchange rate indicated in Article 4.10 (b)(i) of the General Conditions will also be used when paying expenses with funds from IDB and local sources.
- 3. The external audit of the program will be performed by an independent firm eligible to audit Bank-financed operations, selected and hired according to the procedures, terms of reference, and model contract previously agreed to with the Bank or by Argentina's Office of the Auditor General. During execution, the DNV will present to the Bank the audited financial reports within 120 days following the close of each program fiscal year or the original deadline for disbursements or any extensions thereto.

## III. Agreements and requirements for procurement execution

Bidding documents	The Bank's standard bidding documents, or those agreed upon by the Bank and the executing agency for the specific procurement, will be used for the procurement of works, goods and nonconsulting services subject to international competitive bidding and executed in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-15). Consultants will be selected and hired in accordance with the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-15). The standard request for proposals issued by the Bank or agreed upon by the Bank and the executing agency for the specific selection will be used. The program's sector specialist is responsible for reviewing the technical specifications and terms of reference of procurement during preparation of the selection processes. This technical review may be ex ante and is independent of the procurement review method.

Advance procurement and retroactive financing	The executing agency plans to carry out some advance [bidding/procurement/contracting] in relation to the works planned under Component 1 of the program. This procurement will be carried out in accordance with the Bank's procurement policies (documents GN-2349-15 and GN-2350-15). The Bank may recognize eligible expenditures incurred prior to the loan approval date against the local contribution, where these expenditures total not more than US\$2 million (4.4% of the estimated local contribution) and were made under conditions substantially similar to those established in the loan contract. Procurement must be of satisfactory quality and compatible with the conditions established in the program, delivered or completed on time, and be of a price that does not adversely affect the economic and financial viability of the program. Such expenditures must have been incurred on or after 8 March 2021 (the date on which the program was officially included in the IDB operations pipeline). Under no circumstances will expenditures incurred more than 18 months prior to the date of loan approval be included.  Regarding the use of international competitive bidding, the Bank			
Special procurement provisions applicable to the operation	Regarding the use of international competitive bidding, the Bank and the borrower agree that the provisions of Appendix 2 of the procurement policies on the margin of domestic preference in comparing bids for the procurement of goods can be applied to goods manufactured in the territory of the borrowing country, as indicated in the respective bidding document.			
Procurement supervision	Procurement will be supervised ex post, except in cases where ex ante supervision is justified. For procurement executed through country systems, supervision will rely on the country's national supervision system. The [(i) ex ante, (ii) ex post or (iii) country system] supervision method will be determined for each selection process. Ex post reviews will be conducted at least once per year, in accordance with the project supervision plan, subject to changes during execution. Ex post review reports will include at least one visit.  Thresholds for ex post review:			
	Works Goods/services Consulting services			
	US\$25 million	US\$1.5 million	US\$1 million	
Records and files	The DNV will be responsible for safeguarding the original files concerning its procurement, contracting, and financial management in the course of program implementation.			

## **Main procurements**

Procurement description	Procurement method	New procedures/tools	Estimated date	Estimated amount (in US\$)
		Works		
Road Infrastructure conservation	International competitive bidding (ICB)		2022	72,300,000
Improving rural roads	National competitive bidding (NCB)		2022	62,900,000

Consulting services				
Consulting firms	Quality-			
for technical	and cost-			
inspection and	based		2022	4,000,000
works supervision	selection			
to be contracted.	(QCBS)			

The procurement plan can be accessed <u>here</u>.

## IV. Financial management agreements and requirements

Programming and budget	The executing agency is responsible for formulating and programming the annual budget for approval. If it becomes necessary to increase or reallocate line items, the executing agency will request the modifications and be in charge of managing their approval. Budget appropriations are executed through quarterly and monthly accrued commitment installments, which are allocated by the National Budget Office (Ministry of the Economy).
Cash and disbursement management	Bank accounts. The loan proceeds will be deposited in a dollar-denominated account exclusive to the project. The funds will be converted to pesos as required for operational purposes. The same practice will be followed as in the two previous operations, with conversion to pesos in the master account with the Treasury of the Republic, through a subaccount assigned to the program, permitting the DNV to order payments and issue income, payments, and balance statements. The executing agency will continue to monitor the use of funds advanced strictly and appropriately such that available balances on their accounting records can be verified and reconciled with the corresponding items on the Bank's records. Financial plan. Disbursements will be made in accordance with a detailed financial plan based on actual program liquidity needs.

	Disbursement methods. The Bank will disburse resources under the advance of funds modality or another modality established in the guidelines in document OP-273-12. Funds will be advanced based on a financial plan for the next six months or any other reasonable period. Subsequent disbursements may be processed once 80% of prior advances have been substantiated. The "Online Disbursement" electronic platform will be used to manage disbursements with the Bank.
	Flow of program funds. Program funds will be deposited in a dedicated account with the Central Bank of Argentina for the receipt of IDB disbursements, from where they will be transferred to a special account for managing loan proceeds at Banco de la Nación Argentina.
Accounting, information systems, and reporting	The executing agency will use the system for managing execution units of external loans (UEPEX) <sup>1</sup> as the financial administration system, which enables identification of program funds and sources of financing. In accordance with the chart of accounts approved by the Bank, UEPEX assigns the program investments by component from the cost table. Cash basis accounting will be used and International Financial Reporting Standards followed, where applicable.
Internal control and auditing	The Office of the Comptroller General (SIGEN), the governing body for the internal oversight system, will be responsible for internal control. SIGEN conducts periodic internal audits on the various government agencies through the internal audit units.
External control and financial reports	The external audit of the program may be performed by an independent auditing firm eligible to audit Bank-financed operations, selected and hired in accordance with the terms of reference and the model contract previously agreed upon with the Bank. It may also be conducted by the Office of the Auditor General (AGN), insofar as its workload allows, for which there must be a prior agreement with the Bank.
Financial supervision of the operation	The financial supervision plan will be based on risk assessment and fiduciary capacity evaluations of the executing agency and will take into account on-site visits and desk reviews, as well as the analysis and monitoring of results and recommendations of the audits of the annual financial reports.

<sup>&</sup>lt;sup>1</sup> https://www.argentina.gob.ar/economia/sechacienda/dgsiaf/uepex

#### DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

#### PROPOSED RESOLUTION DE- /21

Argentina. Loan	_/OC-AR to the Argentine Republic. Program for Productive Road
Infrastructure -	Phase III. Third Individual Operation under the Conditional
Credit Line for	or Road Infrastructure Projects – CCLIP Line - AR-X1016

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 Argentine Republic, as borrower, for the purpose of granting it a financing to cooperate in the execution of the Program for Productive Road Infrastructure - Phase III, which constitutes the third individual operation under the Conditional Credit Line for Road Infrastructure Projects – CCLIP Line - AR-X1016, approved by Resolution DE-102/09 on 16 September 2009. Such financing will be in the amount of up to US\$150,000,000, 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 \_\_\_\_ 2021)

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