

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## **NICARAGUA**

### **ATLANTIC COAST ROAD CONNECTIVITY**

**(NI-L1087)**

### **LOAN PROPOSAL**

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ELECTRONIC LINKS	
REQUIRED	
1. Multiyear program execution plan (PEP)	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38978585">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38978585</a>
2. Monitoring and evaluation plan	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38879697">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38879697</a>
3. Environmental and social management report (ESMR)	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38937072">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38937072</a>
4. Procurement plan	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38978327">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38978327</a>
OPTIONAL	
1. Ex ante economic analysis	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38937429">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38937429</a>
2. Projection of exogenous benefits	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38941267">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38941267</a>
3. Analysis of technical design options	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38979424">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38979424</a>
4. Risk matrix	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38879706">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38879706</a>
5. Analysis of institutional capacity and other aspects of implementation	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38978105">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38978105</a>
6. NI-L1087 Context analysis	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38981886">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38981886</a>
7. Nicaragua's Road Network 2012	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38941307">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38941307</a>
8. Project map	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38930832">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38930832</a>
9. Technical annex on regional integration	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=39193863">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=39193863</a>
10. Safeguard policy filter (SPF) and safeguard screening form (SSF)	<a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38769867">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38769867</a>

## ABBREVIATIONS

EIRR	Economic internal rate of return
ENPV	Economic net present value
ESMR	Environmental and social management report
FOMAV	Fondo de Mantenimiento Vial [Highway Maintenance Fund]
GCI-9	Ninth General Capital Increase, or Ninth General Increase in the Resources of the Inter-American Development Bank
HDM-4	Highway Development and Management Model Version 4
INIDE	Instituto Nacional de Información de Desarrollo [National Development Information Institute]
INPESCA	Instituto Nicaragüense de Pesca [Nicaraguan Fisheries Institute]
INTUR	Instituto Nicaragüense de Turismo [Nicaraguan Tourism Institute]
IRI	International roughness index
MARENA	Ministry of the Environment and Natural Resources
MHCP	Ministry of Finance and Public Credit
MTI	Ministry of Transportation and Infrastructure
PCR	Project completion report
PCU	Project coordination unit
POD	Proposal for operation development
RAAN	Región Autónoma Atlántico Norte [North Atlantic Autonomous Region]
RAAS	Región Autónoma Atlántico Sur [South Atlantic Autonomous Region]
SCF	Single Currency Facility
ZMUS	Zonas de manejo y uso sostenible [sustainable use and management areas]

## PROJECT SUMMARY

### NICARAGUA ATLANTIC COAST ROAD CONNECTIVITY (NI-L1087)

Financial Terms and Conditions					
<b>Borrower:</b> Republic of Nicaragua				Single Currency Facility of the Ordinary Capital (OC)	Fund for Special Operations (FSO)
<b>Executing agency:</b> Ministry of Transportation and Infrastructure (MTI)			<b>Amortization period:</b>	30 years	40 years
			<b>Disbursement period:</b>	5 years	5 years
			<b>Grace period:</b>	6 years	40 years
<b>Source</b>	<b>Amount (US\$)</b>	<b>%</b>	<b>Interest rate:</b>	LIBOR*	0.25%
<b>IDB (OC)</b>	30,750,000	49.0%	<b>Inspection and supervision fee:</b>	**	N/A
<b>IDB (FSO)</b>	30,750,000	49.0%	<b>Credit fee:</b>	**	N/A
<b>Local</b>	1,261,000	2.0%	<b>Currency of approval:</b>	United States dollars	
<b>Total</b>	62,761,000	100.0%			
Project at a Glance					
<b>Objective:</b> The project objective is to improve physical accessibility for the population in the South Atlantic Autonomous Region (RAAS), facilitating their integration with national and regional productive markets as well as public, economic, and social services through improvement of their road infrastructure. The specific objectives are to lower transportation costs and shorten travel time along the La Gateada–Naciones Unidas–Bluefields corridor (see paragraph 1.15).					
<b>Contractual conditions:</b>					
(a) <b>Special conditions precedent to the first disbursement:</b> A technical advisor will be contracted, with the Bank's prior no objection, to support the executing agency in the technical structuring processes for the project, preparation of bidding documents, execution, and contract administration with special emphasis on cost control, the quality of the works, and documentation of the lessons learned (see paragraph 3.3);					
(b) <b>Conditions precedent to execution:</b> As a project execution condition, the executing agency will have contracted for works supervision as planned, and shown that it has legal possession, easements, and/or rights sufficient to start the works, all to the Bank's satisfaction (see paragraph 3.3);					
(c) <b>Other special contractual conditions.</b> (i) the conditions set in the project's environmental and social management report (ESMR) have been met (see paragraph 3.3); and (ii) the Highway Maintenance Fund (FOMAV) will maintain the financed works with resources of the Government of Nicaragua, and deliver an annual report on their condition to the Bank in the first quarter of each calendar year, along with the annual maintenance plan prepared by FOMAV, for four years after completion of the works (see paragraph 3.3).					
<b>Exceptions to Bank policies:</b> None.					
<b>Project qualifies as:</b> SEQ [ ] PTI [X] Sector [ ] Geographic [X] Headcount [ ]					

\* The borrower will pay interest on the outstanding balance of the OC portion of the loan at a LIBOR-based rate. Whenever the outstanding balance reaches 25% of the approved net amount or US\$3 million, whichever is greater, the base rate will be set based on that balance.

\*\* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problems, strategy, and rationale

- 1.1 **General.** Nicaragua is Central America's largest country, covering an area of 130,373.4 square kilometers. In 2013, its population was estimated at 6,146,400, and its GDP at US\$11.2556 billion.<sup>1</sup> Nicaragua's economy grew at an annual average of 5.1% between 2011 and 2013.<sup>2</sup> Progress has been made in the social sector in terms of reduced poverty and inequality, although significant gaps remain in rural areas, where 63.3% of the total population lives in poverty, and 26.6% in extreme poverty.<sup>3</sup> In particular, the Atlantic coast scores worst on these indicators.<sup>4</sup> Politically, this area comprises the North Atlantic Autonomous Region (RAAN) and South Atlantic Autonomous Region (RAAS). Both regions are the country's most affected by extreme poverty, with an average of 35.7%.<sup>5</sup>
- 1.2 **Highway transportation infrastructure.** Nicaragua has the lowest road density in Central America, with 183.3 km/1,000 km<sup>2</sup> of roads,<sup>6</sup> compared to a regional average of 397.6 km/1,000 km<sup>2</sup>. In Managua and the Pacific region, 60% to 80% of all households have access to paved roads/highways, whereas on the Atlantic coast this proportion is 10%.<sup>7</sup> This scarcity of roads, in conjunction with the poor condition of existing ones—the majority unpaved—leaves the region relatively isolated from the rest of Nicaragua, as well as from Central America and Panama. This is particularly significant in rural areas, where the lack of connections to international trunk routes and ports is hampering the growth potential of the main productive sectors such as agriculture, livestock, fishing, and tourism, and hindering their integration into national and regional logistics and supply chains. The lack of road connectivity also restricts access to basic social services such as health, education, and public safety, thus playing a major role in perpetuating rural poverty.
- 1.3 **South Atlantic Autonomous Region (RAAS).** The RAAS covers an area of 27,260 square kilometers and has a population of 306,510.<sup>8</sup> The departmental capital is Bluefields. The southern part of the RAAS has two population hubs, the cities of Nueva Guinea and Bluefields, where the main productive activities are arable farming, livestock, fishing, and tourism. Bluefields, together with Bilwi (or Puerta Cabezas in the RAAN) are the only two departmental capitals not directly

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<sup>1</sup> Source: "Nicaragua en cifras" [Nicaragua by the numbers], [Central Bank of Nicaragua](#).

<sup>2</sup> Source: Ibid.

