

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HAITI

PROGRAM TO SUPPORT TRANSPORTATION SECTOR DEVELOPMENT IN HAITI

(HA-L1046)

PROPOSAL FOR NONREIMBURSABLE FINANCING

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CONTENTS

PROJECT SUMMARY

I.	PROGRAM DESCRIPTION AND RESULTS MONITORING.....	1
A.	Strategic guidelines for transportation programs in Haiti	1
B.	Background, problem to be addressed, and rationale	3
C.	Objective, components, and costs.....	7
D.	Results matrix and main indicators	8
II.	FINANCING STRUCTURE AND MAIN RISKS	9
A.	Financing instrument and contractual conditions	9
B.	Environmental and social risks and mitigation measures.....	9
C.	Fiduciary risk.....	10
D.	Financial management	10
E.	Other issues and risks	10
III.	IMPLEMENTATION AND MANAGEMENT PLAN.....	11

Annexes

Annex I	Development Effectiveness Matrix (DEM) Summary
Annex II	Results Framework
Annex III	Procurement Plan Summary

Electronic Links	
Required	
1. Procurement Plan	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35180691
2. Annual Work Plan (AWP)	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35178363
3. Monitoring and Evaluation Arrangements	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35178360
4. Environmental and Social Management Report (ESMR)	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35180139
Optional	
5. Economic Feasibility	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35178368
6. Economic Feasibility - Annexes RN1 and RN2	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35180149 http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35180151
7. Letter of Request for the New Operation	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35178350
8. Haiti – Proposal for Additional Financing for 2010	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35178351
9. Rationale for Financing of Additional Costs (GN-2329 of September 2004)	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35178348
10. CEU Organizational Chart	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=1103501
11. Operating Manual, Loan 991/SF-HA	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=1103502
12. Operating Manual, Loan 1638/SF-HA	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=1103504
13. MTPTC Transportation Plan	http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=1098413
14. Plan for National Recovery and Development of Haiti	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35176549
15. Status of Loans 991/SF-HA and 1638/SF-HA	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35213770

16. Consultant Report on Support for Management of Transportation Operations in Haiti, August 2009 <http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35140726>
<http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35140739>
17. Map: <http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35142142>
18. Estimated Investments from the Program to Support Transportation Sector Development in Haiti for 2011-2015
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35188148>
19. Status of Haiti's Road System - 2004
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35188209>

APPENDICES

Proposed resolution

ABBREVIATIONS

ADT	Average daily traffic
CEU	Central executing unit
CNE	Centre National des Equipements [National Center of Equipment]
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Management Report
FER	Fond d'Entretien Routier [Road Maintenance Fund]
IRI	International Roughness Index
IRR	Internal rate of return
MTPTC	Ministry of Public Works, Transportation and Communications
NPV	Net present value
RN1	Route Nationale 1 [National Route 1]
RN2	Route Nationale 2 [National Route 2]
RN5	Route Nationale 5 [National Route 5]
PADTH	Program to Support Transportation Sector Development in Haiti

PROJECT SUMMARY

HAITI PROGRAM TO SUPPORT TRANSPORTATION SECTOR DEVELOPMENT IN HAITI (HA-L1046)

Financial Terms and Conditions				
Beneficiary: Republic of Haiti			Conditions of the nonreimbursable financing	
Executing agency: Ministry of Public Works, Transportation, and Communications			Amortization period:	N/A
			Grace period:	N/A
Source	Amount (in US\$)	%	Disbursement period:	3 years
IDB Grant Facility	29,000,000	100	Inspection and supervision fee:	N/A
Local	0.00	0	Credit fee:	N/A
Total	29,000,000	100	Currency:	U.S. dollars
Project at a glance				
Objective and description: The general objective is to improve the capacity and efficiency of Haiti's transportation sector, promoting improved accessibility to the productive regions of the country, lower transportation operating costs, and shorter travel times, thus contributing to the country's sustainable economic and social development. The specific objective is to continue providing support for the execution of works designed to improve the physical conditions of traffic and safety within the national road system. To this end, the program will provide additional resources for the projects financed under loans 991/SF-HA and 1638/SF-HA, to ensure that their main development objectives regarding rehabilitating the major roadways in the country are met.				
Special contractual conditions: (a) precedent to the first disbursement: (i) submission to the Bank of the detailed design for works on the Bon Repos-Titanyen and Xaragua-Saint Marc stretches of Route Nationale 1 (RN1); (ii) addenda extending the term and modifying the respective amounts of the contracts for operational and financial audits under loans 991/SF-HA and 1638/SF-HA; (iii) addenda extending the term and modifying the respective amounts of the contracts for works and supervision financed under loans 991/SF-HA and 1638/SF-HA, including the environmental conditions for implementing works set forth in the Environmental and Social Management Plan; and (iv) selection and contracting of environmental and social audits using resources from HA-L1027, currently being prepared (paragraph 2.2); (b) during program execution: (i) submission of annual work plans for the program (paragraph 3.7); (ii) completion of operational, financial, and environmental audits (paragraph 3.8); and (iii) commencement of any works is contingent on the relevant supervisory services being in place (paragraph 3.5).				
Exceptions to Bank policies: Exception to Policy OP-504 and Bank guidelines on retroactive expenditures, in order to recognize retroactively nearly US\$6.7 million (paragraph 3.6).				
Special features: None.				
Project consistent with country strategy: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Project qualifies as: SEQ <input checked="" type="checkbox"/> PTI <input type="checkbox"/> Sector <input type="checkbox"/> Geographic <input type="checkbox"/> Headcount <input type="checkbox"/>				

