

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

NICARAGUA

**PUEBLA-PANAMA PLAN HIGHWAY PROJECT FOR
COMPETITIVENESS**

ZONE III

(NI-0113)

LOAN PROPOSAL

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Proposed resolution

Electronic Links and References	
Abbreviations	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=429312
Basic Socioeconomic Data	http://www.iadb.org/RES/index.cfm?fuseaction=externallinks.countrydata
Status of loan in execution and loans approved	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=429311
Tentative lending program	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=429310
Information available in the RE2/FI2 technical files	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=429315
Annex I – Logical Framework	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=439132
Annex II – Procurement plan	http://opsws3.reg.iadb.org/idbdocswebservices/getDocument.aspx?DOCNUM=429314

PROJECT SUMMARY

NICARAGUA

PUEBLA-PANAMA PLAN HIGHWAY PROJECT FOR COMPETITIVENESS

ZONE III

(NI-0113)

Financial Terms and Conditions¹					
Borrower:	Republic of Nicaragua			Amortization period:	40 years
Executing agency:	Ministry of Transportation and Infrastructure (MTI)			Grace period:	10 years
Source	Amount	%	Disbursement period:	4 years	
IDB (FSO)	US\$40 million	80	Interest rate:	1% during the grace period 2% for the next 30 years	
Local	US\$10 million	20	Inspection and supervision fee:	1%	
Other/Cofinancing			Credit fee:	0.5%	
Total	US\$50 million	100	Currency:	U.S. dollars	
Project at a glance					
Project objective:					
The project's general objective is to promote greater competitiveness for the principal products of Zone III in the Departments of Matagalpa, Jinotega, and León by improving highway transportation. The project's specific objectives are: (i) to reduce vehicle operating costs and freight charges; and (ii) to reduce travel times.					
Special contractual conditions:					
The loan contract will contain (i) as conditions precedent to the first disbursement: (a) an agreement must have been signed for allocation and transfer of funds and for project maintenance activities (paragraph 3.1); (b) an agreement must have been signed for the maintenance of the country's maintainable road network for 2005 (paragraph 3.3); (c) the conditions concerning FOMAV's (Fondo de Mantenimiento Vial, or Highway Maintenance Fund) financial viability must have been fulfilled (paragraph 3.4); (d) the social and environmental specifications must have been incorporated into the model bidding conditions and draft contracts; (4.20); and (e) the MTI institutional strengthening plan must have been approved (paragraph 1.13); and (ii) as special contractual conditions of execution: (a) the holding of semi-annual project monitoring meetings (paragraph 3.10); (b) fulfillment of maintenance obligations (paragraph 3.11); and (c) submission of baseline data and related information (paragraph 3.13).					
Exceptions to Bank policies: None					
Project consistent with country strategy: Yes [X] No []					
Project qualifies as: SEQ [X] PTI [X] Sector [] Geographic [] Headcount []					
Verified by CESI on: The project was reviewed by CESI on 18 June 2004.					
Environmental and social management proposal: See section G (4.19 to 4.21).					
Procurement: See paragraphs 3.8 and 3.9.					

I. FRAME OF REFERENCE

A. Socioeconomic context

- 1.1 Changes in the principal macroeconomic indicators during 2003 are indicative of the successes achieved in economic management. The downward trend in GDP was reversed, with the growth rate rising to 2.3%. The combined public sector deficit, taking into account donations, dropped to 4.4% of GDP, as a result of increased revenues and reduced spending under the new Fiscal Equity Law. Inflation remained stable at around 6%, and the balance of payments improved.
- 1.2 The ability of the government to manage the public debt also improved. Compliance with the PRGF (Poverty Reduction and Growth Facility) program, agreed with the IMF in December 2002, permitted Nicaragua to reach the completion point of the debt reduction initiative for heavily indebted poor countries (HIPC) in January 2004. This means that its external debt (US\$4.5 billion in net present value (NPV) in December 1999) will be reduced by approximately 72% in NPV. The nominal debt relief follows a timetable that extends until 2023. This frees up resources allocated to debt service, relieves pressure on fiscal accounts and balance of payments, and makes it possible to allocate these resources to social sectors, pursuant to strategic guidelines for poverty reduction.
- 1.3 Given the government's efforts to continue prudent economic management in the PRGF framework and to improve sectoral performance, GDP can be expected to show close to 5% annual growth by the end of 2004. In fact, through the first half of the year, most of the productive sectors have performed better than in the same period of the preceding year, particularly the industrial, construction, energy and water, and financial sectors. Prudent fiscal and monetary management will help keep inflation under control (despite rising oil prices). Given economic recovery and the greater tax revenues accompanying it, along with the results of the May 2003 tax reform and public-spending controls, the fiscal deficit can be expected to decline. Meanwhile, improvements in exports, increased flows of foreign currency as a result of tourism, and a greater flow from remittances will help improve the balance of payments current account.
- 1.4 The principal challenge in the medium term is to promote growth and reduce poverty in a stable macroeconomic environment. This means meeting the requirements of the economic program (fiscal consolidation, prudent monetary policy and continued reform), while carrying out policies that foster private investment and productive activity.

B. The Puebla-Panama Plan

- 1.5 In order to maintain the sustainable development of their economies in an increasingly globalized world, the Central American countries have attempted to

achieve competitive economic integration in the region, and have signed the Central American Free Trade Agreement (CAFTA) with the United States. The Puebla-Panama Plan (PPP) was created by the President of Mexico, the Presidents of the Central American countries, and the President of Panama in the framework of the Tuxtla Gutiérrez Dialogue and Consensus Mechanism, and has become the ideal high-level regional integration instrument for achieving the objectives of the various free trade agreements being entered into by the countries. The Bank has supported the PPP since its inception, providing technical assistance funds, and was designated by the presidents of the eight countries to coordinate the Institutional Technical Group that supports the plan by seeking funding for projects that emerge from the various PPP initiatives.¹

