

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## **EL SALVADOR**

# **MESOAMERICAN PACIFIC CORRIDOR IMPROVEMENT PROGRAM**

**(ES-L1085)**

## **LOAN PROPOSAL**

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ELECTRONIC LINKS	
<b>REQUIRED</b>	
1.	Annual work plan (AWP) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096503">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096503</a>
2.	Monitoring and evaluation plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096476">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096476</a>
3.	Procurement plan <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096446">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096446</a>
4.	Environmental and social management report (ESMR) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096394">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096394</a>
<b>OPTIONAL</b>	
1.	Regional integration annex <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096383">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096383</a>
2.	Economic analysis <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096342">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096342</a>
3.	Memorandum of Understanding on the Red Internacional de Carreteras Mesoamericanas [International Network of Mesoamerican Highways] (RICAM) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096271">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38096271</a>
4.	Institutional capacity assessment of MOPTVDU <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095883">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095883</a>
5.	Institutional Capacity Assessment System (ICAS) matrices <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095860">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095860</a>
6.	Maps <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095786">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095786</a>
7.	Project execution plan (PEP) <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095691">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38095691</a>
8.	International Network of Mesoamerican Highways (RICAM) <a href="http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38033748">http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=38033748</a>

## ACRONYMS AND ABBREVIATIONS

AADT	Average annual daily traffic
EIRR	Economic Internal Rate of Return
EDFCM	Estrategia de Desarrollo Integral y Sostenible de la FCM 2012-2014 [Marine Coastal Strip Integrated and Sustainable Development Strategy for 2012-2014]
ENPV	Economic net present value
FOVIAL	Fondo de Conservación Vial [Road Maintenance Fund]
LACAP	Ley de Adquisiciones y Contrataciones de la Administración Pública [Public Administration Procurement Law]
MCC	Millennium Challenge Corporation
MCS	Marine coastal strip
MOPTVDU	Ministry of Public Works, Transportation, Housing and Urban Development
MPC	Mesoamerican Pacific Corridor
RICAM	Red Internacional de Carreteras Mesoamericanas [International Network of Mesoamerican Highways]
SAFI	Sistema de Administración Financiera Integrado [Integrated Financial Administration System]
TEU	Twenty-foot equivalent unit
UACI	Unidad de Adquisiciones y Contrataciones Institucional [Institutional Procurement Unit]
UFI	Unidad Financiera Institucional [Institutional Financial Unit]
VMOP	Office of the Vice Minister of Public Works

## PROJECT SUMMARY

### EL SALVADOR MESOAMERICAN PACIFIC CORRIDOR IMPROVEMENT PROGRAM (ES-L1085)

Financial Terms and Conditions				
<b>Borrower:</b> Republic of El Salvador		<b>Flexible Financing Facility*</b>		
<b>Executing agency:</b> Ministry of Public Works, Transportation, Housing, and Urban Development (MOPTVDU), acting through its Office of the Vice Minister of Public Works (VMOP)		Amortization period:	25 years	
		Original WAL:	15.25 years	
		Disbursement period:	5 years	
		Grace period:	5.5 years	
<b>Source</b>	<b>Amount</b>	Inspection and supervision fee:	**	
IDB: Ordinary Capital (OC)	US\$115 million	Interest rate:	LIBOR-based	
Local	0	Credit fee:	**	
Total	US\$115 million	Currency of approval:	U.S. dollars from the Ordinary Capital	
Project at a Glance				
<b>Project objective/description:</b> The general objective of the program is to contribute to improve the physical integration and road connectivity of El Salvador. The specific objective is to improve passenger and freight transportation conditions on the Mesoamerican Pacific Corridor (MPC). The program will also contribute to make the MPC a regionally competitive arterial freight corridor for the linkage of production hubs, consumer markets, and trade infrastructure, as well as international linkage. To meet these objectives, the program includes rehabilitation, expansion, and improvement of localized sections of the MPC, adapting their functional characteristics to those agreed upon in the Memorandum of Understanding on the International Network of Mesoamerican Highways (RICAM).				
<b>Special contractual clauses:</b>				
<b>Conditions precedent to the first disbursement:</b> (i) evidence that the execution unit has been established, and that the project manager, a procurement specialist, an engineering specialist, and a financial specialist have been selected (see paragraph 3.2); and (ii) entry into force of the program Operations Manual, on the terms previously agreed upon with the Bank (see paragraph 3.4).				
<b>Condition precedent to the first disbursement of loan proceeds for component 1:</b> evidence from the borrower that the program management support services have been selected (see paragraph 3.1).				
<b>Execution conditions:</b> (i) the executing agency will provide the following, to the Bank’s satisfaction, with the bidding documents for each of the program projects (sections of works): (a) the environmental and social management plan (ESMP) for the project in question; (b) the involuntary resettlement plan, should the works require the relocation of persons or economic activities; and (c) the environmental technical specifications; and (ii) before the start of works on each of the projects (sections), the borrower will provide evidence, to the Bank’s satisfaction, that it has: (a) obtained the environmental permits required under national legislation; (b) conducted at least one dissemination and public consultation process as required under Directive B.06 of Operational Policy OP-703; and (c) cleared the right-of-way for the target section (see paragraph 2.5).				
<b>Exceptions to Bank policies:</b> None.				
<b>Project qualifies as:</b>		SEQ [ ]	PTI [ ]	Sector [ ]      Geographic [ ]      Headcount [ ]

\* Under the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

\*\* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans.

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problems to be addressed, and rationale

- 1.1 With a population of 6.2 million<sup>1</sup> and per capita income of US\$3,775,<sup>2</sup> El Salvador is the most densely populated Central American country (285 inhabitants/square kilometer). Its GDP in 2012 was US\$23,787,<sup>3</sup> contributing approximately 16% to the GDP of the Central American region.<sup>4</sup> El Salvador stands out for its development strategy focused on international trade,<sup>5</sup> which has enabled the country to diversify its productive sector and access international financial markets.<sup>6</sup> Although the performance of the Salvadoran economy over the past decade can be considered stable, the country's growth rates remain below the regional mean.<sup>7</sup>
- 1.2 To address these economic growth challenges, since the 1990s the Government of El Salvador has been implementing medium- and long-term plans that, in addition to pursuing macroeconomic stability,<sup>8</sup> serve to foster the country's competitiveness. Thus, the government has prioritized target areas most capable of impacting growth, such as investment in human capital, basic infrastructure, and business climate. In particular, the transportation infrastructure area, regarded as a pillar of the national development strategy,<sup>9</sup> demonstrates the country's engagement and active participation in the regional integration initiative known as the Mesoamerica Project, which seeks to maximize complementarity and cooperation among Central American countries in physical, economic, and commercial terms.
- 1.3 **Mesoamerica Project.** Under the Mesoamerica Project, the countries of the region (Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Belize, Colombia, Mexico, and the Dominican Republic), including El Salvador, have identified the need to promote development of the most commercially important highway corridors, to be implemented at the national level pursuant to standards

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<sup>1</sup> World Bank, 2011.

<sup>2</sup> *Open Data*, World Bank, 2012.

<sup>3</sup> *Country Economic Report*, Economist Intelligence Unit Limited, 2013.

<sup>4</sup> Consejo Monetario Centroamericano [Central American Monetary Council].

<sup>5</sup> CAFTA-DR (Dominican Republic–Central America–United States Free Trade Agreement), signed 5 August 2004, to create new economic opportunities among the countries involved by eliminating tariffs, opening markets, and reducing barriers.

<sup>6</sup> The country obtained the third highest score in terms of export sophistication behind Costa Rica and Panama. *Unlocking Central America's Export Potential*, World Bank, 2012.

<sup>7</sup> GDP growth rates: 2011: 2%; 2012: 1.6%; and projected 2013: 2.5%. By contrast, the 2012 growth rates for Guatemala, Honduras, and Nicaragua were respectively: 3.8%; 3.6%; and 4.7%.

