

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HONDURAS

REGIONAL ROAD INTEGRATION PROGRAM II

(HO-L1121)

LOAN PROPOSAL

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2. Annual Work Plan
3. Monitoring and Evaluation Plan
4. Environmental and Social Management Report
5. Procurement Plan
OPTIONAL
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2. Regional Integration Annex
3. Gender Annex
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5. Climate Change Annex
6. Analysis of possible additional costs
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ABBREVIATIONS

CEINRH	Corredores Estratégicos de Integración Nacional y Regional de Honduras [Strategic Corridors of Honduran National and Regional Integration]
CIF	Cost, insurance, and freight
EIRR	Economic internal rate of return
ENPV	Economic net present value
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Management Report
FOB	Free on board
INSEP	Secretaría de Estado en los Despachos de Infraestructura y Servicios Públicos [State Secretariat of Infrastructure and Public Services]
INVEST-H	Inversión Estratégica de Honduras [Strategic Investment-Honduras]
IRP	Involuntary Resettlement Plan
MCA	Millennium Challenge Account
MT	Metric tons
RICAM	Red Internacional de Carreteras Mesoamericanas [International Network of Mesoamerican Highways]
WTO	World Trade Organization

PROJECT SUMMARY
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Financial Terms and Conditions					
Borrower: Republic of Honduras				Ordinary Capital	Fund for Special Operations
Executing agency: Inversión Estratégica de Honduras [Strategic Investment-Honduras] (INVEST-H)			Amortization period:	30 years	40 years
Source	Amount (US\$)	%	Disbursement period:	4 years	4 years
IDB (Ordinary Capital):	45,000,000	58.3	Grace period:	6 years	40 years
IDB (Fund for Special Operations):	30,000,000	38.8	Inspection and supervision fee:	(a)	N/A
Local:	2,250,000	2.9	Interest rate:	Single Currency Facility -Fixed ^(b)	0.25%
Total:	77,250,000	100	Credit fee:	(a)	N/A
			Currency of approval:	U.S. dollars	
Project at a Glance					
Program objective/description:					
<p>The program's objective is to help raise productivity and increase national and regional integration in Honduras, by upgrading the quality of its road infrastructure. The program's specific objective is to help improve the level of service provided on two of the Strategic Corridors of Honduran National and Regional Integration (CEINRH), specifically the logistics and tourism corridors, by building additional lanes and refurbishing targeted segments. This will result in lower vehicle operating costs and shorter travel times for users. These two corridors are being targeted because, under the public-private partnership scheme currently operating in Honduras, the logistics and tourism corridors have been placed under concession contracts, and the government has undertaken to deliver several upgraded and refurbished segments for operation and maintenance by the concession holder.</p>					
<p>Special contractual conditions precedent to the first disbursement of the loan to be fulfilled by the borrower, through the executing agency: (i) presentation of satisfactory evidence that INVEST-H is legally authorized to implement the program (paragraph 3.1); and (ii) presentation of evidence that the program's operating manual has been approved and has entered into force, under the terms previously agreed on with the Bank (paragraph 3.2).</p>					
<p>Special contractual conditions for execution: (i) presentation of the following documents for the Bank's no objection, together with the bidding documents for each of the road projects to be financed by the program: (a) the specific Environmental and Social Management Plan for the project in question, which will include the special socioenvironmental management measures envisaged in the Environmental and Social Management Report; and (b) in the event that persons and/or economic activities need to be relocated, a specific Involuntary Resettlement Plan for the corresponding road project; (ii) prior to the signing of each work contract, supervision for the work in question must have been contracted; and (iii) prior to the start of each of the program works, evidence will be presented that: (a) the environmental permits and authorizations required under national legislation have been obtained; and (b) in the event that an Involuntary Resettlement Plan is needed for the work in question, and in accordance with that plan: (1) at least one public information and consultation process has been carried out; and (2) the rights of way have been secured on at least 70% of the length of the targeted road segment (paragraph 3.7).</p>					
Exceptions to Bank policies: None.					
Strategic alignment					
Challenges: ^(c)	SI		PI	X	EI
					X
Crosscutting issues: ^(d)	GD		CC	X	IC

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

^(b) The borrower will pay interest on the outstanding balances of this portion of the Ordinary Capital loan at a LIBOR-based rate. Once the outstanding balance reaches 25% of the net amount approved, or US\$3 million, whichever is greater, the base rate will be set on this balance.

^(c) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

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

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **Context.** With a population of 8.43 million inhabitants and a gross domestic product (GDP) per capita of US\$2,400 in 2015, Honduras is one of the region's poorest countries.¹ Its GDP of US\$20.3 billion in 2015 represented roughly 12% of the Central American total. Since the 2009 crisis, when GDP shrank by 2.4%, there has been a modest recovery driven mainly by exports² in sectors such as agriculture, manufacturing, and telecommunications. This recovery, which has been hampered by a trade deficit³ and fiscal vulnerability, generated average GDP growth of 3.5% in 2010-2015, compared to an average rate of 5.6% before the 2003-2008 crisis.⁴ The main factors underlying the slower pace of growth relate to the low rate of human capital accumulation, shortcomings in road and electric energy infrastructure, limited international integration, and scant technological innovation.⁵
- 1.2 Productivity in the agriculture sector is low, with value added per worker⁶ of US\$3,610 in 2015, compared to a regional average of US\$7,360, and only higher than Guatemala among Central American countries (US\$2,440). This low productivity level is due, among other factors, to the relative paucity and low service level of Honduras' road infrastructure (0.13 km of roads per km²)⁷ owing mainly to insufficient investment (paragraph 1.8). This situation hampers territorial connectivity at the national and regional levels, raising transportation and logistics costs, and making it harder for domestic production⁸ to integrate into international trade chains. Honduras is ranked 88th in the Global Competitiveness Index,⁹ scoring 4 points out of 7 (2015-2016); and it occupies 112th place in the Logistics Performance Index (2016), second-to-last in Latin America.¹⁰
- 1.3 **Regional context.** Honduras has access to both oceans and shares a border with El Salvador, Guatemala, and Nicaragua. Its location makes it a key link in the consolidation of the main Mesoamerican integration corridors,¹¹ since its territory

¹ Honduras is a lower middle-income country that faces significant challenges, with about two-thirds of its population living in poverty and over four in every 10 in extreme poverty (2013). In rural zones, 56% of households live in extreme poverty (IDB: Country strategy with Honduras 2015-2018, document GN-2796-2).

² The Honduran growth model is oriented towards international trade. In 2004, it signed the Dominican Republic, Central America Free Trade Agreement (CAFTA-DR), which expands economic opportunities among the countries involved by eliminating tariffs, opening markets, and lowering barriers.

³ Over the last three years (2013-2015), the trade balance has posted annual deficits of US\$803 million, US\$709 million, and US\$809 million, in the respective years (Central Bank of Honduras).

⁴ On the basis of data from the Central Bank of Honduras and the International Monetary Fund.

⁵ Source: IDB - Country strategy with Honduras 2015-2018, document GN-2796-1.

⁶ Source: [World Bank Indicators Database](#), (2016).

⁷ The regional average is 0.35 km/km². *Anuario Estadístico de Transporte de Carga y Logística, 2015*.

⁸ In [Estudio de Productividad Total de los Factores en Honduras](#), Quijada and Sierra note that one of the factors explaining the country's low productivity is the deficient provision of public goods and services, such as transportation infrastructure generally (p. 22).

⁹ Source: [World Economic Forum](#).

¹⁰ Source: [World Bank](#).

¹¹ Includes the territory of the countries of the Central American isthmus and the southern and eastern states of Mexico.

includes major parts of the Mesoamerican Atlantic corridor, the Pacific corridor, and the corridors of the Northern Triangle. It also has the leading Mesoamerican port on the Caribbean (Puerto Cortés), and access to the Pacific Ocean through Puerto San Lorenzo. Accordingly, the quality of its transportation infrastructure has a major impact on trade performance, not only for Honduras itself (80% of its exports are transported overland), but also for Mesoamerican intraregional trade,¹² and particularly for the countries of the Northern Triangle, among which Honduras has the highest trade-volume-to-GDP ratio (109%).¹³

- 1.4 **Strategic Corridors of Honduran National and Regional Integration (CEINRH).** Road infrastructure development in Honduras is a key factor for promoting productive activities and integrating the country into regional and international logistics chains. Most of the country's main road network consists of strategic national and regional integration corridors defined by the Honduran government, which link production zones, consumption centers, and export hubs, namely: the logistics, western, agricultural, tourism, Pacific, and Lenca corridors.¹⁴ Nonetheless, Honduran highway infrastructure suffers from constraints¹⁵ that have direct repercussions on logistics costs, which undermine the domestic economy's productivity and exports. According to the indicators published in [Doing Business 2014](#),¹⁶ the average cost to export a representative container from Honduras was US\$1,450—more than double the average cost in Panama and nearly 30% higher than in Nicaragua.¹⁷
- 1.5 Aware of the problems in terms of road infrastructure and the country's potential logistics development, the strategic guidelines for productive infrastructure defined in the government's National Plan 2010-2022 included the challenge of taking maximum advantage of the country's geographic location, to position itself as the most important interoceanic land transportation circuit for merchandise in Central America, targeting a 285% increase in export freight tonnage transported between 2009 and 2038.