- 1.6 The Mesoamerican Initiative for Transportation comprises projects and works for the construction, rehabilitation and improvement of the principal transportation infrastructure of Mesoamerica, as well as activities to promote transportation regulation and technical standards. The PPP's member countries have established the International Network of Mesoamerican Highways (RICAM), and have made it an investment priority in all their countries, with the goal of increasing the connectivity and competitiveness of their economies. The RICAM road network consists of 9,034 kilometers of roadways, including 4,904 kilometers of main integration corridors and 4,130 kilometers of complementary branch and regional connecting roads. RICAM includes 691 kilometers of roads in Nicaragua, of which 342 are part of the Pacific Corridor and 349 are complementary branch and connecting roads. Since its inception, the PPP has included the main trunk roads that connect Nicaragua with Central America's northern countries and with Honduran ports.
- 1.7 The Pan American highway, from El Guasaule (on the Honduras border) to Peñas Blancas (on the Costa Rican border), is part of the PPP's Pacific Corridor. This corridor, which stretches for 3,159 kilometers between Puebla (Mexico) and Panama City (Panama), is the most practical integration corridor in the Central American region in terms of length, topography, and altitude, and has the greatest investment needs. Improving the Nicaraguan section between El Guasaule and Chinandega is one of the highest and most urgent priorities in the corridor. Contracts have been awarded for the works with funding from Mexico, channeled through the Central American Bank for Economic Integration (CABEI), and is in the initial stage of execution. At the same time, the portion that links the port of Corinto, on the Pacific coast, with the Pan American Highway in Chinandega, is part of RICAM's branch and regional connecting roads, while the Telica-San

¹ The PPP strategy is built around eight initiatives and their projects, which are: (1) sustainable development; (2) human development; (3) prevention and mitigation of natural disasters; (4) promotion of tourism; (5) facilitation of trade; (6) transportation; (7) energy interconnection; and (8) integration of telecommunications.

Isidro portion, which is a trunk road offering an alternative route to the Chinandega-El Guasaule highway, is part of the addition to RICAM requested by Nicaragua. The Telica-Malpaisillo portion is currently out for bid under loan 1530-SF/NI, with cofinancing under Loan 423 of the Nordic Development Fund (NDF). Its completion will include the addition of the Malpaisillo-San Isidro section under the present operation, thereby connecting the two trunk roads that comprise the Pacific Corridor in Nicaragua. The Malpaisillo-San Isidro segment will absorb 80% of the Bank's proposed funding for this operation, reflecting the priority that the country assigns to this section, as well as its importance to the PPP.

- 1.8 The region's secondary, tertiary and rural roads, which connect RICAM with Central America's populations and productive areas, are of great importance in the PPP framework. Reducing transportation costs, in an economy based largely on primary production, with generally low value-volume ratios, is decisive for competitiveness, investment, and employment in the area. Thus, it is essential that the RICAM feeder networks be integrated in the PPP's road transportation program in a manner consistent with sustainable development and competitiveness objectives. Along with investment in the RICAM corridors, the transportation initiative includes programs and projects to rehabilitate and maintain secondary, tertiary, and rural road networks, as proposed in the project described here. These are to be funded as part of the national highways programs.
- 1.9 Like all of the countries in the PPP, Nicaragua, recognizes the need to complement the efforts to upgrade the Pacific and Atlantic corridors, while also focusing on the branch roads and regional connections, and to arterial highways and roads, both national and regional. This, as will become clear below, is the purpose of the present project.

C. Nicaragua's transportation sector

- 1.10 Nicaragua's road network includes 18,712 kilometers of highways and rural roads. Only 1,986 kilometers, or 10.6% of the total, are paved, and some of the roads have exceeded the useful design life. There are 13,780 kilometers of rural dirt roads (73.6%) built to minimal specifications and of limited use in the rainy season. The remaining 2,946 kilometers are gravel and concrete.

1. Institutional framework

a. Ministry of Transportation and Infrastructure (MTI)

- 1.11 Under Law 290, in force since 1998, the MTI is the planning, regulatory and standards-setting agency for the transportation and road infrastructure sectors. In fulfillment of its legal mandate, it directs, administers and supervises the maintenance and development of transportation infrastructure, either directly or

by delegation. The MTI shares with FOMAV the responsibility for developing and maintaining roads. The Bank's experience with the MTI as an executing agency for projects has been generally positive, except where maintenance is concerned. Once eligible for disbursement, project execution has achieved the technical, social and environmental quality standards envisaged, and has generally fallen within anticipated timeframes and costs. The IDB's Project Execution Unit has accumulated sufficient experience, and its technical staff has largely proved capable of avoiding the problems that arise whenever a new administration assumes office.

- 1.12 Nevertheless, an analysis of the institutional capacity of the institution (carried out in connection with preparation of the PPP Highway Project to Promote Competitiveness (Zone II) and in connection with the present operation) concluded that in order for the MTI to be in a position to carry out the government's investment program for 2004-2006, it needs to be strengthened in the following areas: (a) restructuring the General Directorate of Highways (DGV) to establish effective coordination among the units reporting to it (Highway Construction, Highway Maintenance, and Highway Administration); (b) training the procurement staff; (c) strengthening by the General Directorate of Environment (DGA), including funds for appropriate and thorough supervision of works; (d) designing and implementing information systems for MTI and FOMAV; and (e) designing and providing equipment for the geographic information system (GIS) within the DGA. Funds of US\$1 million were earmarked to finance these activities as part of loan 1530/SF-NI, which is financing the Zone II loan, and the same amount is being requested in the present operation to implement the action plans associated with the institutional strengthening program.
- 1.13 Funds from Bank loan 1088/SF-NI are being used to pay for management consulting needed to prepare the terms of reference for the consulting services required as part of the above-mentioned strengthening program. This will allow the strengthening efforts to proceed immediately in the areas indicated, so that the MTI will be in a position to execute not only the Bank's operations in the 2004-2006 period, but also its other investments during this period. To ensure that the MTI has the institutional capacity to carry out the present project, it will need to demonstrate, to the Bank's satisfaction, as a condition precedent to the first disbursement, that it has approved an institutional strengthening plan that would be funded from loan 1530/SF-NI, together with a timetable and work schedule prepared on terms and conditions previously agreed with the Bank. The plan must also include the terms of reference for implementing the MTI strengthening activities.

b. Road maintenance fund

- 1.14 FOMAV was created by Law 355, of 1 August 2002, in order to ensure the preservation of the basic national highway network, which comprises an estimated 8,000 kilometers of roadways. FOMAV is a legal entity with an indefinite lifetime and with its own assets, and it enjoys technical and administrative autonomy. Its primary objective is to maintain the country's maintainable road network. Though the law created FOMAV, it did not provide it with the permanent and sustainable source of funding it needs to fulfill its legal mandate. In addition, implementation of its structure and operation have been slowed by complications in passing the relevant regulatory legislation. Only in May 2003 was the legislation approved by the Legislative Assembly. FOMAV then began to draw up its first contracts, using seed capital of US\$8.1 million provided by the Bank and the World Bank for the 2003-2005 period.
- 1.15 Since FOMAV does not yet receive funds from the national budget, the seed fund has only allowed it to maintain approximately 30% of the maintainable road network. Thus, it is urgent for the government to allocate funds for FOMAV to enable it to continue maintenance activity once the seed money is exhausted, and to maintain roads not currently being serviced.

c. Investment program for the transportation sector

- 1.16 The table below shows the MTI investment program for 2003-2007. Only those projects in execution and those effectively funded are shown here. The table shows the projects in the four zones of the PPP Highway Project to Promote Competitiveness.