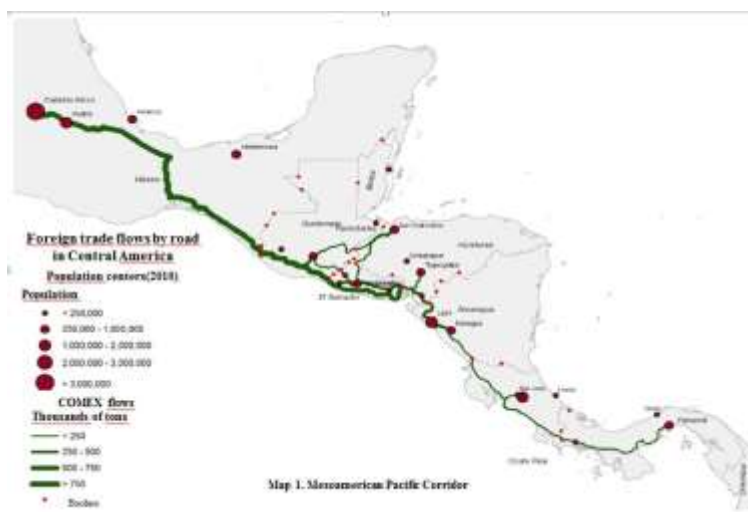
<sup>8</sup> Anticrisis Plan 2007, as a mechanism for long-term recovery.

<sup>9</sup> Five-year Development Plan 2010-2014, El Salvador.

consistent with international traffic demand.<sup>10</sup> This set of trunk and feeder corridors today constitutes the Red Internacional de Carreteras Mesoamericanas [International Network of Mesoamerican Highways] (RICAM) (see [optional electronic link 8](#)), principally comprised of the Pacific Corridor (see paragraph 1.5) and Atlantic Corridor and a series of supplementary spur and connector roads, and is the basis of a coordinated plan for developing the sector and addressing the high costs of transportation.

- 1.4 Recent studies<sup>11</sup> indicate that highway transportation costs in Central America represent 30% to 35% of total logistics costs. A gravitational model for Central America developed by the World Bank in 2012 that assesses the econometric relationship between volume of freight carried and the distances<sup>12</sup> between production hubs and consumption centers, estimated that a 1% increase in highway transportation costs and times can reduce Central American exports by 1.65%.

- 1.5 **The Mesoamerican Pacific Corridor (MPC).** The MPC is the shortest route between the cities of Puebla and Panama, and has the lowest average altitude above sea level of any route. Ninety-five percent of the region's ground freight circulates on the MPC. Given these characteristics, the corridor is considered the most efficient means of road integration. In addition, because of the volume of freight carried on the MPC (see Map 1, [optional electronic link 6](#)), the region's countries chose to strengthen it ahead of every other corridor.<sup>13</sup> As the region's major logistics corridor for transportation and trade integration, the MPC originates in the city of Puebla, Mexico, and from the city of Arriaga onward follows the Pacific coastline route until it reaches Panama City, covering a total



<sup>10</sup> The predominant mode of transportation for freight in the region is over the road. Among Central American countries, El Salvador is the principal user of road transportation for its foreign trade, both in volume and as a percentage of total foreign trade (52% of imports and 56% of exports in volume, and 27% and 44%, respectively, in value).

<sup>11</sup> "Road freight in Central America: five explanations to high costs of service provision." Ruiz Olmedo, 2007; WTO, 2010.

<sup>12</sup> Gordillo, Stokenberg, Schwartz, 2010, assert that the transportation time and cost from an origin to a destination increase the "real" distance between markets.

<sup>13</sup> [Mesoamerican Pacific Corridor Acceleration Program](#).

distance of 3,244 km. Using information provided in 2011 by the customs authorities of all countries in the region,<sup>14</sup> it was estimated that the corridor's major freight flows total approximately 7.9 million tons, equivalent to US\$11.200 billion.

- 1.6 **MPC in El Salvador.** In their passage through El Salvador, the MPC and the Pan-American Highway form the structural backbone of the country, facilitating the connection between San Salvador, the country's main manufacturing node and consumer market, and the secondary nodes of Santa Ana and San Miguel. In addition, in the event of a natural disaster, the MPC is the viable alternative ground connection route. With a length of 313 km, it traverses the country from the border crossing at La Hachadura (in Guatemala) to El Amatillo (in Honduras), encompassing international routes CA-2 (from the Guatemalan border to El Delirio) and CA-1 (from El Delirio to the El Amatillo bridge, on the border with Honduras). The fact that El Salvador has shared borders with two Central American countries makes it a natural and necessary ground corridor for intraregional trade. Approximately 40% of El Salvador's foreign trade is destined primarily for Guatemala (381,599 tons moved in 2011) and Honduras (203,469 tons moved in 2011). In terms of the dynamics of trade with Honduras, the MPC is the gateway for commercial access to the east coast of the United States and Europe. Thus, the existence of an extensive, efficient network of highway transportation and logistics services capable of sustaining a steady rise in demand is necessary in order to contribute to regional and global integration and the development of productive activities, facilitating passenger transportation and the exchange of goods and services and lower costs to enhance the country's competitiveness.
- 1.7 **Marine Coastal Strip (MCS) development and the MPC.** In addition to the MPC's significance at the regional level, within El Salvador it fits into the Marine Coastal Strip Integrated and Sustainable Development Strategy for 2012-2014 (known by its Spanish-language acronym, EDFCM).<sup>15</sup> Under this strategy, the MPC functions as a logistics corridor to stimulate and enhance the production system of this area, which spans 34% of the nation's territory.<sup>16</sup> This area is home to the country's main logistics infrastructure linking the country with the rest of the world, including the Port of La Unión, the Port of Acajutla<sup>17</sup> and the Comalapa International Airport. It is worth noting that, between 2008 and 2011, products for export originating in this area grew nearly 30%,<sup>18</sup> demonstrating the productive

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<sup>14</sup> See [origin-destination matrix](#), Pacific Corridor, ALG, 2011.

<sup>15</sup> This strategy is coordinated with the National Risk Reduction Program 2010-2014, which focuses on building risk reduction considerations into public investment (infrastructure).

<sup>16</sup> [Marine Coastal Strip Integrated and Sustainable Development Strategy for 2012-2014 \(EDFCM\)](#).

<sup>17</sup> The Port of Acajutla is responsible for moving 45.15% of imports and exports. In 2011, it processed a total of 4,256,000 tons (1,530,892 TEUs).

<sup>18</sup> Principally agriculture, fishing, aquaculture, and industry.



potential of this area, where 51% of the country's best agricultural land is concentrated.<sup>19</sup>

- 1.8 **MPC transportation and logistics problems in El Salvador.** The national highway system encompasses 10,886 kilometers of roads, 26% of which are paved. The density is 0.52 kilometers per square kilometer,<sup>20</sup> which is considered acceptable by international standards.<sup>21</sup> In general, the road network is in good condition, as a result of annual maintenance;<sup>22</sup> however, certain sections have reached the end of their useful life, and others have physical characteristics that require upgrades due to current demand. In the specific case of the MPC, growth in demand for inputs for industrial and food products from the area<sup>23</sup> will put pressure on the corridor's service conditions in the short term. In addition, the existence of critical sections of road network with inadequate technical standards for future traffic<sup>24</sup> undermines the efficiency of freight and passenger transportation within the country. These conditions, combined with the strong bias in the freight matrix toward road transportation,<sup>25</sup> translate into: (i) high transportation and logistics costs; (ii) low accessibility to important parts of the country; and (iii) consequently, constraints on this region's growth and development.
- 1.9 Furthermore, in order to maintain regional competitiveness and not limit economic activity and productive development in El Salvador, the growth in demand projected by the EDFCM should be accompanied by investments in basic infrastructure, primarily in road infrastructure rehabilitation, improvement, expansion, and regular maintenance, so as to foster intra- and inter-regional integration and the country's economic and social development. These sector investments will in turn enable El Salvador to position itself as a logistics center for Central America's north quadrant through its integrated intermodal system joining the road network, particularly the MPC, to the two maritime ports (La Unión and Acajutla) and the Avianca-Taca air hub.

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<sup>19</sup> Technical Secretariat of the Office of the President.