I. PROGRAM DESCRIPTION AND RESULTS MONITORING

A. Strategic guidelines for transportation programs in Haiti

- 1.1 **Situation in Haiti.**¹ Haiti has nine million inhabitants, 76% of whom live below the poverty line (56% in extreme poverty), making it the poorest country in the Americas. Gross domestic product (2009) is US\$7 billion (US\$780 per capita). In recent years, Haiti has been struck by several severe natural events (intense rains, hurricanes, etc.), and has also been affected by international economic crises. The 12 January 2010 earthquake struck a harsh blow to the country, causing nearly 300,000 deaths and affecting some 3.5 million inhabitants.
- 1.2 The earthquake took a serious toll on public and housing infrastructure in the capital, Port-au-Prince, and the surrounding areas, such as Léogâne. The destruction was estimated at nearly US\$8 billion in losses and damages and is expected to reduce GDP by 8% in 2010. The destruction in Port-au-Prince also led to internal migration, as a significant portion of the affected population in the disaster area (600,000 persons or almost 7% of the total population) was forced to move to other cities in Haiti in search of housing or livelihoods.² They could remain there for an extended period of time. This has affected the demand for transportation in the country. The relocation of the population has made existing limitations on connectivity within the country more acute.
- 1.3 The transportation infrastructure suffered US\$300 million in damages. The earthquake only had a local impact on the road infrastructure,³ as its effects were primarily concentrated around Port-au-Prince. As a result of the severe damage to the port and airport, some of the goods that once traveled through the port are now being transported via land, also changing land traffic flows.
- 1.4 In response to the special circumstances in post-quake Haiti, the international community has provided various forms of support, including significant financial assistance programs through grants in order to rebuild the country (investment in infrastructure, training, subsidies, etc.). The total amount of bilateral and multilateral grants committed for the next decade is US\$9 billion.
- 1.5 This increased post-disaster assistance is expected to spur development in Haiti, improving average incomes within approximately a decade. This effort could lead

¹ Bibliographic sources: (paragraph 1.1): *"Action Plan for National Recovery and Development of Haiti."* Government of the Republic of Haiti, March 2010; *"Infrastructure and Institutions Emergency Recovery Project."* World Bank, March 2010; and CIA – *The World Factbook - Haiti*; (paragraphs 1.1, 1.2, and 1.3): *"Haiti Earthquake PDNA Assessment of damage, losses, general and sectoral needs"*, March 2010; and (paragraph 1.4): <http://www.haiticonference.org/communiqu.html>.

² There is no information available on the size or location of the new settlements, however it is known that migrants have relocated to Cap-Haïtien (North Department), Jacmel, Les Cayes and Jérémie (South and Southeast Departments), and to rural regions.

³ There was minor damage to road surfaces (cracks and displacement) and to bridges (shifting in approach embankments) along Route 2 (Port-au-Prince-Léogâne), and minor damage (landslides) on Route 4 (Carrefour-Jacmel).

to a qualitative leap forward for conditions in Haiti, going far beyond repairing the damage caused by the earthquake. This makes the current situation a historic opportunity to benefit the country's population—one that must not be wasted.

- 1.6 **Program to support transportation sector development in Haiti.** Even before the earthquake, Haiti's transportation sector had long-standing infrastructure problems, resulting from weak institutional support for the sector and the chronic lack of resources. These deficiencies have become a more critical issue in the face of the international post-earthquake reconstruction efforts, since the various international aid programs and the population's access to essential social services will depend in large part on the existence of a functioning transportation infrastructure.
- 1.7 Contributions to Haiti's transportation sector must be effective and, now more than ever, timely. This requires a significant financial intervention, concentrated over just a few years and planned with a comprehensive vision of the sector. The Bank will spearhead the Program to Support Transportation Sector Development in Haiti (known by its Spanish-language acronym, PADTH). During the initial stage (PADTH 1), the Bank plans to provide US\$54 million to support transportation development in Haiti, through approval of this program and program HA-L1027, which is being prepared simultaneously. Investments during the second stage are expected to total some US\$400 million, to be executed in 2011-2015, and are expected to be financed with resources from the Bank as well as cofinancing channeled through the Multi-Donor Trust Fund, pursuant to approval by the Interim Haiti Reconstruction Commission.
- 1.8 Representatives of the Government of Haiti and Bank officials agreed during their programming discussions that a second phase, PADTH 2, would focus on: (i) rehabilitation or improvement of main roads, with a view to ensuring the physical integration of the country and facilitating a safe, reliable connection between the main cities in Haiti and with the Dominican Republic; (ii) rehabilitation or improvement of secondary roads, which feed onto main roads or connect them with one another; (iii) improvement of rural roads, to support productive areas with potential for agricultural economic development; (iv) rehabilitation and improvement of the Toussaint Louverture international airport, which serves Port-au-Prince and is Haiti's main port of entry; and (v) improvements to road maintenance, through support for the State-owned company Centre National des Equipements [National Center of Equipment] to carry out these efforts. Table I provides a summary of the estimated breakdown of resources under PADTH 2, which are in addition to this loan and to HA-L1027 (which correspond to PADTH 1). Details regarding the second stage are provided in [link 18](#).