Table I-1

US\$ millions	Year	Amount	Execution				
			2003	2004	2005	2006	2007
A. IDB		168					
II. In execution							
Pan American highway rehabilitation	1999	3	1	2			
San Lorenzo-Muhan rehabilitation	2001	35	6	17	12		
PPP Highway Project, Zone II	2004	40			15	25	
III. In preparation							
PPP highway project, Zone III	2005	40			8	20	12
PPP highway project, Zone IV	2006	50				25	25
B. CABI		20					
Chinandega-Guasaule rehabilitation	2002	20		7	13		
IV. World Bank		106					
V. In execution							
Agreement II 3085-NI	1998	7	3	3	1		
Agreement III 3464-NI	2001	49	27	17	5		

US\$ millions	Year	Amount	Execution				
			2003	2004	2005	2006	2007
In preparation							
Agreement IV	2005	50				23	27
Spain (Widening of Managua-Masaya-Granada highway)	2003	30	4	7	19		
Denmark (San Benito-San Lorenzo Highway)	1999	22	5	10	7		
European Union (Guayacán-Jinotega Highway)	2002	14		2	6	6	
OPEC	2001	5		2	3		
National resources (Local counterpart)		51	10	5	13	9	14
VI. Total		416	56	72	102	108	78

D. Country's strategy for the sector

1.17 The country's strategy is to improve highway infrastructure and promote integration, in order to facilitate access to production and markets and foster economic growth. This is reflected in the National Transportation Plan [Plan Nacional de Transporte] (PNT), which was developed in 1999 with Bank funding. This strategy was established at the highest political level, and includes: (a) strengthening public institutions in the sector; (b) accelerating the use of funds available under loans and donations now in execution; and (c) preparing the Highway Project to Promote Competitiveness and presenting it to the international financial community. In addition to providing for integrated road infrastructure services on important highway networks for competitive development at the regional and national levels, this program incorporates Nicaragua's corridors into RICAM and its feeder road system.

1. Highway Project to Promote Competitiveness

1.18 In designing this program, the Nicaraguan government has designated four geographic zones (Program Zone Map), which the National Transportation Plan identifies as the highest priority zones for transportation investment, due to their potential. The goal is to improve productivity as quickly as possible, increase competitive production of goods and services and create jobs. The zones require public infrastructure investment, especially in integrated road networks that allow for high connectivity and access, higher-quality freight and passenger transportation services, and lower production and marketing costs. Using this approach, combined with the PPP's RICAM priorities, the government has decided to execute the Highway Project to Promote Competitiveness in the 2004-2006 period. The program addresses a number of fundamental priorities: (i) in each region selected, it identifies the integrated road network important for developing road infrastructure services, so as to remove obstacles to competitiveness and investment; (ii) it links the capacity to effectively maintain

each of the networks in the four zones with the capacity to invest in rehabilitation and improvement; (iii) it ensures the coordination of available external financing and its systematic monitoring; and (iv) it facilitates the identification, funding and execution of complementary public investment in other sectors.

- 1.19 The MTI is preparing projects simultaneously for the four zones, with funding from CABEL, the Nordic Fund and the Bank. The Bank approved funds for the Zone II project (loan 1530/SF-NI), and the present document deals with funding for Zone III. The government has also requested funding from the Bank for Zone IV feasibility studies.

E. The Bank's strategy and experience in the sector

- 1.20 The Competitiveness Strategy (document GN-2243) reaffirms that lack of access to adequate infrastructure is an obstacle to the development of productive activity and the growth of enterprises, and confirms the Bank's priority of providing and administering coordinated infrastructure services. The Bank's operational priorities with regard to integration, defined in the Regional Strategy (document GN-2245), highlight the importance of supporting infrastructure development, not only in terms of national objectives, but also with a view to facilitating regional integration. The strategy also assigns priority to PPP activities, both to execute coordinated infrastructure investment and to harmonize policies and measures that facilitate the provision of logistical and transportation services, including those at transshipment centers and border crossing points. The Bank strategy for Nicaragua (document GN-2230-1) emphasizes economic growth based on fostering competitiveness and production as primary objectives and prerequisites to reducing poverty. The strategy also stresses improving the maintenance of basic infrastructure, providing additional services, and promoting the convergence of interests and coordination of synergies between bilateral and multilateral institutions.
- 1.21 The Bank funded a Rural Road Rehabilitation and Upgrading Program with two loans: 756/OC-NI and 902/SF-NI. Execution concluded in 1999. The program covered 17 gravel roads, totaling 372 kilometers, over a period of six years, at a cost of US\$64.2 million (US\$47 million from loans). In 1999, the Bank also approved loan 1036/SF-NI for rehabilitating six sections of the Pan American Highway. Funds from this loan were used to complete four sections (207 kilometers), while the institutional capacity of the MTI was strengthened and support was provided for the creation of FOMAV. In 2001, the Bank approved loan 1088/SF-NI for US\$35 million to rehabilitate 88 kilometers of the Managua-Rama highway, an operation that is currently in execution. Finally, the Bank granted Nicaragua a loan of US\$40 million (1530/SF-NI) on 2 February 2004, in order to fund the PPP Highway Project to Promote Competitiveness (Zone II). The contract for this loan was ratified by Nicaragua's Legislative Assembly on 29 September 2004.

F. Experience of other financial agencies

- 1.22 As shown in the table above, other entities are also participating in funding the sector: the World Bank, CABEL, the Nordic Fund, Denmark, Spain, and OPEC. The IDB is working closely with these institutions in identifying projects in implementing them. The Bank will also administer the financing received from the Nordic Fund.