<sup>20</sup> International indicator of highway system development, obtained by dividing the number of kilometers in the national road system by the surface area of the country.

<sup>21</sup> In Central America, only Costa Rica has a higher density (0.62).

<sup>22</sup> For 2008-2009, the World Economic Forum ranked the country's infrastructure as the second most competitive in Latin America and the best in Central America, attributable in part to confirmation of the Fondo de Conservación Vial [Road Maintenance Fund] (FOVIAL).

<sup>23</sup> This demand will tend to increase, since it focuses on inputs for industrial manufactures and foodstuffs, which are highly correlated with regional GDP. In its report on economic projections, the International Monetary Fund (IMF) states that the Central American economies will continue to grow at an average rate of 4% of GDP, as a result of strengthening of exports.

<sup>24</sup> The network includes sections with physical and operational characteristics that require improvement due to current demand (AADT: 2,000 to 10,000), as well as sections that have reached the end of their useful life, limiting the corridor's operating speeds, travel times, and safety.

<sup>25</sup> Among Central American countries, El Salvador is the principal user of road transportation for its foreign trade, both in volume and as a percentage of total foreign trade (52% of imports and 56% of exports in volume, and 27% and 44%, respectively, in value).

- 1.10 The conclusion from international experience in implementing road rehabilitation, expansion, and improvement projects is that these projects yield the following results:<sup>26</sup> (i) lower vehicle operating costs; (ii) shorter travel times; and (iii) fewer traffic accidents.
- 1.11 **Road safety.** The traffic accident fatality rate in El Salvador is 21.5 deaths per 100,000 inhabitants, whereas the average in Latin America and the Caribbean is 16.3 deaths per 100,000 inhabitants. The occurrence of accidents relates basically to human behavior, vehicle, and infrastructure. It is therefore essential to improve safety conditions in the current road system and ensure that all engineering designs for new highway investment projects meet adequate road safety standards (see paragraph 1.23).
- 1.12 **Initiative of the Government of El Salvador.** The Government of El Salvador, with support from the Bank and other multilaterals, has decided to undertake an ambitious investment program to move ahead with the EDFCM on all fronts (more than 900 government projects are in execution or scheduled for the 2013-2015 period, which will help to make the MCS more attractive for private investment) and, in particular, improve conditions on the MPC. Mindful of the status of the preinvestment studies of highway sections on the MPC, the Bank and the Government of El Salvador selected the rehabilitation of the Sirama–Santa Rosa de Lima Bypass section as a representative sample of the investments to be made under this program (see paragraph 1.21). This potential intervention complements initiatives financed by other donors, such as those described below (see Map 2, [optional electronic link 6](#)): (i) the Millennium Challenge Account (FOMILENIO II, US\$277 million) is financing construction of the Agua Salada section to the Amatillo border crossing, as well as the upgrade and expansion of the Comalapa–Zacatecoluca section. Both sections to be targeted are located on the MPC; in particular, the Agua Salada–Amatillo section is contiguous to the corridor of the sample under IDB financing; (ii) the Japan International Cooperation Agency (JICA) (US\$140 million) will finance construction of the San Miguel Bypass to prevent freight vehicle access into urban areas, thus ensuring the competitiveness of the arterial corridor that parallels the MPC (Highway CA-2); and (iii) the Yucatán/Government of Mexico Fund (US\$154 million) is preparing the Puerto Libertad Highway project on the MPC and the construction of two new bridges at the Angiatú and La Hachadura border crossings, respectively.

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<sup>26</sup> El Niño-Affected Highway Rehabilitation Project, external evaluator: Takeshi Yoshida (TREA), March 2009: <http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36735074>; and implementation report for World Bank project IDA 34329: <http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=37219221>.



- 1.13 **Institutional framework.** The Ministry of Public Works, Transportation, Housing, and Urban Development (MOPTVDU), acting through the Office of the Vice Minister of Public Works (VMOP), is the agency responsible for planning, rehabilitation, improvement, and expansion of the national network. Fondo de Conservación Vial [Road Maintenance Fund] (FOVIAL) is an autonomous institution created to perform regular and routine maintenance of the national road system using revenue from a gasoline and diesel fuel charge of US\$0.20/gallon, applicable to all motorized vehicles.<sup>27</sup> The Government of El Salvador advanced a set of reforms for FOVIAL, passed by the Legislative Assembly in 2012, that have added approximately US\$26 million to the nearly US\$70 million FOVIAL received annually prior to June 2012, and enabled FOVIAL to leverage its investments by issuing securities.
- 1.14 **The country's strategy.** Improving the MPC where it passes through El Salvador is consistent with the objectives of the Five-year Development Plan 2010-2014, as they relate to expanding and upgrading the country's road network for Central American integration and the country's competitiveness. In this regard, El Salvador gives priority to highways that can contribute to: (i) consolidate a logistics and transportation corridor in the MCS; (ii) link production centers with domestic consumer markets and foreign trade transfer nodes (ports, airports, and border crossings); (iii) optimize strategic logistical assets (international airport and the ports of Ajacutla and La Unión) (iv) develop the tourism, agricultural, and other potentials of the MCS and special development hubs; and (v) generate savings in

<sup>27</sup> In the past four years, the institution invested US\$21 million to repair more than 408 km of streets and highways throughout the country.

vehicle operating costs (particularly freight) and travel times and reduce the road accident rate.

- 1.15 **The Bank's strategy.** In the transportation sector, the Bank's country strategy with El Salvador (document GN-2575) focuses on improving the rural road network. This operation is consistent with the country strategy objectives, inasmuch as it supports the country in making progress toward the improvement and interlinkage of the highway, port, and airport subsectors, to facilitate freight transport and connectivity with activity centers that have logistics development potential.
- 1.16 Additionally, this operation is part of the Bank's Road Safety Strategy.<sup>28</sup> Since launching this strategy in 2010, the Bank has been working to build road safety components into its transportation-related operations and foster intersector dialogue among the agencies involved, to make road safety a priority on the political agenda of the region's countries. The Road Safety Strategy consists of: (i) strengthening the technical and institutional capabilities of the region's countries in the area of road safety; (ii) mobilizing financial resources for road safety through Bank-financed transportation-related operations; and (iii) promoting awareness and a culture of road responsibility and good practices in road safety.
- 1.17 The program contributes to the priorities of the Ninth General Capital Increase (GCI-9) (document AB-2764): (i) lending to small and vulnerable countries; (ii) lending to support regional cooperation and integration, within the criteria of multinational focus and additionality (document GN-2650), while contributing to the Mesoamerica Project regional initiative (see [optional electronic link 1](#), Regional integration annex); and (iii) financing to support climate change initiatives and environmental sustainability, since the scope of the works under the program will incorporate climate change adaptation criteria (design of concrete or masonry structures with more recent overflow parameters, height of viaducts taking the floods of recent years into account, etc.).<sup>29</sup>
- 1.18 **The Bank's sector knowledge.** Since 2010, the Bank has been supporting the transportation sector in El Salvador through operations to improve the rural road system (loans ES-L1061 and ES-L1045) and the urban transportation system in the nation's capital (loan ES-L1050). In addition, planning studies for multimodal transportation in Mesoamerica have been financed with resources from regional technical cooperation operation RG-T1660. Importantly, in parallel with preparation of this program, the Bank is also structuring a Productive Corridors Program (loan ES-L1075) to support improvements to rural roads within the MCS,

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<sup>28</sup> See the IDB's Road Safety Strategy document: <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37043401>.

<sup>29</sup> In 2006, a report by the World Bank's Independent Evaluation Group ranked El Salvador in first place as the most vulnerable country, since 96.4% of its GDP is produced in hazard-prone areas (World Bank IEG, 2006: 130). "[Informe sobre el estado y calidad de las políticas públicas sobre cambio climático y desarrollo en El Salvador](#)" [Report on the status and quality of public policies on climate change and development in El Salvador], June 2012.

which will serve as MPC feeders, for 2012-2024. Furthermore, the proposed program incorporates lessons learned from the execution of other, similar Bank-financed operations, in particular, the practice of updating project designs prior to competitive bidding, adjusting the quantity of works and their budgets in order to avoid subsequent modifications of works, delays in execution, and cost overruns. This is vitally important in the case of a road in service, which is used and subject normal wear and tear until the work actually takes place. For this reason, plans call for the process of contracting detailed engineering studies for the Sirama–Santa Rosa de Lima Bypass project to start in November 2013, financed with resources from the Fondo Salvadoreño para Estudios de Preinversión [Salvadoran Fund for Preinvestment Studies] (FOSEP).<sup>30</sup> The VMOP has therefore initiated the process of securing these funds.

