

## SECONDARY AND TERTIARY ROADS REHABILITATION AND MAINTENANCE PROGRAM

(HA-0075)

### EXECUTIVE SUMMARY

**BORROWER:** République d'Haïti

**EXECUTING AGENCY:** Ministère des Travaux Publics, Transports et Communications (MTPTC)

**AMOUNT AND SOURCE:**

IDB:	US\$50,000,000 (FSO)
Cofinancing:	US\$04,000,000 (OPEC)
Local counterpart funding:	US\$01,000,000
Total:	US\$55,000,000

**FINANCIAL TERMS AND CONDITIONS:**

Amortization period:	40 years
Grace period:	10 years
Disbursement period:	4 years
Interest rate:	1% 1st ten years and 2% thereafter
Inspection and supervision:	1%
Credit fee:	0.5%

**COFINANCING:** The Organization of Petroleum Exporting Countries (OPEC)

Amortization period:	17 years
Grace period:	5 years
Disbursement period:	4 years
Interest rate:	2%
Inspection and supervision:	1%
Credit fee:	no

**OBJECTIVES:**

**Development goal.** The Program will contribute to the GOH's rural development strategy, which revolves around four goals: (i) to facilitate the integration of isolated rural areas into the national community; (ii) to improve access to basic social services for the rural population; (iii) to support rural economic activity by facilitating the transportation of goods; and (iv) to contribute to the development of tourism by facilitating access to sites of interest.

**Purpose of the Program.** The purpose of the Program is to improve the country's secondary and rural infrastructure in a **sustainable** way.

**DESCRIPTION:**

The proposed Program will be a four year program consisting of two components: an **investment component** will finance the rehabilitation and maintenance of selected road networks, while an **institutional component** will support the development of an institutional framework to ensure the sustainability of investments.

The investment component includes: (i) the rehabilitation and maintenance of 200 km of secondary roads; and (ii) the rehabilitation and maintenance of 300 km of tertiary roads. The institutional component includes: (i) technical assistance to the MTPTC to facilitate Program execution; (ii) community development assistance to local stakeholders for the management of the tertiary network; and (iii) technical assistance and training for private companies and communities involved in rehabilitation and maintenance works.

**ENVIRONMENTAL  
CLASSIFICATION:**

The Environmental Management Committee, at its meeting of July 11, 1996, classified this as a Category III operation. The Committee on Environment and Social Impact approved the Program's Environmental Summary at its session of February 4, 1997.

**BENEFITS:**

The Program is expected to: (i) rehabilitate 14.5% of the country's secondary network and 11.6% of the country's tertiary network, serving a total of 750,000 rural residents; (ii) improve the planning and programming capacity of the MTPTC; (iii) strengthen the local branches of the MTPTC; (iv) build local capacity and motivation for tertiary road management; and (v) strengthen small enterprises and community groups participating in road works.

Indicators of these achievements include: (i) the percentage of completion of the investment plan; (ii) the number of Decentralized Program Offices operational; (iii) the number of Triennial Maintenance Plans signed and duly implemented; and (iv) the number of contracts signed and executed by small companies and community groups.

These outputs will contribute to the sustainable improvement of the secondary and tertiary road networks, as measured by the percentage of these networks in good condition and by the amount of national and local resources allocated to their maintenance.

Finally this sustained improvement of the road infrastructure will have an impact on the global socio-economic indicators linked to the development goals of the Program. The Program will have a significant impact on the rural population of the targeted areas, 80% of which is below the poverty level. Although not gender specific, the Program will also have a significant impact on women, since they play the leading role in the transportation and marketing of agricultural products.

**RISKS:**

**Execution capacity of the MTPTC.** An important determinant of Program success will be the execution capacity of the MTPTC, which, given the weakness that presently characterizes Haitian institutions, may raise some concern. Three factors mitigate this concern:

(a) The two road programs that the MTPTC are presently managing are now well under way and the MTPTC has gained positive experience in project management through them. 70% of the resources of both programs have already been committed.

(b) It is important to stress that the MTPTC's contribution to program preparation has been very significant thanks to the presence, within the MTPTC, of a core group of highly motivated and competent professionals. This group represents an important source of human capital for the future regeneration of the Ministry and efforts will be made within the Program to strengthen it.

(c) While overall program execution will be coordinated by the MTPTC through the Central Executing Unit, the proposed Program will rely intensively on local structures (Decentralized Program Offices and Local Coordination Structures). The expansion of the absorption base through the involvement of local stakeholders is indeed one of the surest means to increase the country's overall absorption capacity.

**Program sustainability.** As past experience has demonstrated, the major issue confronting this type of program upon completion is that of maintenance. To address this issue, it is proposed to set up a Road Fund with revenues from a fuel levy, vehicle registration fees and traffic fines.

Resources from the Road Fund will be complemented, on the tertiary network, by the contribution of local stakeholders. This contribution, although modest, is important to build competencies and a sense of ownership at the local level, at a time when the responsibilities and the resources of local authorities are being redefined. Local commitment to maintenance will therefore be a major criterion for the selection of tertiary road projects.

**THE BANK'S  
COUNTRY AND  
SECTOR STRATEGY:**

The Bank's strategy in Haiti revolves around two complementary objectives: (i) the improvement of living conditions and (ii) the development of the productive economy. The present Program will serve the first objective by integrating rural areas into the national community and facilitating access to social services, and the second objective by supporting agriculture production and tourism.

The proposed Program attempts to simultaneously address three important fields of Bank intervention - decentralization, rural development and transport - and will look for synergies with other Bank's programs related to these three fields.

**EIGHTH  
REPLENISHMENT  
POVERTY TARGETING:**

The proposed Program is a poverty targeted investment (PTI) since Haiti is a country where the poverty head count ratio is above 50%. Consequently, Bank financing has been increased to 90% of the overall amount of the operation, in application of paragraph 2.93 of the 8th replenishment document (AB-1704).

**SPECIAL  
CONTRACTUAL  
CONDITIONS:**

**Conditions prior to first disbursement:**

1. The Borrower shall submit evidence that it has presented the draft law for the creation of the National Road Maintenance Fund to the Parliament before the approval by the Parliament of the loan contract for the proposed Program. (see paragraph 1.17 and 4.10)
2. The Borrower must submit evidence of having established and adequately staffed the Central Executing Unit (CEU) within the Roads Directorate; (see paragraph 2.13)
3. The Borrower must submit evidence of having established and adequately staffed the Environmental Unit; (see paragraph 2.17)

4. The Borrower must submit evidence that the agreement with OPEC for complementary financing has entered into effect; (see paragraph 2.27)
5. The Borrower must submit evidence that the Program's operating regulations have entered into effect; (see paragraph 3.3)

**Other special contractual conditions:**

6. Prior to the signature of the first rehabilitation contract to be financed by the Program, the Borrower must submit evidence that the law for the creation of the Road Fund has entered into effect; (see paragraph 4.10)
7. The contract will also specify conditions related to: the timing for contracting the Program's technical assistance (see paragraphs 2.14 to 2.19); the level of resources to be disbursed by the National Road Maintenance Fund every Program year (see paragraphs 1.15, 3.24 and 4.10); program monitoring and evaluation procedures (see paragraphs 3.24 thru 3.31); the presentation of the Program's certified financial statements to the Bank (see paragraph 3.32); and the use of Bank procurement procedures for works, goods and consultant services (see paragraph 3.33 to 3.38).