<sup>3</sup> Source: IDB country strategy with Nicaragua (2012-2017) (document GN-2683).

<sup>4</sup> Source: "Mapa de pobreza extrema municipal por el método de las necesidades básicas insatisfechas (NBI)" [Municipal extreme poverty map using the unmet basic needs method], 2005, [National Development Information Institute \(INIDE\)](#).

<sup>5</sup> Source: Municipal extreme poverty map using the unmet basic needs method, 2005, [INIDE](#).

<sup>6</sup> Nicaragua's road network covers 23,897.1 km, 3,282.1 km (13.7%) of which is paved. Source: Nicaragua's Road Network 2012 ([optional electronic link 7](#)).

<sup>7</sup> Source: IDB country strategy with Nicaragua (2012-2017) (document GN-2683).

<sup>8</sup> Source: [INIDE](#). 2005 Census. Departmental figures.

linked by paved highway to the national capital and the backbone highway network connecting the country to the rest of Central America and Panama. The existing unpaved roads are unusable during the rainy season, making it necessary to use river transportation alternatives with very limited capacity and high costs for more than half the year. Bluefields, in particular, connects to the backbone network via the rural road between Naciones Unidas and Bluefields that, even so, only provides limited service during the dry season and is impassable the rest of the year. The main communication route from Bluefields and nearby population centers to the rest of the country is therefore along the Escondido River. This carries most passenger and freight for approximately 94 km to the river port at El Rama, where there is a connection to the national road network, resulting in inefficient travel times and costs.<sup>9</sup>

- 1.4 **Institutional structure of the road sector.** Nicaragua's institutional structure is well organized to address road system construction, improvement, and maintenance. The Ministry of Transportation and Infrastructure (MTI) is responsible for organizing and directing transportation sector policy and planning, preparing, contracting, and administering road improvement, construction, rehabilitation, and maintenance projects.<sup>10</sup> The Fondo de Mantenimiento Vial [Highway Maintenance Fund] (FOMAV) is an autonomous agency of the national government that collects the proceeds from a levy on fuel sales to preserve the maintainable road network at the national level<sup>11</sup> (see paragraph 3.7). The coordination and complementarity between these two institutions is designed to ensure the sustainability of the country's road assets. They have sound management and technical capabilities in their respective areas with high levels of budgetary execution and experience in the preparation and execution of Bank-financed projects.<sup>12</sup>
- 1.5 **The Bank's sector work.** The Bank is a key player in the development of the Nicaragua's transportation sector. Its commitment has been demonstrated with the approval of loan operations totaling more than US\$309 million over the last ten years,<sup>13</sup> along with ongoing technical advice and support. At the end of execution of these projects: (i) a series of rehabilitation and improvement works will have been

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<sup>9</sup> This operation will improve the Naciones Unidas–Km 46+100 San Francisco Sector, which is 46.1 km long and part of the La Gateada–Naciones Unidas–Bluefields corridor (see Figure 1). The ex ante economic analysis ([optional electronic link 1](#)) compared the total transportation costs between this corridor and the La Gateada–El Rama–Bluefields intermodal route.

<sup>10</sup> The MTI handles maintenance not covered by FOMAV through its Road Maintenance Bureau.

<sup>11</sup> For present purposes, the maintainable road network refers to that portion of the basic road system in good or fair condition, for which periodic or routine maintenance can extend its useful life. FOMAV does not deal with those parts of the basic road system in such poor condition that they require rehabilitation or reconstruction. Nor does it maintain roads for which municipal authorities are responsible. FOMAV contracts private firms for maintenance works and services. FOMAV ensures that all road projects are properly maintained, once built or improved.

<sup>12</sup> For more details on institutional considerations and context, see [optional electronic link 5](#) and [optional electronic link 6](#).

<sup>13</sup> Loan agreements: 1530/SF-NI; 1599/SF-NI; 1796/SF-NI; 2225/BL-NI; 2427/BL-NI; 2840/BL-NI; and 2979/BL-NI.

completed on over 456 km of the national road system; and (ii) special maintenance will have been done on over 600 km of roads. The institutional strengthening of MTI and the FOMAV has also been supported through training in results-based management, procurement of hardware and software, systems development, technical support, road safety promotion, weight and size control, laboratory equipment to control the quality of works, assistance to make the road system less vulnerable to climate change, ongoing improvement of Bank project execution capacity, and other efforts.

- 1.6 In Nicaragua, the Bank financed the Acoyapa–San Carlos–Costa Rican Border Highway Integration Program under the Puebla-Panama Plan (loan 1796/SF-NI), to improve 146 km of highways through paving, building bridges, and alignment corrections. During execution it was found that the soil conditions differed substantially from the design considerations, leading MTI to adjust the scope of the works to ensure project quality. This, combined with higher costs of inputs during the 2008 international financial crisis, resulted in this project and others being executed simultaneously (loans 1530/SF-NI and 1599/SF-NI) requiring additional resources, which were provided with approval of the Supplemental Road Infrastructure for Competitiveness Program (loan 2225/BL-NI). With the synergy between the Bank and borrower, the works were completed successfully, showing that MTI had gained considerable experience in both project management and implementation of the Bank’s environmental safeguard policies.<sup>14</sup>
- 1.7 **Lessons learned.** With this recent track record of successful execution, the MTI’s institutional capacity can be assessed as satisfactory, bolstered by the ongoing capitalization of lessons learned, which are built into this operation. In particular, this includes: (i) the engagement of a technical advisor to support technical structuring of the project and tracking of time, cost, scope, and quality of the works during execution (see paragraph 2.8); and (ii) the experience gained in social and environmental terms, especially interagency coordination for land use planning activities and monitoring of socioenvironmental and social variables.
- 1.8 **The problem.** The main problem this operation will contribute to solve is the limited mobility and physical access to the rest of the country for people living in the RAAS (see paragraph 1.3). Access is currently via a 160 km<sup>15</sup> multimodal corridor with a river transportation alternative with very limited capacity and high costs. Travel times are ten hours for freight and five hours for passengers ([optional electronic link 1](#)).<sup>16</sup> This problem is mainly a result of: (i) low road coverage;<sup>17</sup> (ii) low levels of service and passability of the existing road between Naciones Unidas and Bluefields; and (iii) limited financial resources to improve road infrastructure.

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<sup>14</sup> See the project completion report (PCR) for the Acoyapa–San Carlos–Costa Rican Border Highway Integration Program under the Puebla-Panama Plan ([loan 1796/SF-NI](#)).

<sup>15</sup> From La Gateada to Bluefields (Figure 1) along the Escondido River.

<sup>16</sup> With the road in good condition, this same journey takes an estimated 2.9 hours (see Annex II).

<sup>17</sup> RAAS has a paved road coverage of 4.1 km/1,000 km<sup>2</sup> versus a national average of 25.2 km/1,000 km<sup>2</sup> ([optional electronic link 7](#)).