Table I - Summary Breakdown of Resources for PADTH 2 (in US\$000)

	Km	Cost of studies	Superv. costs	Cost of works	Total cost	Start of studies	Start of works
(1) Gonaïves – Ennery	30	(0.50)	2.25	45.00	47.75	6/10	2/11
(2) Ennery – Cap-Haïtien	70	(0.15)	3.00	60.00	63.00		10/10
(3) Carrefour Joffre – Port-de-Paix	73	(1.00)	3.20	75.00	79.20	8/10	4/11
(4) Croix des Bouquets – Malpasse	43	Available	1.25	25.00	26.25		10/10
(5) Petite Rivière – Petit Trou de Nippes	25	Available	1.25	25.00	26.25		7/10
(6) Petit Trou de Nippes – Baradères	18	(0.40)	1.00	20.00	21.40	8/10	5/11
(7) Baradères – Pestel – Carrefour Charles	53	1.00			1.00	10/10	
(8) Urban roads	20	0.50	1.50	30.00	32.00	8/10	2/11
(9) Rural roads	100	1.40	2.25	40.00	43.65	8/10	1/11
(10) Airport (runway/terminal/concession)		0.90	1.60	30.00	32.00		
(11) Other technical studies		10.00			10.00	7/10	
(12) Road maintenance				11.90	10.00		1/12
(13) Program administration / institutional strengthening					7.00		
TOTAL		13.80	17.30	361.90	400.00		

B. Background, problem to be addressed, and rationale

1.9 **Haiti's road network.** With a network of 3,400 km of roads, a population of 9 million (60% in rural areas), and an area of 28,000 km², Haiti's road density (0.4 km/1,000 inhabitants; 0.12 km/km²) is very low compared to Latin American and Caribbean averages (7.1 km/1,000 inhabitants; 0.14 km/km², respectively). The difference becomes more striking when only considering paved roads. The primary network accounts for 20.3% (690 km) of roads connecting the major cities and towns, with average daily traffic (ADT) ranging from 1,000 to 6,000 vehicles a day. The secondary network connects urban centers to the primary network, with 1,508 km of road (44.4% of the total), and ADT ranging from 200 to 1,100 vehicles a day. The tertiary network connects rural communities and settlements with the secondary network. Because of the road system's serious state of disrepair, lack of maintenance, and discontinuity in several segments, parts of Haiti are either inaccessible or cannot be safely traveled. In 2004 only an estimated 5% of the road network was in good condition, and 80% in poor or very poor condition. This situation reflects the extent of the deterioration, which has been accelerating in recent years as evidenced in the table available at [link 19](#).

1.10 Road maintenance in Haiti is quite deficient, covering only about 10% of the network. The Ministry of Public Works, Transportation, and Communications (MPTC) budget does not distinguish clearly between investment (construction or rehabilitation) and maintenance (routine or periodic) and has always fluctuated greatly depending on the country's situation. The law creating the Road Maintenance Fund (known by its French-language acronym, FER) was enacted in 2003. The IDB, World Bank, and European Union have approved programs to

strengthen the new institution and finance its first few years of operation. Despite the FER's limited resources, these efforts are laying the foundation for maintenance to become part of Haitian road culture, and for road investments that have been made to be preserved.

- 1.11 **Bank participation in Haiti's transportation sector.** The Bank is Haiti's primary source of investment financing, maintaining a permanent presence in the country during years of crisis, as the Country Office never closed its doors. The Bank's operations for Haiti's transportation sector over the last decade have focused on road development and maintenance and on institutional strengthening for the MTPTC. Accordingly, financing was approved to improve and rehabilitate primary and secondary roads (loan 1638/SF-HA for US\$50 million; loan 991/SF-HA for US\$50 million; and loan 1922/GR-HA for US\$75 million). Several technical cooperation operations have also been approved to support project execution (ATN/8676-HA, ATN/8959-HA, and ATN/8960-HA), and, in 2004, ATN/8957-HA was approved to update the road inventory and classification. In addition to financing and grants in Haiti, the Bank's main value added has focused on technical support to improve the use and concentration of the funds available in the main operations approved for the institutional development of the sector; and on mobilizing significant cofinancing (for example, Can\$75 million from Canada).
- 1.12 **Country strategy.** This program is consistent with the Bank's 2007-2011 country strategy, approved by the Board of Executive Directors in 2007 (document GN-2465). The country strategy is directed at economic growth based on the promotion of infrastructure in the transportation and energy sectors, agriculture, and private sector development, while improving governance and strengthening the institutional capacity of the Government of Haiti. The expected outcomes for the transportation sector are shorter travel times and lower transportation costs. The proposed program is consistent with this strategy, as it will make it possible to complete the programs approved by the Bank, thereby (i) contributing to the development of a more efficient transportation system (lower transportation costs and shorter travel times), with improved road infrastructure and increased safety, providing access to social services for the population and facilitating the movement of people and goods; (ii) specifically making Route RN1 between Port-au-Prince and Saint Marc passable at all times, spurring development in the Arcadins Coast region and facilitating connections in northern Haiti and along Route RN2, ensuring access to the entire southern part of the country from Grand Goâve to Les Cayes and Jérémie; and (iii) boosting competitiveness for the regions in question by increasing passenger and freight mobility.
- 1.13 **Rationale for the Bank's participation.** The financing strategy set forth in the country strategy included several operations to provide resources for improvement works in the different areas identified as development priorities by the Government of Haiti. This operation will supplement two operations currently in execution that finance rehabilitation of sections of Routes RN1 and RN2, two of the most

important arteries in Haiti, and will ensure their completion. The scope of the aforementioned operations is described in paragraphs 1.15 and 1.16 below.