- 1.19 **Coordination with other institutions<sup>31</sup> and donors.** The Bank's efforts will be simultaneous with, and similar to, those under FOMILENIO II,<sup>32</sup> which will work on sections contiguous to, or similar in characteristics or importance to, those targeted by the Bank (see Map 2, [optional electronic link 6](#)). To that end, regular dialogue will be fostered to establish a direct communication channel that can facilitate the validation of technical issues and maximize investment returns through coordinated planning and execution. In principle, the IDB and the Millennium Challenge Corporation (MCC) are negotiating a letter of intent to strengthen coordination and collaboration efforts for joint infrastructure financing, for which the parties state that they intend to: (i) study the possibility of joint cofinancing of programs; (ii) explore the possibility of programs being executed by national entities in IDB member countries of Latin America and the Caribbean, including entities created by the governments of these countries to manage resources from the MCC; (iii) study alternatives to strengthen the mechanisms for coordination, collaboration and execution of projects related to logistics infrastructure, human capital, investment climate, and other areas of common interest; (iv) share due diligence data and information on the performance and outcomes of cofinanced projects, subject to their respective access to information policies or applicable rules; and (v) consider jointly participating in working groups to foster dialogue, strategic planning, programming, execution, and monitoring.

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<sup>30</sup> FOSEP is a financial institution organized and operating under public law with separate legal status, headquartered in San Salvador, and created by Legislative Decree 532 of 18 May 1978.

<sup>31</sup> There will only be coordination with FOMILENIO II, since the works are complementary.

<sup>32</sup> FOMILENIO is an institution created under an agreement between the United States and the Republic of El Salvador for a fixed term of five years, to administer and supervise the execution of its work program with MCC grant funds. On 12 September 2013, the MCC approved an additional agreement for a further grant of US\$277 million for five years (FOMILENIO II), focused on enhancing the country's competitiveness and productivity in international markets. FOMILENIO II is subject to legislative approval in the United States and the Republic of El Salvador.

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

- 1.20 **Objective.** The general objective of the program is to contribute to improve the physical integration and road connectivity of El Salvador. The specific objective is to improve passenger and freight transportation conditions on the Mesoamerican Pacific Corridor (MPC). The program will also contribute to make the MPC a regionally competitive arterial freight corridor for the linkage of production hubs, consumer markets, and trade infrastructure, as well as international linkage. To meet these objectives, the program includes rehabilitation, expansion, and improvement of localized sections of the MPC, adapting their functional characteristics to those agreed upon in the Memorandum of Understanding on the International Network of Mesoamerican Highways (RICAM).<sup>33</sup>
- 1.21 **Eligibility criteria for works.** The program has a 30% representative sample consisting of the Sirama–Santa Rosa de Lima Bypass project. Since this is a multiple-works loan, any works to be included in the program must satisfy the following eligibility criteria: (i) they must be part of the MPC; (ii) they must have socioeconomic viability studies and an economic internal rate of return (EIRR) of 12% or more; and (iii) they must meet the program’s socioenvironmental requirements. To achieve the proposed objective, the program has two components:
- 1.22 **Component 1. Mesoamerican Pacific Corridor works (US\$107 million).** The objective of this component is to rehabilitate, improve, and expand priority sections of the MPC. It includes the construction of new pavement layers, deep patching, sealing of existing asphalt surfacing, adaptation of viaducts to withstand critical hydrological conditions, drains and ditches, rehabilitation and improvement of longitudinal and crosswise drainage systems, signs and pavement markings, and concrete/masonry structures. It also includes activities to upgrade horizontal or vertical road standards or road width, alignment, curvature, or longitudinal slope with a view to increasing road capacity or traffic speed and improving road safety in populated areas, including through installation of pedestrian crossings or use of road safety devices such as energy dissipation and speed reduction mechanisms. In addition, this component will finance the purchase of land for the necessary rights-of-way and the implementation of resettlement, when and as required. It will also finance technical and socioenvironmental supervision of the aforementioned works, to be performed by independent firms, which must be engaged prior to signature of the respective works contracts.
- 1.23 **Component 2. Program administration and studies (US\$8 million).** This component includes the operating costs of the program, as well as the costs of the execution unit, program management support services, audits, program monitoring and evaluation, and strengthening of the executing agency in the areas of monitoring and evaluation. This component also includes consulting studies to assess the program’s technical, socioeconomic, and environmental viability, as well

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<sup>33</sup> Memorandum of understanding among the Mesoamerican countries.

as the designs of certain program works. The designs will include the results of road safety audits and/or reviews and will have a road safety annex, with the objective of improving their quality.

- 1.24 **Costs.** The program will be financed through an investment loan structured as a multiple-works program, with a disbursement period of five years. The total cost of the program is US\$115 million, to be financed with resources drawn from the Bank's Ordinary Capital.

**Table 1. Costs and Financing**

Description		Total cost
		US\$000s
1	MPC works	107,000
2.	Administration and studies	8,000
2.1	Program management support services	3,000
2.2	Engineering studies	2,000
2.3	Execution unit	1,600
2.4	Office equipment, furniture, and refurbishment	650
2.5	Audits	200
2.6	Evaluation and monitoring	550
Program total		115,000

## C. Key results indicators

- 1.25 The program will seek to obtain the following outcomes, to be evaluated on the basis of the indicators proposed in the results matrix: (i) reduction in travel times, which in the case of the representative sample project is 20%; (ii) reduction in vehicle operating costs, which in the case of the sample project is a maximum of 12%; (iii) increase in road safety, which in the case of the representative sample project is a 15% decrease in the fatality rate for average daily traffic. In addition, the impact of improvements on volumes of freight carried will be analyzed, which in the case of the representative sample project rise from 14% to 23% (in 2019).

## II. FINANCING STRUCTURE AND RISKS

### A. Financing instruments

- 2.1 **Modality.** The program is an investment loan structured as a global multiple-works program. The loan amortization period will be 25 years, and the disbursement period will be 5 years, running from the effective date of the loan contract, as shown in the following schedule:



**Table 2. Tentative Disbursement Schedule (US\$000s)**

Source	2015	2016	2017	2018	2019	Total
IDB	15,000	20,000	30,000	30,000	20,000	115,000

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

- 2.2 The program fits within the guidelines proposed by the strategic environmental assessment of the Marine Coastal Strip (MCS), which forms the axis along which the Mesoamerican Pacific Corridor (MPC) runs. It includes works to upgrade, expand, and rehabilitate consolidated priority sections of the existing corridor, and will have a highly positive impact by improving the country's road infrastructure conditions, thus enhancing the mobility of passengers and goods, generating savings in vehicle operating costs and travel times.
- 2.3 The adverse impacts that may be generated are considered low to medium in magnitude, short in duration, and manageable by means of standard procedures. These impacts include: (i) tree felling; (ii) earth-moving and changes in the topography of the terrain; (iii) temporary effects on ground fauna; (iv) minor effects on farmers and herders adjacent to the roads due to potential vehicle traffic interruption; (v) potential involuntary displacement of persons and businesses;<sup>34</sup> (vi) rise in noise levels in the vicinity of the roads due to the presence of machinery; (vii) increased risk of accidents due to the work being done on the road; and (viii) increased risk of domesticated animals and wildlife being run over. The environmental and social management report (ESMR) (see [optional electronic link 4](#)),<sup>35</sup> which includes an analysis of the typical associated socioenvironmental implications and which verified compliance with the Bank's socioenvironmental policies, contains greater details of the impacts to be generated during the project's construction and operation stages, as well as the management, monitoring, and supervision measures to be adopted and followed throughout the operation's execution.
- 2.4 Responsibility for the program's environmental management will rest principally with the MOPTVDU's Environmental Management Department, which will coordinate its actions with the Ministry of Environment and Natural Resources (MARN).
- 2.5 In order to ensure the environmental and social sustainability of the works to be included in the program, a special execution condition has been established that the borrower will provide the following, to the Bank's satisfaction: (i) with the bidding documents for each of the program projects (sections of works): (a) the environmental and social management plan (ESMP) for the project in question;

<sup>34</sup> In the event that this impact occurs, an involuntary resettlement plan (IRP) will be prepared as required under Operational Policy OP-710.