- 1.9 **Consequences of the problem.** The lack of reliable connectivity year-round along the Naciones Unidas–Bluefields corridor adversely impacts the competitiveness of the southern part of the RAAS and hurts the various supply chains. This has a greater effect on small-scale producers, particularly in the fishing and tourism sectors,<sup>18</sup> curbing their potential to grow and enter national and international markets. The conditions seen in the RAAS are consistent with research<sup>19</sup> showing that less access to basic productive infrastructure in Nicaragua is associated with lower productivity and higher poverty and infant mortality. Households without road connectivity are five times more likely than those with it to be living in poverty.<sup>20</sup>
- 1.10 **Atlantic coast road connectivity and this operation.** In order to address the problem described above (see paragraph 1.8) in a sustainable way, the Government of Nicaragua, acting through MTI, has laid out a phased work strategy with an investment program to create a reliable, year-round road corridor along the La Gateada–Naciones Unidas–Bluefields route. As part of that strategy in 2012, the segment to Naciones Unidas has been paved with blocks, and as the next step to complete the corridor a total of 74.2 km from Naciones Unidas to Bluefields is slated for improvement. Studies and engineering designs have been completed for that work, and ad hoc construction has been done laying drainage, building unpaved roads, and surfacing with gravel, in order to improve serviceability while financing is being arranged for comprehensive improvements all the way to Bluefields. Consequently, as part of the dialogue between the Government of Nicaragua and the Bank, this operation has been proposed to finance improvement of the Naciones Unidas–Station 46+100 San Francisco Sector segment (approximately 46.1 km), so as to upgrade the road from a dry season rural road to a permanently passable paved road. The remaining segment to Bluefields will be financed with resources already

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<sup>18</sup> Catches from fisheries on the Pacific coast increased by an average of 20% between 2008 and 2013, while on the Atlantic coast they remained constant (Nicaraguan Fisheries Institute (INPESCA), 2013 Yearbook). This is despite the fact that the maritime areas fished on each coast are similar. The low output from the Atlantic coast is due, among other factors, to the historical inaccessibility of the Atlantic coast area from the main markets in the rest of the country. The same applies to tourism: national average hotel occupancy rates are 60%, whereas in the RAAS they are 50% (Nicaraguan Tourism Institute (INTUR)).

<sup>19</sup> Source: (i) Nicaragua: “Análisis del impacto de los servicios de infraestructura y las condiciones de vida en las zonas rurales” [Analysis of the impact of infrastructure services and living conditions in rural areas], consultant’s final report, ECLAC/IDB/FPRI Cooperation Project; (ii) “Nicaragua: Informe sobre pobreza 1993-2005” [Nicaragua: Report on poverty 1993-2005], principal report, 30 March 2008, World Bank document; (iii) Monograph, “Oportunidades para generar ingresos en Nicaragua: acceso a infraestructura, insumos de la inversión, y productividad rural” [Opportunities for income generation in Nicaragua: access to infrastructure, investment inputs, and rural productivity], Diego Angel-Urdinola, Ezequiel Molina, and María Victoria Fazio, World Bank consultants; and (iv) Rural Roads Infrastructure Improvement Project, Report 61418-NI, World Bank, November 2011.

<sup>20</sup> Nicaragua: “Análisis del impacto de los servicios de infraestructura y las condiciones de vida en las zonas rurales” [Analysis of the impact of infrastructure services and living conditions in rural areas], consultant’s final report, ECLAC/IDB/FPRI Cooperation Project.

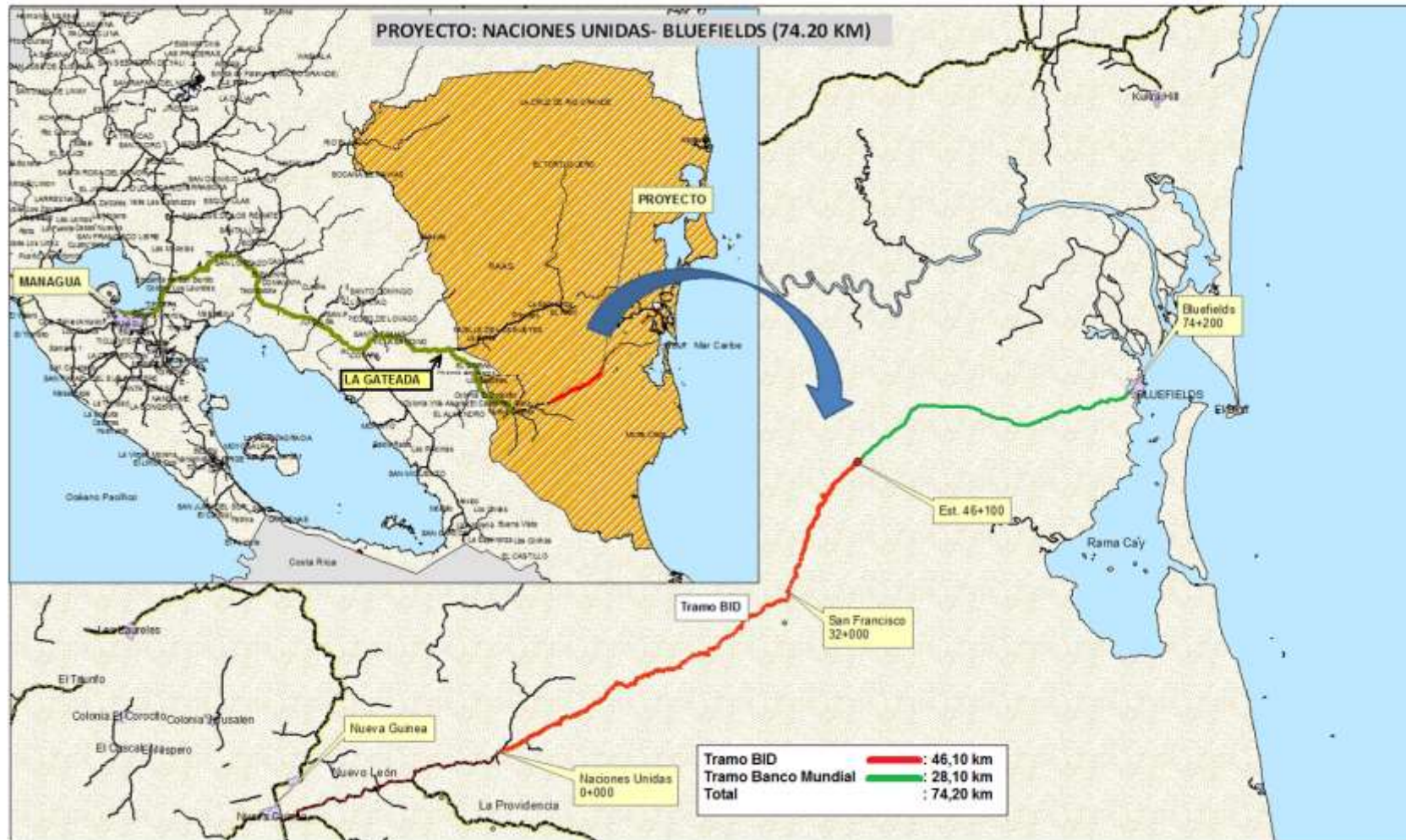
approved by the World Bank,<sup>21</sup> with an execution period of approximately two years starting in the first half of 2015.

- 1.11 **Strategic alignment.** This project is consistent with the Bank's country strategy with Nicaragua (2012-2017) (document GN-2683), which has the objective of supporting efforts to build, improve, and rehabilitate highways and rural roads and keep them in a good state of repair, so as to ensure productive sectors have permanent access to both domestic and export markets. The project is also included in the update of the 2014 Operational Program Report (document GN-2756-2). The transportation sector is one of the four strategic priorities for Bank intervention, focusing on supporting investments in road networks that, firstly, connect rural production centers with the main corridors and border crossings, ensuring year-round serviceability, and general interconnections, and secondly facilitate access to social services for the population with limited resources.
- 1.12 Additionally, the project will contribute to the lending program priorities of the Ninth General Capital Increase (GCI-9) (document AB-2764): (i) lending to small and vulnerable countries; (ii) lending for poverty reduction and equity enhancement (see paragraph 1.1); and (iii) lending to support global and regional competitive integration (see paragraph 1.13). It will also contribute to the regional development goal set in the Results Matrix of "paved road coverage" and the output "km of interurban roads built or maintained/upgraded." The operation is also aligned with the Infrastructure Strategy (document GN-2710-5), particularly in the priority areas of action to "support the construction and maintenance of an environmentally and socially sustainable infrastructure." Lastly, the project is compatible with the Transportation Sector Framework Document (document GN-2740-3) under the dimension to "increase the coverage, quality, connectivity, and capacity of the transportation system."