- 1.14 This operation is part of the PADTH (see paragraph 1.7), which is being designed to provide support from the Bank to Haiti, and is the first in a series of grants that will be made within this framework. The PADTH will be designed within the framework of the next country strategy and in accordance with the Plan for National Recovery and Development of Haiti, which was drafted following the earthquake and contains updated information on the sector's needs (see [link 14](#)).
- 1.15 **Loan 1638/SF-HA.** This loan, approved in 2005 to execute the Transportation Infrastructure Rehabilitation Program, received additional financing from the Bank (documents PR-2941-1 and PR-2941-2), bringing the total to US\$77.8 million (US\$77.1 million in financing from the IDB and US\$700,000 in counterpart funds). The last disbursement for this operation will be in July 2011. The resources for this program were to be used to rehabilitate the approximately 84 km section of Route RN1 between Bon Repos and Saint Marc, a 23 km stretch of the road between Gonaïves (Carrefour Joffre) and Gros Morne on Route RN5, and a 23 km section of Route RN2 between Fond des Negres and Aquin. However, for the financial reasons described in paragraph 1.17, it was only possible to complete a 54 km middle section on Route RN1 between Titanyen and Xaragua. The works on the stretches on either end (the 20 km between Xaragua and Saint Marc and 10 km between Titanyen and Bon Repos) are still pending, awaiting additional funds. The majority of the works along Route RN5 were completed, but suffered significant damage during the October 2008 rains. The works on the Route RN2 stretches are being completed.
- 1.16 **Loan 991/SF-HA.** The contract for this loan, originally approved in 1997 as the Secondary and Tertiary Road Rehabilitation and Maintenance Program, has been amended three times, including changing the name in 2004 to the Road Rehabilitation and Maintenance Program and modifying the objective. Its current objective is to improve road network infrastructure in a sustainable way, so as to facilitate access to the country's production areas and the transportation of production to consumption or export centers. This operation involves US\$50 million in IDB financing, US\$4 million in financing from the Organization of the Petroleum Exporting Countries (OPEC), and US\$1 million in counterpart funds. The last disbursement was scheduled for January 2010. This program financed the rehabilitation of the 43 km stretch of Route RN2 between Grand Goâve and Miragoâne; the 17 km stretch between Miragoâne and Fond des Negres; and 5 engineering works on Route RN2. It also financed engineering studies and strengthening of the MTPTC. These works are near completion. However, the works along Route RN2 were seriously damaged during the 2008 rains, and the Government of Haiti had to do additional work to restore the highway and prevent future damage.
- 1.17 **Problem to be addressed: Rising costs for works.** The two aforementioned programs to improve Haiti's road infrastructure have budget constraints, making it

difficult or impossible to carry out pending works and services, as well as to pay for services that have already been rendered. The budget drafted for those loans included costing for works and services that was appropriate at the time it was prepared. However, subsequent events drove prices above forecasts. The main causes for this were that (i) the prices received during the competitive bidding process were higher than expected (the particularities of the Haitian road construction market led to rigidities that affected road construction prices); (ii) the rise in international oil prices led to higher parametric costs; (iii) unplanned works were carried out to improve the technical aspects of the projects; (iv) the damage caused by the 2008 rains was repaired; and (v) preventive works had to be done to reduce the impact of future rains.

- 1.18 The project team conducted a comparison through analysis of the input costs for “typical works” similar to those in the loans for Haiti. The results demonstrated a causal relationship between rising oil prices and the costs for road construction in the country; other costs factors that could be applicable to Haiti were, however, a mitigating factor. Construction costs rose sharply between January 2007 and December 2008. The higher actual costs are the primary reason additional resources are needed to cover the investment. Input prices were also slow to react to falling oil prices, and construction costs took several months to drop after oil prices fell.
- 1.19 Moreover, input prices respond to the structural conditions of the respective market, rather than being determined by construction companies. For example, asphalt, cement and fuel are provided by a small number of suppliers in Haiti.⁴ There are also a small number of companies in Haiti’s road construction market. The combination of a market with few suppliers, local price rigidity, international price volatility and financial risks led to higher standard prices than those in more competitive markets. The final prices in the revised budgeted include the necessary adjustments based on the nature of the works to be executed. The team has also analyzed each of the investments in road infrastructure and institutional strengthening in the aforementioned loans. A breakdown of the results is available in the technical annexes, and a summary of the results is provided below.
- 1.20 **Resources necessary for execution of loan 1638/SF-HA.** This operation is currently in execution; 100% of the loan proceeds have been committed and 84% have been disbursed. Approximately 64% of the originally planned works are complete. Based on the resources budgeted in this loan, the expenditures made and the budget needed to complete the originally planned services and works, the additional budget necessary is estimated at almost US\$24 million.
- 1.21 **Resources necessary for execution of loan 991/SF-HA.** One hundred percent of this loan has been committed, and 99.6% has been disbursed. Based on the funds budgeted in this loan, the expenditures made and the budget needed to cover the

⁴ Between January 2007 and June 2009, the price of Portland cement rose continuously, with minimal fluctuation, reaching an overall increase of 65% for the period (in US\$). This had a serious impact on sewerage, bridge, and other works.

outstanding obligations, the estimated additional budget needed is almost US\$4.9 million.