<sup>35</sup> See document <http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38086277>.



- (b) the involuntary resettlement plan (IRP), should the works require the relocation of persons or economic activities; and (c) the environmental technical specifications; and (ii) before the start of works on each of the projects (sections), evidence that it has: (a) obtained the environmental permits required under national legislation; (b) conducted at least one dissemination and public consultation process as required under Directive B.06 of Operational Policy OP-703; and (c) cleared the right-of-way for the target section.
- 2.6 In view of the foregoing, the operation has been classified as category “B” under the Bank’s Environment and Safeguards Compliance Policy (Operational Policy OP-703)

**C. Fiduciary risks**

- 2.7 The MOPTVDU has experience in the administration of road project cycles for both rural roads and major highways; it has executed projects financed by the Bank and by other multilateral cooperation agencies. Nonetheless, due to the number of projects currently being executed, the MOPTVDU faces limitations in its operational and oversight capacity. Consequently, it has been concluded that the most efficient way of executing the program is by creating an execution unit specifically for the program, to be supported by a management firm that will serve to strengthen this unit’s capabilities in the construction and operational aspects of the program. In addition, agreement was reached on the unit’s staffing and when these staff are to be hired, with emphasis on obtaining: (i) capacity to contract and manage large works using the Bank’s procurement procedures; (ii) capacity to review engineering designs; and (iii) implementation of resettlement plans, when and as required. The fiduciary team concluded that the program’s overall risk associated with financial and procurement management is medium to moderate, trending to low if the measures identified above are adopted.

**D. Other issues and risks**

- 2.8 **Economic viability.** For the economic evaluation, a cost-benefit analysis was performed for the representative sample project (see [optional electronic link 2](#)). This analysis was based on a comparison of costs and benefits at efficiency prices in the conditions with and without the road works. The estimate of the individual project’s benefits relied on a method of analysis generally used in road projects (consumer surpluses), quantifying the savings in generalized transportation costs for normal traffic, both derived and generated/induced, as well as the reduction in road maintenance costs. The Highway Design and Maintenance Standards Model (HDM-4) was used to calculate the return on each project, considering investment costs resulting from the engineering studies, including direct socioenvironmental impact mitigation costs and vehicle operating costs, including annual maintenance time and costs, for the conditions with and without the project.
- 2.9 The analysis yielded an economic net present value (ENPV) of US\$3.176 million, using a discount rate of 12% and an economic internal rate of return (EIRR) of 14.3%, for the base-case scenario. In addition, the project’s robustness was to more

adverse scenarios was established through a sensitivity analysis for: (i) a 20% increase in investment cost; (ii) a 20% decrease in benefits; and (iii) a combination of a 10% increase in investment cost and a simultaneous 10% decrease in benefits. Table 3 summarizes the results obtained:

**Table 3. Results of Cost-Benefit and Sensitivity Analyses**

Project	Financial indicator	Economic evaluation			
		Base case	Investment cost (IC) +20%	Benefits (B) -20%	IC +10% B -10%
Sirama–Santa Rosa de Lima Bypass	ENPV (US\$000s)	3,176	0.714	0.078	0.396
	EIRR (%)	14.3%	12.5%	12.1%	12.3%

- 2.10 There are additional, external benefits that were not quantified in the project analysis but would have a positive impact on the results obtained: (i) impact on local productive offerings and increase in value-added of farm production; (ii) development of the tourism sector; and (iii) savings due to fewer road accidents, among others.
- 2.11 **Works maintenance.** Fondo de Conservación Vial [Road Maintenance Fund] (FOVIAL) will assume the obligation of maintaining the road works financed by this loan, and will send a report to the borrower on the status of each work, to be forwarded to the Bank, during five years following the completion of each work under the program. This information will be compiled by the borrower and sent to the Bank within the first quarter of each calendar year, together with the maintenance plan prepared by FOVIAL for the relevant works.
- 2.12 **Execution risks.** Another identified risk related to the preparation of the projects to be included in the program is a potential delay in loan execution due to lags in completing designs that are not part of the program's representative sample. To mitigate this risk, the program will finance the necessary consulting studies to assess the institutional, technical, economic, and socioenvironmental viability of the works as well as their final designs, thus ensuring timely availability of resources and reducing the risk of cost overruns. In addition, the involvement of the management firm to assist the executing agency in the aforementioned areas will help to mitigate the identified risks.

### III. IMPLEMENTATION AND ACTION PLAN

#### A. Implementation arrangements

- 3.1 **Borrower and executing agency.** The borrower will be the Republic of El Salvador. The executing agency will be the Ministry of Public Works, Transportation, Housing, and Urban Development (MOPTVDU), acting through its Office of the Vice Minister of Public Works (VMOP). To execute the program, the

- VMOP will create an execution unit reporting directly to the Vice Minister. The executing agency will receive program management support services in engineering, economic, social and environmental, right-of-way acquisition and resettlement (when and as required), and other areas contributing to effective program implementation. As a special condition precedent to the first disbursement of loan proceeds for Component 1, the borrower will provide evidence that the program management support services have been selected.
- 3.2 **As a special condition precedent to the first disbursement of loan proceeds, the borrower will provide evidence that the execution unit has been established, and that the project manager, a procurement specialist,<sup>36</sup> an engineering specialist, and a financial specialist have been selected.** These key staff will be hired based on profiles and terms of reference agreed upon with the Bank. Renewal or replacement of these staff will require the Bank's concurrence.
- 3.3 The responsibilities of the execution unit are expected to include: (i) supporting the corporate and technical units of the executing agency in program procurement, contracting, and financial management; (ii) monitoring and tracking the execution of contracts; (iii) keeping records and monitoring progress on works, as well as supervision and construction costs; and (iv) conducting program monitoring and evaluation activities.
- 3.4 **Program Operations Manual.** Since this is a multiple-works operation, execution will rely on a program Operations Manual that includes: (i) technical, economic, and socioenvironmental criteria for project eligibility; (ii) socioenvironmental impact analysis requirements in line with the project category and the vulnerability of the target area; (iii) procurement-related provisions; and (iv) duties and responsibilities of each execution and interagency coordination area. **Entry into force of the program Operations Manual on the terms previously agreed upon with the Bank will be a special condition precedent to the first disbursement of the loan proceeds.**
- 3.5 **Procurement.** Program procurement and contracting will be conducted in accordance with the "Policies for the procurement of goods and works financed by the IDB" (document GN-2349-9) and the "Policies for the selection and contracting of consultants financed by the IDB" (document GN-2350-9), both of March 2011, and with the provisions established in the loan contract and the procurement plan. In addition, the aforementioned documents will indicate the methods of supervision applicable to the procurement of goods, nonconsulting services, works, and consulting services carried out with Bank financing.

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<sup>36</sup> The Government of El Salvador has requested US\$200,000 in nonreimbursable technical cooperation funding to support the activities necessary to facilitate the start of execution of the MPC program, once approved by the Legislative Assembly. This funding would be used to finance the execution unit, preparation of the Operations Manual, and other activities required to streamline program execution. Approval is expected in January 2014.