¹² Honduras' logistics corridor is classified as one of the most important roads for Central American integration, allowing for the interconnection of Atlantic ports (Puerto Cortés) with those of the Pacific (La Unión in El Salvador) and with customs in El Amatillo and Guasaule, thus forming an interoceanic route for international transportation and trade. This corridor carries a large volume of products (1,963,308 kg per year), including bananas, coffee, metals, and plastics, most of which stems from import or export activities. See [Regional integration annex \(Optional link 2\)](#).

¹³ Compared to Guatemala (51%) and El Salvador (68%) according to 2015 data. Source: World Bank Development Indicators.

¹⁴ See [Regional integration annex \(Optional link 2\)](#).

¹⁵ Of the national road network, 23% is in good repair, 52% fair, and 25% in bad condition. Source: INSEP, Government of Honduras.

¹⁶ Source: World Bank.

¹⁷ Average cost of exports per container: Guatemala US\$1,355, Nicaragua US\$1,140, El Salvador US\$1,045, Costa Rica US\$1,020, and Panama US\$665. Source: *Doing Business 2014*.

Figure 1. Logistics corridor and the La Barca-Pimienta representative sample



- 1.6 **The problem and its consequences.** The CEINRHs (paragraph 1.4) contain segments that offer low levels of service, with slow circulation speeds owing to congestion, and hence higher vehicle operating costs and longer travel times.¹⁸ These conditions increase the logistic costs of the country's exports. Studies show that road transportation cost in countries such as Honduras represent 30%-35% of total logistic costs. They also estimate that in Central America a 1% increase in road transportation costs and times can reduce exports by 1.65%.¹⁹
- 1.7 The low level of service provided by the CEINRHs (paragraph 1.4) affects the production and transportation of some of Honduras' most important exports.²⁰ Examples include the coffee-producing zones of Comayagua, Olancho, and

¹⁸ The segment of the representative sample, the La Barca-Pimienta segment of logistics corridor CA-5, the CA-5 North segment, with average annual traffic of 10,754 vehicles and annual growth of 4.95%, is the only double-lane segment of this highway that has not been widened; and it is an essential road for linking the country's industrial capital, San Pedro Sula, with the rest of the country. About 40% of the traffic consists of buses and trucks transporting tradable goods (for domestic consumption and export). This makes it a critical highway segment with a service level classified between D and E, depending on the time of day and the direction of circulation. The average traffic speed on this segment is 55 km/h, which is below the average for an integration corridor of this importance (70-80 km/h).

¹⁹ *Five Explanations to High Costs of Service Provision*. Ruiz Olmedo, 2007; WTO, 2010. Based on a 2012 World Bank study that makes an econometric evaluation of the relation between cargo volumes and distances between production and consumption centers. In addition, Gordillo, Stokenberga, and Schwartz (2010) state that transportation cost and time have an effect equivalent to increasing the real distance between markets.

²⁰ Coffee and bananas are among the country's most important export products, representing 26% and 6% of total general merchandise exports, respectively. Jointly they generate earnings of around US\$1.4 billion (Central Bank of Honduras, 2015).

El Paraíso, and the banana-growing zone of Colón, which use these corridors²¹ to supply the country's two main cities (San Pedro Sula and Tegucigalpa) and the international market through Puerto Cortés²² and Puerto Castilla²³ on the Caribbean coast. The growth possibilities of these production zones, and their potential for integration into both national and regional production chains, are hindered by the poor quality of their connections to urban centers and ports.

- 1.8 **Causes of the problem.** The main cause of the problem is the lack of financial resources for the public investments needed on certain segments of the CEINRHs, which have deteriorated, owing to the growth in vehicle traffic. Those corridors currently have sections with capacity and design standards that are insufficient to support the volumes and type of both current and future traffic. The result has been a rapid deterioration, which is being compounded by deficiencies in the existing drainage structures ([Optional link 4](#)).
- 1.9 To reduce how far behind the Honduran road network is relative to the rest of Central America²⁴ and to not limit economic activity and productive development, investment is needed to upgrade the road infrastructure, and thus avoid the higher transportation costs that hold back the country's growth and development, and hinder its integration with the rest of the region. The government has been promoting various financing modalities, including arrangements such as PPPs for the construction, rehabilitation, and upgrading of the road network according to traffic levels, to enable Honduras to position itself in the region as a logistics hub with competitive transportation costs. To date, under PPPs, concessions involving the logistics corridor have been granted for construction, operation, and maintenance of the Goascorán-Villa de San Antonio segment and operation and maintenance of the CA-5 North highway (Tegucigalpa-San Pedro Sula-Puerto Cortés). The tourism corridor (La Barca-Progreso-Tela-La Ceiba) has also been placed under concession. In the corridors under concession, the government undertook to deliver some upgraded and rehabilitated segments for operation and maintenance by the concession holder (paragraph 1.28).
- 1.10 The government has been investing in the CEINRHs with support from multilateral organizations. In that context, in December 2015, the Bank approved the loan for the Regional Road Integration Program (HO-L1104), aimed at upgrading Honduras' regional physical integration and road connectivity, including projects such as the 139.4 km long Mesoamerican Pacific Corridor. The loan is currently in execution; of the three segments comprising the Mesoamerican Pacific Corridor, two have been tendered and awarded (97 km), and the third is at the design review stage. Thus far,

²¹ The main corridors connecting the country's production zones to the centers of consumption and main ports are from the Puerto La Unión logistics corridor, in El Salvador, to Puerto Cortés (which belongs to the CA-5 North highway) and the Lenca corridor, in Honduras; the CA-5 North corridor, which is essential for the transportation of coffee, sugar, and textiles, and San Pedro Sula; and the Tegucigalpa-Puerto Castillo agricultural corridor which connects the port to the banana-growing and mining zones. For further information, consult the Regional Integration Annex.

²² Honduras is the region's largest coffee exporter, with an export value of US\$986 million.

²³ Puerto Cortés and Puerto Castilla are two important banana export hubs in Honduras, which generated earnings of US\$505 million in 2015. These two ports exported 600,000 MT of bananas in 2014. Source: [Central American Port Statistics Information System](#).

²⁴ Honduras is the lowest ranked Central American country in terms of infrastructure quality, according to the Logistics Performance Index, scoring 2.04. Source: World Bank.

US\$14.7 million has been disbursed, and a total of US\$21.7 million is projected for disbursement by the year-end, surpassing the planned targets.

- 1.11 **Climate change.** The Global Climate Risk Index, published in December 2014 by the nongovernmental organization, Germanwatch, identified Honduras as the country most affected by extreme weather events in 1994-2013 anywhere in the world. Accordingly, it has worked to design legal frameworks and institutional coordination mechanisms to help address its exposure to climate change. In terms of infrastructure, designs have prioritized mechanisms for adapting to climate change associated with hydrometeorological events. In the design of the engineering works, the sample project has used parameters from the most recent floods of the last few years, applying return periods of 100, 50, and 25 years for bridges, box culverts, and drains, respectively ([Optional link 5](#)).
- 1.12 **Sector institutional framework.** The government created the State Secretariat of Infrastructure and Public Services (INSEP) in 2014,²⁵ to oversee the country's infrastructure. Among other things, its role is to plan, regulate, rehabilitate, upgrade, and expand the national road network. The Highway Fund, a deconcentrated entity that began operations in 2001, is responsible for routine, periodic, and emergency maintenance of the network. Since 2012, the Millennium Challenge Account-Honduras, now known as Strategic Investment-Honduras (INVEST-H), which reports to the General Coordination Secretariat of the Government of the Republic of Honduras, has been satisfactorily implementing Bank-financed loans in the road sector.²⁶
- 1.13 Although INSEP has human resources for its routine activities, it needs to strengthen its medium- and long-term transportation planning and management capabilities and meet the new crosscutting challenges demanded by the sector. This requires better knowledge of functionally strategic areas of the sector, such as the management of highway assets, adaptation of infrastructure to climate change, road safety,²⁷ and gender mainstreaming in the sector.²⁸ This operation includes a component for INSEP strengthening in the aforementioned areas (paragraph 1.30).
- 1.14 **Proposed intervention.** To contribute to the productive development of Honduras and raise its productivity and increase national and regional integration, the

²⁵ Through Executive Decree PCM-001-2014, which creates sector offices aimed at improving the functioning of public administration.