## I. FRAME OF REFERENCE

- 1.1 The impact of the persistent economic decline in Haiti over the past two decades has been particularly severe and pervasive in rural areas. The declining quality of life in the countryside of this still predominantly rural society (60%) has precipitated a massive rural exodus and has led to the uneven development of the Haitian territory as a whole. The persistent decline in agricultural productivity and the scarcity of employment alternatives have diminished the purchasing power and levels of nutrition in rural households. Poor access to basic social services further undermines the quality of life. Rural illiteracy remains at 65%, 15 points higher than in urban areas, while the average life expectancy in rural areas is 5 years below the national level. Finally, the fact that secondary and rural areas are remote and not easily accessible has fractured civil society and frustrated the incipient democratic process.
- 1.2 A series of factors have undermined the productive capacity and quality of life in rural areas. They include: (i) an unstable macroeconomic environment, (ii) the unsecured legal framework for land tenure, (iii) the poor condition of the secondary and rural road infrastructure and, (iv) problems related to the availability of water for household and agricultural uses. The Government of Haiti (GOH), assisted by the Bank and other donors, has conceived a multi-faceted strategy to address the most critical of these impediments. This proposed Program seeks to contribute to this strategy by targeting the issues related to the poor condition of the secondary and rural road infrastructure.
  - A. Haiti's road infrastructure
- 1.3 Haiti's road infrastructure consists of 4,500 km of roads, of which 13% are paved, 33% are gravel roads, and 54% are dirt roads. Irrespective of the type of wearing course, the highway system is broken down by function into the following categories:
  - a. The primary or arterial roads [routes nationales] are those which link the most important cities. They should be designed to support a level of traffic in excess of 1000 vehicles per day. They total 590 km, of which 470 km are paved.
  - b. The secondary or feeder roads [routes départementales] are those towards which local roads in production zones converge. They link important urban centers and provide access to the primary network. When in fair condition, they generally carry a traffic of 200 to 1000 vehicles per day. Totaling 1,375 km, about half of these roads are gravel roads and half are dirt roads.

c. The tertiary or local roads [routes de pénétration] are the links that provide for human settlements in rural areas and support for agricultural activities. Motorized traffic on these roads is generally low (under 200 vehicles per day). The total length of these roads is 2,580 km, out of which 1,840 km are dirt roads.

- 1.4 The Ministry of Public Works (MTPTC), has the overall responsibility over the transport sector. The law attributes the management of the primary and secondary networks to the MTPTC and the management of the tertiary network to the municipalities.
- 1.5 According to the latest comprehensive road inventory (1991), only 34% of the road network was in fair condition. 72% of the paved network was in fair condition, whereas 51% of the gravel roads and 87% of the dirt roads were in poor to bad condition. Virtually no maintenance has taken place between 1991 and 1995 because of the political and economic situation of the country, and the state of the network has markedly worsened. Emergency support has been provided during the first 18 months following the restoration of democracy. Emphasis has been placed on employment generation through labor intensive works, but little progress has been made toward sustainable improvement of the road network. The first long-term rehabilitation efforts, initiated by the National Road Rehabilitation Program mid-1996, have been concentrating on the primary network and major secondary network segments.

B. The National Road Rehabilitation Program

- 1.6 The National Road Rehabilitation Program (NRRP) is a US\$130 million program co-financed by the Bank, the World Bank, KfW and the European Community. Approved in January 1995, it consists of: (i) an investment component seeking to rehabilitate the entire primary network and; and (ii) an institutional component aimed at restructuring the transport activities of the MTPTC, establishing a National Road Maintenance Fund (NRMF) and drafting a National Transport Masterplan. The institutional achievements of the NRRP will play a crucial role in ensuring the success of the new Program. The progress of each institutional component is described here below.

1. The MTPTC's reorganization

a. Achievements

- 1.7 The MTPTC's effectiveness has declined in the last ten years, due notably to organizational and human resources problems. To tackle these shortcomings, the GOH has undertaken the task of restructuring the Ministry's transport activities. This reorganization, which aims at shifting the MTPTC's functions away from execution towards policy-making, regulation and planning, will involve: (i) Re-assigning road network management functions (planning, investment, and maintenance management) to a yet-to-be-

established agency known as the Roads Directorate [Direction des Routes], such that the existing Transport Directorate [Direction des Transports] is left exclusively with policy making functions; (ii) privatizing road maintenance and establishing a specific financing mechanism; and (iii) transferring the supervision of road maintenance works to decentralized offices [Directions Départementales des TPTC].

- 1.8 A consensus was recently reached within the MTPTC on the modalities of the reorganization and the process is now underway. It has been established that: (i) the executing unit of the NRRP will become the primary roads department of the Roads Directorate, while the executing unit of the new Program will become the secondary and rural roads department of the said directorate; (ii) maintenance, which presently is non-existent, will be privatized when the National Road Maintenance Fund is established; correspondingly, the Ministry's division formerly responsible for maintenance will be reduced to an emergency maintenance patrol; and (iii) the decentralized offices [Directions Départementales des TPTC] will be strengthened through the proposed Program.

b. The MTPTC's assets

- 1.9 In spite of the shortcomings that justified the MTPTC's reorganization, it is important to stress that the MTPTC's contribution to program preparation has been very significant: under strict time constraints, the MTPTC coordinated a preliminary survey of the non-primary network, it screened potential first-year projects, and it contracted and supervised the corresponding technical studies.
- 1.10 This contribution can be attributed to the presence, within the MTPTC, of a core group of highly motivated and competent professionals. Working long hours in a difficult environment, these well-trained professionals earn salaries that are two times less than private sector salaries for comparable level of skills. Kept in the Ministry by their sense of public service and the prospect of high-level responsibilities at a time of national reconstruction, this group represents an important source of human capital for the Ministry.

2. Financing of Road Maintenance

a. Historical perspective

- 1.11 During the period from 1972 to 1982, maintenance of the road network was performed satisfactorily. The Service d'Entretien Permanent du Réseau Routier National (SEPRRN), (National Road Maintenance Service) was constituted in 1972 as an autonomous agency and given the responsibility of maintaining the network. Important support was provided to the SEPRRN by the USAID and the World Bank (WB) in the form of heavy equipment and training. The



GOH set up a counterpart fund, with revenues from a fuel levy, to finance the SEPRRN's recurrent costs.

- 1.12 By 1982, international support to the SEPRRN had declined. In 1983, the Ministry of Public Work's new organic law integrated the SEPRRN into the Ministry's structure and the counterpart fund was dissolved. From 1982 on, the SEPRRN's performance and budget declined dramatically. The 1996 maintenance budget was under US\$0.2 million, compared to the US\$11 million which would be required to maintain the existing network at a serviceable level.

ROAD MAINTENANCE BUDGET 1982-1988 in 1996 US\$ 1,000								
Year	1982	1983	1984	1985	1986	1987	1988	1989
Budget	12,135	9,588	8,547	6,890	7,421	6,468	6,079	4,441
Year	1990	1991	1992	1993	1994	1995	1996	1997
Budget	3,883	2,936	728	25	18	14	180	(???)

Source: National Road Fund Feasibility Study - Preliminary Report

b. The proposed solution

- 1.13 To address the crucial lack of resources for road maintenance, the GOH is looking into the feasibility of establishing a National Road Maintenance Fund (NRMF), fed by direct users' fees such as a gas surcharge and vehicle registration fees. A comprehensive study financed by the NRRP is being finalized to this end.
- 1.14 The NRMF would finance the periodic and routine maintenance of all rehabilitated primary and secondary roads, while significantly contributing to the maintenance of the rehabilitated tertiary roads. Complementary financing for the maintenance of tertiary roads would come from local sources. (see chapter IV).
- 1.15 Based on the current and future road investment programs, the financing needs for routine and periodic maintenance are expected to evolve as follows in US\$ thousand and in 1996 constant prices:

	Year 97/98		Year 98/99		Year 99/00		Medium-term	
	Routine	Periodic	Routine	Periodic	Routine	Periodic	Routine	Periodic
Primary	700	2,000	1,100	3,000	1,200	3,600	1,500	4,500
Secondary	500	400	900	800	1,100	900	1,400	1,100
Tertiary	500	300	1,100	600	1,300	700	1,600	900
Total	4,500		7,400		8,900		11,000	

- 1.16 The needs for road maintenance will increase rapidly as the network is rehabilitated. The medium-term level of necessary road maintenance expenditure (US\$ 11.0 million in 1996 constant prices)

will be achieved by reallocating part of the current users' contribution 1/ from the general budget to the Road Maintenance Fund and by gradually introducing - to limit inflationary impacts - a surcharge on gas.

- 1.17 The tentative schedule for the implementation of the NRMF is as follows: (i) by May 97, a finalized technical proposal will be with the GOH; (ii) by June 97, the draft law should be presented to the Parliament together with the loan contract for the proposed Program; (iii) by November 97, the said law should have been approved by the Parliament; and (iv) by mid-1998, the NRMF should be in place, in time to take over the maintenance of the first rehabilitated segments of the primary network.

### 3. National Transport Masterplan

- 1.18 An international consulting firm has been hired to prepare the National Transport Masterplan. Its rural transport module will be carried out in close coordination with the proposed Program. The masterplan is expected to be completed by September 1997.

#### C. Main problems affecting the secondary and rural networks and contribution of the proposed Program

- 1.19 In terms of investment, the NRRP will concentrate on the primary network, and it is expected that all 590km of Haiti's highways (except for 75km of the Route Nationale 3, see paragraph 1.28) will have been rehabilitated by end of year 1999. The secondary and rural road infrastructure, however, continues to deteriorate at a fast pace. Its increasingly critical state can be attributed to three major causes: technical, financial and institutional. The present sub-chapter details these causes and explains how the proposed Program will seek to eliminate them.