G. Lessons learned

- 1.23 The Bank's experience in executing operations in the transportation sector indicates that the useful life of highway investments and their economic viability depend on regular and periodic maintenance. Technical and economic analysis has shown that the useful life of the road and highway rehabilitation and upgrading included in this project would be reduced by half (from 15 to 7.5 years) if regular, periodic maintenance is not carried out. Given the importance of road maintenance for efficient transportation, the contract for loan 1530/SF-NI included a number of clauses making the disbursement of funds from the loan conditional on allocation of resources to FOMAV for maintenance of highways and roads included in the project, as well as for the rest of the maintainable road network.² The loan contract for the present operation will include the same clauses, in order to ensure enforcement of the FOMAV legislation.
- 1.24 Another lesson learned is that when there is an investment program such as the PPP Highway Project to Promote Competitiveness, where a number of institutions are participating in funding, coordination among the institutions is essential in order to prevent duplication of efforts and delays in executing works. As in the contract for loan 1530/SF-NI, the present operation includes a clause to ensure regular meetings to conduct oversight and to monitor progress in both this project and the Competitiveness Program as a whole, so as to ensure proper coordination among the participating institutions.

² The special conditions precedent to the first disbursement of the second phase of the PPP Highway Project to Promote Competitiveness, as reflected in the contract for loan 1530/SF-NI, are as follows: (i) evidence that the local counterpart funds needed to execute the activities contemplated as a part of the first phase of the project have been allocated in the national budget and transferred to the MTI and FOMAV during 2004; (ii) evidence that FOMAV's new financial regime has been modified and implemented, guaranteeing effective, appropriate, permanent and independent allocation of the resources needed to fulfill the obligations of regular, periodic maintenance of the country's maintainable road network; (iii) evidence that FOMAV has actually received the transfers for carrying out a minimum of four months of regular, periodic maintenance of the country's maintainable road network; and (iv) evidence that the activities contemplated in the first phase of the project have been executed in accordance with the timetable for disbursements and execution of investments and maintenance agreed with the Bank.

H. Project strategy

- 1.25 The object of the operation outlined in this document is Zone III, situated in the north-central part of the country, principally in the departments of Matagalpa, Jinotega, and León. It includes the country's principal coffee plantations and major grain production, livestock, mining and vegetable production areas. Like the Zone II project, the components of this project are designed to solve problems of capacity, quality, and sustainability in infrastructure services designated as priorities by the government and the productive sectors concerned.
- 1.26 At of this writing, Nicaragua's Legislative Assembly has ratified the loan contract to fund the Zone II project, and the preconditions have been fulfilled. The projects for the four zones are not organized sequentially, and are independent of each other in terms of their technical, economic and environmental viability. The works in the project can also be executed independently, since, as in Zone II, all work, including maintenance, will be contracted to the private sector. Moreover, the time needed for the legislative process and the fulfillment of preconditions suggests that it is best to avoid basing the projects' preparation and execution timetables solely on the time needed to execute the physical work.

II. THE PROGRAM

A. Objectives

- 2.1 The project's general objective is to promote greater competitiveness for the principal products of Zone III in the departments of Matagalpa, Jinotega, and León by improving road transportation conditions. The specific objectives are (i) to reduce vehicle operating costs; and (ii) to reduce travel times.

B. Description

- 2.2 The project consists³ of the IDB-financed components and the components financed with local counterpart funding as shown in Table II-1.

- 2.3 The Bank-financed components are:

1. **Engineering and supervision:** comprising civil works supervision costs, external audits, and feasibility studies for the Acoyapa-San Carlos Zone IV project (**US\$7.2 million**).
2. **Direct costs:** (i) Rehabilitation of 72 kilometers of the Malpaisillo-San Isidro trunk corridor with hot asphalt surfacing 5 centimeters thick, a 20-centimeter base and a 25-centimeter recycled cement sub-base. (**US\$18 million**). This section joins up with the Telica-Malpaisillo segment that was financed out of loan 1530/SF-NI. This makes it possible to connect with two trunk roads: the Panamerican Highway and the Costanera (Coastal Highway) which are in turn part of the PPP Pacific Corridor.

(ii) A 30-centimeter-thick gravel resurfacing of 93.5 kilometers of trunk highway feeder roads 5.5 meters wide for the following sections of road: Cuyali-La Colonia-Abisinia, 28.5 kilometers; Abisinia-Empalme la Pavona, 7.5 kilometers; the Abisinia–Puente La Pavona, 1 kilometer; the Cuyali-Asturias-Empalme Las Cruces, 16.5 kilometers; the Empalme Las Cruces-San Gabriel, 25 kilometers; and Empalme Las Cruces-Pantasma, 15 kilometers (**US\$6.5 million**). These sections, situated in rich agricultural areas, will provide the means of transporting production to major routes and ports.

(iii) Regular maintenance of 286 kilometers of paved roads by FOMAV for four years, as follows: the Sébaco Empalme San Isidro, 10 kilometers; Matagalpa-Santa Emilia-El Tuma-La Dalia, 40 kilometers;

³ For map of project sections, see: *Mapa Tramos del Proyecto.pdf*.

Empalme San Isidro-Esteli link, 35 kilometers; Empalme San Ramón-San Ramón, 5 kilometers; San Rafael del Norte-Jinotega, 22 kilometers; Jinotega-Cuyali, 18.5 kilometers; Estela-Yalaguna-El Espino, 86 kilometers; and San Benito-Sébaco, 69 kilometers (US\$4 million). These roads will also make it easier to transport goods and people to the trunk roads alluded to.

3. **Contingencies.** The Bank financing also makes allowances for contingencies, which have been estimated at 5% of the direct costs (**US\$1.5 million**).
 4. **Environmental social management.** This item covers activities and works to assist the beneficiary population and care for the environment. (**US\$1.8 million**).
 5. **Institutional strengthening for MTI and FOMAV**, with an emphasis on contracts for works, technical supervision, and project monitoring and evaluation, including environmental aspects (**US\$1 million**).
 6. **Financial expenses.** The Bank will provide financing for interest on the loan and inspection and supervision. (**US\$1 million**).
- 2.4 The local counterpart funding will cover: **routine maintenance by FOMAV** of 225 kilometers of gravel roads for four years, including the following roads: El Tuma-Guapotal, 24 kilometers; Empalme La Concordia-La Concordia-Esteli, 33 kilometers; La Pavona bridge-La Pita-Maleconcito, 38 kilometers; Santa Emilia-El Roblar 19 kilometers; La Dalia-Empalme La Mora, 11 kilometers; Empalme La Mora-Cerro Verde-La Colonia, 19 kilometers; Empalme La Mora-Puente La Pavona (El Portillo)-El Cua-San José de Bocay, 61 kilometers; and El Cua-La Docha-La Pavona bridge, 20 kilometers. These roads will make an important contribution to the project objectives and will continue to ensure that FOMAV is financially sustainable. (US\$3.2 million).
- 2.5 Financing will also be provided for taxes on civil works, contingencies, and consulting services for supervision of civil works and their environmental effects, project studies, and the external audit of the project (**US\$6.6 million**). The credit fee will also be financed (**US\$200 million**).