²⁶ INVEST-H, previously MCA, has executed, satisfactorily and on a timely basis, projects with the Millennium Challenge Corporation (MCC), the Central American Bank for Economic Integration (CABEI); and the IDB (loans 1565/SF-HO [HO0207], 1910/BL-HO [HO-L1020], 1910/BL-HO-1 [HO-L1089], 1907/BL-HO [HO-L1013], 2017/BL-HO [HO-L1018], 2155/BL-HO [HO-L1033], 2470/BL-HO-1 [HO-L1037], and 2470/BL-HO-2 [HO-L1104]). It has sound technical, socioenvironmental and project management experience.

²⁷ In 2013, there were 1,408 deaths from traffic accidents, with a death rate of 17.4 per 100,000 inhabitants. The average for Latin America and the Caribbean is 16.3. The occurrence of accidents is basically related to human behavior, the vehicle, and the operational and functional constraints of the infrastructure. Accordingly, it is essential to improve safety conditions on the current road network and ensure adequate road safety standards are met in all engineering designs for new highway investment projects.

²⁸ The success of an infrastructure project depends on the capacity and effectiveness of the institutions that participate in each of its stages. The strong positive relation between adequate institutional capacities and the achievement of the results specified in project planning has been widely documented ([Infrastructure Strategy, IDB, 2015](#)).

operation proposes to upgrade two of the key corridors of the CEINRH road infrastructure (paragraph 1.9), with a view to reducing vehicle operating costs and shortening travel times. The rehabilitation and improvement works will include the following: an increase in the number of lanes to keep pace with demand; reinforcement of the road surface structure; improvement of intersections, drainage, and bridges; and the incorporation of road safety works, among other items (paragraph 1.25). In addition, training will be provided to women for nontraditional skilled activities in the construction sector (paragraph 1.26), and institutional strengthening will be provided for INSEP (paragraph 1.30).

- 1.15 **Empirical evidence.** A set of studies describes the impact of infrastructure on growth and productivity. Diechmann et al. (2002) found that a 10% improvement in market access can raise labor productivity by 6%.²⁹ In another study, Kiprono and Matsumoto (2014) estimate a differences-in-differences model for interventions on new roads, and the rehabilitation and maintenance of infrastructure in Kenya. They conclude that, for every 1% reduction in travel times between the production zone and the largest town, crop yields rise by 1.5% (measured in kilograms of output per hectare). Henderson, Shalizi, and Venables (2001) show that a doubling of transportation costs can reduce trade volume by 80%.³⁰ Also, using a gravity trade model with transportation costs and the CIF/FOB ratio, Limao and Venables (2001) show that an improvement in infrastructure from the 50th to the 25th percentile would be equivalent to bringing a country 2,358 km closer to its trading partners. Lastly, limi et al. (2015) use a Tobit spatial regression model to estimate the potential impacts of improvements in transportation accessibility in East Africa. They find that a 10% reduction in transportation costs to the seaport could increase the production of agricultural export goods (tea in Kenya and tobacco in Tanzania) by over 10%.
- 1.16 Reductions in general transportation costs (travel times and vehicle operating costs) help to encourage traffic growth and the expansion of regional trade. For example, following the implementation of a project to improve a segment of the east-west economic corridor in Laos, an ex post evaluation found that the number of freight operators doubled in five years. The evaluation suggests that the volume of exports and imports grew by multiples of 24 and 39, respectively in 2001-2005 (Rattanatay 2007). Similarly, following the implementation of a highway rehabilitation project on a regional road between Kazakhstan and Kyrgyzstan, traffic volume grew by 25%. The evaluation found that exports from Kyrgyzstan to Kazakhstan grew by 160% between 1998 and 2007, probably owing partly to the completion of the regional road rehabilitation project (Asian Development Bank, 2008).
- 1.17 **The Bank's knowledge of the sector and lessons learned.** The Bank's sector knowledge stems from its role in financing infrastructure and transportation projects in Honduras, where it has approved operations totaling US\$508.4 million over the last 15 years.³¹ These have involved upgrading the main highway network (the Atlantic, logistics, and agricultural corridors) and the secondary road network, and

²⁹ Deichmann, Uwe, Fay, Marianne, Jun, Koo, Lall, Somik V., 2002, "Economic structure, productivity, and infrastructure quality in southern Mexico", *Policy Research Working Paper WPS 2900*. Available at <http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-2900>.

³⁰ Henderson J.V., Shalizi Z. and Venables A., 2001, "Geography and Development", *Journal of Economic Geography*, 1, 81-106. Available at <http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-2456>.

³¹ [Operaciones en el Sector Transporte en Honduras 2000-2015](#).

- modernization of the urban transportation system, among other things. The lessons learned during implementation of the projects applicable to this operation include the following: (i) the importance of updating project designs prior to putting them to tender, so as to adjust works quantities and budget, and thus reduce the chances of subsequent changes to works, delays in execution, and cost overruns; (ii) priority attention should be given to road safety by including works to reduce the chances of accidents; (iii) attention to the effects of climate change on works designs, given the country's vulnerability; and (iv) integrated and fluid management of rights of way, through strict compliance with safeguard requirements and the contracting of experienced firms.
- 1.18 **Government initiative.** The National Plan 2010-2022, aimed at achieving integral economic and social development for Honduras, includes "Productive infrastructure as an engine of economic activity" as one of its key areas. The main challenge in this domain is to facilitate road links between centers of production and consumer and export markets, taking advantage of the country's geographical location to make it Central America's most important circuit for the interoceanic land transportation of goods. Moreover, the Plan of the Alliance for Prosperity in the Northern Triangle, of which Honduras is a member, promotes the upgrading and expansion of integration corridors.
- 1.19 **Regional strategy: Mesoamerica Project.** Under the Mesoamerica Project, member countries (Belize, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama) identified the need to promote the development of the most commercially important road corridors for the region, to be carried out at the national level, according to standards consistent with the demands of international traffic.³² This set of trunk and complementary roads constitutes the International Network of Mesoamerican Highways (RICAM)—the most important transportation program of the Mesoamerica project. It consists of the Pacific and Atlantic corridors and a series of complementary branch and connecting roads, forming the physical basis for a coordinated development plan for the regional transportation sector.
- 1.20 **The Bank's country strategy.** This program is consistent with the Bank's country strategy with Honduras 2015-2018 (document [GN-2796-1](#)), which emphasizes the importance of road infrastructure for regional integration as one of its five priority areas. The strategy includes improving national and regional integration and reducing operating and transportation costs among its strategic objectives, through the maintenance and improvement of the infrastructure of the Pacific corridor and other complementary logistics axes. The latter include roads with strong regional tourism potential, east-west road connections, and feeder roads for the agricultural and logistics corridors, which are under considerable pressure due to their current condition and vulnerability to disasters. The operation is also included in the 2016 Operational Program (document GN-2849).
- 1.21 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document [AB-3008](#)), strategically aligning with the challenges of productivity and innovation, since it will enhance connections between Honduras' production zones and its main foreign trade hubs and distribution and consumption

³² Intraregional freight transportation in Mesoamerica is predominantly by road.

centers, via the logistical corridors, by reducing travel times and transportation costs, and, thus, stimulating productivity.³³ The program is also aligned with the challenge of economic integration, under the multinational targeting criterion, since it supports national investments to upgrade the infrastructure of the CEINRHs, thereby facilitating the country's greater regional integration, by contributing to the goal of turning Honduras into one of the region's key logistics hubs. The program is also consistent with the regional additionality criterion, since it prioritizes national investments under the regional initiatives of the Mesoamerica project, and the logistics corridors prioritized by the Plan of the Alliance for Prosperity in the Northern Triangle (PAPTN). The program is strategically aligned with the crosscutting issue of climate change, as it includes measures for adapting road infrastructure to climate change (paragraph 1.11). The program also contributes to the output indicator from the 2016-2019 Corporate Results Framework (document GN-2727-6), defined as the number of kilometers constructed or rehabilitated.