#### 1. Technical issues

- 1.20 The secondary and tertiary networks suffer from inadequate planning: financed by a multitude of donors and NGOs, investments are generally made on an ad-hoc basis. This is due to the absence of clearly defined policy objectives and the lack of basic information on the non-primary network. There is no recent inventory of the network; the 1982 network classification needs to be updated; even information on ongoing rehabilitation projects is incomplete.
- 1.21 The proposed Program will rely on the National Transport Masterplan to update the network classification, complement the secondary and rural road inventory and the inventory of current projects, and establish a road database. This will inform the formulation of the

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1/ The 1995-1996 contribution of road users to the national budget was US\$ 40 million, which represented 23% of the total US\$ 174 million national budget.

sector policy, which, in turn, will allow for the definition and implementation of a sector investment plan.

## 2. Financial issues

- 1.22 Given that the primary network has been given first priority to available resources at the national level, the lack of funds for road maintenance has been all the more detrimental to secondary and rural roads. The municipalities lack the resources to ensure proper road maintenance. De facto, maintenance of the secondary and tertiary network has been left to NGOs and local stakeholders.
- 1.23 The Program will help establish nationwide financing mechanisms for the maintenance of secondary and tertiary roads, relying on the National Road Maintenance Fund for secondary roads and on cost-sharing between the NRMF and local stakeholders for tertiary roads.

## 3. Institutional issues

- 1.24 The institutional arrangements related to the secondary network are rather clear, with the MTPTC in charge of planning, investment and maintenance. With regards to the tertiary network, however, significant problems remain. The institutional framework for the management of local public infrastructure has been redefined by an October 1982 decree. This decree transferred the responsibility for rural road construction and maintenance from the central government to the municipalities. The corresponding resources, however, were not transferred to the municipalities and they have been left with little means to carry out their responsibilities. The concentration of resources at the central level has discouraged the involvement of local stakeholders such as municipalities, CASECs [municipal districts] and grassroots organizations.
- 1.25 Decentralization is one of the priorities of the GOH, and the Bank approved, early in 1996, a technical cooperation loan to help redefine the institutional and fiscal framework of local governance and strengthen the capacity of municipalities. So far, the Parliament has failed to ratify the said loan, which indicates the high socio-political stakes in decentralization. Since the main impediment to the efficient provision of local services is the excessive fiscal centralization, the proposed Program will attempt to propose alternative solutions to rural road maintenance that systematically involve local stakeholders.

## D. Bank's strategy and rationale for involvement

- 1.26 **Bank's strategy.** The Bank's strategy in Haiti revolves around two complementary objectives: (i) the improvement of living conditions and (ii) the development of the productive economy. The present Program will serve the first objective by integrating rural areas into the national community and facilitating access to social

services, and the second objective by supporting agriculture production and tourism.

- 1.27 **Synergies with other Bank's programs.** The proposed Program attempts to simultaneously address three important fields of Bank intervention - decentralization, transport and rural development. The Program will attempt to establish synergies with Bank programs that are related to these three fields.

- (a) Decentralization. In coherence with its decentralization technical assistance program, the Bank is currently preparing a series of investment programs aimed at improving local public services <sup>2/</sup>. To develop local institutions and train local actors in a sustained and consistent manner, synergies with these and other decentralization efforts will be systematically sought. Furthermore, the proposed Program will enhance local governance not only through the execution of its specific provisions, but also through the improved accessibility that it will afford to other programs that seek to reach out to secondary and rural cities.
- (b) Transport. The proposed Program will benefit from the institutional reforms fostered by the NRRP (reorganization of the MTPTC, creation of the Maintenance Fund, National Masterplan) and will complement the NRRP's investments by addressing the non-primary network.
- (c) Rural development. The proposed Program integrates the Government's overall strategy to restore rural growth. In this respect, it will work together with the Intensification of Agriculture Program (HA0016), which seeks to eliminate some of the most structural impediments to agricultural productivity such as land titling and water-related issues.

E. Current projects and past experience

1. Current Bank's road projects in Haiti

- 1.28 The Bank has currently two road projects under execution in Haiti. Approved in January 1995, the US\$45 million Bank's contribution to the National Road Rehabilitation Program (loan 945/SF-HA) finances the rehabilitation of 120km of the country's primary network. The NRRP initially contemplated the rehabilitation of the whole primary network. However, the increase in local construction costs due to the embargo and the insufficiency of cofinancing resources have left the last segment of Route Nationale 3 (75km) unfunded.

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<sup>2/</sup> They include the potable water investment program, the municipal development program, an education program, a health program, the sanitation investment program, and the social investment fund.

- 1.29 Approved by the Bank in 1990 but declared eligible only in February 1995 because of the coup d'état, the US\$50 million loan 838/SF-HA finances the rehabilitation of the 74 km primary road Pont-Sondé/Mirebalais. This program also contemplated the rehabilitation of 66km of rural roads in the Artibonite Valley.
- 1.30 For coherence purposes and in view of the importance of completing the rehabilitation of the primary network, the Government of Haiti has proposed and the project team recommends that the following adjustments be made: (i) transfer the 66km of rural roads initially considered under loan 838/SF-HA to the new Program; (ii) reallocate the available balance of loan 838/SF-HA (US\$10 million) to the financing of Route Nationale 3; and (iii) provide up to US\$12 million of complementary financing for the RN3 through the new Program.
- 1.31 Resources from loans 838/SF-HA and 945/SF-HA are 70% committed and this figure should reach 100% by June 1997. Three of the four major works contracts have been signed. Earthworks have started on three primary roads (Pont-Sondé/Mirebalais, RN2 and Route de Jacmel) and the first rehabilitated road is expected to open before June 1998. The progress of the institutional aspects of loan 945/SF-HA have been described in paragraphs 1.6 thru 1.18.
- 1.32 These two programs are coordinated by an executing unit staffed by regular MTPTC personnel. An international project management firm was hired and the executing unit is benefiting from the permanent transfer of this firm's expertise. The smooth execution of the two programs is a fair indicator of the absorptive capacity of the MTPTC, an agency that has managed to remain relatively organized compared with other key administrations.

## 2. Lessons learned from past experience

- 1.33 The experience of the Bank and other selected donors in Haiti and in other relevant countries served as an input for the preparation of the Program. The specific recommendations drawn from this experience and incorporated into the design of the Program include:
- (a) **Institution building:** the need to define clearly the division of responsibilities between the national and the local level for secondary and tertiary road planning, programming and maintenance;
- (b) **Maintenance financing:** the crucial importance of establishing sustainable mechanisms to mobilize central funding and local resources towards road maintenance;
- (c) **Road selection:** the need to select low traffic tertiary roads on the basis of simple criteria rather than on economic rate of return calculations;

(d) **Technical design and road works:** the need to develop design standards for each category of roads, adapted to the functions assumed by these roads in the network.

3. Lessons learned from a recent diagnostic of rural road management successes and failures in Haiti

- 1.34 A thorough evaluation of recent experiences of rural road management was carried out based on a sample of 300km of rural roads preselected for the Program, in order to determine the main factors that influence the success of such experiences. The results of this study served as a foundation on which to design the institutional arrangements ruling the selection and maintenance of rural roads in the proposed Program.
- 1.35 The diagnostic, which included about 20 rural road segments, demonstrates that rural road management practices can be classified according to four categories, depending on the observed willingness of local stakeholders to contribute to road maintenance.
- a. 11% of the roads investigated are maintained more or less adequately, with little to no intervention of the Ministry of Public Works. In this instance, a major economic drive such as a successful hotel resort usually explains the existing set-up.
  - b. 26% of the roads investigated used to be maintained by local stakeholders, but maintenance has been interrupted, usually because of organizational problems.
  - c. 21% of the roads investigated do not get maintained but local stakeholders say they would be willing to participate in road maintenance if the State would provide part of the resources needed and if the road was to be rehabilitated first. The usefulness of the roads of this category is often not questionable, and the problem is usually one of affordability for local users, notably in terms of mobilization of money.
  - d. The last category consists of roads which do not get maintained and local stakeholders say they do not want to participate in maintenance as long as the State does not provide them with financial resources. The usefulness of such roads for the local communities they serve is often questionable.
- 1.36 The challenge of the proposed Program will be to design a system that: (i) screens roads according to their perceived usefulness, (ii) evaluates the potential for local mobilization of resources, and (iii) establishes the level of State funding needed to complement (rather than deter) local financing of maintenance costs.