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<sup>21</sup> The borrower has informed the project team that the 28.1 km section between Km 46+100 and Bluefields will be financed with resources already approved by the World Bank, thus achieving synergies and alignment between the two agencies to help integrate the RAAS with the rest of the country.

Figure 1. Project Location Map



- 1.13 Under the Bank's Sector Strategy to Support Competitive Global and Regional Integration (document GN-2565-4), and in accordance with the guidelines for the classification and validation of operations under the GCI-9 objective of regional integration financing (documents GN-2650 and GN-2733), this operation, included in the transportation networks connectivity subsector, is consistent with this objective,<sup>22</sup> as an infrastructure investment project of national scope with a multinational focus that contributes to the internationalization of the productive sectors in the RAAS.<sup>23</sup>
- 1.14 After the project has been executed, there will be a paved road that is passable year-round, shortening transportation times and lowering operating costs.<sup>24</sup> This will make possible continuous and efficient connectivity between the RAAS and the rest of the country, the rest of the region, and the main ports and airports concentrated in the eastern part of the country. The expected indirect benefits of the project include boosting the various economic activities, including more activity in the fishing industry and larger tourist numbers ([optional electronic link 2](#)). The project being considered in the RAAS is therefore a key part of obtaining the benefits of regional integration, such as leveraging economies of scale, attracting investments, and accessing global markets for goods and services at more competitive prices. The project is fundamental to making decisive progress towards Nicaragua's integration and territorial cohesion so as to help reduce regional and national asymmetries.

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

- 1.15 **Objective.** The project objective is to improve physical accessibility for the population in the South Atlantic Autonomous Region (RAAS), facilitating their integration with national and regional productive markets as well as public, economic, and social services through improvement of their road infrastructure. The specific objectives are to lower transportation costs and shorten travel time along the La Gateada–Naciones Unidas–Bluefields corridor. The project has the following components:
- 1.16 **Component 1. Improvement of the Naciones Unidas–Km 46+100 San Francisco Sector road segment (US\$57,169,500).** Includes the paving of approximately 46.1 km to a width of 7.20 meters, construction of longitudinal and transversal drainages, adaptation of embankments to critical hydrological conditions, and investments in road signs, pavement markings, and protective

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<sup>22</sup> See annex substantiating the operation's classification under the Bank's regional integration objective ([optional electronic link 9](#)).

<sup>23</sup> According to the ex ante economic analysis ([optional electronic link 1](#)), the main exogenous benefits include annual exports of fishery products (from 1.95 to 2.8 million pounds of lobster, from 1.46 to 1.59 million pounds of shrimp, and from 3.05 to 5.09 million pounds of fish) and the expansion of tourism in the RAAS from 174,800 to 273,700 tourists per year.

<sup>24</sup> According to the ex ante economic analysis ([optional electronic link 1](#)), the results obtained would be: (i) a shortening of travel times on the La Gateada–Bluefields segment from 10 to 2.9 hours for freight, and from 4.9 to 2.9 hours for passengers; and (ii) lowering of the costs of vehicle operation on the Naciones Unidas–Km 46.1 San Francisco Sector road segment from 0.25 to 0.15 US\$/veh-km for automobiles; from 0.85 to 0.52 US\$/veh-km for buses, and from 1.17 to 0.78 US\$/veh-km for 10-ton trucks.

barriers to improve road safety ([optional electronic link 3](#)). The segment starts in Naciones Unidas (Station 0+000) in the municipio of Nueva Guinea and ends at Km 46+100 San Francisco Sector, municipio of Bluefields. The component will also finance contract works supervision by independent firms.

- 1.17 **Component 2. Administration and management (US\$1,410,000).** Includes the contracting of services for: (i) financial audits; (ii) social and environmental management of indirect impacts, (iii) monitoring and evaluation; and (iv) support to the PCU through technical assistance, equipment, furniture, and adaptation of workspaces.
- 1.18 The financing will also include resources for the following items: (i) contingencies US\$1,551,500; and (ii) financial expenses, estimated at US\$2,630,000.
- 1.19 **Cost.** The total cost of the operation will be US\$62,761,000. Of that amount, US\$61,500,000 will be financed with IDB resources, and US\$1,261,000 with the local contribution of the Government of Nicaragua. The breakdown of costs is presented in Table 1 below.

**Table 1. Cost and Financing (in US\$)**

Investment category	IDB	GoN	Total
<b>Component 1. Improvement of road segment</b>	<b>56,058,500</b>	<b>1,111,000</b>	<b>57,169,500</b>
Improvement of the Naciones Unidas–Km 46+100 San Francisco Sector road segment	56,058,500	1,111,000	57,169,500
<b>Component 2. Administration and management</b>	<b>1,260,000</b>	<b>150,000</b>	<b>1,410,000</b>
Audits	180,000	27,000	207,000
Social and environmental management of indirect impacts	300,000	48,000	348,000
Monitoring and evaluation	80,000	0	80,000
Support to PCU	700,000	75,000	775,000
<b>Contingencies</b>	<b>1,551,500</b>	<b>0</b>	<b>1,551,500</b>
<b>Financial expenses*</b>	<b>2,630,000</b>	<b>0</b>	<b>2,630,000</b>
<b>Project total</b>	<b>61,500,000</b>	<b>1,261,000</b>	<b>62,761,000</b>

\* Interest may be financed with the loan proceeds.

## C. Key results indicators

- 1.20 The main expected outcomes are the reduction in travel times and cost for the transportation of freight and passengers along the La Gateada–Naciones Unidas–Bluefields corridor, better road condition,<sup>25</sup> and lower operating costs for vehicles using the highway segment to be financed with this operation. The impacts on the region's integration with national and regional productive markets are associated with fishery production (volume of RAAS fishery products) and tourist arrivals. These outcomes and impacts are detailed in the Results Matrix ([Annex II](#)). The

<sup>25</sup> Road condition is measured using the international roughness index (IRI); the lower the IRI value, the better the road condition.



baseline is the reference for evaluation of the project. The output and outcome indicators will be verified directly. The observed outcomes will be compared with the values given in the Results Matrix. The project will include indicators for environmental and social considerations, included in the environmental and social management report (ESMR) ([required electronic link 2](#)).

- 1.21 **Technical and economic viability.** During the preparation of this operation, the project team conducted due diligence of the plan submitted by the MTI, in order to verify its technical, economic, and socioenvironmental feasibility. In terms of engineering, an analysis of the technical design options was performed ([optional electronic link 3](#)), and the project was found to have the necessary calculation reports, plans, technical specifications, and budget for its execution. An ex ante economic analysis has also been done ([optional electronic link 1](#)), to calculate the general transportation cost savings based on the Highway Development and Management Model (HDM-4), comparing the costs associated with the current La Gateada–El Rama–Bluefields intermodal corridor with those associated with the La Gateada–Naciones Unidas–Bluefields road corridor under this project. An analysis of exogenous benefits was also done, to factor in the project’s impact on potential economic activities in its target area ([optional electronic link 2](#)), identifying additional benefits, which have been incorporated into the cost-benefit analysis.
- 1.22 The economic evaluation yielded an estimated economic net present value (ENPV) of US\$39.23 million and an economic internal rate of return (EIRR) of 16.6%. A sensitivity analysis was performed for the profitability indicators in four different scenarios of variation in costs and benefits. The analysis showed that, even in the least favorable scenario, the ENPV was above zero, and the EIRR over 12%. A frontier analysis was also done, concluding that, even with a 40% drop in the projected benefits, the ENPV would remain above zero (see Table 2).