- 1.22 As demonstrated by the analysis above, there are exceptional circumstances beyond the borrower's control that justify financing the aforementioned cost overruns. Furthermore, the proposed program is fully consistent with the Policy on Additional Financing of Cost Overruns for Operations in Progress (document GN-2329 of September 2004 and Operational Policy OP-310). Compliance with the policy criteria is shown in the table available at [link 9](#). The government's current financial capacity does not enable it to provide additional resources to finance these works. The additional financing is expected to make it possible to complete the works and meet outstanding commitments. Many of these works are already in execution under current contracts, or are works whose development objectives could not be met if the targets were scaled back. Therefore, the project amount cannot be reduced. [Link 15](#) provides details on the specific contracts with a financing deficit to be covered by this program, and their status as of mid-March 2010. A shortfall of US\$29 million has been identified.

C. Objective, components, and costs

- 1.23 **Objective.** The general objective of the program is to continue support for the works designed to improve the physical conditions of passenger and freight traffic and safety within Haiti's transportation system, promoting physical integration among the different regions of the country and connection of these regions with Port-au-Prince while facilitating the import and export of goods, thus contributing to sustainable economic and social development in Haiti. The specific objective is to provide additional resources to complete the road rehabilitation and improvement works financed under loans 1638/SF-HA and 991/SF-HA and maintain the goals and purposes of those loans.
- 1.24 The actions included in this program are expected to provide benefits for users of the national road system (including individual users, transport companies, passengers, and others who use the system in any way). The works on Route RN2, financed under loan 991/SF-HA, will connect the southern region with Port-au-Prince and ensure shorter travel times and lower transportation costs. Southern Haiti is one of the country's most important regions from an economic standpoint, and this program will specifically benefit farmers by facilitating the transport of their goods to the main consumption centers (Port-au-Prince and its metropolitan area, including nearby cities within a 30 km radius), as well as the transport of manufactured consumer goods from Port-au-Prince to the southern region. It will also improve transportation to the southern beaches, supporting the tourism potential of the region. The works carried out along Route RN1, under loan 1638/SF-HA, ensure better connections, shorter travel times, and lower transportation costs along the most heavily traveled stretch (Bon Repos–Saint Marc) between Port-au-Prince and Cap-Haïtien. Cap-Haïtien is the second largest city in the country; its port is capable of handling some of the cargo entering and leaving Haiti in the wake of the earthquake damage to the Port-au-Prince port.

- 1.25 **Component 1 - Investments to supplement loan 1638/SF-HA (US\$24.1 million).** The US\$24 million allocated to this component will finance the cost overruns from the following investments under loan 1638/SF-HA: (i) execution of rehabilitation works on the Bon Repos-Titanyen and Xaragua-Saint Marc stretches of Route RN1, and completion of the rehabilitation works between Fond des Negres and Aquin on Route RN2; (ii) the additional cost of supervisory services for the aforementioned works to be commenced and/or completed; and (iii) recovery of the environmental damage along these sections of Routes RN1 and RN2.
- 1.26 **Component 2 - Investments to supplement loan 991/SF-HA (US\$4.9 million).** This program provides an additional US\$4.9 million for loan 991/SF-HA. These resources will be used to: (i) complete the rehabilitation works of the 17 km of Route RN2 between Miragoâne and Fond des Negres and/or pay for the expenses already incurred under this contract; (ii) complete the three engineering works along Route RN2 and/or cover the expenses already incurred under this contract; and (iii) recover the environmental damage along this section of Route RN2 and repair the construction of the three bridges.
- 1.27 **Program budget.** Table II shows the program cost and financing, which totals US\$29 million (100% IDB funds).

D. Results matrix and main indicators

- 1.28 The main results expected from implementation of this program, in the areas of vehicle operating costs and improved road conditions, are summarized in Table III below. The Results Framework (Annex II) provides further details.

Table II - Cost Table (in US\$000)

Components	IDB	%
1. Component 1: Investments to supplement loan 1638/SF-HA	24,098	83.1
1.1 Rehabilitation works	23,365	80.6
- RN1: Bon Repos–Titanyen (10 km)	7,419	25.6
- RN1: Xaragua–Saint Marc (20 km)	14,303	49.3
- RN2: Fond des Negres-Aquin (23 km)	1,643	5.7
1.2 Supervision of works	583	2.0
- RN1	511	1.8
- RN2	72	0.2
1.3 Social and environmental mitigation measures	150	0.5
2. Component 2: Investments to supplement loan 991/SF-HA	4,902	16.9
2.1 Rehabilitation works	3,245	11.2
- RN2: Miragoâne–Fond des Negres (17 km)	3,245	11.2
2.2 Bridges (engineering works)	1,607	5.5
2.3 Social and environmental mitigation measures	50	0.2
Program Total	29,000	100

Table III – Main Indicators

Expected Outcomes	Indicator
Improvement of conditions on the roads benefited by the program (roughness)	50% improvement in the International Roughness Index (IRI)
Reduction in transportation costs	9% average

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instrument and contractual conditions

- 2.1 The financing structure is nonreimbursable financing from the Bank's Grant Facility. This will be a specific investment project with an execution period of two years.
- 2.2 **The following will be conditions precedent to the first disbursement:** (i) submission to the Bank of the detailed designs for works on the Bon Repos-Titanyen and Xaragua-Saint Marc stretches of Route RN1; (ii) addenda extending the term and modifying the respective amounts of the contracts for operational and financial audits funded under loans 991/SF-HA and 1638/SF-HA; (iii) addenda extending the term and modifying the respective amounts of the contracts for works and supervision financed under loans 991/SF-HA and 1638/SF-HA, including the environmental conditions for works set forth in the Environmental and Social Management Plan (ESMP); and (iv) selection and contracting of environmental and social audits using resources from program HA-L1027, currently in preparation.