## II. THE PROGRAM

### A. Objectives

- 2.1 **Development goals.** The Program will contribute to the GOH's rural development strategy, which revolves around four goals: (i) to facilitate the integration of isolated rural areas into the national community; (ii) to improve access to basic social services for the rural population; (iii) to support rural economic activity by facilitating the transportation of goods; and (iv) to contribute to the development of tourism by facilitating access to sites of interest. The selection of the road segments to be financed by the Program will be based on the extent to which these segments contribute to the four goals stated above.
- 2.2 **Purpose of the Program.** The purpose of the Program is to improve the country's secondary and rural infrastructure in a **sustainable** way.

### B. Program description

- 2.3 The proposed Program will be a four year program consisting of two components: an **investment** component will finance the rehabilitation and periodic maintenance of selected road networks, while an **institutional** component will support the development of an institutional framework to ensure the sustainability of investments.

#### 1. Investment component (US\$46.350 million)

- 2.4 The investment component will finance the rehabilitation and maintenance of approximately 200km of secondary and 300km of tertiary roads and provide complementary financing (US\$12 million) for Route Nationale 3 (RN3).

#### a. Route Nationale 3 (US\$12 million)

- 2.5 As explained in paragraph 1.30 above, the Program will provide up to US\$12 million of complementary financing for the Route Nationale 3, a primary road included in (and partly financed by) the NRRP. This sub-component of the proposed Program will be executed within the framework of the NRRP. 3/

b. Secondary road sub-component

(i) Rehabilitation of secondary roads (US\$12 million)

- 2.6 This component will finance the rehabilitation of 200km of secondary roads. The rehabilitation works envisaged aim at restoring adequate capacity, year-round access and traffic safety, and will include such works as regravelling, grading, bridge replacing, slope protection and drainage works.

(ii) Maintenance of secondary roads (US\$250,000)

- 2.7 This component will finance a proportion declining over time (80%, 50%, 30% and 0% during the first, second, third and fourth years of the Program, respectively) of the maintenance requirements for the secondary roads which will have been rehabilitated. The complement will be financed by the National Road Maintenance Fund. Program contribution to maintenance is meant to ease the gradual establishment of the Road Fund.
- 2.8 Equipment-intensive rehabilitation works will be contracted out to small local contractors and labor-intensive maintenance works will be contracted to local communities. Routine maintenance will be regularly performed throughout the year to maintain the drainage systems (ditches, culverts, vegetation) and the running surface (filling potholes and ruts). Reshaping will be performed twice a year.

c. Tertiary road sub-component

(i) Rehabilitation of tertiary roads (US\$18 million)

- 2.9 This component will finance the rehabilitation of 300km of tertiary roads. The proposed works will concentrate on the rehabilitation of critical sections to secure a level of access tailored to the specific transport needs of the local community. This will entail protecting the surface over poor soils and steep gradients, and constructing retaining walls, drainage works and erosion control structures.

(ii) Maintenance of tertiary roads (US\$350,000)

- 2.10 This component will finance a proportion declining over time (80%, 50%, 30% and 0% during the first, second, third and fourth years of the Program, respectively) of the maintenance costs for the tertiary roads which will have been rehabilitated. The complement will be financed in part by the Road Fund and in part through the contribution of local actors. For each project, the various contributions will be specified in a Triennial Maintenance Plan. Local actors are expected to contribute at least 20% of labor costs, whereas equipment-intensive works will be financed by the National Road Fund.



2. Institutional component (US\$4.850 million)

- 2.11 The institutional component will be implemented in coordination with the NRRP. Its main purpose is to ensure the sustainability of the Program's investments. The institutional building effort concentrates on three main actors: (i) the MTPTC, which manages the secondary network and supports local stakeholders in their management of the tertiary network; (ii) local stakeholders (see paragraph 2.18) which manage the tertiary network; and (iii) private companies and local communities which execute rehabilitation and maintenance works.

a. The Ministry of Public Works

- 2.12 The proposed Program will finance a number of technical assistance (TA) services to strengthen the MTPTC, as described below. Specific attention will be given to on-the-job training and transfer of expertise, so as to increase the long-term impact of these TAs on the Ministry's institutional capacity. These activities will be written into the corresponding terms of reference and the consulting firms will be asked to budget them in their offer.

(i) Implementation of a plan to strengthen the Central Executing Unit of the MTPTC (US\$1,550,000)

- 2.13 A Central Executing Unit (CEU), will be set up within the Ministry's General Directorate for Roads and will be staffed, initially, with one engineer/technical expert [program coordinator], one institutional expert and one administrative/financial officer. The CEU is meant to become the Secondary and Tertiary Road Department of this directorate once the Ministry's restructuring is implemented under the NRRP.
- 2.14 To strengthen the CEU, the Program will finance, for the entire duration of the Program, the recruitment of:
- a. an international project management firm, which will provide specialized technical and administrative assistance to the CEU to: (i) review standards and specifications; (ii) prepare procurement procedures (prequalification, bidding, selection and contracting); (iii) review financial, accounting, auditing and budget procedures; (iv) update and implement the sector investment plan; and (v) prepare monitoring meetings and reports.
  - b. a high level institutional expert, who will assist the CEU in: (i) reviewing the competitive process for the selection of tertiary road projects; (ii) reviewing the modalities of local participation in the maintenance of tertiary road projects; and (iii) building consensus on best practices for local participation in tertiary road maintenance.

(ii) Implementation of a plan to strengthen the Decentralized Program Offices of the MTPTC  
(US\$2,350,000)

2.15 Decentralized Program Offices (DPOs) will be set up at the departmental level. Each DPO will be staffed with one technical expert and one administrative officer from the MTPTC's local office. The DPOs are intended to become the future Secondary and Tertiary Road Divisions of the MTPTC departmental offices.

2.16 To strengthen the DPOs, the Program will finance, for the entire duration of the Program, the recruitment of:

- a. a specialized firm, which will provide technical and administrative assistance to all DPOs to: (i) oversee rehabilitation works and supervise maintenance works; (ii) manage maintenance contracts with small companies and communities; (iii) provide technical training to small companies and communities; and (iii) prepare monitoring documents.
- b. one individual consultant in each DPO, who will provide community development expertise and assist in developing a partnership with local actors for the management of tertiary roads.

(iii) Implementation of an Environmental Unit within the MTPTC (US\$250,000)

2.17 An Environmental Unit (EU), initially staffed with one MTPTC specialist, will be established within the MTPTC to provide support to all current road projects. The Program will finance expatriate and local expertise to train the specialist and assist him in: (i) enforcing the environmental procedures defined in the Environmental Summary for project preparation, execution and maintenance; (ii) reviewing environmental impact studies of individual projects; (iii) reviewing mitigation measures in rehabilitation and maintenance contracts; and (iv) setting up training programs and community outreach programs geared toward agents and communities in charge of road rehabilitation and maintenance according to the terms of reference in the Environmental Summary.

b. Local Stakeholders (US\$700,000)

2.18 In the present document, the term "Local Stakeholders" refers to the institutions and persons who have a particular interest in a given road project and are willing to contribute to its maintenance <sup>4/</sup>. Local stakeholders consist of local authorities (municipalities and CASECs) and of other local actors which vary

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<sup>4/</sup> By contrast, local communities paid to execute road maintenance works are not considered local stakeholders.

for each tertiary road project, as pointed out in the institutional feasibility study (see Annex I-2). They may include grass-roots organizations, local NGOs, farmers, fishers, lorry drivers, craftsmen, merchants, hotel managers, etc.

- 2.19 The Program will finance, for the entire duration of each rural road rehabilitation and maintenance project (three years), the recruitment of a community development organization with a strong field presence to help local stakeholders mobilize to participate in project selection and management. Specific tasks will include: (i) identifying local priorities and formalizing project; (ii) setting up the Local Coordination Structure; (iii) negotiating the Triennial Maintenance Plan; and (iv) facilitating the implementation of the Triennial Maintenance Plan.

c. Private companies and local communities

- 2.20 Technical assistance and training services will be organized by the CEU to strengthen local engineering and construction companies. Assistance will cover the following areas: (i) feasibility studies; (ii) technical and environmental studies; (iii) rehabilitation works; and (iv) supervision of works. The feasibility of establishing a certification process controlled by the CEU and administered by the DPOs will be examined.
- 2.21 The DPOs will organize technical assistance, training and community outreach initiatives to strengthen the regional maintenance industry and the local communities which participate in labor-intensive maintenance works.