- 1.22 The program is consistent with the Bank's strategy "Sustainable Infrastructure for Competitiveness and Inclusive Growth" (document GN-2710-5), as it supports road infrastructure for Honduras' regional and global integration. It is also consistent with the Transportation Sector Framework (document GN-2740-4), since it contributes to the goal of providing a more efficient logistics network, by reducing transportation costs and promoting regional integration through CEINRH rehabilitation. The operation is aligned with the strategic area of logistics (paragraph 1.5) and the crosscutting area of climate change (paragraph 1.11).
- 1.23 **Gender additionality.** In Honduras, women are mostly employed in sectors such as commerce, manufacturing, and services, where average wages are lower and there are fewer benefits.³⁴ Women are significantly under-represented in nontraditional sectors,³⁵ such as construction and transportation, which offer better pay and benefits, particularly in skilled jobs. In the case of contractors hired by the executing agency, a study showed that only 2.7% of all skilled employees working in construction are women.³⁶ The studies also show that promoting women's participation in nontraditional skilled jobs in sectors such as construction and transportation through training and job opportunities, could help to increase their own

³³ The results matrix includes an indicator for measuring the impact on productivity and regional integration: "Number of freight vehicles transporting tradable goods (domestic consumption and export) circulating daily on the sample road segments".

³⁴ In 2013, women held over 50% of total jobs in traditional sectors (social and community, commerce, manufacturing, finance and insurance), but no more than 15% in the construction and transportation sectors. Source: Gender Annex, prepared on the basis of the Household Survey of Honduras.

³⁵ A traditionally female or male sector is one in which the other gender is under-represented, usually accounting for less than 25%. Traditionally male sectors are usually construction, transportation, mining, or energy. See *Hegewisch, Ariane and Hartmann, Heidi (2014). Occupational Segregation and the Gender Wage Gap: A Job Half Done. Institute for Women's Policy Research.*

³⁶ These data refer to the four leading construction companies in Honduras. They are based on a preliminary study financed through technical-cooperation operation RG-T2618, which aims to quantify female participation in different links of the construction value chain and ascertain whether there are programs or special measures that the different entities related to this chain are implementing to foster greater female participation in the construction and transportation labor market.

income and provide them with social benefits such as Social Security³⁷ ([Optional link 3](#)). Accordingly, as additionality to this operation, training activities will be provided for women in nontraditional sectors of the construction industry (paragraph 1.26).

B. Objectives, components, and cost

1.24 **Objective.** The program's objective is to help raise productivity and increase national and regional integration in Honduras, by upgrading the quality of its road infrastructure. The project's specific objective is to help improve the level of service³⁸ provided on two of the Strategic Corridors of Honduran National and Regional Integration (CEINRH), specifically the logistics and tourism corridors, by adding lanes and refurbishing targeted segments. This will result in lower vehicle operating costs and shorter travel times for users. These two corridors are being targeted because, under the public-private partnership (PPP) scheme currently operating in Honduras, the logistics and tourism corridors have been placed under concession contracts, and the government has undertaken to deliver several upgraded and refurbished segments for operation and maintenance by the concession holder.

1.25 **Component 1. Improvement of integration road segments (US\$75.50 million).** This component will finance rehabilitation, improvement, and expansion works on eligible road segments (paragraphs 1.28 and 1.29) in the logistics and tourism corridors. This will include the construction of new lanes, improvement of the road surface structure, patching potholes, sealing of the existing asphalt surface, upgrading embankments to address critical hydrological issues, sewers and culverts, rehabilitation and improvement of longitudinal and crosswise drainage systems, bridges, concrete structures, road signs and pavement markings, and other works needed for road safety and the functionality of the targeted segments. It will also include horizontal or vertical standard, cross-section, alignment, curvature, or longitudinal slope improvement activities, so as to increase road capacity, increase traffic speed, and enhance road safety in population centers. Pedestrian crossings and bridges will be put in place, along with upgraded intersections, overpasses, and the application of road safety devices to dissipate energy and reduce speed. The component will also finance environmental and social mitigation works, land purchases,³⁹ and the implementation of involuntary resettlement plans.

³⁷ An impact assessment on a training program for women in nontraditional jobs in Nepal showed that a treatment group increased its employment rate by 14 percentage points and its income by 45% over the control group. World Bank, [Partnering for Gender Equality](#).

³⁸ "Level of service" measures the quality that the road provides to the user, based on factors such as: speed, travel time, comfort, safety, and operating costs. According to the Highways Capacity Manual and the AASHTO Geometric Design of Highways and Streets ("Green Book"), the levels of service are: (i) A. Free-flow; (ii) B. Reasonably free-flow; (iii) C. Stable flow but with speeds and maneuverability more closely controlled by high traffic volumes; (iv) D. Approaching unstable flow; (v) E. Unstable flow with road at full capacity; and (vi) F. Forced or breakdown flow at slow speeds. In this operation, the results indicators will measure the improvement in service, understood as time saved and reduction in vehicle operating costs.

³⁹ The purchase of the land on which the works of the representative sample will be built will be financed from the program's local counterpart funding. Any land purchases under the other projects that may be financed by the program can be financed with the proceeds of the Bank loan, provided the requirements and conditions defined in the Bank's policy on expense eligibility are fulfilled (document GN-2331-5).

- 1.26 The component will finance the hiring of independent firms for the works' technical-environmental supervision; and it will also finance technical, socioeconomic, and socioenvironmental studies of the works not included in the representative sample, together with future studies. In addition, the component will fund actions aimed at the integration of women in nontraditional skilled jobs in the construction sector, for their potential entry into the labor market. For this purpose, the following activities will be financed: (i) training for women in nontraditional skilled jobs, and internships for them; (ii) awareness-raising both within the executing agency and among contractors and supervisors; and (iii) studies to monitor progress made in this area.
- 1.27 **Eligibility criteria.** For projects to be selected for inclusion in the operation, they must meet the following targeting, efficacy, efficiency, and socioenvironmental criteria: (i) Targeting, the works to be undertaken must be located in the logistics corridor and the tourism corridor, in the segments identified in paragraphs 1.28 and 1.29; (ii) Efficacy, the project must have a technical study showing that the problem to be solved is addressed comprehensively; (iii) Efficiency, the project must propose the most efficient technical solution and attain an economic internal rate of return (EIRR) of at least 12%; and (iv) Socioenvironmental, the projects must have detailed technical and socioenvironmental studies appropriate to the type of work to be executed, and they must fulfill the Bank's Environment and Safeguards Compliance Policy, the provisions of the Environmental and Social Management Report, and the Involuntary Resettlement Policy (OP-710). Any project must be presented by the executing agency to the Bank for its respective no objection.
- 1.28 **Representative sample.** The sample identified satisfies the specified eligibility criteria (paragraph 1.27) and consists of the La Barca-Pimienta segment (roughly 23 km) of the logistics corridor project. This corridor is of maximum strategic importance for Honduras, since it links Tegucigalpa with San Pedro Sula (241 km in the north-south direction) and extends a further 53 km from San Pedro to Puerto Cortés, one of the region's main ports for imports and exports.⁴⁰ The sample's estimated cost is US\$48.36 million, representing 62% of the total program amount. The sample works are part of the government's commitment to the logistics corridor concession holder ([Optional link 4](#)). Maintenance of the segment of the La Barca-Pimienta sample is guaranteed because it is part of the concession contract.
- 1.29 The tourism corridor-Libramiento El Progreso project will be the second to be considered under program financing. It aims to give continuity to the efficient traffic flow passing through the village of El Progreso (in the department of Yoro). Project eligibility is based on the criteria mentioned above (paragraph 1.27); and the scope of the works, their impact on regional and national integration, and the project beneficiaries will be determined through the corresponding technical studies.
- 1.30 **Component 2. INSEP institutional strengthening (US\$750,000).** This component will finance actions to strengthen INSEP in the following areas: (i) human resource training in priority areas such as the economic evaluation of projects, vulnerability and climate change, works planning and budget, contract administration, road safety audits; (ii) upgrading of office spaces for the risk management and climate change,

⁴⁰ Freight movements from this port are estimated at 12,048.74 MT in 2015 (81% of total port freight moved in Honduras, and around 8% of the Central American total). Source: Preliminary figures from the Central American Port Statistics Information System.