C. **Costs and financing**

- 2.6 Table II-1 shows total estimated project cost and proposed financing. Bank financing will take the form of an investment loan covering 80% of the total cost. The remaining 20% will be provided by Nicaragua as counterpart funding. The costs, by investment category, are as follows:

Table II-1
US\$ millions

Category	IDB	GNI	Total
1. Engineering and supervision	6.20	1.00	7.20
1.1 Studies	2.50	0.40	2.90
1.2 Supervision, audits	3.70	0.60	4.30
2. Direct costs	31.30	8.60	39.90
2.1 Civil works	24.50	4.36	28.60
2.2 Maintenance	4.00	3.84	7.84
2.2.1 Periodic	4.00	0.64	4.64
2.2.2 Routine		3.20	3.20
2.3. Social/environmental management	1.80	0.30	2.10
2.4 Institutional strengthening	1.00	0.10	1.10
3. Contingencies	1.50	0.20	1.70
4. Financing expenses	1.00	0.20	1.20
4.1 Interest	0.60		0.60
4.2 Credit fee		0.20	0.20
4.3 Inspection and supervision	0.40		0.40
Project Total	40.00	10.00	50.0
	80%	20%	100%

III. PROJECT EXECUTION

A. Borrower and executing agency

- 3.1 The borrower will be the Republic of Nicaragua, and the MTI will serve as the executing agency. For the execution of the maintenance components, as well as coordination of activities with the MTI and fulfillment of the conditions relating to maintenance of the works, an agreement satisfactory to the Bank will be signed with FOMAV as a condition precedent to the first disbursement of the loan. The MTI will act through the Project Executing Unit under the General Directorate of Highways [Dirección General de Vialidad] (DGV) and, for social and environmental aspects of the project, under the DGA.
- 3.2 The general role of the DGV will include planning, scheduling, construction, contracting, supervision and upgrading of highways and bridges in the road network. Currently, the DGV includes three offices: Highway Construction, which includes the executing units for projects funded by the World Bank, the Bank, CABI and other financial agencies; Highway Conservation and Highway Administration.
- 3.3 FOMAV will be responsible for the project maintenance activities, through contracts with the private sector. MTI and FOMAV have already signed the highway maintenance agreement for 2004, and are in the process of signing the agreement for 2005, subject to Bank approval, which will include the sections of highway specified in this project. For these, FOMAV will be responsible for funding and carrying out periodic and routine maintenance. The signing of the maintenance agreement for 2005, and inclusion of the respective sections and the required funding, will be a condition precedent to the first disbursement of the loan.
- 3.4 The Bank must also receive evidence of compliance with the following conditions related to FOMAV's financial viability: (i) the counterpart funds required for the project have been allocated in the national budget and transferred to MTI during 2005; (ii) FOMAV's new financial regime has been modified and is in effect, ensuring the presence of the appropriate ongoing, independent funds needed to carry out routine and periodic maintenance obligations for the country's maintainable road network; and (iii) FOMAV has received the funds to cover at least 4 months of routine and periodic maintenance of the country's road network

B. Execution and administration

- 3.5 Through the executing unit responsible for IDB projects, the DGV will prepare and transmit to the Bank semi-annual progress reports on the execution of the project's components. The reports will include, among other things, details of the

bidding process, bar charts of the physical progress of the main activities in each of the road works and maintenance operations, comparison of execution with the timetables in the respective contracts, physical and financial indicators, indicators for progress evaluation, notes on physical and financial changes to plans, along with their justification and an assessment of possible results, problems encountered and anticipated, and solutions adopted and proposed. Through the MTI's General Directorate of Environment (DGA), the DGV will also be responsible for environmental and social impact monitoring and follow-up, pursuant to the social strategy designed for the project. The Bank will monitor execution of the project's components through its Country Office in Nicaragua, with support from the project team.

- 3.6 The executing agency will: (a) prepare and submit to the Bank requests for disbursements, along with justification of eligible project expenses; (b) prepare and submit to the Bank semi-annual reports on flows in the revolving fund; (c) prepare and submit to the Bank audited financial reports of the project, as well as other reports required by the Bank; and (d) maintain a proper filing system for supporting documentation on eligible expenses, to facilitate verification by Bank staff and external auditors.
- 3.7 Pursuant to IDB requirements, it will also maintain separate accounting records for project operations, integrated in the executing agency's system, in such a manner as to facilitate accounting and financial management of funds supplied by the Bank, other funders and the local counterpart. The system is to be supported by a contract administration system. The executing agency is also to keep separate, specific bank accounts for Bank funds and local counterpart funds. Finally, it will submit semi-annual reports on the revolving fund within 60 days after the close of each 6-month period.

C. Procurement of goods and services

- 3.8 Contracting for works, procurement of goods and related services, and contracting for consulting services will be conducted in accordance with applicable Bank procedures and policies. Supervision of works will also be conducted by private consulting firms. There will be international competitive bidding for (i) civil works, including maintenance contracts, valued at or above US\$3 million; (ii) procurement of goods valued at or above US\$300,000; and (iii) consulting services valued above US\$200,000.
- 3.9 The project's bidding plan has been prepared by the firm that conducted the project's engineering studies. The work funded by the Bank will be contracted through international competitive bidding. In the case of maintenance work funded by the local counterpart, local competitive bidding will be employed, since these contracts will be for amounts less than the Bank's threshold for international competitive bidding. This work will be distributed over some 40 or more

contracts over a four-year period, with different execution schedules, according to the needs of the road network covered by the project. If, however, there are bidding packages that exceed the Bank's ceiling for local competitive bidding, international competitive bidding will be conducted pursuant to Bank procedures.

D. Coordination of projects in the Highway Project to Promote Competitiveness

- 3.10 During the execution of the program, the Bank will meet twice yearly with other funders of the Highway Project to Promote Competitiveness, either in Managua or Washington, D.C., or by teleconference. The meetings will be held by 15 March and 15 September each year, beginning on 15 March 2005. At least two weeks prior to the meetings, the DGV will prepare and transmit to the Bank standard consolidated reports covering the program's different components and projects, including, but not limited to, details of the bidding process, bar charts of physical and financial progress and charts on progress evaluation, notes on physical and financial changes to plans, along with their rationale and an evaluation of potential results, problems encountered and anticipated, and solutions adopted and proposed.