B. Environmental and social risks and mitigation measures

- 2.3 This is a Category B program in accordance with the Bank's environmental and social policies, as the potential environmental impacts of implementation are not significant, and are easy to control and mitigate. Generally speaking, the positive and negative impacts identified prior to the approval of loans 991/SF-HA and 1638/SF-HA remain the same for this program. An Environmental and Social Management Report (ESMR) is being drafted as part of program preparation. The ESMR will provide a detailed description of the environmental and social consequences, and will also establish an ESMP, which will define measures to mitigate and monitor adverse impacts and promote positive ones.
- 2.4 The main positive and negative impacts that could result from program implementation include: (i) the negative effects of rehabilitation works (road surfaces, drainage systems and bridges) on the physical environment, leading to soil erosion and sedimentation, and degradation in the quality of water bodies; and modification of hydrological systems (all of this could be prevented or satisfactorily mitigated by revising the characteristics of the drainage systems and adopting good engineering practices); (ii) social environment: negative effects, such as an increase in traffic leading to more pedestrian accidents, could be mitigated with appropriate

- signposting and the construction of overpasses and speed bumps in urban areas; (iii) benefits include improved mobility for persons and goods, job creation, and increased income; and (iv) recovery of the most significant environmental damage.
- 2.5 The usual procedures for interaction and communication will be used in reporting to and consulting with the affected social groups. A series of activities will be developed to promote a sense of ownership of the program by the public.
- 2.6 An environmental audit is being conducted to identify any environmental damage that may have resulted from the rehabilitation works already completed under loans 991/SF-HA and 1638/SF-HA, and to ensure compliance with the established plans, Bank policies, and Haitian environmental laws. The findings will guide the execution of new projects and will supplement the ESMP.

C. Fiduciary risk

- 2.7 This operation is expected to have a low fiduciary risk given the central executing unit's (CEU) satisfactory experience with previous Bank programs, and because no institutional or fiduciary problems are expected. The CEU has been able to maintain a permanent, committed, and well-trained staff that is familiar with the Bank's procurement, disbursement, and reporting procedures. While the CEU has demonstrated certain weaknesses in its ability to control and gauge, in a timely manner, factors that could affect the cost of works, the resources from 1922/GR-HA will be directed at rectifying this problem by improving its operations. The supervisory visits by the Bank's fiduciary sector team and audit reports have demonstrated satisfactory results in terms of financial statements and procurement. There will be no counterpart. The MTPTC, through the CEU, has shown sufficient institutional capacity to act as executing agency for Bank-financed programs.

D. Financial management

- 2.8 This operation will provide additional resources for the projects financed under loans 991/SF-HA and 1638/SF-HA. Disbursements will be made as direct payments to contractors or consulting firms, in accordance with the needs identified in the procurement plans and any updates thereto. A semiannual inspection visit will review the financial management of the programs executed by the CEU. The proceeds of the financing will be administered by the CEU in accordance with its current operating manual. This operation will apply the disbursement, accounting, reporting, and monitoring and supervision mechanisms established by the Bank for fiduciary management, and will comply with the technical internal control standards for investment operations in Haiti's road sector.

E. Other issues and risks

- 2.9 **Technical viability.** The technical viability of the works is established in the studies and designs included in loans 1638/SF-HA and 991/SF-HA, which have been updated. The revised plans will serve as the basis for the contract addenda for completion of those sections.

- 2.10 **Economic viability.** The economic viability of the works on Routes RN1 and RN2 was verified during the processing and approval of loans 991/SF-HA and 1638/SF-HA. Nevertheless, given the modifications that were made to the projects, the project team for this operation considers it prudent to conduct an ex post evaluation of the completed, current, and future works on Route RN1. The revised economic feasibility analysis is expected to produce reasonable, generally accepted figures for this type of project. Indeed, the economic feasibility of the remaining works on Route RN1 is expected to increase the overall feasibility of the Bon Repos-Saint Marc project. The established indicators of return will be included with the first report drafted by the CEU following approval of this operation. A preliminary study reached the following conclusions: (i) considering the financial resources necessary to cover the capital costs for all of the Route RN2 projects, the 15-year net benefit, discounted at 11% (NPV) will be: US\$5,625,000, with an internal rate of return (IRR) of 16.4%; (ii) considering the financial resources necessary to cover the capital costs for all of the Route RN1 works, the 15-year net benefit, discounted at 11% (NPV) will be: US\$15,910,000, with an IRR of 18.2%. This shows that the works as a whole are profitable and have satisfactory indicators.
- 2.11 **Implementation risks.** The outstanding works do not present any particular technical difficulties, and the existence of construction companies available for their implementation has been verified. Nevertheless, given the difficult weather conditions and the vulnerability of the heavy construction market in Haiti, there is a residual risk of cost overruns during implementation. Accordingly, the supervisory structure will be strengthened to include as one of its functions the ongoing evaluation of the risk of cost overruns, to ensure, in a timely manner, that there is a source to cover them. With regard to technical and operational sustainability, loan 991/SF-HA provided resources to strengthen seven Departmental Offices and to train small community enterprises on road maintenance and included a number of maintenance contracts. The Bank's strategic guidelines for post-earthquake Haiti, which are currently being drafted, provide for the Bank's future participation in the area of maintenance, either through institutional support or direct financing for maintenance activities.