- gender and environmental management units; (iii) purchase of computer hardware, georeferencing equipment, and software; and (iv) transportation equipment for the operating units.
- 1.31 **Other expenses (US\$1 million).** Financing will be provided to cover the operating costs of the program’s administration and management, including monitoring, evaluation, and audit.
- 1.32 **Characterization of the beneficiaries.** The direct beneficiaries of the La Barca-Pimienta sample segment are 61,000 people who use the road on a daily basis. The project will also benefit 126,000 people living in this road segment’s direct area of influence.
- 1.33 **Costs.** The program has a total estimated cost of US\$77.25 million, of which US\$45 million will be funded from the Bank’s Ordinary Capital, US\$30 million from the Fund for Special Operations, and US\$2.25 million from local counterpart funding.⁴¹ A breakdown of the estimated costs by investment category is given in Table 1.

Table 1. Program financing (US\$)

Components	(US\$)	Local contribution (US\$)	Total
1. Upgrading of integration road segments	73,250,000	2,250,000	75,500,000
1.1 Works	68,425,000	2,250,000	70,675,000
1.2 Supervision	4,075,000	-	4,075,000
1.3 Technical studies	500,000	-	500,000
1.4 Gender focus	250,000	-	250,000
2. INSEP institutional strengthening	750,000	-	750,000
2.1 Institutional strengthening	750,000	-	750,000
Other expenses	1,000,000	-	1,000,000
Program management	875,000	-	875,000
Monitoring and evaluation	50,000	-	50,000
External audit	75,000	-	75,000
Program total	75,000,000	2,250,000	77,250,000

C. Key results indicators

- 1.34 The program will pursue the following results, which will be evaluated on the basis of the indicators proposed in the [Results Matrix](#): (i) a 20% reduction in vehicle operating costs; and (ii) a 36% reduction in travel times. In terms of impact, the program will contribute to an increase in the number of freight vehicles circulating on regional strategic integration corridors.⁴²
- 1.35 **Economic viability.** The analysis of the sample project, using a 12% discount rate, reports an EIRR of 29.1%, under base-scenario conditions and assumptions. The project’s robustness to less favorable scenarios was assessed through a sensitivity analysis that combines a 20% increase in investment cost and a simultaneous 20%

⁴¹ The local contribution covers the implementation of the resettlement plan for the representative sample.

⁴² The number of freight vehicles will be used as a proxy for the growth in economic activity, because vehicles of this type transport goods produced for domestic consumption and for export. The vehicle types will be C2, C3, and articulated trucks.

reduction in benefits. This found that the economic net present value (ENPV) is positive, and the EIRR is 19.5%. In addition, a frontier analysis was performed, which showed that, with a 35% increase in investment cost and a 40% reduction in benefits, the project would generate an ENPV over 0. Table 2 summarizes the results obtained ([Optional link 1](#)).

Table 2. Results of cost-benefit and sensitivity analysis

Project	Length (km)	Investment cost (US\$ thousand)	ENPV (US\$ thousand)	EIRR (%)	
				Base	Sensitivity analysis
					IC: +20% and B: -20%
Segment: La Barca - Pimienta	23	48,360	19,245	29.1%	19.5%

IC: Investment cost; B: Benefits.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The program is an investment loan structured as a multiple works program, which includes similar but mutually independent works, for a total of US\$77.25 million. The representative sample has already been analyzed (paragraph 1.28). The disbursement period will be four years as from the date on which the respective contract enters into force, according to the following schedule. The initial material deadline for all program works will be two years after the loan contract enters into force.

Table 3. Tentative disbursement schedule (US\$ thousand)

Source	2017	2018	2019	2020	2021	Total
IDB	15,551	15,715	25,661	11,573	6,500	75,000
Local contribution	1,750	500	-	-	-	2,250
Total	17,301	16,215	25,661	11,573	6,500	77,250

B. Environmental and social risks

- 2.2 According to the Bank's Environment and Safeguards Compliance Policy (document GN-2208, policy OP-703), this has been classified as a Category "B"⁴³ operation. The works in question (paragraph 1.25) generate medium- to low-level environmental impacts; and the environmental management measures to be implemented are known by the executing agency and by the construction and supervision companies. As the works will be executed on existing main corridors, no sites of archaeological or cultural interest, indigenous communities, or protected natural areas are expected to be affected.
- 2.3 Pursuant to the Bank's Involuntary Resettlement Policy (OP-710), the need for involuntary resettlement will be kept to a minimum; but, where this is unavoidable,

⁴³ As part of the environmental evaluation process from April to July 2016, the executing agency conducted four public consultations processes with the participation of local governments, public institutions (education, health, safety) and private institutions (maquilas, restaurant owners, ranchers, carriers), community organizations (boards, water boards, auxiliary mayors) and owners of structures in the project's immediate area of influence (150 meters on either side of the central axis of the highway).

an involuntary resettlement plan (IRP) will be implemented, having been prepared previously for each project. The IRP is based on the following principles: avoid or minimize population displacements; ensure community participation; consider resettlement as a sustainable development opportunity; define compensation criteria; compensate according to the cost of relocation; compensate for the loss of customary rights; create economic opportunities for the displaced population; provide an acceptable level of housing and services; and keep safety issues in mind. The IRP offers the option of direct payment of monetary compensation to those partially affected, or to nonvulnerable persons who are totally affected; and for the purchase of new land and the construction or purchase of a new home, to persons whose relocation cannot be avoided. The monetary compensations also cover the cost of land, buildings or improvements, payment of moving and notary expenses, replacement of accessory works or various facilities of a property and community infrastructure. These actions will be accompanied by the implementation of programs for information and community participation, social monitoring of compensation, monitoring of economic re-establishment, complaint response, and monitoring and evaluation of IRP implementation. In the case of the sample project, the [IRP](#) indicates that seven homes belonging to vulnerable families dispersed along the road will be affected. In addition, 23 homes and 25 businesses will suffer impacts on their land; and there will be 33 cases of minor land effects. The executing agency has extensive experience in managing and implementing involuntary resettlement plans; and the implementation of positive compensation processes has been demonstrated.

C. Fiduciary risks

- 2.4 The most recent institutional capacity assessment performed in the context of the Regional Road Integration Program (HO-L1104) concluded that INVEST-H has adequate procedures in all key areas, human resources with the experience needed for program execution, and adequate planning and organization of its activities. These elements give it the institutional capacity to execute the loan and ensure proper management of the proceeds. The fiduciary team rated the total program risk associated with financial and procurement management as low.

D. Other project risks

- 2.5 **Other risks.** The most important risks to the program were identified by using the project risk management tool. The operation was rated medium-risk since the risks identified are typical for this type of project. The development risks are: (i) delays in securing rights of way, which will be mitigated through close coordination between the actors involved; and (ii) delays in reviewing and concluding engineering designs for the segment to be defined, which will be mitigated by hiring an international consultant to review the designs. One execution risk is potential budgetary constraints, which will be mitigated by maintaining good performance in the operation's execution, thereby enabling the Finance Secretariat to allocate resources on a timely basis. In relation to public management and governance, the main risk is a lack of continuity and permanency of the executing agency's current technical and managerial staff linked to the Bank-financed operations, for which the Bank will maintain permanent channels of dialogue and coordination with the executing agency, to minimize, to the extent possible, changes in the key executing agency staff identified in the program's operating manual (paragraph 3.2).