**Table 2. Indicators of Economic Return**

Base case analysis		20% cost increase		20% decrease in total benefits		20% cost increase and 20% benefit decrease		Not including exogenous benefits	
ENPV US\$ millions	EIRR	ENPV US\$ millions	EIRR	ENPV US\$ millions	EIRR	ENPV US\$ millions	EIRR	ENPV US\$ millions	EIRR
39.23	16.6%	26.75	14.8%	21.16	14.7%	8.69	13.0%	0.58	12.1%

- 1.23 **Profile of project beneficiaries.** The direct beneficiaries will be all inhabitants of communities near the road, who will be able to travel at any time of year in a shorter amount of time. They will be able to sell their products in less time with more competitive transportation costs, obtain inputs at lower cost, and have access to basic services for health and education. The population directly benefiting will be in the towns of Naciones Unidas, Germán Pomares, Nuevo León, La Esperanza, El Paraisito, Nuevo Horizonte, San Francisco, Kukra River, and Bluefields. The

estimated total number of beneficiaries is 52,908, comprising 26,733 women (50.52%) and 26,175 men (49.48%).<sup>26</sup>

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 This operation is structured as a specific investment loan with a disbursement period of five years and the following sources of financing: (i) US\$30,750,000 from the resources of the Single Currency Facility of the Ordinary Capital (OC); and (ii) US\$30,750,000 from the resources of the Fund for Special Operations (FSO). The projected disbursement schedule, as it now stands, is given in Table 3 below.

**Table 3. Projected Disbursement Schedule (in US\$)**

Source	2015	2016	2017	2018	2019	Total
IDB	68,307	16,836,933	15,412,975	12,675,094	16,506,690	61,500,000
GoN	2,000	295,641	412,499	373,670	177,190	1,261,000
<b>Total</b>	<b>70,307</b>	<b>17,132,574</b>	<b>15,825,474</b>	<b>13,048,764</b>	<b>16,683,880</b>	<b>62,761,000</b>

### B. Environmental and social risks

- 2.2 The main positive impacts generated by the project will include: (i) improved welfare and quality of life of the beneficiaries; (ii) more opportunities for productivity and sale of goods and services; (iii) less isolation of disadvantaged segments of the population; (iv) facilities for access to education, public health, and general basic services; (v) safe mobility and travel for the population; (vi) reduction in travel time and costs for the population's products; (vii) improved mobility and transportation for the population; (viii) improved opportunities for farming, tourism, and livestock activities; (ix) improved mobility in rural areas; and (x) inclusion of outlying communities in productive processes. The direct adverse impacts generated by the project will be those typical of any similar road improvement works.<sup>27</sup> These are considered low to medium in magnitude, short in duration, localized in the immediate vicinity of the road, personnel, and work site, and manageable by means of standard procedures.<sup>28</sup>
- 2.3 The main indirect impacts arising once the entire Nueva Guinea–Naciones Unidas–Bluefields corridor goes into operation include: (i) increased spontaneous migration

<sup>26</sup> Data obtained from the 2005 Population Census. More details on the beneficiaries and a description of the target area can be found in the “Ex ante economic analysis” ([optional electronic link 1](#)).

<sup>27</sup> These impacts include: (i) felling of trees; (ii) earth moving and changes in the topography of the terrain; (iii) temporary effects on ground fauna; (iv) minor effects on farmers and herders adjacent to the roads due to potential vehicle traffic interruption; (v) rise in dust, vibration, and noise levels in the vicinity of the roads due to the presence of machinery; (vi) increased risk of accidents due to the work being done on the road; and (vii) increased risk of domesticated animals and wildlife being run over.

<sup>28</sup> These measures include: (i) watering ground at open worksites; (ii) barriers to intercept bodies of water, drains, or gullies; (iii) speed restrictions on movements of vehicles and machinery; (iv) installation of environmental and occupational safety signage; and (v) community information campaigns.

into the area from other parts of the country, with the resulting increase in: (a) demand for basic services in sanitation and health; (b) pressure on sustainable use and management areas (ZMUS), ecological recovery areas (ZRE), and wetland conservation and management areas (ZCMH) in the Cerro Silva Nature Reserve; and (c) pressure on the lands of the Rama-Kriol community; (ii) rise in property values of land around the ZMUS with potential impact on real estate market speculation and indirectly encouraging the clearing of forest for pasture; (iii) possible conversion of natural areas into pasture; and (iv) potential impact on the lifestyles of indigenous and afrodescendent communities. The ESMR<sup>29</sup> contains more details of these impacts and how they will be managed.<sup>30</sup>

- 2.4 The team identified the following risks additional to those associated with the most common natural hazards<sup>31</sup> in the project area, since management of the indirect and cumulative impacts is beyond the scope of the project and requires action by entities<sup>32</sup> other than the executing agency:<sup>33</sup> (i) the effectiveness of the institutional arrangements to manage the indirect impacts of the corridor; and (ii) the effectiveness of the environmental and social management systems for projects with the potential to generate cumulative effects in the corridor.
- 2.5 Although the actions planned in this operation will take place on the Naciones Unidas–Km 46+100 San Francisco Sector segment of the Nueva Guinea–Naciones Unidas–Bluefields corridor, the environmental analysis was done for the whole route. Therefore, given that the indirect and cumulative effects along the whole corridor are much more significant than the direct impacts associated with the improvement of the targeted segment, the operation has been classified as Category “A” under the Bank’s Environment and Safeguards Compliance Policy (Operational Policy OP-703).

### C. Fiduciary risks

- 2.6 An analysis was done of the executing agency’s institutional fiduciary capacity (finance and procurement), which found that the MTI has made significant progress in its execution and control capacity for fiduciary management of procurement, so the risk level assigned is medium. The fiduciary risks for project procurement are low, since the main competitive bidding process is for a single specific item of

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<sup>29</sup> See [required electronic link 2](#).

<sup>30</sup> These management measures include: (i) assessment of the state of migration, changes in land use, and occupation of Rama-Kriol lands in the corridor’s service area; (ii) installation of a forest ranger cabin to control poaching of wildlife; (iii) environmental signage; (iv) support for the engagement of indigenous and afrodescendent communities; and (v) support for the implementation of a claim and complaint intake and resolution mechanism, including strengthening of the system of reporting environmental infractions through the Environmental Prosecutor.

<sup>31</sup> Mainly flooding, drought, landslides, and hurricanes.

<sup>32</sup> Such as the Department of Natural Resources (SERENA), the National Commission for Land Demarcation and Titling (CONADETI), etc. and agencies proposing or regulating projects with potential cumulative impacts (see Section IV.D of the ESMR ([required electronic link 2](#))).

<sup>33</sup> It should be noted that the MTI has solid experience in social and environmental management of complex projects. More details are given in the PCR for the Acoyapa–San Carlos–Costa Rican Border Highway Integration Program under the Puebla-Panama Plan ([loan 1796/SF-NI](#)).



improvement works on the highway to be financed, and the executing agency has experience in such processes. Nevertheless, the executing agency must continue its efforts to improve in the areas of control, financial planning, and disbursement.

**D. Other issues and risks**

- 2.7 **Execution risks and cost overruns.** As a precautionary measure to prevent cost overruns, prior to issuing the solicitation for works, the designs and budgets must be revised and/or updated, as applicable, and a determination made as to whether the costs are within the range of the economic sensitivity analysis. The borrower agrees that the MTI will engage a technical advisor with the loan proceeds to support the technical structuring of the project, preparation of bidding documents, execution, and contract administration with special emphasis on cost control, quality, and documentation of the lessons learned, and support the project cycle until final acceptance of the work (see paragraph 1.7). The contracting of the technical advisor will be subject to the Bank's no objection.
- 2.8 The works do not have a high degree of technical difficulty, and there is a large market for works supervision and construction firms qualified for the type of works to be financed. The following measures have been taken to mitigate risks of cost overruns: (i) designs and budgets have been updated prior to solicitation of the works; (ii) a full-time technical advisor has been engaged, financed with the loan proceeds; and (iii) price adjustment formulas have been incorporated when deemed appropriate. The most significant risks of the project have been identified using the "project risk management" tool, and the executing agency prepared a mitigation plan with indicators to track its implementation. Prior to the start of works, works supervision will have been contracted (see paragraph 3.3), and evidence will be provided showing legal possession, easements, or rights to commence the works.