- 3.6 **Disbursements.** The borrower will open a special account at Banco Central de Reserva for depositing the loan proceeds disbursed by the Bank, as well as a designated operating account at a commercial bank for making payments to vendors and contractors, using the cash management subsystem of the Integrated Financial Administration System (SAFI). Both accounts will be operated exclusively for the program. In accordance with the new “Financial management policy for IDB-financed projects” (document OP-273-1), disbursements will be made in the form of advances of funds based on the program’s liquidity needs. To such purpose, the execution unit will prepare a financial plan that will be updated periodically.
- 3.7 **Financial statements.** The borrower undertakes to deliver the program’s audited financial statements, duly audited by external auditors acceptable to the Bank, through the executing agency within 120 days after the close of each fiscal year of the executing agency during the original disbursement period and any extensions thereof. The final set of statements will be delivered within 120 days after the end of the original disbursement period or any extensions thereof.
- B. Summary of arrangements for monitoring and evaluating results**
- 3.8 The monitoring and evaluation plan (see [required electronic link 2](#)) will track execution of the operation against the targets and progress indicators established in the Results Matrix. The program’s expected outcomes will be monitored and evaluated using before-and-after methodologies as well as ex post cost-benefit analysis. The Bank will monitor the program by means of inspection visits and administration missions.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	i) Lending to small and vulnerable countries, ii) Lending to support climate change initiatives, renewable energy and environmental sustainability, and iii) Lending to support regional cooperation and integration.		
Regional Development Goals	Paved road coverage (km/km <sup>2</sup> ).		
Bank Output Contribution (as defined in Results Framework of IDB-9)	Km of inter-urban roads built or maintained/upgraded.		
2. Country Strategy Development Objectives	Not aligned		
Country Strategy Results Matrix			
Country Program Results Matrix	GN-2696	The intervention is not included in the 2013 Country Program Document.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)	GN-2575	Improving the CPM in its passage through El Salvador, is consistent with the objectives of the Five-Year Development Plan 2010-2014, related to the expansion and improvement of the country's road network for Central American integration and competitiveness. In this context, the country gives priority to roads that contribute to: 1) consolidate logistics and transport corridors in the Gaza Coastal Marina, 2) link the production centers with domestic consumption spaces and transfer nodes for international trade (ports, airports and border crossings), 3) develop strategic logistic assets (international airport and Acajutla and La Union ports, 4) develop the tourism, agricultural, potential etc. of the Gaza Coastal Marine and special development poles, and 5) generate savings in vehicle operating costs (especially freight), travel times and reducing road accidents.	
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	8.9		10
3. Evidence-based Assessment & Solution	8.3	33.33%	10
4. Ex ante Economic Analysis	10.0	33.33%	10
5. Monitoring and Evaluation	8.3	33.33%	10
III. Risks & Mitigation Monitoring Matrix			
Overall risks rate = magnitude of risks*likelihood	Low		
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 (VPC/PDP criteria)	Yes	Financial Management: Budget and Treasury. Procurement: Information system.	
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	The executing agency is supported in the preparation of the terms of reference for contracting final engineering designs, which include aspects of road safety audits in the financed sections.	
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	Yes	The monitoring and evaluation plan is based on an ex post cost-benefit analysis and a before and after comparison that will identify and quantify the results the project has on the accessibility, efficiency and security of priority sections in the Mesoamerica Pacific Corridor.	

The Mesoamerican Pacific Corridor (CPM) is the shortest route between the cities of Puebla and Panama. 95% of land freight in this sub-region travels through it. In El Salvador, the CPM facilitates the connection between San Salvador and the secondary nodes of Santa Ana and San Miguel. Besides its importance to the region, the CPM in El Salvador is part of the Coastal Marine Strip Comprehensive and Sustainable Development Strategy. In this strategy, the CPM functions as the logistical corridor in order to streamline and improve the productive system in this area which involves 34% of the country.

The demand growth for manufacturing inputs for industrial and food products from the area exercises short term pressures on the service conditions of the CPM. In addition, the existence in the network of critical sections with inadequate technical standards unsuitable for future transit, affects the efficiency of internal mobilization of cargo and passengers. These conditions coupled with an imbalance in favor of cargo by road, result in i) high transport and logistics costs, ii) low accessibility to important areas of the territory, and iii) a constraint to growth and development of this region.

The diagnosis presented is complete and the rehabilitation, improvement and expansion of priority sections of the CPM is presented. As a result of this analysis, an intervention is proposed to improve the conditions in the transportation of people and goods in the Mesoamerica Pacific Corridor (CPM). The results matrix presents appropriate impact, outcome and output level indicators.

The economic analysis includes an assessment of a 27.1 kilometer section using HDM-4, which identifies savings in vehicle operating costs, road maintenance costs, time savings and accident cost reduction. The ERR of the project is 14.3% and includes a sensitivity analysis. The Monitoring and Evaluation Plan is complete and proposes an ex-post cost-benefit and a before-and-after analysis.

## RESULTS MATRIX

<b>Program expected impact</b>	The general objective of the program is to promote the physical integration and road connectivity of El Salvador. The specific objective is to improve passenger and freight transportation conditions on the Mesoamerican Pacific Corridor (MPC). The program will also contribute to make the MPC a regionally competitive arterial freight corridor for the linkage of production hubs.		
<b>Impact indicators<sup>1</sup></b>	<b>Baseline</b>	<b>Target (2019)</b>	<b>Means of verification/Comments</b>
Annual tons of freight (domestic and international transit) at Paso El Amatillo (thousands of tons).	Imports and international transit 1,086 (2010)  Exports and international transit 1,619 (2010)	Imports and international transit 1,786  Exports and international transit 2,658	Freight volume report. Customs Office of the Ministry of Finance Office of the Vice Minister of Public Works (VMOP).
Annual average daily traffic on the MPC (vehicles/day).	2,410 (2013)	3,178	Traffic study. VMOP.
Trucks as a percentage of total annual average daily traffic.	14% (2013)	23%	Traffic study. VMOP.

<sup>1</sup> These indicators are included as a way of inferring the impact that the investments to rehabilitate and improve priority sections of the MPC will have on the physical integration and road connectivity of El Salvador.

Program expected outcomes	Improve accessibility, efficiency, and safety conditions of the MPC through rehabilitation, improvement, and expansion of priority sections.				
Outcome indicators	Baseline (2013)		Target (2019)		Means of verification/Comments
Vehicle operating cost on the Sirama–Santa Rosa de Lima section (constant US\$/vehicle-km).	Auto	0.28	Auto	0.27	Highway Development and Management Model (HDM-4). VMOP.
	Pickup	0.36	Pickup	0.35	
	Microbus	0.61	Microbus	0.56	
	Bus	1.58	Bus	1.46	
	C2	0.42	C2	0.43	
	C3	0.82	C3	0.86	
	T3S2	1.16	T3S2	1.18	
	T2S3	1.22	T2S3	1.23	
Travel time on the Sirama–Santa Rosa de Lima section (minutes per trip per vehicle and weighted average).	Auto	24.0	Auto	19.3	Traffic study. Highway Development and Management Model (HDM-4). VMOP.
	Pickup	24.0	Pickup	19.3	
	Microbus	24.6	Microbus	20.6	
	Bus	25.8	Bus	25.4	
	C2	24.7	C2	21.0	
	C3	27.3	C3	19.4	
	T3S2	24.3	T3S2	20.8	
	T2S3	24.4	T2S3	21.1	
	Weighted average	24.2	Weighted average	19.9	
Number of fatalities due to traffic accidents for average daily vehicles.	To be determined prior to program execution.		To be determined prior to program execution.		Traffic Division of the National Civil Police.

Program expected outputs								
<b>Component 1. MPC works</b>	Engineering works	Rehabilitation, improvement, and expansion of priority sections of the MPC.						
Output indicators	Baseline	2015	2016	2017	2018	2019	Cumulative target (2019)	Means of verification/ Comments
Kilometers of MPC rehabilitated by the program. <sup>2</sup>	0	0	0	0	0	27	27	Final acceptance certificate, Road Management System VMOP.

<sup>2</sup> Rehabilitated kilometers: defined as kilometers of roadway with deteriorated pavement replaced with new pavement, including signs and pavement markings, upgrade of pedestrian crossings, and geometry improvements, among other road safety measures.