3. Dimensioning of the Program

- 2.22 As part of the NRRP, a National Transport Masterplan is being drafted. A preliminary step to the preparation of the rural module of this masterplan was recently carried out. This consisted of a global survey of the non-primary network which produced a preliminary inventory of potential projects. 2,000km of secondary and tertiary roads were identified and characterized by the Directions Départementales of MTPTC in terms of simple criteria corresponding to the goals of the program: traffic (motorized and non motorized); population; number of schools; health facilities; markets and tourism sites.
- 2.23 100km of secondary and 200km of tertiary road projects were then pre-selected based on the criteria above, taking into account any synergies with complementary projects (primary road rehabilitation, agricultural projects). This sample of roads covers the nine Départements of Haiti and is representative of the variety of characteristics to be found in secondary and tertiary roads throughout the country. Pre-selected projects were then screened according to technical, environmental, financial and institutional criteria. 32km of secondary and 49km of tertiary road projects in the three Départements were eventually selected for the first year

of the Program and will serve as pilot projects. The main criterion for selecting secondary roads was the economic benefit yielded by savings in vehicle operating costs. For tertiary roads, the major criteria were prospects for local contribution to road maintenance, and rehabilitation and maintenance costs.

- 2.24 The Program was dimensioned based on the analysis of the first-year sample and on the appraisal of the institutional capacity of the main participants. Program dimensioning reflects: (i) the financial capacity of local communities to maintain road infrastructure; (ii) the expected capacity of the future Road Maintenance Fund; (iii) the limited capacity of the local engineering and construction industry; (iv) the absorption capacity of the MTPTC; and (v) the availability of FSO resources from the Bank. 200km of secondary roads (14.5% of the secondary network) and 300km of tertiary roads (11.6% of the tertiary network) will be rehabilitated with the resources of the Program.

C. Program cost and financing

1. Sources of financing

- 2.25 The total budget of the Program is of US\$55 million. The Bank will finance US\$50 million through the Fund for Special Operations. The Organization of Petroleum Exporting Countries (OPEC), will finance US\$4 million. The OPEC's Board approved the operation in December 1996, based on the Bank's feasibility studies. It is recommended that, prior to first disbursement, the Borrower submit evidence that the agreement with OPEC has entered into effect. The GOH will contribute US\$1 million.

- 2.26 The conditions of the Bank's and the OPEC's financing are summarized in the following table.

TERMS AND CONDITIONS OF THE LOANS	IDB	OPEC
Resources (US\$000)	50,000	4,000
Amortization	40 years	17 years
Grace period	10 years	5 years
Interest rate	1% 10 years 2% thereafter	2%
Credit fee (on undisbursed balance	0.5%	0%
Inspection	1%	1%

2. Cost table

- 2.27 Costs include: (i) Program administration costs; (ii) feasibility and engineering studies; (iii) rehabilitation and maintenance works; (iv) technical and administrative assistance; (v) a provision for cost escalation; and (vi) financial costs.

COST TABLE (in US\$ thousands)	IDB	OPEC	LOCAL	TOTAL
1. Program administration	<u>500</u>		<u>1,000</u>	<u>1,500</u>
1.1 CEU and DPOs staffing			1,000	1,000
1.2 Equipment	350			500
1.3 Audits	150			
2. Investment Component	<u>42,550</u>	<u>3,800</u>		<u>46,350</u>
2.1 Pre-investment studies	1,950			1,950
2.2 Civil Works	38,800	3,800		42,600
2.2.1 Rehabilitation RN#3	8,200	3,800		12,000
2.2.2 Rehabilitation Secondary	12,000			12,000
2.2.3 Rehabilitation Tertiary	18,000			18,000
2.2.4 Maintenance Secondary	250			250
2.2.5 Maintenance Tertiary	350			350
2.3 Supervision	1,800			1,800
3. Institutional component	<u>4,850</u>			<u>4,850</u>
3.1 Institutional Strengthening CEU	1,550			1,550
3.2 Institutional Strengthening DPOs	2,350			2,350
3.3 Institutional Strengthening of Local Stakeholders	700			700
3.4 Environmental Component	250			250
4. Financial Costs	<u>2,100</u>	<u>200</u>		<u>2,300</u>
4.1 Interest	1,200	200		1,400
4.2 Credit Commission	400			400
4.3 FIV	500			500
TOTAL	<u>50,000</u>	<u>4,000</u>	<u>1,000</u>	<u>55,000</u>
Percentage	91%	7%	2%	100%

2.28 Program costs have been estimated based on the costs of the sample of pre-selected roads, using unit prices in effect as of November 15, 1996 and the official exchange rate of that date. Imported materials and consulting services involving foreign firms have been assessed using average international prices whereas labor, local materials, equipment rental and local services have been estimated using the current local market price.

### III. PROGRAM EXECUTION

#### A. Borrower and Executing Agency

- 3.1 The Borrower will be the Government of the Republic of Haiti (GOH), and the Executing Agency will be the Ministry of Public Works, Transport and Communications (MTPTC).

#### B. Program organization and management

- 3.2 The GOH has defined the following institutional arrangements for the management of secondary and tertiary roads: (i) the management of the secondary network is the responsibility of the MTPTC; (ii) the management of the tertiary network is the responsibility of local authorities with the support of the MTPTC; and (iii) rehabilitation and maintenance works are performed by private companies and local communities. The Program is managed according to these institutional arrangements.
- 3.3 The operational arrangements ruling Program execution are described here below. They will be specified in the Program's operating regulations. It is recommended that, prior to the first disbursement, the Borrower submit evidence that the operating regulations have been finalized and have entered into effect.

#### 1. The MTPTC

##### a. Central Executing Unit

- 3.4 The execution of the proposed Program will be coordinated by a Central Executing Unit (CEU) located within the Ministry's General Directorate for Roads. The CEU is meant to become the "Secondary and Rural Road Department" of this directorate when the MTPTC's restructuring is implemented.
- 3.5 The CEU will act as a focal point for secondary road planning and programming and serve as a channel for earmarked funds. Specific tasks will include: (i) managing secondary road inventory and updating network classification; (ii) defining and reviewing technical standards and administrative procedures; (iii) managing the Sector Investment Plan, which includes handling of engineering and works contracts; (iv) coordinating activities with other ministries (Agriculture, Environment, Planning) and various donors; and (v) reviewing Program performance against agreed indicators.
- 3.6 The CEU will be responsible for defining policy and planning the overall tertiary road sector. The CEU will: (i) define and review technical standards and administrative procedures; (ii) set guidelines for the competitive process for selecting tertiary roads and ensure overall coordination; (iii) manage feasibility studies, technical designs and works contracts for the tertiary road

projects; (iv) define and build consensus on best practices for local participation in tertiary road maintenance; and (v) review Program performance against agreed indicators.

b. Decentralized Program Offices

- 3.7 The CEU will rely on the regional branches of the MTPTC (Directions Départementales), which will act as Decentralized Program Offices (DPOs). The DPOs are meant to become the future "Secondary and Rural Road Divisions" of the Directions Départementales.
- 3.8 With regard to the management of the secondary network, the DPOs will be responsible for: (i) updating the road inventory; (ii) participating in the programming process; (iii) overseeing rehabilitation and maintenance works; and (iv) managing maintenance contracts with small regional companies and local communities.
- 3.9 With regard to the management of the tertiary network, the DPOs will be responsible for: (i) informing the local stakeholders about the Program and the competitive process; (ii) pre-screening local proposals; (iii) negotiating Triennial Maintenance Plans for the selected projects; (iv) overseeing rehabilitation works; and (v) implementing the Triennial Maintenance Plans.
- 3.10 The roads to be rehabilitated during the first year of the Program are located in three Départements. DPOs will initially be set up in these three Départements and will also assist neighboring Directions Départementales in the selection of new projects. As the Program takes off, DPOs will progressively be established in other Départements. 5/

c. Environmental Unit

- 3.11 The Environmental Unit to be established by the Program will be in charge of: (i) enforcing the Program's environmental procedures for project selection, preparation, execution and maintenance; and (ii) setting up training programs and community outreach programs geared toward agents and communities in charge of road rehabilitation and maintenance.