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

**A. Implementation arrangements**

- 3.1 **Borrower and executing agency.** The borrower will be the Republic of Nicaragua, and the executing agency will be the Ministry of Transportation and Infrastructure (MTI), which will make use of its organizational structure of senior management and technical, administrative, procurement, financial, environmental, and support units for project execution.
- 3.2 The MTI has a project coordination unit (PCU) within its organizational structure for this and other Bank-financed operations, made up of permanent staff of the institution and responsible for three levels of coordination: (i) internally within the MTI for technical, procurement, socioenvironmental, and financial matters and ongoing reporting to senior management; (ii) with contractors and consultants engaged for execution of the loan, to verify completion of the outputs and activities included in the loan's work plan; and (iii) with the IDB for monitoring, reports, management, and communications.
- 3.3 The following contractual conditions have been set: **(a) special conditions precedent to the first disbursement: A technical advisor will be contracted,**

- with the Bank's prior no objection, to support the executing agency in the technical structuring processes for the project, preparation of bidding documents, execution, and contract administration with special emphasis on cost control, the quality of the works, and documentation of the lessons learned; (b) conditions precedent to execution: as a project execution condition, the executing agency will have contracted for works supervision as planned, and shown that it has legal possession, easements, and/or rights sufficient to start the works, all to the Bank's satisfaction; and (c) other special contractual conditions: (i) the conditions set in the project's environmental and social management report (ESMR) have been met; and (ii) the Highway Maintenance Fund (FOMAV) will maintain the financed works with resources of the Government of Nicaragua, and deliver an annual report on their condition to the Bank in the first quarter of each calendar year, along with the annual maintenance plan prepared by FOMAV, for four years after completion of the works.
- 3.4 **Financial management.** The project's financial and accounting management will be performed by the executing agency's financial/accounting unit. The report prepared on the analysis of the executing agency's institutional fiduciary capacity (finance and procurement) observed that its fiduciary capacity had improved since the last assessment done in August 2012, and it had completed the action plans agreed upon in the areas of control, financial planning, and disbursement management.
- 3.5 **Procurement.** The procurement of goods, works, and services envisaged in this operation will be carried out by the MTI's procurement office in accordance with the "Policies for the procurement of works and goods financed by the IDB" (document GN-2349-9) and the "Policies for selection and contracting of consultants financed by the IDB" (document GN-2350-9), both of March 2011. Annex III sets forth the general management framework for procurement. Procurement will be supervised by the Bank in accordance with the procurement plan.
- 3.6 **External audit.** Within 120 days after the close of the respective fiscal year, the borrower will deliver the financial statements for the project to the Bank, duly audited by an independent audit firm acceptable to the Bank. The cost of these audits will be financed with the loan proceeds.
- 3.7 **Sustainability of investments.** FOMAV will be responsible for maintaining the road works financed under this project, which will have priority since they are a recent investment in roads categorized as maintainable (see paragraph 1.4). The maintenance is intended to keep the works in the same working condition as when they were built, within a level compatible with the services to be provided. FOMAV will therefore deliver an annual report on their condition to the borrower, for forwarding to the Bank along with the annual maintenance plan.
- B. Summary of arrangements for monitoring and evaluation of results**
- 3.8 **Monitoring and evaluation.** During project execution, the executing agency will deliver six-monthly consolidated status reports to the Bank, indicating progress made, including the agreed indicators in the Results Matrix. The reports will also

include: (i) a description of the activities completed; (ii) updated timetable for physical execution and disbursements; (iii) the extent to which the agreed execution indicators have been achieved;<sup>34</sup> (iv) a program of activities for the next six months; (v) a summary of the project's financial execution status, and the flow of funds planned for the next six months; (vi) identification of possible events that could jeopardize project execution; and (vii) consolidated information on the project's social and environmental management. The borrower will deliver a final evaluation to the Bank when 90% of the project disbursements have been made. This evaluation will include at least: (i) an ex post economic evaluation, using the same methodology as the ex ante economic evaluation, which will include the comparison of outcomes in order to verify the assumptions made, all in accordance with the methodology established in the monitoring and evaluation plan ([required electronic link 2](#)) (ii) the results of financial execution; (iii) achievement of the targets set, as shown by the agreed results indicators; and (iv) performance of the contractual commitments.

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<sup>34</sup> See Annex II, "Results Matrix."

Development Effectiveness Matrix				
Summary				
I. Strategic Alignment				
1. IDB Strategic Development Objectives		Aligned		
Lending Program		(i) Lending to small and vulnerable countries; (ii) Lending for poverty reduction and equity enhancement; and (iii) Lending to support regional cooperation and integration.		
Regional Development Goals		Paved road coverage.		
Bank Output Contribution (as defined in Results Framework of IDB-9)		Km of inter-urban roads build or maintained/upgraded.		
2. Country Strategy Development Objectives		Aligned		
Country Strategy Results Matrix		GN 2683	Road infrastructure built, improved and maintained, particularly in the case of rural roads and access for producers.	
Country Program Results Matrix		GN 2746-2	The intervention is included in the 2014 Operational Program.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)				
II. Development Outcomes - Evaluability		Evaluable	Weight	Maximum Score
		8.9		10
3. Evidence-based Assessment & Solution		9.8	33.33%	10
3.1 Program Diagnosis		3.0		
3.2 Proposed Interventions or Solutions		4.0		
3.3 Results Matrix Quality		2.8		
4. Ex ante Economic Analysis		10.0	33.33%	10
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis		4.0		
4.2 Identified and Quantified Benefits		1.5		
4.3 Identified and Quantified Costs		1.5		
4.4 Reasonable Assumptions		1.5		
4.5 Sensitivity Analysis		1.5		
5. Monitoring and Evaluation		7.0	33.33%	10
5.1 Monitoring Mechanisms		2.0		
5.2 Evaluation Plan		5.0		
III. Risks & Mitigation Monitoring Matrix				
Overall risks rate = magnitude of risks*likelihood		Medium		
Identified risks have been rated for magnitude and likelihood		Yes		
Mitigation measures have been identified for major risks		Yes		
Mitigation measures have indicators for tracking their implementation		Yes		
Environmental & social risk classification		A		
IV. IDB's Role - Additionality				
The project relies on the use of country systems				
Fiduciary (VPC/PDP Criteria)				
Non-Fiduciary				
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:				
Gender Equality				
Labor				
Environment				
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project				
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan				

The POD presents the problems to be addressed by the project as well as the factors causing them. The magnitudes of the problems are provided and the proposed interventions are linked to the problems identified in the diagnosis.

The results matrix has vertical logic. The matrix has impact indicators that have baselines, targets and sources of information. One of the impact indicators is not SMART, since the indicator "volume of fishing products" does not necessarily measure accessibility to markets. The outcome and output indicators have baselines, targets and sources of information. The output indicators are SMART. Although the matrix includes as indicator the km of pavement financed by the project, it is not clear how the km constructed by the World Bank project will be monitored. This is important to monitor since it is required to do the ex-post economic analysis.

The project was analyzed using a rigorous cost-benefit analysis. The economic benefits were clearly specified and calculated and the costs reflect real resource costs to the economy. The assumptions used were clearly presented and justified. Additionally, a sensitivity analysis was performed using the assumptions presented.

The project has a monitoring and evaluation plan. The evaluation follows the DEM guidelines. The operation will be evaluated using a reflexive methodology and an ex-post cost-benefit analysis.