- 2.6 An analysis was made of the likelihood of cost overruns for this operation ([analysis of possible additional costs](#)), by studying a database of 18 projects implemented by the executing agency, for which the probability of occurrence of the risk was estimated using a Monte Carlo simulation. The historical analysis showed a mean variation of 11.7%. In terms of scaling for input price variations, it was found necessary to make a provision of 3.9%. These percentages are very reasonable for this type of project and reflect a controlled execution discipline. To mitigate the risk of cost overruns, the following measures have been adopted: (i) review of designs and budgets prior to works tendering; (ii) incorporation of price adjustment formulas when deemed relevant; and (iii) close supervision of the works by the executing agency, the supervision contracted for the purpose, and monitoring by the Bank's team to achieve a reasonable cost, scope, time, and quality balance.
- 2.7 **Maintenance.** To guarantee the sustainability of the investment, the borrower undertakes to maintain the projects financed from the proceeds of this loan. The borrower will also ensure that the roads financed by the loan are maintained according to generally accepted technical standards, either through its own institutions or a private entity. To that end, the borrower will: (i) implement an annual maintenance plan; and (ii) present to the Bank, during the four years following the end of the first of the program works, and within the first quarter of each calendar year, a report on the status of the works and the maintenance plan for the year in question.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 The borrower will be the Republic of Honduras, and the executing agency will be INVEST-H, an entity reporting to the General Coordination Secretariat of the Government, created by Legislative Decree 233-2005 and amended through Executive Decree PCM 006-2014. **A special contractual condition precedent to the first disbursement of the financing requires satisfactory evidence to be presented that INVEST-H is legally authorized to implement the project.** INVEST-H will be responsible for: (i) the programming of the works and services to be contracted; (ii) the preparation of bidding documents; (iii) the bidding processes; (iv) the contracting processes; and (v) the administration of all program works, and ensuring fulfillment of all socioenvironmental specifications and management plans. The executing agency will act under strategic coordination of the productive infrastructure office,⁴⁴ maintaining its technical, administrative, and financial independence (paragraph 1.12).
- 3.2 **Program operating manual.** As this is a multiple works program, it will be implemented on the basis of an operating manual that will include the following

⁴⁴ Executive Decree PCM-001-2014, creating sector offices for the functioning of public administration, defines two coordination mechanisms for the executive agency: (i) with the Office of the Secretary General of the Government, which coordinates all sector offices; and to which the executing agency reports, so its coordination relates to administrative and budgetary issues; and (ii) with INSEP, which is part of the Productive Infrastructure Sector Office, so its coordination relates to the executing agency's alignment with the strategic planning of the infrastructure sector. Apart from INSEP, the Infrastructure Office comprises seven institutions in the sectors of road maintenance, PPPs, ports, energy, telecommunications, postal services, and flood control, which do not coordinate with the executing agency on program execution.

- topics at least: (i) technical, economic, and socioenvironmental criteria for project eligibility; (ii) the guidelines of the program's management and social framework; (iii) requirements of socioenvironmental impact analysis, according to the project's category and the vulnerability of the area of influence; (iv) the flow of procurement processes and their different stages, together with the evaluation committees in the analyses of proposals and bids, to ensure efficiency and quality in procurement processes; (v) functions and responsibilities of key executing agency staff; and (iv) any other Bank requirement. **A special contractual condition precedent to the first disbursement of the financing will require evidence to be presented that the program's operating manual has been approved and has entered into force, under the terms previously agreed on with the Bank.**
- 3.3 **Procurements.** The program's procurement and contracting processes will abide by the framework defined in the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9), both of March 2011. Annex III contains the general management framework governing procurements. The Bank will supervise procurements as specified in the procurement plan.
- 3.4 **Retroactive financing and recognition of expenditures.** The Bank may retroactively finance up to US\$750,000 as a charge against the loan (1% of the proposed loan amount) and recognize up to US\$700,000 (31% of the estimated local contribution) as a charge against the counterpart funding, in respect of eligible expenditures made by the borrower before the loan approval date, for the payment of consulting services to supervise the sample project and payments made for its civil works. To be eligible, the expenditures must have met requirements substantially similar to those defined in the loan contract; and will have been made as from 17 May 2016, the project profile approval date, but in no circumstances more than 18 months before the loan approval date.
- 3.5 **Disbursements.** The loan will be disbursed through advances of funds, at a frequency to be determined based on the project's financial programming, which INVEST-H will update periodically. The Bank may release a new advance of funds when at least 70% of funds previously disbursed has been justified. The financial review of disbursement request will be done ex post.
- 3.6 **Financial statements.** Within 120 days of the executing agency's fiscal year-end, during the original disbursement period or extensions thereof, the borrower, through the executing agency, will present the program's audited financial statements, duly certified by external auditors acceptable to the Bank. The last of these reports will be filed within 120 days following the expiry of the original disbursement period, or extensions thereof. The external audit services will be selected and contracted using the procedures defined in the external audit tendering document (document AF-200). The audit costs will be financed from program resources.
- 3.7 **Special contractual conditions for execution:** (i) presentation of the following documents for the Bank's no objection, together with the bidding documents corresponding to each of the road projects to be financed by the program: (a) specific Environmental and Social Management Plan for the project in question, which will include special socioenvironmental management measures as envisaged in the Environmental and Social Management Report; and (b) in cases requiring the

resettlement of individuals and/or economic activities, a specific IRP for the corresponding road project; (ii) prior to the signing of each work contract, the corresponding works supervision must be contracted; and (iii) prior to the start of each of the program's works, evidence will be presented that: (a) the environmental permits and authorizations required under national legislation have been obtained; and (b) in cases requiring an IRP for the work in question, and in accordance with that IRP: (1) at least one public information and consultation process has undertaken; and (2) rights of way have been secured on at least 70% of the length of the target segment.

B. Summary of arrangements for monitoring results

- 3.8 **Monitoring.** During execution, the executing agency will present a consolidated semiannual progress report to the Bank, indicating the progress made in each of the components and the project's overall performance, based on the indicators agreed upon in the Results Matrix. The semiannual report will include the following at least: (i) fulfillment of the contractual conditions; (ii) description of the activities undertaken; (iii) progress in terms of the execution indicators and the agreed disbursement schedule; (iv) summary of the project's financial situation; (v) description of the bidding processes held; (vi) a section on the socioenvironmental management of the project, including schedules, results, and measures implemented to fulfill the Environmental and Social Management Report; and (vii) a section identifying potential risks in program execution and their mitigation measures
- 3.9 **Evaluation.** The results expected from the program will be evaluated using before and after methodologies, along with an ex post cost-benefit analysis. The Bank will monitor the program through inspection visits and administration missions. For further detail, see the [Monitoring and evaluation plan](#).

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives		Aligned	
Development Challenges & Cross-cutting Themes		-Productivity and Innovation -Economic Integration -Climate Change and Environmental Sustainability	
Regional Context Indicators			
Country Development Results Indicators		-Roads built or upgraded (km)*	
2. Country Strategy Development Objectives		Aligned	
Country Strategy Results Matrix		GN-2796-1	To improve national and regional integration and reduce operating and transportation costs.
Country Program Results Matrix		GN-2849	The intervention is included in the 2016 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
		8.7	10
3. Evidence-based Assessment & Solution		9.6	33.33%
3.1 Program Diagnosis		3.0	
3.2 Proposed Interventions or Solutions		3.6	
3.3 Results Matrix Quality		3.0	
4. Ex ante Economic Analysis		10.0	33.33%
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		6.6	33.33%
5.1 Monitoring Mechanisms		2.5	
5.2 Evaluation Plan		4.1	
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		B	
IV. IDB's Role - Additionality			
The project relies on the use of country systems			
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting, External control.	
Non-Fiduciary			
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality	Yes	Training solutions for women were identified, as well as a gender indicator at the output level.	
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			

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The low agriculture sector productivity in Honduras is due to the poor quality of its road infrastructure, among other factors, which places the country as the one with the lowest road density in Central America (0,13 km/km2), translating this to long travel times and high vehicular operating costs. The main cause of this problem is the lack of financial resources to invest in deteriorated sections of Strategic Corridors. Project HO-L1121, under the multiple works modality, aims to solve this condition through improving the service level of Honduras' National and Regional Integration Strategic Corridors, which will result in the reduction of generalized transport costs. The operation will conduct infrastructure works intended to increase the number of road lanes and rehabilitating integration roads' sections; and will conduct actions to strengthen INSEP's infrastructure management and planning capabilities.

The vertical logic has been correctly identified by quantifying and explaining the main determinants of the general and specific problems. The results matrix, which reflects the diagnosis and proposed intervention, is correctly defined.

The economic analysis shows the results of the economic evaluation for the sample, Logistic Corridor Section La Barca – Pimienta (23 km, 62.6% of total investment). By applying a 12% social discount rate, it displays a positive NPV, and the sensibility analysis finds that with a 15% increase of the planned investment and a traffic increase equal to half of the expected, the project would still have a return rate higher than the social discount rate.

The monitoring and evaluation plan is adequate and consistent with the intervention. It correctly identifies the phases, responsibilities, budget and timelines. The ex post evaluation of results proposes a before and after methodology and an ex post cost-benefit analysis, which will validate the economic benefits related to motor vehicular operating costs savings and travel time savings.