E. Maintenance

- 3.11 The MTI and FOMAV will: (a) ensure that the work done on the road network is properly maintained in accordance with generally accepted technical standards; (b) during project execution, submit to the Bank (i) no later than 15 September of each calendar year, beginning in 2005, the draft annual maintenance agreement for the following year, for the Bank's nonobjection; and (ii) by 15 March of each calendar year, beginning in 2006, the signed and effective annual maintenance agreement for the year in question; (c) by 15 September of each year during project execution, beginning in 2006, the annual road maintenance plan for the following fiscal year; and (d) by 15 March of each year during project execution, beginning in 2006, an annual report on the maintenance carried out on the country's maintainable road network. If inspections by the Bank or reports received by it determine that maintenance has been below the technically recommended and agreed levels, MTI and FOMAV will take the necessary steps to correct the deficiencies.

F. External audits

- 3.12 The project's external audits are to be conducted by an independent auditing firm acceptable to the Bank, based on terms of reference previously approved by the Bank. The Bank's standard procedures for the selection of external auditing services (Document AF-200) will be used to select and hire the firm. The project's annual financial statements will be submitted within 120 days following the end of the fiscal year, and the final audit within 120 days following the last

disbursement. Auditing expenses are a part of project cost and will be funded out of the Bank financing. A social/environmental audit is also envisaged.

G. Ex post evaluation

- 3.13 The borrower has not opted for an ex post evaluation of the project. However, the project team has reached an agreement with the government to maintain complete information, so as be able to verify fulfillment of the objectives of the project and its relation to the Competitiveness Program, along with the impact and effectiveness of the operation. Maintaining information on results, referenced to a baseline established for the project, will facilitate comparative analysis of the situation in the particular region before and after the project, as well as an ex post evaluation comparing the project region with zones that did not receive the concentrated road-network investment and maintenance vital to competitiveness, investment and jobs. Within six months of the date on which this contract enters into effect, MTI will submit to the Bank: (a) initial baseline data, in categories previously agreed with the Bank; and (b) the procedures and methodology to be used in compiling, processing, maintaining and reporting the annual data. These data will be compared with the initial baseline data, for purposes of evaluating the results of the project. This process will be based on the methodology and guidelines previously agreed with the Bank.

H. Revolving fund

- 3.14 The project team recommends that a revolving fund of up to 5% of the loan amount be set up for the project, taking into account a four-month scheduling cycle to respond to funding needs for covering the simultaneous execution of investments and periodic road maintenance.

I. Disbursement period and schedule

- 3.15 The minimum disbursement period for the loan will be three years and the maximum will be four years, according to the following timetable.

Table III-1
Disbursement timetable
(in millions of US dollars)

Source	Year 1	Year 2	Year 3	Year 4	Total
IDB – FSO	7	21	10	2	40
Local contribution	3	5	1	1	10
Program total	10	26	11	3	50
%	20	52	22	6	100

IV. VIABILITY AND RISKS

A. Technical and economic viability

- 4.1 The zones and road networks of the Highway Project to Promote Competitiveness, including the project region and its relevant road network, were selected on the basis of their potential to improve production, productivity, investment and employment. The determining factors were the road needs and priorities expressed by producers of goods and services, especially through producer groups and associations; major marketers, and municipal authorities; and the priorities established under the PPP initiative. Once the improvements were identified, the conditions and activities needed for the rest of the road network were evaluated, including routine and periodic maintenance, in order to ensure that overall the infrastructure in the project region would reach and maintain levels of access and service consistent with its competitive potential. Alternative technical solutions to the problem were then immediately formulated using the HDM4 simulation model. In all cases, the solutions chosen for the project were those which, broken down by specific networks and road sections, showed the highest net present value, discounted at 12%.
- 4.2 The Malpaisillo-San Isidro section is part of the Pacific Corridor. Its completion involves the Telica-Malpaisillo section, which is a part of Zone II and will be funded by loan 1530/SF-NI. The economic analysis of the rehabilitation of this section of trunk highway was conducted using the HDM4 model, basing the economic costs of the investment on the financial costs as estimated in the final design and environmental studies. To these economic costs were added costs of routine and periodic maintenance, with these costs defined, by equations showing progressive deterioration or by the periodic maintenance policy adopted, as the case may be. In regard to economic benefits, the economic costs of operating different vehicles was estimated, based on the average daily traffic calculated from one year's data in the MTI's pavement management system, which was developed, and is maintained, by the Danish Agency for International Development (DANIDA). Economic benefits taken into consideration included the cost of operating vehicles, maintenance expenditures and travel times.
- 4.3 The sections of road included in component II were selected due to the fact that they are the channel for agricultural production in Zone III, as well as being feeder roads for the trunk highways of Telica-San Isidro and the Pacific Corridor. The sections of road in components III and IV to be maintained by FOMAV, with either asphalt or gravel, connect with the rural roads in component II. Many sections of the road network in need of upgrading, reconstruction and maintenance were built many years ago and have deteriorated greatly due to lack of preventive maintenance, both routine and periodic. The highway and road sections in the project lie mainly on flat land. A short section traverses rolling

terrain, and the horizontal and vertical geometric conditions are generally good. The highways and roads are essentially stable. Economic analysis of the roads applied the same cost-benefit approach, but without the HDM4 model. To predict deterioration, HDM3 deterioration equations were used, and where information on traffic and types of vehicles was lacking, field visits were conducted.

- 4.4 Periodic maintenance activities have been scaled based on personal field visits by MTI, FOMAV and the Ministry of Environment and Natural Resources (MARENA) staff and consultants, taking into consideration typical sections of road and types and volume of work, as recorded in the paving, bridge, and maintenance management systems developed and validated with outside assistance.
- 4.5 During the preparation of the project, the MTI and its consultants completed and updated design alternatives and figures on volume of work and costs, based on comparable levels of service and useful life. This information, along with traffic data, current and projected conditions, costs of vehicle operation, and other variables, was processed for each segment of road and proposed alternative, using the MDM4 model. Based on yield indicators for the different runs of the model, technical solutions were selected, and designs and costs were adjusted accordingly.
- 4.6 The resulting economic costs and benefits of the project's investments are shown in the following table.