## RESULTS MATRIX

<b>Project expected impact</b>	The project objective is to improve physical accessibility for the population in the South Atlantic Autonomous Region (RAAS), facilitating their integration with national and regional productive markets as well as public, economic, and social services through improvement of their road infrastructure.		
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Impact indicators <sup>1</sup>	Baseline (2015)	Target (2021)	Means of verification/ Comments
Total volume of marine fishery products from the RAAS (million pounds/year) <ul style="list-style-type: none"> <li>Lobster</li> <li>Shrimp</li> <li>Fish</li> </ul>	2.03 1.54 5.41	2.91 1.78 9.02	The baseline has been set based on information from the records of the Nicaraguan Fisheries Institute (INPESCA) and the Nicaraguan Tourism Institute (INTUR).
Number of tourists per year in the RAAS	174,800	273,700	The target has been set based on projections made in the ex ante economic analysis (optional electronic link 1) and will be verified by the MTI.

<b>Project expected outcomes</b>	Lower transportation costs and shorten travel time along the La Gateada–Naciones Unidas–Bluefields corridor.		
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Outcome indicators	Baseline (2015)	Target (2021)	Means of verification/ Comments
Travel times for passenger transportation on the La Gateada–Bluefields segment (hours)	4.9 (La Gateada–Rama–Bluefields intermodal route)	2.9 (La Gateada–Naciones Unidas–Bluefields highway route)	Study on travel speed. Responsibility: Project coordination unit (PCU), MTI, and IDB.
Travel times for freight transportation on the La Gateada–Bluefields segment (hours)	10.0 (La Gateada–Rama–Bluefields intermodal route)	2.9 (La Gateada–Naciones Unidas–Bluefields highway route)	Study on travel speed. Responsibility: PCU, MTI, and IDB.

<sup>1</sup> The impact indicators relate to the main exogenous benefits identified after completion of the road corridor connecting the RAAS to the rest of the country, from La Gateada to Bluefields. These benefits are increased fishery product exports and increased tourist arrivals in the RAAS (optional electronic link 2).

Outcome indicators	Baseline (2015)	Target (2021)	Means of verification/ Comments
Average travel time on the Naciones Unidas–Km 46.1, San Francisco Sector segment (hours)	4.5 <sup>2</sup>	1.0	Study on travel speed. Responsibility: PCU, MTI, and IDB.
International roughness index (IRI) <sup>3</sup> on the Naciones Unidas–Km 46.1, San Francisco Sector segment (m/km)	16.0	2.6	Specialized equipment (roughness meter). Responsibility: PCU, MTI, and IDB.
Vehicle operating costs on the Naciones Unidas–Km 46.1, San Francisco Sector segment (US\$/veh-km)			Calculation report. Responsibility: PCU, MTI, and IDB.
<ul style="list-style-type: none"> <li>Automobile</li> <li>Bus</li> <li>10-ton truck</li> </ul>	0.25 0.85 1.17	0.15 0.52 0.78	

Project expected outputs								
Component 1: Improvement of the Naciones Unidas–Km 46+100 San Francisco Sector road segment								
Output indicators	Baseline	2015	2016	2017	2018	2019	Cumulative target (2020)	Means of verification/Comments
Km of paved highway	0.0	0.0	5.0	15.0	15.0	11.1	46.1	Supervision reports. Works acceptance certificate. Responsibility: PCU, MTI, and IDB.

<sup>2</sup> The average travel time baseline represents the weighted average annual traffic conditions between the dry and rainy seasons.

<sup>3</sup> IRI is a measure of the general condition of the road.

## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

**Country:** Nicaragua

**Project number:** NI-L1087

**Project name:** Atlantic Coast Road Connectivity

**Executing agency:** Ministry of Transportation and Infrastructure (MTI)

**Fiduciary team:** Santiago Castillo Victoria, Senior Fiduciary Specialist in Procurement (FMP/CNI) and Osmin Mondragón, Fiduciary Specialist in Financial Management (FMP/CNI)

### **I. EXECUTIVE SUMMARY**

- 1.1 The executing agency for this operation will be the Ministry of Transportation and Infrastructure (MTI), the apex agency for the transportation sector in the country.
- 1.2 Fiduciary management in Nicaragua in the procurement area is improving, so efforts to support a number of activities should be ongoing, to make them compatible with international best practices and consistent with Bank policies. The MTI has experience implementing Bank-financed operations and is currently executing operations 2225/BL-NI, 2427/BL-NI, 2840/BL-NI, and 2979/BL-NI.
- 1.3 In terms of financial management, the executing agency has gained significant experience and has managed recent Bank-financed operations acceptably. The findings of the audit reports and Bank visits to determine whether the MTI employs an effective internal control system in project execution have confirmed this. However, training will continue to be given in specific areas in order to improve certain aspects of control and ensure that disbursement review is conducted on an ex post basis. The Bank's Financial Management Policy (document OP-273-3) will be applied.
- 1.4 This operation is for a total of US\$62,761,000 (US\$61,500,000 from IDB resources and US\$1,261,000 from the local contribution). No other sources of financing are anticipated.

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

- 2.1 The MTI is governed by Law 290 on the organization, jurisdiction, and procedures of the executive branch, and Law 550 on financial administration and the budget system, with the mandate of setting rules for public sector financial management through use of the budget, treasury, accounting, and internal and external control subsystems; this law establishes that the government entity is

- responsible for its financial management, with regulation delegated to the Ministry of Finance and Public Credit (MHCP).
- 2.2 One of the MTI's greatest strengths is the experience gained by its staff responsible for executing Bank-financed operations. In terms of its organizational and functional structure, the MTI's procurement office has organization and functions manuals, as well as flow charts for procurement procedures. Procurement plans and contracts are also monitored through the Procurement Plan Execution System (SEPA), the National Public Investment System (SNIP), and monitoring matrices in Excel. According to the most recent ex post review for complexity level I procedures, these were implemented with minimal errors according to the Bank's procedures guide.
- 2.3 As regards financial management, the executing agency uses the SIGFA integrated financial management system comprising the budget, treasury, accounting, and reports subsystems, supported by the SIGFAPRO project system. The Bank is currently supporting the Government of Nicaragua on the design of a new integrated financial management system (SIGAF) that will include: (i) the proprietary applications for the recording and accountability of public funds by the MHCP, as the apex agency of the financial administration system; (ii) the functionalities necessary for the administration of each public sector institution, according to their specific features and administrative autonomy; (iii) budgeting with a results-based management approach; (iv) administrative management of the institutions by full transactional cycles; and (v) international accounting standards and automatic generation of public finance statistics. The performance of the executing agency's staff is considered satisfactory. They have gained experience in the execution of several operations in the externally financed projects portfolio. To maintain this level of performance, the Bank will continue supporting the MTI with training to strengthen management.

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

- 3.1 In terms of procurement, the level of risk assigned to the MTI procurement unit in preparing this operation is medium. To improve that level of execution, the following are recommended: (i) ensure retention of personnel in the procurement units; (ii) address the recommendations arising from the ex post reviews of processes subject to that modality; (iii) update the manuals of procedures, organization, and operations of the procurement units, describing in detail procurement's role in the contract administration process. The Bank will provide ongoing advisory support and assistance to the executing agency staff responsible for the Procurement Plan Execution System (SEPA).
- 3.2 In terms of financial management, the fiduciary risk of the operation is regarded as low, given the control conditions implemented at the different stages of execution of public funds, as revealed by the external audit reports and the Bank's financial accounting inspection visits. In order to ensure that this risk remains low, it is suggested that the staff of the external resources office and the DAF



receive a refresher training session on applicable policies and procedures from the Bank team prior to the start of execution of the operation.

- 3.3 In view of the foregoing, the overall fiduciary risk of the operation is medium, tending toward low risk if the relevant actions are taken as set forth in the Risk Matrix.

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

- 4.1 To facilitate contract negotiation by the project team and, principally, the Legal Department (LEG), the agreements and requirements to be reflected in the Special Provisions are given below:
- a. In order to avoid exchange-rate losses, it is recommended that the operation use the exchange rate in effect in Nicaragua on the date on which resources were converted from foreign currency to córdobas by the executing agency; and
  - b. The project's audited financial statements are to be delivered within 120 days after the close of each calendar year during the original disbursement period or as extended.