2. Local stakeholders

- 3.12 Local stakeholders will be responsible for defining local priorities and proposing tertiary road projects to their Direction Départementale. Once a project has been selected, and before the rehabilitation works can start, a Local Coordination Structure (LCS) will be established, the aim of which will be to ensure coordination between the DPOs, local branches of other line-ministries, local authorities, and other local stakeholders. One of the outputs of the dialogue process within the LCS will be the

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5/ Haiti has a total of nine Départements.

establishment of a Triennial Maintenance Plan (TMP) which earmarks the respective contributions (both financial and in kind) of local stakeholders and of the MTPTC to project maintenance. The signing of a Triennial Maintenance Plan by the LCS and the MTPTC will be a pre-requisite for the first disbursement of every tertiary road rehabilitation project.

### 3. Private companies and communities

- 3.13 Feasibility studies, engineering designs and works supervision will be contracted out to specialized engineering companies and rehabilitation works will be contracted out to construction companies through competitive tenders. Supervision services will be contracted before the initiation of the bidding process for the corresponding works. Road segments will be grouped by geographical sector to reach economies of scale and foreign companies will be encouraged to bid either independently or in association with local companies to increase competition and lower costs. Equipment-intensive maintenance activities will be contracted out to small regional companies to develop the regional private road maintenance industry. Whenever appropriate, labor-intensive maintenance works will be contracted out to local communities.

#### C. Selection of roads

- 3.14 The definition of an annual investment plan for secondary and tertiary roads will involve various actors: (i) local stakeholders will propose tertiary road projects; (ii) DPOs will screen tertiary road projects and propose secondary road projects; (iii) the CEU will perform feasibility studies and finalize the investment plan.

##### 1. Local Stakeholders 6/

- 3.15 Local stakeholders will propose tertiary road projects to the DPOs. The project sponsors shall include the local authorities concerned by the road, as well as the local stakeholders which are to contribute to road maintenance. The proposal will include the following information: (i) a description of the road and of its state; (ii) a review of rehabilitation and maintenance works performed on the road during the last three years, as well as the local contribution to these works; (iii) an identification of the local stakeholders which sponsor the project, explaining their motivations and potential contribution; and (iv) a proposal for local contribution to road maintenance.

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6/ As explained in paragraph 2.17, local stakeholders include local authorities and other local actors with a specific interest in the project, such as grass-roots organizations, local NGOs, farmers, fishers, lorry drivers, craftsmen, merchants, hotel managers, etc.



## 2. Decentralized Project Offices

- 3.16 DPOs will contribute to tertiary road project identification and screening by: (i) promoting the Program to local stakeholders; (ii) assisting local stakeholders in formalizing the projects; (iii) assessing the feasibility of the proposed local contribution to project maintenance.
- 3.17 In addition, DPOs will propose secondary road projects based on the following criteria: (i) the estimated cost of rehabilitation (taking into account a number of simple engineering parameters such as the quantity of river crossings, slopes and special drainage requirements); (ii) the present condition of the road; and (iii) the traffic level.
- 3.18 The DPOs will liaise with the regional branches of the Ministry of Planning, which is in turn responsible for identifying potential synergies among secondary and tertiary road projects, as well as regional programs managed by other line ministries (agriculture, tourism, education, health).

## 3. Central Executing Unit

- 3.19 The CEU will contract out feasibility studies of the secondary and tertiary road projects proposed by the DPOs to the private sector. Feasibility studies will include: (i) standard technical studies; (ii) an environmental impact assessment; (iii) an estimation of rehabilitation and maintenance costs, including the costs of the environmental impact mitigation measures; (iv) an economic study based on vehicle operating costs (VOC) savings for secondary roads and tertiary roads with sufficient level of traffic (average daily traffic (ADT) > 50 veh./day); and (v) the collection of key socio-economic data (population, social infrastructure, agriculture, tourism).
- 3.20 The CEU will then select the secondary and tertiary road projects to be performed during the next phase of the Program. The major criterion for selecting secondary roads will be the result of the economic feasibility study: projects with an IRR of less than 12% will be rejected.
- 3.21 The selection process for tertiary roads will consist of three steps:
  - a. Projects will initially be screened based on environmental criteria, as established in the environmental procedures to be approved by the Committee on Environment and Social Impact (CESI); international technical and environmental standards will then be used to design rehabilitation projects;
  - b. The CEU will compare the economic "viability" of projects using a ranking system; the only two inputs of this system will be projected rehabilitation and maintenance costs and local

willingness to contribute to maintenance (as an indicator of the project benefits);

- c. Finally, other criteria will be incorporated in a casuistical manner, only to prioritize acceptable projects; they include: (i) the role of the project considered vis-à-vis the rest of the network; (ii) synergies with other development projects; and (iii) socio-economic criteria (facilitated access to schools, markets, clinics or severely isolated places).

D. State of preparation of the Program

- 3.22 Pre-investment studies have been performed for 102km of secondary and 189km of tertiary roads. For each pre-selected road, technical, environmental and economic studies have been completed, and bidding documents have been prepared.
- 3.23 A field study that examines the feasibility of local participation in tertiary road maintenance has been performed for all pre-selected tertiary road segments. However, the project team and the MTPTC made a deliberate decision not to initiate the establishment of the Local Coordination Structures for the first-year rural road projects. Certainly, any local stakeholders that would have committed themselves to road maintenance would have been discouraged by the time the Program was finalized, approved by the Bank, and ratified by the Haitian Parliament.

E. Monitoring, reporting and project supervision

1. Indicators

- 3.24 Indicators for the monitoring of the Program include: (i) physical indicators (number of km rehabilitated and number of kilometers maintained); (ii) financial indicators (cost of rehabilitation per km, cost of maintenance per km, amount of national resources mobilized, amount of local resources mobilized); (iii) institutional indicators (number of DPOs operational, number of LCSs operational, number of TMPs that failed after one, two and three years). The logical framework presented in Annex III-1 quantifies these indicators.

2. CEU monitoring and reporting

- 3.25 During the first quarter of each year, and up to five years after the last disbursement, the CEU shall prepare an annual maintenance report. This report shall indicate: (i) the total amount of resources disbursed by the National Road Maintenance Fund (NRMF) during the past year; and (ii) for each road project rehabilitated by the Program, the nature and amount of maintenance works performed as well as the respective contributions of the NRMF and the local stakeholders.

- 3.26 During the third quarter of each year, the CEU shall prepare the annual Program implementation plan for the year to come, breaking down the proposed budget by Program component.

### 3. Bank supervision

- 3.27 The Country Office will be involved in Program supervision on a continuous basis. Upon ratification of the loan contract by the Parliament, COF/CHA will hire an infrastructure specialist who will dedicate a significant part of his/her time to the first two years of the proposed Program. This Program Facilitator will monitor the progress of the institutional build-up of the Program and will be responsible for proposing the necessary adjustments. Specific tasks will include assisting the Haitian Authorities in: (i) implementing the Road Fund; (ii) setting up Program management structures; (iii) defining and implementing the first Triennial Maintenance Plans; (iv) setting up the selection procedure for new projects; and (v) preparing the Program review meetings.
- 3.28 During the second and fourth quarters of each Program year, the Bank and the Government will conduct a joint Program review. These reviews will be performed at the same time as the NRRP semestrial reviews. Participants will include the CEU, the operating DPOs, pertinent consultants and NGOs involved in the technical assistance component, representatives of other ministries, and a sample of beneficiaries. The Program implementation schedule and monitoring indicators will be updated by mutual agreement during the semestrial reviews. In the event of unsatisfactory progress, the Government will prepare remedial action plans satisfactory to the Bank within two months of the review.
- 3.29 The CEU shall furnish the Bank, at least two weeks before the arrival of the semestrial review mission, with a report describing: (i) the Program's physical achievements (quality and cost of works); (ii) the compliance with operating regulations (eligibility criteria, procurement, disbursement and environmental procedures); (iii) the level of performance of the Program's structures (CEU, EU, DPOs, LCSs); and (iv) the achievement of the performance indicators. In addition, the CEU will provide the maintenance report (see paragraph 3.25) for the second quarter review, and the annual implementation plan (see paragraph 3.26), for the last quarter review.

### 4. External audits

- 3.30 Performance audit exercises will be carried out on a yearly basis by an independent firm acceptable to the Bank to be hired with Program resources. Technical auditors will examine a sample of sub-projects under execution by the DPOs. The performance audit will focus on the execution of the projects's physical components (quality and costs of works), the compliance with Program procedures, the level of the performance indicators, and the effectiveness of on-the-job training.

- 3.31 Additionally, and in line with the Bank's standard procedures, the Borrower shall present yearly program financial statements duly certified to the Bank's satisfaction.