Table IV-1
Estimates of IRR, NPV and sensitivity

Section	Length (Km)	NPV (mill. US\$)	IRR (%)	+20%
Malpaisillo-San Isidro	72.0	33.6	28.6	25.0
Cuyali-La Colonia-Abisinia	28.5	0.9	17.0	12.6
Abisinia-Empalme la Pavona	7.5	0.3	17.5	13.2
Abisinia-Puente la Pavona	1.0	5.6	15.5	11.2
Cuyali-Asturias-Empalme Las Cruces	16.5	1.8	30.4	23.6
Empalme Las Cruces-San Gabriel	24.0	2.9	33.8	26.5
Empalme Las Cruces-Pantasma	15.0	0.5	18.5	14.6

B. Institutional viability

- 4.7 The project's road investments present no major difficulties from the technical perspective, and national and foreign firms with capacity and experience are interested in participating in competitive bidding, as has been the case over the

last ten years. The MTI has developed executing units with the capacity to administer contracts in accordance with the requirements of the funding source. The project takes advantage of this capacity through the DVG, ensuring coordination, efficiency and compliance with the requirements of each funding source. For the supervision of investments and road maintenance, the DGV will have the support of specialized consulting firms. For this purpose, and to ensure the project's institutional viability and its extension to the program, the Bank's loan will fund improvement and strengthening of the MTI's organizational structure, and will also provide strengthening for FOMAV, in order to ensure proper execution of the project and program and lay a foundation for the sustainability of road infrastructure services in Nicaragua. Implementation of the institutional strengthening program designed as a part of the Zone II project, and expanded in the present operation, will be a condition precedent to the first disbursement of Bank funds.

- 4.8 FOMAV has also formulated its institutional strengthening plan, for which it has funds from various sources, including the above-mentioned Bank loan currently being executed. The project will complement certain training and technical assistance activities, including the adoption of contracts for results not yet executed, placing FOMAV in a position to manage maintenance, which is a project component. Once FOMAV has permanent funds, it will be able to carry out the activities for the entire network of roadways, as stipulated by law.

C. Financial viability

- 4.9 The project has fully-defined funding for investment and maintenance. The project investments are a part of the National Development Plan and of the Highway Project to Promote Competitiveness, which was submitted to the Consultative Group in late October 2003. The project costs have been included in the MTI's financial projections, which are consistent with the National Development Plan and the Highway Project to Promote Competitiveness. The financial projections reflect the strategy of initiating all contracts for road investments and periodic maintenance during the second half of 2005. The regular maintenance of the maintainable road network in the region covered by the project will also begin in 2005, as road investments and periodic maintenance investments are executed. In the last year of the project, all of the relevant road network will be covered by maintenance paid for by counterpart funds, and are fully expected to make FOMAV's preventive maintenance efforts a sustainable operation.
- 4.10 The borrower will be responsible for guaranteeing the amounts and timely transfer of funds for project execution, independent of the possible funding of some portions by private sector contributions.

D. Benefits and impact on development

- 4.11 The program seeks to promote funding and execution of new investments in road infrastructure services in order to improve competitiveness and attract private investment, and to coordinate the various bilateral and multilateral funding sources, promote integration and support the process of integration with the Puebla-Panama Plan (PPP) countries. In addition, the planned work will help in obtaining benefits from the Central American Free Trade Agreement (CAFTA). In this regard, the principal benefits of the project are increased competitiveness and greater road integration with the PPP countries. These benefits flow from improving transportation for people and freight (both domestic and international). The project seeks to reduce transportation costs and times, and to increase road safety, and Nicaragua's greater competitiveness and integration are expected to lead to increased private investment. Improved transportation in Zone III will foster greater agricultural production for the country and have a multiplier effect on other competitiveness factors, such as enhanced access that the road provides human and natural resources to production centers and services.
- 4.12 The project's baseline is designed in such a way as to permit ex ante and ex post evaluation of Zone III, identifying achievements and changes produced by the investments, and evaluating the maintenance of improvements made to the road network, which will be reflected in indicators of social or economic results, particularly relating to production, productivity, access to social services, jobs and private investment. The methodology used is based on measuring the results of work on the highways by means of a sequential activities procedure, ranging from ascertaining the area of influence of the network to defining results indicators. This includes establishing a control region or group, in order to adjust the indicators based on the particular characteristics involved. The following procedure was chosen for measuring the results of the project: (a) selecting the road network where work is to be performed; (b) establishing the area of influence, identifying existing properties and areas served by the network within the region, using a cadastral map with the previous network layout; and (c) identifying the principal activities conducted on the existing properties, categorizing their uses (by social and economic activity), employing a georeferencing map and consulting with municipalities.
- 4.13 Once the activities are identified and categorized, surveys are prepared to measure divergence from the baseline. To verify the indicators and attain better coverage through equitable distribution of the sample, the region is broken down into sections, and the collection of field data is planned and carried out accordingly. In transportation, direct benefits are established by studies of traffic. Volume measurements use 100% of the information for the period in which they are taken. Where the number of vehicles is over 1,000, the sample in the survey of origin, destination and vehicle characteristics will cover between 30% and 50% of the total traffic. When the total number of vehicles in a day is less than 1,000, the

sample should be over 50%, and if there are 250 vehicles or fewer, an effort will be made to survey 100% of the vehicles.

- 4.14 The project's logical framework (see Annex I) defines the immediate effects of the project (i.e., reduction in the vehicular cost of transportation and in travel times, as intermediate effects). In the medium and long term, these effects will lead to final effects, such as increase in the supply of products and productivity, reduction of the cost of inputs and factors of production, and reduced marketing costs due to reduced loss levels and lower packaging costs. To give an example:
- 4.15 Upon completion of the project, the main project component (Malpaisillo-San Isidro section) will have attained the following targets, from present levels:

In its first year of operation, highway operating costs will have been reduced as follows:

	Malpaisillo – San Isidro %
Trucks	17.2
Buses	21.5
Commercial vehicles	18.9
Cars	15.7

In its first year of operation, vehicle travel time will be reduced in percentage terms as follows

	Malpaisillo – San Isidro %
Trucks	20.8
Buses	23.0
Commercial vehicles	28.2
Passenger cars	29.6

E. Social equity and poverty reduction

- 4.16 The project qualifies as PTI/SEQ. Its impact on economic growth will contribute to the objectives of the poverty reduction strategy. The project will benefit the population in urban centers located along the highway, and improve the competitiveness of industries located in the project's area of influence, as well as that of producers whose products or inputs originate among, or are destined for, these populations.
- 4.17 Any investment project in Nicaragua—especially if its benefits are in geographic areas other than the urban area of the capital city (Managua)—has a positive impact on the poor. If the urban population is excluded and only the country's rural population is considered, the classification thresholds are even more sharply defined, showing any investment as having an impact on poverty (PTI) by

definition. This is the case of the competitiveness program, and the present project. To gauge the project's impact, a sample was taken from the six main municipalities in the project area and poverty rates were measured in these municipalities according to the government's Enhanced Economic Growth and Poverty Reduction Strategy. This measurement is the household average between the consumption level and the general poverty line (US\$402.05) and the results were as follows: Telica (68.4%), San Isidro (65%), Jinotega (60.9%), San Ramón (76.6%), Tuma-Dalia (77.7%), SM de Fantasma (80.1%), and Matagalpa (53.9%).