III. IMPLEMENTATION AND MANAGEMENT PLAN

- 3.1 **Beneficiary and executing agency.** The beneficiary will be the Republic of Haiti and the executing agency will be the Ministry of Public Works, Transportation, and Communications (MTPTC). The MTPTC is responsible for the planning, programming, construction, contracting, supervision, and upgrading of public works, including the roads and bridges within the road network. The MTPTC will work through the central executing unit (CEU) for the project, which is under the authority of the MTPTC.
- 3.2 **Execution arrangement.** The MTPTC, through the CEU, will be responsible for managing the operational relationship with the Bank for this program. The CEU has the appropriate structure and capacity to coordinate the execution of this new

operation, and will maintain the functions assigned to it under the previously approved loans. The CEU was created and trained using resources from previous Bank-financed operations. Its performance has been acceptable in the areas of financial management, technical matters, and procurement. Nevertheless, in view of the volume of work that is expected given the resources that the Bank and other donors expect to invest in Haiti's transportation sector, the CEU will need to be strengthened by hiring consultants in order to properly manage future programs. Part of this strengthening is envisaged under loan 1922/GR-HA, and more specifically operation HA-L1027, which is currently being prepared and which completes the allocation of resources under that grant. This operation will apply the disbursement, accounting, reporting, and monitoring and supervision mechanisms established for loans 991/SF-HA and 1638/SF-HA.

- 3.3 The procurement of goods and services, contracting of works, and selection and contracting of consulting services for the processes to be launched once this operation is approved will be carried out in accordance with the Bank's policies set forth in documents GN-2349-7 and GN-2350-7 of February 2006, and pursuant to the new guidelines approved for Haiti through the Special Procurement Provisions following the emergency caused by the 12 January 2010 earthquake in the Republic of Haiti (document OP-387-1). Nevertheless, this program does not involve any procurement processes. It will only finance addenda to current contracts financed by the Bank under loans 991/SF-HA and 1638/SF-HA. The borrower will submit the fiduciary reports required under those contracts for the purposes of program monitoring and evaluation.
- 3.4 **Execution period and disbursement schedule.** The execution period is estimated to be two years from the entry into force of the loan contract, and the proposed grant is expected to be disbursed over three years. The estimated disbursement schedule is summarized in Table IV.

Table IV – Estimated Disbursement Schedule

Disbursement Schedule (US\$000)					
Year	2nd Half of Year 1	Year 2	Year 3	1st Half of Year 4	Total
IDB	8,767	10,750	8,500	983	29,000
Total	8,767	10,750	8,500	983	29,000
Percentage (%)	30.23%	37.07%	29.31%	3.39%	100%

- 3.5 **Other special contractual conditions.** All of the special contractual conditions set forth in the contracts for loans 1638/SF-HA and 991/SF-HA will apply to the components of this program, as appropriate. These conditions deal with maintenance,⁵ the environment, road safety, evaluation, monitoring, supervisory

⁵ In addition to the obligation to ensure adequate maintenance of the roads financed, the conditions also include the submission of annual maintenance reports for three years after the last disbursement.

meetings and the submission of periodic reports. One condition for program execution is that appropriate supervisory services must be in place before any work may be started.

- 3.6 **Retroactive recognition.** This program entails the payment of nearly US\$6.7 million for works that have already been executed under loans 991/SF-HA and 1638/SF-HA, or 23% of the total. These works were executed prior to the approval of the Project Profile for this operation. In accordance with Policy OP-504, the Bank may retroactively recognize expenses incurred during the 18 months prior to the approval of the loan or technical cooperation. The Bank's guidelines on this matter further stipulate that retroactive expenses may be recognized as of the approval date of the respective Project Profile. As the expenditures were incurred within the 18-month period stipulated in the Policy, but before the approval date of the Project Profile (13 May 2010), a policy waiver is required. While the Policy does not set a maximum amount for expenditures that may be recognized retroactively, the guidelines state that, if they are duly justified, resources for an amount above 20% of the Bank's financing may be endorsed by the Operations Policy Committee. The project team believes that requesting a waiver to these two rules is justified because: (i) these additional resources are for two operations already in execution that have run short of funds due to the increased volume of works and rise in prices; i.e., subject to the Policy on Additional Financing for Cost Overruns and new activities not included in the programs (paragraph 1.18); (ii) the need to repair the damage caused by the 2008 rains, prevent new damage and not leave unfinished structures exposed and vulnerable to weather conditions has made it crucial to continue the works that are already under way; and (iii) the government does not have its own resources to pay for the services already provided on Route RN2.
- 3.7 **Monitoring and evaluation.** The CEU will be required to draft and submit to the Bank the annual work plans for the program and semiannual status reports, indicating the progress on each component and the overall performance of the program, based on the indicators agreed on in the results framework. The reports must also include, *inter alia*: (i) a description of the activities carried out; (ii) updated physical execution and disbursement schedules; (iii) degree of compliance with the agreed execution indicators; (iv) a program of activities for the upcoming six-month period; (v) a summary of the status of the program's financial execution and expected resource flow for the next six-month period; and (vi) a section identifying possible developments or events that could jeopardize program execution. Additionally, within the 90 days following the last disbursement, a final program evaluation will be prepared. It must include at least: (i) the financial execution results, by component; (ii) achievement of the targets, in accordance with the agreed outcome indicators; and (iii) compliance with the contractual commitments. The submission of the annual work plans for the program is a condition for program execution.