<b>Component 2. Program administration and studies</b>		Operational financing of program management, execution unit, and management firm and strengthening of program monitoring and evaluation, VMOP staff, and audits.						
<b>Output indicators</b>	<b>Baseline</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Cumulative target (2019)</b>	<b>Means of verification/Comments</b>
Number of professionals hired for the program execution unit to manage the program.	0	6	0	0	0	0	6	Professional services contracts. Bank's no objection. VMOP.
Number of financial audit reports with the Bank's no objection.	0	1	1	1	1	1	6	Satisfactory acceptance note. Bank's no objection. VMOP.
Number of staff trained in road engineering.	0	0	20	20	20	0	60	List of participants. VMOP.
Number of computer hardware units purchased.	0	6	0	0	0	0	6	Purchase invoice (or certificate of delivery-acceptance). VMOP.
Number of software licenses purchased for program management.	0	0	12	0	0	0	12	Purchase invoice (or certificate of delivery-acceptance). VMOP.
Number of vehicles purchased.	0	2	0	0	0	0	2	Purchase invoice (or certificate of delivery-acceptance). VMOP.
Number of photogrammetric renderings purchased.	0	0	387	0	0	0	387	Purchase invoice (or certificate of delivery-acceptance). VMOP.

**General note:** Outcome indicators and related component indicators will be updated as each successive work is added, using the following indicators in addition to those already included in the matrix:

- **Kilometers of MPC improved by the program.** Defined as kilometers of dirt road paved, including signs and pavement markings, upgrade of pedestrian crossings, and geometry improvements, among other road safety measures.
- **Kilometers of MPC expanded by the program.** Defined as kilometers of road on which the number of lanes is increased.
- Number of families resettled due to road expansion.
- Number of feasibility studies and engineering designs available and approved for bidding.

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

**Country:** El Salvador

**Name:** Mesoamerican Pacific Corridor Improvement Program

**Project number:** ES-L1085

**Executing agency:** Ministry of Public Works, Transportation, Housing, and Urban Development (MOPTVDU), acting through its Office of the Vice Minister of Public Works (VMOP)

**Prepared by:** Marco Alemán and Mario Castaneda (FMP/CES)

### I. SUMMARY

- 1.1 This report was prepared on the basis of the fiduciary context of the executing agency and the financial management and procurement policies for Bank-financed projects.<sup>1</sup> It establishes the financial management and procurement agreements and requirements agreed upon with the executing agency.
- 1.2 The Ministry of Public Works, Transportation, Housing, and Urban Development, acting through its Office of the Vice Minister of Public Works (MOPTVDU-VMOP), will create an execution unit reporting directly to the Vice Minister. Initially, the duties of the program execution unit will include the following: (i) conduct program procurements in coordination with the Institutional Procurement Unit (UACI), which is responsible for all procurement (the UACI participates in the bidding committees for projects managed by the execution unit); (ii) track and monitor the execution of works contracts, authorize payments, etc.; and (iii) keep records and monitor progress on works as well as supervision and construction costs. Financial management will be governed by the Bank's financial management policy and, on an ancillary basis, by the general policies for the public sector. Procurement processes will be conducted in accordance with the Bank policies established in documents GN-2349-9 and GN-2350-9. In addition, the execution unit will coordinate program execution with the Institutional Financial Unit (UFI), which will be responsible for keeping program records and for the financial management of the operation.

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<sup>1</sup> Documents OP-273-2 and OP-274-2, financial management policy and operational guidelines; documents GN-2349-9, GN-2350-9, and OP-272-1, procurement policies and operational guidelines.

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

- 2.1 The country financial management and procurement systems, as well as their internal and external control mechanisms, are well defined in Salvadoran legislation. By law, no sum may be committed or paid unless the corresponding budgetary credit has been approved by the Legislative Assembly. The State Financial Management Act governs financial management in the public sector and provides for an Integrated Financial Administration System (SAFI) that includes budget, public credit, cash management, and government accounting subsystems.
- 2.2 Under the State Financial Management Act, an Institutional Financial Unit (UFI) has been established at each of these government agencies, responsible for its financial management. Each UFI reports directly to the head of the relevant agency. The law assigns policy-making authority to the Ministry of Finance, while the responsibility for financial transactions in the administrative process is decentralized to the execution units (MOPTVDU-VMOP).
- 2.3 At each government agency, the UFI's fiduciary responsibilities are supplemented by the respective internal audit units and UACIs. The Public Administration Procurement Law (LACAP), its implementing regulations, manuals, and directives, establish the policies governing this area. With regard to external control, under the Law on the Audit Court of the Republic, this institution is responsible for overseeing public finances. However, for this particular operation, external control will be entrusted to an independent private auditing firm.

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

- 3.1 The fiduciary team concluded that the program's overall risk associated with financial and procurement management is medium to moderate, trending to low if the appropriate measures are adopted. The identified risks and proposed mitigating measures are summarized below:

**Table 1. Risks Identified and Proposed Mitigation Measures**

<b>Risks/weaknesses</b>	<b>Preventive/corrective action</b>	<b>Date for compliance</b>
Delay in program execution due to lags in the preparation of designs that are not part of the program's representative sample, affecting performance under the procurement plan and the annual work plan (AWP).	The program will include resources to finance consulting studies to assess the institutional, technical, economic, and socioenvironmental feasibility of the works as well as their final designs. In addition, the involvement of a management firm to assist the executing agency in the aforementioned areas will help to mitigate the identified risk.	Selection of the management firm is a condition precedent to the first disbursement.
Delay in works execution due to delays in the payment of certificates to contractors and/or supervisors.	The program administration and studies component includes resources to create an execution unit specifically for the program and engage a management firm to optimize the relevant management and payment processes. Strengthening of the fiduciary areas (UFI-UACI) with additional experienced and specialized staff is recommended.	Creation of the execution unit and selection of the management firm are a condition precedent to the first disbursement.
Likely weakness in managing the large-scale contracts included in the program.	Executing agency staff have received training in project management under the PMR4R methodology, which includes tools for effective management of projects. In addition, a technical training program is being approved to continue the aforementioned training. Consequently, the individuals managing the program will receive the relevant training.	Training in PM4R for the staff responsible for managing the program.

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

- 4.1 The Special Provisions of the loan contract should include the following agreements and requirements: entry into force of the Operations Manual in accordance with paragraph 3.5 of the proposal for operation development.

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

- 5.1 The program provides for the procurement of works, goods, and services and for the selection and contracting of consultants in accordance with Bank policy documents GN-2349-9 and GN-2350-9, respectively. The program procurement plan will establish the procurement processes to be conducted during the remainder of the execution period, to be agreed upon by the executing agency and the Bank. Procurement will be conducted pursuant to the bidding methods and ranges established in the procurement plan. The procurement plan will provide:

- (i) contracts by procurement modality; (ii) proposed procurement methods; and (iii) procedures used by the Bank to review the procurement methods. The executing agency will update the procurement plan on an annual basis, coinciding with the scheduled annual evaluations and before the end of each calendar year, together with the annual work plan (AWP) or whenever material changes occur, covering the following 12 months of the program's execution period. Any proposed change to, and/or review of, the procurement plan will be submitted to the Bank for its no objection. The Project Team Leader, with the support of the procurement specialist, will be responsible for approving the procurement plan and keeping it updated during the program execution period.
- 5.2 **Procurement of works, goods, and nonconsulting services.** Any of the methods described in the procurement policies may be used for the procurement of works, goods, and nonconsulting services, provided that such method has been identified for the respective procurement process in the Bank-approved procurement plan.
- 5.3 The threshold for international competitive bidding (ICB)<sup>2</sup> will be made available to the executing agency at [www.iadb.org/procurement](http://www.iadb.org/procurement). Below this threshold, the selection method will be determined in accordance with the complexity and characteristics of the procurement process in question, which must be reflected in the procurement plan.
- 5.4 **Contracting of consulting services.** Any of the methods described in the consultant selection and contracting policies may be used to select and contract consulting services, provided that such method has been identified for the respective contracting process in the procurement plan.
- 5.5 The threshold for the inclusion of international consultants on the short list<sup>3</sup> will be made available to the executing agency at [www.iadb.org/procurement](http://www.iadb.org/procurement). Below this threshold, the short list may comprise entirely national consultants from the borrower's country.
- 5.6 **Initial procurement plan.** The initial procurement plan is included in the proposal for operation development as an annex. In addition, the Procurement Plan Execution System (SEPA) will be used to plan and monitor any procurements conducted with the loan proceeds.
- 5.7 **Advance procurement/retroactive financing.** No advance procurement and/or associated contracts are planned for this program.
- 5.8 **Domestic preference:** Not applicable.