5. Ex-post evaluation

- 3.32 The data generated through CEU monitoring and external audits will be available for the Program ex-post evaluation. The overall Program success indicator for the ex-post evaluation should be the proportion of projects rehabilitated by the Program that are still maintained adequately five years after completion.

F. Procurement

- 3.33 Procurement of works, goods and services with Bank funds will be carried out in accordance with Bank guidelines. A tentative procurement schedule is presented in Annex III-2.

1. Civil works

- 3.34 International Competitive Bidding (ICB) will be required for any contract exceeding US\$1 million equivalent. National Competitive Bidding (NCB) procedures acceptable to the Bank will be used for work contracts above US\$ 250,000. Procurement of works under the above mentioned limits will follow national legislation procedures.
- 3.35 Works estimated to cost US\$250,000 equivalent or less per contract might be procured under fixed price contracts awarded on the basis of quotations obtained from no less than three qualified domestic contractors in response to a written invitation. All bids received will be opened in public on a predetermined date to be stated in the bidding document. The award will be made to the contractor who offers the lowest price quotation for the required work, and who has the experience and resources to successfully complete the contract.
- 3.36 Procurement of small maintenance works estimated to cost less than US\$50,000 may be carried out on the basis of standard costs through direct contracting of community groups or small regional companies involved in road maintenance. Under these conditions, a single contractor will not handle more than three contracts simultaneously and, in the aggregate, these contracts, to the named contractor, will not exceed US\$250,000 during the Program's life.

2. Goods

- 3.37 Procurement of goods will be limited to the purchase of computer and office equipment, vehicles and small tools. ICB will be required for purchases above US\$250,000.

### 3. Consultant services

- 3.38 Consultants will be hired following the established Bank's procedures. ICB will be required for contracts above US\$200,000. The services include feasibility studies, engineering designs, construction supervision, technical assistance, community development, training courses and auditing services.

### G. Period of execution and payment schedule

#### 1. Execution period

- 3.39 The execution period for the Program will be four years from the effective date of the loan contract and includes the time necessary to comply with the conditions previous to first disbursement and to implement procurement procedures for works, goods and services.

#### 2. Disbursement schedule

- 3.40 A tentative disbursement schedule is proposed below. The annual rehabilitation goals taken in consideration will be reviewed once the results of the first year are evaluated.

DISBURSEMENT SCHEDULE (in thousands of US\$)					
INVESTMENT CATEGORY/YEAR	Year 1	Year 2	Year 3	Year 4	TOTAL
1. Administration	475	325	400	300	1,500
2. Investment Component	14,850	13,150	9,100	9,250	46,350
3. Institutional Component	850	1,100	1,400	1,500	4,850
4. Financial Costs					2,300
TOTAL					55,000

### 3. Advance of funds

- 3.41 Advance payments will be needed for both consulting services and works contracts. It is therefore recommended that, once the conditions previous to first disbursement have been met, funds be advanced in the amount of up to the equivalent of 10% of total amount of the proposed loans, at the request of the Government.

#### IV. PROGRAM VIABILITY

- 4.1 Certain conditions must be realized if the proposed Program is to contribute to the four development objectives mentioned in paragraph 2.1. First, resources from the Program will need to be directed efficiently towards the rehabilitation of the secondary and rural road infrastructure; secondly, the rehabilitated infrastructure will need to be maintained; and finally, the maintained infrastructure will need to assert its role within the "rural development chain" of the country. Correspondingly, the viability of the Program will depend on three critical factors: (i) the institutional capacity of the MTPTC and local stakeholders to execute the proposed Program; (ii) the establishment of the National Road Maintenance Fund and the mobilization of local resources towards maintenance; and (iii) the outcome of other rural development oriented policies. Before presenting the more traditional aspects of program feasibility (technical, economic, and environmental), this chapter will present an analysis of each of the critical factors that influence program viability.

A. Institutional capacity of the MTPTC and local stakeholders

- 4.2 The Bank's field office in Haiti, through the Program Facilitator, will have an important role in monitoring the progress of the institutional build-up of the Program, and will be responsible for proposing the necessary adjustments.

1. MTPTC

- 4.3 The new institutional arrangements within the road sector will help to shift the Ministry's role away from one of execution towards one of planning, regulation and management. This re-organization will involve assembling a smaller, but better-trained staff, with a core group of highly motivated professionals. In implementing this reorganization, the main challenge for the MTPTC (and the public sector in general) will be to retain its most skilled staff at a time where private sector competition has been responsible for an un-precedented brain-drain.
- 4.4 The delicate task of creating a smaller public sector that offers more competitive salaries is outside the scope of the proposed Program. Hopefully, this issue will be directly addressed by the Public Sector Modernization Program, being finalized under the leadership of the World Bank. However, to help anchor the core group, the Program will provide non financial incentives in the form of access to high level training and better work equipment.
- 4.5 The institutional capacity of the Ministry remains limited and efforts have been made to simplify Program procedures and limit the institutional demands on the Ministry. In particular, the operational requirements of the Program on the MTPTC will be

significantly alleviated by the presence of the international project management firm which will bring technical assistance to the CEU and by the contracting out of the yearly performance audits.

## 2. Local stakeholders

- 4.6 The expansion of the absorption base through the involvement of local stakeholders is one of the surest means to increase the country's overall absorption capacity. To this end, the proposed Program will rely intensively on local structures (DPOs, LCSs) and local stakeholders.
- 4.7 At the same time, it is important to recognize that the institutional capacity of local stakeholders remains limited, particularly because they have always been kept out of the institutional loop revolving around Port-au-Prince. One of the specifics of the proposed Program will be to try and bridge the gap between formal institutions (local branches of the Ministry, municipalities) and non-formal organizations (NGOs, grassroots organizations, farmers groups) by enabling them to meet around a common project within a flexible structure (the Local Coordination Structure). A major determinant of the success of this endeavor will be the community development support that the Program provides to local stakeholders. This component will be adjusted based on the evaluation of the process leading to the execution of the first year projects.

## 3. Private sector

- 4.8 The activities of the local construction industry have declined dramatically during the embargo. With the present reconstruction effort, the local private sector has started to rebuild capacity. This process is being facilitated by numerous co-operation agreements between local and international engineering and construction companies, which have helped relieve bottlenecks and have facilitated technology transfers.

## B. Prospect for maintenance

- 4.9 The overwhelming lesson of the Bank's and other donors' past experience with regards to the rehabilitation of non-primary road networks is that lack of maintenance is the most serious threat to project sustainability. In particular, ex-ante commitments by beneficiary governments to allocate sufficient funding to project maintenance have proven of little help in a setting where the Bank is reluctant to resort to drastic measures to enforce such commitments ex-post.
- 4.10 At the national level, the Program's approach to exerting ex-ante rather than ex-post enforcement of GOH maintenance commitments lies in its recommendation that the approval by Parliament of the law establishing the National Road Maintenance Fund be a condition

prior to the signature of the first rehabilitation works contracts. As explained in paragraph 1.17, this is expected to happen before the end of year 1997, so as not to delay the Program. It is also recommended that the Fund maintain a level of resources that is not inferior to that specified in paragraph 1.15. Failure to reach these targets should result in the interruption of the commitment of Program resources.

- 4.11 At the local level, it is more difficult to move from an ex-post towards an ex-ante approach to enforcement since local stakeholders often come with little more than their interest for the project. An option considered was to require local stakeholders to deposit a small sum of money as a collateral for good maintenance (a sort of maintenance performance bond), but the project team dismissed the idea as difficult to handle and often simply not affordable for local beneficiaries. The option that the project team has adopted consists of having the central contribution to maintenance for year  $n + 1$  tied to the availability of local resources for year  $n$ . This feature will be written in the operating regulations of the Program: should local stakeholders fail to bring their share of the pre-agreed Triennial Maintenance Plan a given year, the Road Maintenance Fund would not bring its share the next year.
- 4.12 The success of this deterrent will depend on the rigor with which it is applied by the Central Executive Unit and it is recommended that failure to comply with this rule on the part of the MTPTC result in the interruption of the commitment of Program resources. The ex-ante analysis of the local willingness to contribute to road maintenance will play a major role in ensuring that the failure rate is as low as possible. In particular, for each road considered, the trustworthiness of the Triennial Maintenance Plan will be assessed ex-ante on the basis of former maintenance records and availability of local resources. 7/
- 4.13 While the community development assistance to be provided by NGOs with significant local experience should help prevent such situations, it must be recognized that the proposed system may accelerate road deterioration when local stakeholders do not comply with the TMP. For expensive projects and when feasible, it is suggested that the project be rehabilitated in two phases, and that execution of the second phase be subject to local stakeholders abiding to the TMP for the first phase.