- 4.18 At the same time, the specific objectives, which are designed to create road infrastructure conditions that will foster higher production, productivity, investment and employment, mean that any operation funded by the program—and specifically, the Bank's operation to fund this project as part of the larger program, will contribute to increasing the productivity of labor and, hence, wages, having therefore an impact beyond the temporary effect of the civil works, the road maintenance and the related services. Thus, the project will have a positive impact on social equity.

F. Environmental and social management plan

- 4.19 The road investments to be carried out as part of the project present no major construction difficulties, involve no relocation of roads, and are in stable areas. The project's highways and roads suffer, in general, from a lack of routine and periodic preventive maintenance and, in the case of some roads, problems with the original construction, particularly as regards drainage. The activities of the complete project cycle (including design, construction, operation, supervision and maintenance) include technical, environmental, and social specifications (including preventive measures related to natural disasters) that meet the environmental requirements for appropriate mitigation of potential direct and indirect effects. All of the investment in works, including upgrading of roads that receive periodic maintenance, will be on existing highways and roads, and in already developed and traveled areas in order to restore and enhance transportation capacity and reverse the deterioration that has negatively affected the competitiveness of the productive sectors and the attractiveness of investment. In this context, the Ministry of the Environment and Natural Resources (MARENA) and the Bank's Committee on Environment and Social Impact (CESI) have indicated that, given the nature of the investment and maintenance activities planned for the project, no environmental impact assessments (EIAs) are required. Nevertheless, in order to guarantee the social and environmental feasibility of the project and its compatibility with the environmental sustainability agreements of the Puebla-Panama Plan, section-specific environmental assessments (EAs) have been conducted as a basis for the project's Environmental and Social Management Report (ESMR), which is available in the project's technical files. This document will serve as a basis for environmental and social regulation during the execution of the project.

- 4.20 The EAs include elements such as: (i) identification and description, by section, of potential direct and indirect environmental and social effects in the project's area of influence; (ii) a detailed Environmental and Social Management Plan (ESMP) for each section, including specific plans (maintenance, contingencies, worker safety, etc.), and specific measures and costs (see cost table) to adequately control direct and indirect negative effects on the road network and on the region covered by the project; (iii) institutional strengthening plan for MTI and FOMAV to improve the scope, coordination, integration, and environmental monitoring of preinvestment studies, supervision of investments and of road maintenance, and monitoring of ESMPs in each contractor bid; (v) guidelines and specifications for the preparation and approval of the bids for environmental and social monitoring activity/activities, to be conducted by independent firms specializing in the environment and funded by the project. The ESMPs and EA will serve as operational social and environmental regulations during the execution, operation and maintenance phases of the project. They are available in the project's technical files. Furthermore, for purposes of public access, all of this information will be available on the Bank's Puebla-Panama Plan web page. The loan contract will include a condition precedent to the first disbursement, whereby MTI, through its General Directorate of Environment (DGA) must demonstrate, to the Bank's satisfaction, that the environmental and social specifications in the program's Environmental and Social Management Report and ESA have been duly incorporated in the documents related to contractor bidding, supervision and environmental audit (Information available in Files-Execution).
- 4.21 Within the ESA and as a part of the project's ESMR, a consultation with residents of the project region, local authorities, producers and users of the project's highways and roads was prepared and carried out, and a record of this process is available. Generally, there have not been negative opinions regarding possible environmental and social impacts of the planned work. To complete the ESMR, a public information dissemination plan for the project has been formulated, and procedures have been initiated to obtain the necessary environmental permits.

G. Risks

- 4.22 What particularly distinguishes the project is its incorporation of the program's guiding concept. This is the second operation that includes activity on an integrated road network agreed upon between the government and the productive sector. This is also the second time, without emergencies intervening, that a project is part of a unique, locally conceived program coordinated with the donor and multilateral community. Also, this is the second time that maintenance activities on the road network within the project region have been included in the investment.
- 4.23 The project continues efforts made under loan 1530-SF/Ni to strengthen effective ongoing coordination within the MTI through the DGV, replacing the segmented

procedure and rigidly grouped executing units, compartmentalized according to the source of the foreign funding for which they are responsible, seeking instead to facilitate implementation of a common monitoring and evaluation system. The risks associated with this aspect of the project are deemed to be under control, given that the DGV is taking advantage of accumulated experience in executing programs and projects funded by various sources and different multilateral and bilateral organizations, including activities funded by loans 1530-SF/NI and 423 FND. Furthermore, the DGV, as well as other key divisions in the MTI and FOMAV, will continue to benefit from a range of consulting services concerned with technical and social/environmental monitoring of the road investment and maintenance components, and from technical assistance and strengthening in both institutions.

- 4.24 The principal risk relates not to the executing agency, but rather to having the appropriate, permanent and independent funds for FOMAV to perform road maintenance. This was a condition of loan 1530-SF/NI and is incorporated in the present operation, with agreement that these funds will come from the local counterpart and will be a condition for the execution of project investments funded by the Bank. If the counterpart funds are not approved, or if, though approved, they are not transferred in a timely manner according to the execution schedule, the sustainability of the MTI's investment program will be affected, and the useful life of the projects will be considerably reduced. The Zone II project and the present project contribute to ensuring the effective allocation of maintenance funds by including this component on the local counterpart side. Nevertheless, the allocation of funds must be even greater in order to cover the rest of the maintainable road system. The project team has held meetings with the Ministry of Finance and Public Credit, the Office of the President's Secretariat of Coordination and Strategy and the Managua representative of the International Monetary Fund. These participants have reiterated that, in terms of concessional resources, they anticipate no problems with budget allocations and transfers for the project. The pro forma budget for 2005, which the government sent to the Legislative Assembly, includes funds to set the project in motion, and the Ministry of Finance and Public Credit has promised to request an increase in funding to cover project execution.