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<sup>2</sup> At present, the ICB threshold applies for amounts of US\$5 million or more, in the case of works, and amounts of US\$250,000 or more, in the case of goods and nonconsulting services.

<sup>3</sup> At present, the threshold for contracting consulting firms is for amounts of US\$200,000 or more. For lower amounts, the short list may be comprised of entirely national consulting firms.

## 1. Main procurement processes

**Table 2. Main Procurement Processes**

<b>Works</b>	<b>Reference budget in US\$000</b>	<b>Type of process</b>	<b>Type of supervision</b>
Upgrade of Sirama–Santa Rosa de Lima Bypass section	32,000	ICB	Ex ante
Expansion of Mesoamerican Pacific Corridor section	35,000	ICB	Ex ante
Roadway Pacific Corridor section	33,000	ICB	Ex ante

<b>Consulting services</b>	<b>Reference budget in US\$000</b>	<b>Selection method</b>	<b>Type of supervision</b>
Supervision of Sirama–Santa Rosa de Lima Bypass section upgrade	2,400	QCBS	Ex ante
Supervision of corridor section expansion	5,000	QCBS	Ex ante
Contracting of program management support services (48 months)	3,000	QCBS	Ex ante

## 2. Procurement supervision

- 5.9 The Bank will perform ex post procurement reviews at least once a year. The frequency of the ex post reviews and the thresholds for ex ante review of contracts are consistent with the capacity assessment performed. These thresholds, and the frequency of ex post reviews, may be adjusted as part of the procurement plan updates and reviews, based on the performance of the executing agency and progress in implementing the corrective actions described above. The procedures to be used for each type of procurement process are in accordance with the “Policies for the procurement of goods and works financed by the IDB” (document GN-2349-9) and the “Policies for the selection and contracting of consultants financed by the IDB” (document GN-2350-9). All procurements of works, goods, and nonconsulting services using program resources will be supervised by the Bank in accordance with the procurement plan, Appendix I to documents GN-2349-9 and GN-2350-9, and as stipulated in the following table:

**Table 3. Procurement Procedures**

Investment category	Procurement procedure	Type of review
<b>Works</b>	International competitive bidding (ICB). Amounts of US\$5 million or more	Ex ante
	Direct contracting	Ex ante
<b>Goods and nonconsulting services</b>	International competitive bidding (ICB). Amounts of US\$250,000 or more	Ex ante
	Direct contracting	Ex ante
<b>Consulting services by consulting firms</b>	Short list with broad geographic participation. Amounts of US\$200,000 or more	Ex ante
	Single-source selection	Ex ante

- 5.10 **Records and files.** A single filing system must be established and maintained at the procurement units, properly identifying all procurement processes and allowing all documents for each stage of the process to be stored in a single record. In addition, a physical location must be made available to safeguard all files with the necessary security. The chief of the UACI will be responsible for keeping and safeguarding program files and records. Program reports will be prepared and filed using formats to be described in the aforementioned Operations Manual.

## **VI. FINANCIAL MANAGEMENT AGREEMENTS**

- 6.1 **Programming and budget.** The country system will be used. The MOPTVDU-VMOP will on an annual basis process a budget allocation clearly identifying the program, with budget credits in sufficient amount to cover the execution commitments for each year. The budget will include the required disaggregation for each program component, allocating budget line items so as to facilitate periodic monitoring of sums committed and recognized for each component as a measure of program execution.
- 6.2 It is worth noting that, in the majority of Bank-financed projects, the annual budget allocation ceiling is being interpreted as a limit on commitments (which may spill over into the following fiscal year), rather than a ceiling on expenditures, and this is affecting the ability to mobilize loan proceeds. The Bank has pursued various avenues in an attempt to find a budget management approach more favorable for investment projects. With a view to improving budget management and ensuring that budget ceilings are uniformly interpreted as a ceiling on expenditures, since commitments under the program are guaranteed by the Bank's financing, the Ministry of Finance has included an article in the 2014 Budget Law that ensures such an interpretation.
- 6.3 **Disbursements and cash flow.** The country cash management subsystem will be used to manage disbursements. The MOPTVDU-VMOP will maintain a special account at Banco Central de Reserva, as well as a designated operating account at

a commercial bank<sup>4</sup> for payments to vendors and contractors, supported by the SAFI cash management subsystem. Both accounts will be operated exclusively for the program. In accordance with the Bank's financial management policy (document OP-273-2), disbursements will be made on the basis of liquidity needs. To this end, the MOPTVDU-VMOP will prepare a financial plan that will serve as a basis for advances or any other form of disbursement it deems appropriate. This mechanism will be reviewed and adjusted, in the event that the Ministry of Finance implements a single treasury account at the executing agency.

- 6.4 **Internal control.** The technical internal control regulations issued by the Audit Court of the Republic are applicable.<sup>5</sup> An important ex ante control provides for the UFI's budget area to review annual procurement programming using resources allocated in the respective budget. At a later stage, the budget area makes the budgetary commitment through a SAFI entry. Before payment of the obligations is made, the expenditure accrual entry is inspected once again. Payment of the obligation is recorded immediately after the check is deposited or the amount is credited in the beneficiary's account.
- 6.5 **Internal audits.** The MOPTVDU-VMOP has an internal audit unit, but its resources are limited. The internal audit unit is expected, to the best of its ability, to include a review of program execution as part of its annual plan.
- 6.6 **External control and reports.** External control of the program will be entrusted to an independent auditing firm acceptable to the Bank. MOPTVDU-VMOP will engage this firm through a bidding process, in accordance with the guidelines set forth in Bank document AF-200. The terms of reference will be previously agreed upon with the Bank. This contracting process will be reviewed on an ex ante basis. The annual financial statements will be prepared in accordance with the Bank's financial reporting and audit guidelines.
- 6.7 **Supervision.** Financial monitoring of the program will be conducted using the (unaudited) financial statements generated by the institutional application (SAFI), and any required disaggregation will be provided in the respective notes and supplementary financial information. Initially, these reports will be required on a quarterly basis, but such frequency may subsequently be adjusted. It is estimated that these reports could be submitted no later than 45 days after the close of each calendar quarter. The explanatory notes to the financial information will be designed so as to be consistent with the Bank's financial policies and tools. These reports must evidence progress made in executing the activities set forth in the multiyear project execution plan (PEP) and the corresponding financial plan.

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<sup>4</sup> This arrangement will remain in place unless the Government of El Salvador implements a single account for payment purposes.

<sup>5</sup> Under Salvadoran legislation, civil servants are personally responsible for performing their duties. Thus, breach of duty may give rise to legal proceedings against a public official. Title III. Civil service liability, Articles 52-61 of the Audit Court Act.



- 6.8 In the first six months of execution, the financial information submitted will be reviewed in situ and compared with the planning data. The fiduciary risks will be reassessed, and a determination made as to whether further supervision in situ is needed, as opposed to desk reviews.
- 6.9 **Execution mechanism.** The execution mechanism will be centralized. The MOPTVDU-VMOP will ensure that the annual operational planning documents and periodic progress reports are prepared and kept up-to-date, together with the estimates of funds for the preparation of disbursement plans and update of the program management and monitoring tools (PEP, procurement plan, and financial plan).
- 6.10 **Operations Manual.** The points presented in these fiduciary agreements and requirements will be developed in greater detail in an Operations Manual, which will require the approval of the undersigned fiduciary specialists.

**References:**

**Institutional capacity assessment:**

[Institutional capacity assessment under the ICAS methodology](#)

[ES-L1085, Institutional capacity assessment matrixes under the ICAS methodology](#)