- 3.8 **External audits.** During the execution period, MTPTC will submit audited consolidated financial statements for the program annually. Each of the two program components represents additional financing for different loan agreements. Loans 991/SF-HA and 1638/SF-HA are audited by different firms: (i) loan 991/SF-HA is audited by Mérové-Pierre – Cabinets Experts Comptables (which is currently preparing the final audit report for the last disbursement, scheduled for 29 January 2010) and the firm is expected to be extended until 30 September 2010; (ii) loan 1638/SF-HA is audited by Experts Conseils & Associés. The last disbursement is scheduled for 28 July 2011. An addendum will be drafted for each of the audit contracts, and the firms will continue to be responsible for auditing the operational, financial, and system-related processes and aspects of the operations, in accordance with the terms of reference previously agreed on with the Bank. The resources for extending the audit services will be provided through operation HA-L1027, which is currently being prepared by the Bank. The performance of operating, financial, and environmental audits is a condition for the execution of the program. The program's annual financial statements will be presented within 120 after the end of the fiscal year and the closing statements within 120 days following the last disbursement.

Annex Confidential

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Results Framework

Program Objective	The general objective is to improve the capacity and efficiency of Haiti's transportation sector, promoting improved accessibility to the productive regions of the country, lower transportation operating costs, and shorter travel times, thus contributing to the country's sustainable economic and social development. The specific objective is to continue providing support for the execution of works designed to improve the physical traffic and safety conditions within the national road network. To this end, the program will provide additional resources for loans 991/SF-HA and 1638/SF-HA, to ensure that their main development objectives regarding rehabilitating the primary roadways in the country are met.			
Program Outcome Indicators	Baseline (2007)	Target (2013)	%	Frequency - Source, comments
Improved road conditions (Roughness)	6.0 IRI	3.0 IRI	50	Final program evaluation in 2013: road conditions, expressed as the average roughness of the section of the road, will have improved considerably; this means that the Bank's actions affect accessibility for people and goods, contributing to the country's development.

Outcome Indicators	Baseline (2007) (US\$)		Target (2013) (US\$)		%	Frequency -Source, comments
Lower operating costs on the roads benefiting from the program						
Reduction of transportation costs for users of the roads rehabilitated under the program	Car	0.294	Car	0.274	7	At the end of the program, vehicle operating costs (measured in US\$ and with constant vehicle-Km values using HDM-4) will be lower than at the beginning of the program. Frequency: annual, included in the semiannual management report submitted at year-end.
	Pickup	0.360	Pickup	0.328	9	
	Bus	1.247	Bus	1.134	9	
	Tap-tap	0.427	Tap-tap	0.384	10	
	Mid-size truck	0.540	Mid-size truck	0.491	9	
	Heavy truck	0.984	Heavy truck	0.886	10	

		Baseline 2007	2010	2011	2012	2013 / Target	Frequency
Component 1: Investments to supplement loan 1638/SF-HA							
Outcomes							
Rehabilitation of a 10 km stretch between Bon Repos and Titanyen	Design completed	0	1	0	0	0	Frequency: annual, included in the semiannual management report submitted at year-end.
	Contract addendum added	0	1	0	0	0	
	Work in execution	0	1	1	1	0	
	Work completed	0	0	0	0	1	
Rehabilitation of a 20 km stretch between Xaragua and Saint Marc	Design completed	0	1	0	0	0	
	Contract addendum added	0	1	0	0	0	
	Work in execution	0	1	1	1	0	
	Work completed	0	0	0	0	1	
Completion of rehabilitation of a 26 km stretch between Titanyen and Arcahaie	Works completed	0	1	0	0	1	
Completion of rehabilitation of a 28 km stretch between Arcahaie and Xaragua	Works completed.	0	1	0	0	1	

		Baseline 2009	2010	2011	2012	2013/ Target	Frequency
Component 2: Investments to supplement loan 991/SF-HA							
Products							
Completion of the rehabilitation of a 17 km stretch between Miragoâne and Fond des Negres	Works completed	0	1	0	0	1	Frequency: annual, included in the semiannual management report submitted at year-end.
	Works completed	0	1	0	0	1	
Recovery of environmental damage	In execution	0	1	0	0	0	
	Concluded	0	1	0	0	0	

Procurement Plan Summary

This program does not involve any procurement processes. It will only finance addenda to current contracts financed by the Bank under loans 991/SF-HA and 1638/SF-HA.

Ref No.	Contract description	Estimated cost (US\$000)	Procurement method	Review prior/post	Source of Financing		Prequalification Yes/No	Estimated dates		Status
					IDB %	Other %		Contract start	Contract end	
A. Civil works										
	Civil works to complete loan 1638/SF-HA	23,515	ICB	-	100	0	-	-	Q2 2013	In execution
	Civil works to complete loan 991/SF-HA	4,902	ICB	-	100	0	-	-	Q4 2010	In execution
B. Consulting services										
	Supervision of works	583	ICB	-	100	0	-	-	Q2 2013	In execution
	Audit and evaluation	15	NCB	-	100	0	-	-	Q4 2013	In execution

ICB: International competitive bidding; LIB: limited international bidding; NCB: national competitive bidding; PC: price comparison; DC: direct contracting; FA: force account; PSA: Procurement through specialized agencies; PAs: Procurement agents; IA: Inspection agents; PLFI: Procurement in loans to financial intermediaries; BOO/BOT/BOOT: Build, own, operate/build, operate, transfer/build, own, operate, transfer; PBP: Performance-based procurement; PLGB: Procurement under loans guaranteed by the Bank; PCP: Community participation procurement; QCBS: Quality- and cost-based selection; QBS: Quality-based selection; FBS: Selection under a fixed budget; LCS: Least-cost selection; CQS: Selection based on the consultants' qualifications; SSS: Single-source selection.