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

- 5.1 The fiduciary agreements and requirements for procurement establish the provisions applicable to all program procurements.

##### **A. Procurement execution**

- 5.2 **Procurement of works, goods, and nonconsulting services:** Contracts for works, goods, and nonconsulting services generated under the program and subject to international competitive bidding (ICB) will be procured using the Bank's standard bidding documents (SBDs). Bidding processes subject to national competitive bidding (NCB) will be executed using national bidding documents agreed upon with the Bank. The program's sector specialist is responsible for reviewing the technical specifications for procurements during preparation of the procurement processes.

- 5.3 **Procurement of information technology (IT) systems:** Not applicable.

- 5.4 **Turnkey procurements (supply and install):** Not applicable.

- 5.5 **Procurements with community participation:** Not applicable.

##### **B. Selection and contracting of consultants**

- 5.6 Contracts for consulting services generated under the project will be procured using the standard request for proposals (SRFP) issued by, or agreed upon with, the Bank. The project's sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services.

5.7 **Selection of individual consultants:** There will be cases in which the contracting of individual consultants may be announced through local or international publicity for the purpose of forming a short list of qualified individuals.

5.8 **Training:** Not applicable.

**C. Use of country procurement systems**

5.9 The country procurement (sub)system approved by the Bank (SISCAE) will be used to publish notices of requests for expressions of interest and/or bid solicitations in all procurement procedures. Any system or subsystem subsequently approved will be applicable to the operation. The operation's procurement plan and its updates will indicate that procurements will be executed using the approved country systems.

5.10 **Strengthening measures:** Not applicable.

5.11 **Recurrent expenditures:** Not applicable.

5.12 **Commercial practices:** Not applicable.

5.13 **Advance procurement/retroactive financing:** Not applicable.

5.14 **Domestic preference:** Not applicable.

5.15 **Other:** Not applicable.

**D. Thresholds amounts for ICB and international short list (US\$000s)**

Method	ICB works	ICB Goods and nonconsulting services	International short list for consulting services
Threshold amount	> 1,500	> 150	> 200

**E. Main procurement**

Activity	Selection method	Estimated date of solicitation/invitation	Estimated amount (US\$000s)
<b>Works</b>			
Improvement of rural road Naciones Unidas–Km 46+100 San Francisco Sector	ICB	August-15	52,915.50
Improvement of offices	Shopping	March-16	115.00
<b>Goods</b>			
Procurement of transportation equipment (eight pickup trucks)	ICB	March-16	299.00
Procurement of computer and office equipment (15 laptops, 10 digital cameras, 5 multifunction printers, 5 scanners)	ICB	March-16	161.00

Activity	Selection method	Estimated date of solicitation/invitation	Estimated amount (US\$000s)
<b>Nonconsulting services</b>			
Consultation workshops for complaints and grievances system	Shopping	May-15	17.00
Community participation workshops	NCB	July-15	99.00
<b>Firms</b>			
Works supervision services for improvement works on rural road Naciones Unidas–Km 46+100 San Francisco Sector	Quality- and cost-based selection (QCBS)	July-15	4,254.00
Independent financial audit of multiyear program	QCBS	August-15	207.00
Consulting services for evaluation of migration, change in land use, and occupation of Rama-Kriol territory.	QCBS	October-16	232.00
<b>Individuals</b>			
MTI technical advisory support	3 CVs	March-15	200.00
Program final evaluation	3 CVs	December-18	80.00

\* To access the 18 month procurement plan, click [here](#).

## F. Procurement supervision

- 5.16 The procurement supervision method will be as indicated in the procurement plan, and will be determined for each selection process. Ex post reviews will be conducted every six months in accordance with the project supervision plan. Reports on ex post reviews will include at least one physical inspection visit, chosen from among the procurement processes subject to ex post review. No less than 10% of the contracts reviewed must be inspected physically.

Thresholds for ex post review		
Works	Goods	Consulting services
US\$150,000.00	US\$25,000.00	US\$200,000.00

Note: The thresholds for ex post review are based on the executing agency's fiduciary capacity for execution, and may be modified by the Bank to the extent that such capacity changes.

## G. Special provisions

- 5.17 **Measure to reduce the likelihood of corruption:** Institutional implementation of an ethics and conduct code for the staff, covering the procurement division, primarily the issue of conflict of interest.
- 5.18 **Other special procedures:** Not applicable.

## **H. Records and files**

- 5.19 The procurement and financial area will be responsible for keeping project files and records. The agreed formats and procedures routinely used by the MTI in Bank-financed operations must be used when preparing and filing project reports.

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

### **A. Programming and budget**

- 6.1 The country system, governed by the Financial Administration and Budget System Law and the SNIP, will be used, following the national general budget approval cycle directed by the MHCP. The MTI will process an annual budgetary allocation clearly identifying the project, in order to have sufficient budget appropriations to cover each year's execution commitments, the operation will use the Integrated Financial and Administrative Management system (SIGFAPRO) as a financial/accounting system acceptable to the Bank. If there is any change or improvement in the SIGFA/SIGFAPRO project administration module, the operation would automatically migrate to the changed or improved version.

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

- 6.2 The IDB will make disbursements to the borrower through the Central Bank of Nicaragua into the account opened for this operation. No account will be opened at commercial banks. The advance of funds modality will be used for up to six months, depending on the project's liquidity requirements. To process a new advance of funds will be processed, justification must have been provided for at least 80% of the previous advance. Documentation in support of disbursements will be sent to the Bank by electronic means. The MTI will have a financial plan, which must be aligned with the program execution plan, annual work plan, and procurement plan.
- 6.3 Cash flows will include the payment of interest during the execution period with funds from the loan proceeds, as per the amount established in the project budget (Sole Annex). Since this is a blended operation, interest cannot be capitalized automatically; the process approved by the Bank must be followed.

### **C. Accounting and financial reports**

- 6.4 The financial statements of the entity and the project must be issued in accordance with International Accounting Standards accepted by the Bank in its Financial Management Policy (document OP-273-3) and must be audited annually by an independent firm eligible for the Bank. The project's financial accounting records will be kept using the SIGFAPRO system.

### **D. Internal control/internal audit**

- 6.5 The executing agency has a reliable internal control system, with manuals and procedures established under the responsibility of the office of external resources

and the finance and administration office. The executing agency also has an internal audit unit, which is expected to include the review of project execution in its annual planning, insofar as it is able to do so.

**E. External control and reports**

- 6.6 Since the Contraloría General de la República [Office of the Comptroller General of the Republic (CGR)] is not currently accepted by the Bank to audit Bank-financed projects, the executing agency will be required to engage the services of an independent audit firm eligible for the Bank, in accordance with Bank policies.
- 6.7 The external audit reports on the program and the review of disbursement processes and requests must be submitted within 120 days after each fiscal year during the disbursement stage, and 120 days after the end of each calendar year during the original disbursement period or any extensions to it, based on the International Standards on Auditing (ISA), and the annual financial statements will be prepared in accordance with the guidelines for financial and external audit reports on Bank-financed projects.

**F. Financial supervision plan**

- 6.8 Unaudited financial reports will be used for financial monitoring of the project. However, it is the executing agency's responsibility to ensure the monitoring and control of operations in a centralized or decentralized manner. Nevertheless, during project execution the Bank will implement the following actions: (i) before the first disbursement, a launch workshop will be held to train the team members in charge of execution in the use and application of legal instruments for fiduciary management; (ii) accounting/financial visits to confirm the progress of project execution and the introduction of internal control measures, with an emphasis on gathering information on financial execution processes, quality, and timeliness of accounting records and the relevance of supporting documentation; and (iii) ex post review of disbursement requests by Bank staff and the external auditor, who will also confirm the implementation of current and future recommendations made for the project.