The overall risk for this project has been classified as medium. The risks identified are: (i) potential delays during implementation, (ii) restrictions to budget authorization as a result of fiscal policy, and (iii) lack of continuity of the executing agency's technical and management personnel related to the operation. All these risks have mitigation measures.

RESULTS MATRIX

Program objective:	The program's objective is to help raise productivity and increase national and regional integration in Honduras, by upgrading the quality of its road infrastructure. The program's specific objective is to help improve the level of service provided on two of the Strategic Corridors of Honduran National and Regional Integration (CEINRH), specifically the logistics and tourism corridors, by building additional lanes and refurbishing targeted segments. This will result in lower vehicle operating costs and shorter travel times for users. These two corridors are being targeted because, under the public-private partnership scheme currently operating in Honduras, the logistics and tourism corridors have been placed under concession contracts, and the government has undertaken to deliver several upgraded and refurbished segments for operation and maintenance by the concession holder.
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EXPECTED IMPACT

Indicators	Unit of measurement	Baseline		Targets		Means of verification	Comments
		Value	Year	Value	Year		
Impact 1: Increase the number of freight vehicles circulating on strategic regional integration corridors							
Number freight vehicles circulating on the upgraded stretches per day ¹							
<ul style="list-style-type: none"> La Barca – Pimienta segment 	Vehicles/day	3,467	2016	4,892	2021	Traffic study	Responsible entity: INVEST-H

¹ The number of freight vehicles will be used as a proxy for the growth in economic activity, since vehicles of this type transport goods produced for domestic consumption and export. The vehicle types will be C2, C3, and articulated trucks.

EXPECTED OUTCOMES

Expected outcomes	Unit of measurement	Baseline		Intermediate		Targets		Means of verification	Comments
		Value	Year	Value	Year	Value	Year		
Outcome 1: Reduction in overall transportation costs²									
Average vehicle operating cost ³ on the segments of the regional integration corridors upgraded by the program. La Barca-Pimienta segment	US\$ / Vehicle-km	0.48	2016	N/A ⁴		0.38	2021	Traffic study Ex post evaluation	Responsible entity: INVEST-H
Average travel time on the segments of the regional integration corridors upgraded by the program.	Minutes	25	2016	N/A		16	2021	Speed study Ex post evaluation	Responsible entity: INVEST-H

² The outcome indicators will measure improvements in service, defined in terms of time savings and reduced vehicle operating costs.

³ Average of the values for the following vehicle types: automobile, pickup, bus, C2, C3, and articulated truck.

⁴ Given the nature of the program, no midterm evaluation is required.

OUTPUTS

Outputs	Estimated cost (US\$)	Unit of measurement	Baseline 2016	2017	2018	2019	2020	2021	Final target	Means of verification	Comments
Component 1: Improvement of integration road segments											
Km of roads built or improved⁵	75,500,000	km	0			23.0	11.0		34.0	Supervision reports. Works acceptance certificate. Responsible entity: INVEST-H	
• La Barca–Pimienta segment	48,360,044	km	0			23.0			23.0		
• Additional segments	26,889,956	km					11.0 ⁶		11.0		
Number of training events held by the Honduran government on nontraditional jobs for women ⁷	250,000	No. of training workshops	0			1			1	Final training reports. Responsible entity: INVEST-H	Gender Tracking Criteria
Component 2: INSEP institutional strengthening											
Number of training events held for staff of the Secretariat of Infrastructure and Public Services (INSEP) ⁸	330,000	No. of training workshops	0		1	1	1	1	4	Final training reports. Responsible entity: INVEST-H	
Number of offices upgraded in the INSEP risk management and climate change, gender, environmental management units. ⁹	200,000	No. of offices upgraded	0		3				3	Installation acceptance certificates. Responsible entity: INVEST-H	

⁵ Construction or improvement includes construction of new lanes, improvement of the road surface structure, patching potholes, sealing of the existing asphalt surface, upgrading embankments to address critical hydrological issues, sewers and culverts, rehabilitation and improvement of longitudinal and crosswise drainage systems, bridges, concrete structures, road signs and pavement markings, and other works needed for road safety and the functionality of the targeted segments. It will also include horizontal or vertical standard, cross-section, alignment, curvature, or longitudinal slope improvement activities, so as to increase road capacity, increase traffic speed, and enhance road safety in population centers. Pedestrian crossings and bridges will be put in place, along with upgraded intersections, overpasses, and the application of road safety devices to dissipate energy and reduce speed.

⁶ Length defined on the basis of cost per kilometer of the sample project, which will be adjusted when the executing agency implements the works.

⁷ The workshop will provide training to about 60 women for nontraditional activities in the construction and transportation sectors.

⁸ Training courses will be given to 100 people on HDM-4, contract management, unit costs, road safety audits, climate change adaptation, risk management, and information technology.

⁹ The upgraded spaces consist of redesigned and properly furnished offices.

Outputs	Estimated cost (US\$)	Unit of measurement	Baseline 2016	2017	2018	2019	2020	2021	Final target	Means of verification	Comments
Number of computers and pieces of georeferencing equipment purchased by INSEP and functioning.	50,000	1.1 No. of pieces of equipment purchased	0		28				28	Goods acceptance certificates. Responsible entity: INVEST-H	
Number of software licenses acquired by INSEP and functioning ¹⁰	70,000	No. of licenses purchased	0		22				22	Goods acceptance certificates. Responsible entity: INVEST-H	
Number of vehicles for the operating units acquired by INSEP and functioning.	100,000	No. of vehicles purchased	0		3				3	Goods acceptance certificates. Responsible entity: INVEST-H	

¹⁰ 12 licenses for MS Office, a unit price analysis, a geometric design, a hydraulic design, an equipment operation simulator, one license for ArcGIS, and five licenses for MS Project.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Honduras
Project number:	HO-L1121
Name:	Regional Road Integration Program II
Executing agency:	Inversión Estratégica de Honduras [Strategic Investment-Honduras] (INVEST-H)
Fiduciary team:	Nalda Morales (Financial Management FMP/CHO) and María Cecilia Del Puerto (Procurement FMP/CHO)

I. EXECUTIVE SUMMARY

- 1.1 According to the most recent evaluation of fiduciary management, the executing agency, INVEST-H, has gained exceptional experience over the last four years in executing Bank-financed operations in Honduras (HO0207, HO-L1018, HO-L1020, HO-L1033, HO-L1089, and HO-L1104), with very satisfactory results in fiduciary terms. The evaluation in question concluded that INVEST-H has the capacity to undertake fiduciary management activities and to administer the loan proceeds.
- 1.2 The most recent diagnostic assessments on public financial management systems in Honduras show significant progress towards good practices and international standards, mainly in terms of modernizing the institutional framework and implementing the Integrated Financial Management System (SIAFI), the Single Treasury Account (CUT), the decentralization of the treasury function, and the use of the UEPEX (Executing Units for Externally Financed Projects) module of SIAFI for issuing financial statements and other project reports. The Public Expenditure and Financial Accountability evaluations for 2013, 2014, and 2015 highlight greater organization in budgetary formulation, under a multiyear approach, and the linkage of projects from the preinvestment phase with strategic plans and expenditure estimates over a medium-term horizon. In 2014, the Bank signed a strategic partnership with the Superior Audit Office (TSC), which will make it possible to consider using this entity for external oversight services in Bank-financed operations in Honduras. In terms of the public procurement system, since 2010 the diagnostic of the Methodology for Assessing Procurement Systems of the Organisation for Economic Co-operation and Development (MAPS/OECD) indicates that the country displays strengths, particularly a legal framework aligned with most international best practices. Nonetheless, challenges remain in terms of meeting standards that would enable the Bank to use the country procurement system for the operations it finances, so Bank policies will be applied in executing procurements in this operation.

II. THE EXECUTING AGENCY'S FIDUCIARY CONTEXT

- 2.1 INVEST-H has assumed responsibility for executing 100% of the road transport operations financed by the Bank in Honduras. Its governance structure consists of a Board of Directors, made up of various government and civil society institutions,

and a project management unit coordinated by an executive director, assisted by a competitively hired high-level technical team. Its fiduciary staff meet the educational and experience requirements needed to execute the operation.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 Based on the most recent evaluation of the executing agency's institutional capacity, conducted as part of operation HO-L1104, the Bank's fiduciary team considers that overall fiduciary risk is low—basically owing to INVEST-H's past experience executing contracts for similar operations and implementing the Law on Simplification of Procedures for Investing in Public Infrastructure (Legislative Decree 58-2011). The update of the project risk management exercise indicates a medium level of risk, related, among other things, to potential difficulties arising at the start of works contracting procedures, the signing of contracts for the coordination of the different bidding processes, and the budgetary complexities of Honduras, for which the mitigation actions were incorporated into a plan of action agreed on with the borrower.
- 3.2 With regard to procurements, INVEST-H will be required to: (i) implement procurements in accordance with Bank policies; (ii) publish Bank-financed procurements in Honducompras, the official government site for advertising opportunities for State procurements and contracts, in addition to publication on the United Nations Development Business (UNDB) website, as appropriate; and (iii) use standard national competitive bidding (NCB) and shopping documents for goods and works procurement, as agreed by the Bank and the Government Procurement and Contracting Regulator (ONCAE).

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

- 4.1 The official buying rate published by the Central Bank of Honduras on the date of payment will be used. An annual financial audit of the project's financial statements will be required, with interim reports by 30 June of each year, pursuant to the terms of reference agreed on with the Bank

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 The fiduciary arrangements and requirements for procurements define the provisions applicable to all procurement processes envisaged for the program.
- 5.2 **Procurement execution.** INVEST-H will be responsible for executing procurements in keeping with the Bank's procurement policies, set forth in documents GN-2349-9 and GN-2350-9, and the provisions of the operation's procurement plan. The latter will cover all procurements needed to execute the operation. To ensure timely planning and monitoring of procurements, the executing agency will update the procurement plan annually, or according to program needs. Any modification of the procurement plan will be submitted to the Bank for approval.
- 5.3 **Procurement of works, goods, and nonconsulting services.** For contracts subject to international competitive bidding (ICB), procurements will be processed using the standard bidding documents issued by the Bank. Tenders requiring

national competitive bidding (NCB) will use the national bidding documents agreed on with the Bank and published on the ONCAE website.

- (i) **Selection and contracting of consulting services.** For the selection and contracting of consulting services, any of the methods described in the policies on consultants can be used; but the method chosen for each contract must be indicated in the procurement plan.
- (ii) **Selection of individual consultants.** At the executing agency's discretion, the contracting of individual consultants can be requested through local or international announcements to form a shortlist of qualified individuals.

5.4 **Recurrent costs.** These are the operating and maintenance expenses that are needed to undertake INVEST-H's specific functions under this program, which will be financed with the loan proceeds during its life. They include a portion of the remuneration of staff who will be assigned part-time to collaborate in program execution, and the corresponding coverage of ordinary INVEST-H operating costs in the program context. These consist of the use and insurance of facilities and properties, basic services, logistical support for monitoring and other administrative expenses to support execution. Such expenses are eligible for financing insofar as they fulfill the requirements for Eligible Expenditures in Investment Loans (OP-311) in the Bank's Operational Policies, as applicable to recurrent costs, and also conform to the financial parameters for Honduras.

5.5 The thresholds governing the use of ICB and formation of the shortlist of international consultants will be made available to the executing agency on the Bank's public portal. For amounts below these thresholds, the selection method will be determined according to the complexity and characteristics of the procurement or contract, which will be indicated in the procurement plan approved by the Bank.

5.6 **Main procurements.** INVEST-H will be responsible for preparing the program's procurement plan. The main contracts to be financed from the loan proceeds are as follows:

Table 1. Main Procurements

Activity	Type of bidding	Estimated date (publication)	Estimated amount (US\$ thousands)
Works			
La Barca-Pimienta project	ICB	Oct 2016	43,455
Works to be determined	ICB	Apr 2018	21,000
Consulting			
Supervision of the La Barca-Pimienta project	Quality and cost-based selection (QCBS)	Aug 2016	2,604
Supervision of construction works to be determined	QCBS	Jan 2018	1,470

5.7 **Supervision of procurements.** Procurements will be supervised using a mix of ex ante and ex post reviews, as defined in the procurement plan and its updates.

5.8 **Retroactive financing and recognition of expenditures.** The Bank may retroactively finance up to US\$750,000 as a charge against the loan (1% of the proposed loan amount) and recognize up to US\$700,000 (31% of the estimated local

- contribution) as a charge against the counterpart funding, in respect of eligible expenditures made by the borrower before the loan approval date, for the payment of consulting services to supervise the sample project and payments made for its civil works. To be eligible, the expenditures must have met requirements substantially similar to those defined in the loan contract; and will have been made as from 17 May 2016, the project profile approval date, but in no circumstances more than 18 months before the loan approval date.
- 5.9 **Special provisions.** Measures to reduce the likelihood of corruption: the contracts envisaged for this program will comply with the provisions of documents GN-2349-9 and GN-2350-9 on prohibited practices.
- 5.10 **Records and files.** INVEST-H will maintain original files and supporting documentation for all procurements and payments.

VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

- 6.1 **Programming and budget.** SIAFI operates in real time for the budgeting stages of State institutions that execute Bank projects. The budget formulation process from 2017 onwards will be done in the SIAFI management formulation module, which includes a new budgetary framework to align projects with the National Plan to 2038 and the current government plan, for monitoring strategic objectives, indicators, and targets. Budget execution takes place where the expenditure originates, in a decentralized manner, through the corresponding administrative management authorities, and this is also applicable to projects. Budget reprogramming and extensions do not require legislative approval, but rather the approval of the Finance Secretariat. The Bank's financial parameters for the country allow for the financing of all program costs.
- 6.2 **Accounting and information systems.** The SIAFI/UEPEX module will be used for financial reporting and the rendering of accounts for Bank-financed projects. Financial transactions and project accounting will follow the practices of this country system. Cash-based accounting will be used.
- 6.3 **Disbursements and cash flow.** The loan will be disbursed through advances of funds, based on cash flow. Given the number of processes to be conducted simultaneously and the payment processing times, and to avoid the risk of slowing execution of some components and liquidity issues, the project team agreed that the Bank could release a new advance of funds when at least 70% of funds previously disbursed has been justified.
- 6.4 The treasury subsystem will be used, since it is adapted to Bank standards, which means it is an appropriate means of managing income and disbursements, and is also suitable and reliable for administering program funds. A special account is to be opened at the Central Bank of Honduras in the project's name; and the Single Treasury Account (CUT) will be used to make payments via direct transfers to the bank accounts of the suppliers of the project's goods and services. Disbursements will be made through advances of funds.
- 6.5 **Internal control and internal audit.** This function is currently in development, so responsibility for evaluating the program's internal control system will fall to the external auditors hired to perform the project's financial audit.

- 6.6 **External control and reports.** The operation will be audited by an external audit firm eligible for Bank operations. The estimated cost of the audit for the entire period is US\$75,000. At the Bank's discretion, the audit may be performed either by an external audit firm eligible for Bank operations or by the Superior Audit Office (TSC), based on terms of reference that have received the Bank's no objection. In either case, the audit will be financed from the loan proceeds. The audit firm will be contracted by the executing agency through a competitive process. The TSC can be hired under an interagency cooperation agreement signed between the TSC and INVEST-H, in the framework of the strategic partnership with the Bank. Pursuant to its current access to information policy, the Bank will publish the annual audited financial statements, which will include the statement of sources and uses of cash, a statement of cumulative investments, explanatory notes, and the auditor's opinion.
- 6.7 **Financial supervision plan.** Disbursements will be reviewed ex post by the auditing firm that is hired. The Bank will supervise the operation using information from SIAFI, UEPEX, and the Honduran National Public Investment System. Audit reports will also be reviewed and their findings tracked; and risk mitigation actions will be monitored for implementation, through on-site reviews at the executing agency's office. In addition, desk reviews will be conducted. Supervision will be performed by the fiduciary financial management specialist, supported by external auditing services and consultants, in coordination with the Project Team Leader, the other project team members, officials from the Bank's Country Office, and personnel from the Bank's Operations Financial Management and Procurement Services Office (VPC/FMP). With a view to harmonizing and aligning information needs between the country systems and those of the Bank, the cost structure to be entered into the Loan Management System will be as agreed on between the borrower, the executing agency, and the Bank, once the operation has been approved.
- 6.8 **Other financial management agreements and requirements.** Actions to mitigate the fiduciary risks identified in the project risk management evaluation will be followed up periodically; and strengthening measures will be proposed as needed, to ensure reasonable security in the proper and efficient use of resources. Any necessary amendments to the fiduciary arrangements will also be made.