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7/ When the local stakeholders which sponsor the project and contribute to maintenance are also those who will execute the maintenance works, an additional difficulty is that they may be tempted to contribute to road maintenance not out of genuine interest for a road in good condition, but, rather, because of the direct salary benefits they will receive from externally provided financial resources. To avoid this, the local contribution must be significant enough to offset the differential between the local opportunity cost of labor and the Program salaries [see also paragraphs 4.30 thru 4.33]. In other terms, the net financial cashflow of local stakeholders has to remain negative.



C. External determinants

- 4.14 The success of the proposed Program in contributing to the GOH's development objectives will also depend on the success of other programs in removing structural obstacles to rural development. Among the most pressing are the issues of land titling and water resource management. These issues are being addressed by two specific IDB-financed technical cooperations that will feed into the preparation of the Intensification of Agriculture Operation (HA0016). Special attention will be given to ensure that the proposed Program would not exacerbate such conflictive issues.
- 4.15 With regard to the decentralization policy, the proposed Program will not need the long-awaited decentralization laws to be in place since: (i) the proposed Program has been designed to operate within the existing institutional arrangements ruling network management; and (ii) the mechanism proposed to finance tertiary road maintenance takes into account the existing level of local resources. However, the GOH's continued commitment to decentralization will be key to ensuring the success of the Program, since local authorities will need to play a major role within Local Coordination Structures.

D. Other Aspects

1. Technical feasibility

- 4.16 From the technical point of view, the rehabilitation and maintenance works to be carried out as part of the proposed Program do not present any major difficulties, and the capacity and experience required to carry them out can be developed rapidly in both the public and the private sectors. The Program will provide for specialized assistance to effect technology transfer. Proven practices and optimal technical alternatives have been chosen. The designs and specifications for the projects making up the analyzed sample provide the information that contractors need to know when they draw up proposals and assume responsibilities and obligations under the respective contracts.
- 4.17 The team has prepared the estimated quantities and budgets, within permissible margins of precision, which will define the contracts for the works on each road. A contingency allowance equal to 10% of the cost of the works was factored into the table of Program costs and the terms of reference for the supervision services include the obligation on the part of the supervisors to verify and adjust the work volumes before a contractor begins each of the activities called for in his contract.

## 2. Economic feasibility

### a. Secondary roads

- 4.18 For the first year projects involving secondary roads or tertiary roads with sufficient level of traffic (Average Daily Traffic - ADT > 50 vehicles/day), a conventional economic appraisal based on the World Bank's Highway Design and Maintenance Model (HDM-III) was carried out. The period of analysis, corresponding to the design life span of the roads, was set at 15 years. The time of road users was not valued. Market prices were applied <sup>8/</sup>. Periodic maintenance requirements were determined to consist of surface re-grading every six months and regravelling every six years.
- 4.19 The Internal Rates of Return (IRR), of the first year projects have been found to range between 14% and 40%, assuming a conservative annual increase in traffic of 5%, equivalent to the average annual increase in GDP. The project with an IRR of 40% involves a 450 veh./day road, currently in bad condition, yet easy to repair due to its topographic characteristics. Four projects were found to have an IRR in the range of 0 to 6%, mostly because the technical options proposed were extremely costly (numerous bridges and/or special drainage works). These projects were taken out of the first year program and further analysis of technical alternatives will be performed.
- 4.20 A sensitivity analysis was carried out on the eligible first year projects. The main parameters likely to vary are: (i) the price of gasoline; (ii) the traffic growth rate; and (iii) construction costs. With a 20% increase in construction and maintenance costs, all first year projects but two were found to have an IRR of 12% or above. Detailed economic analyses are available in the technical files of the operation with RE2/FI2.

### b. Roads with low traffic level

- 4.21 With regards to very low traffic roads (ADT < 50 vehicles/day), surpluses realized by agricultural producers (rather than savings on vehicle operating costs) are usually used to estimate project benefits. However, past experience suggests that conventional cost/benefit analysis methods are very costly and highly unreliable in the absence of reliable data on the agricultural production. Therefore, a ranking system based on a set of simple criteria will be used. This system takes into account technical, environmental, socio-economic and institutional criteria as presented in Chapter III.

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<sup>8/</sup> Shadow pricing was not carried out for lack of reliable information on shadow prices in Haiti. Furthermore, trade tariffs and quotas have been almost entirely lifted. The only markets susceptible to remain affected by market distortions are that of cars and spare parts, for which information is non-existent.

- 4.22 The main criterion used to assess the direct economic interest of local stakeholders in road rehabilitation is the local willingness to contribute to maintenance, measured both in terms of the proportion of the maintenance costs that local stakeholders commit to contribute and in terms of the expected reliability of such a commitment. A 20% minimum participation to labor costs (valued at the legal minimum wage) will be asked from local stakeholders. This contribution may be made in cash, in nature (donated labor and/or materials), or both.
- 4.23 To take into account investment costs in the screening process, rehabilitation costs per kilometer will be weighed against local willingness to contribute to maintenance. Projects with a higher ratio [local willingness to contribute over rehabilitation costs] will be given priority.

c. Distributive impact

- 4.24 **Impact on the poor.** The proposed Program is expected to improve the living conditions of an estimated 750,000 rural residents. The proposed Program is expected to have a stronger impact on the poor, since 65% of the poor in Haiti live in rural areas and 80% of the rural residents are below the poverty level.
- 4.25 **Impact on women.** The Program is not designed to be gender specific. However, it will have a positive impact on women because it will facilitate the transport and marketing of agricultural products, for which women play the leading role, and because women and children will be the main beneficiaries of improved access to social services, notably health posts.

3. Environmental feasibility

- 4.26 The Environment Management Committee (EMC), reviewed and approved the Environmental Brief in its session of July 11, 1996, and classified the Program as category III operation. The Committee on Environment and Social Impact approved the Program's Environmental Summary at its session of February 4, 1997. The main potential negative impact of the proposed Program would result from facilitated access to forested areas, which could lead to unregulated deforestation. Given the seriousness of this problem in Haiti, it was decided that the proposed Program would simply not finance the rehabilitation of roads in such areas.
- 4.27 Environmental procedures for project selection, preparation, execution and maintenance have been prepared, and institutional mechanisms to control the enforcement of these procedures have been designed. The community development component of the Program will include an environmental training program geared toward all parties involved in road works as well as community outreach programs for communities involved in tertiary road maintenance.

- 4.28 Environmental impact assessments have been performed by engineering companies and reviewed by an international and a local consultant for the 300 km of preselected road projects. Projects with potential effects on forested areas were screened out while mitigation measures were designed (and will be written into the corresponding works and maintenance contracts) for more straightforward impacts.
- 4.29 It is recommended that the following environmental conditions be written into the loan contract: (i) the strict enforcement of environmental procedures during the entire duration of the Program; and (ii) the establishment and training of an environmental unit within the MTPTC before the first disbursement of Program resources.

E. A delicate risk: impact of the Program on rural employment

- 4.30 One of the most obvious negative impacts of the current reconstruction efforts financed by the international community on the Haitian economy is the distortion it tends to induce in the labor market. The employment generated by most internationally financed works programs integrates, even if temporarily, the formal economy, and thus is subject to the Government's regulations on minimum wages, not to market mechanisms. As a result, the salaries paid to the unskilled labor force under such programs are sometimes as much as twice or three times higher than that of the informal economy. Internationally financed works programs are therefore introducing temporary distortions and dislocations which undermine otherwise viable economic activities necessary for the long term.
- 4.31 This is of little importance when the internationally financed jobs are sustainable, or when the workers attracted to these jobs come from a sector of the informal economy to which it is relatively easy to return. However, this "migration phenomenon" can prove extremely disruptive when the sectors of origin require a high level of internal organization and obey specific cycles. This is exactly the case of the agriculture sector, and works programs may be accused of structurally disorganizing agricultural production if they employ labor-intensive techniques in rural areas.
- 4.32 The proposed Program cannot address the mentioned issue on its own. However, in order to avoid exacerbating this problem, it was decided that firms, rather than communities, will be contracted for rehabilitation works. Employment that is generated through rehabilitation projects should therefore, as a priority, benefit existent construction firms.

- 4.33 On the other hand, local communities may participate in maintenance agreements with minimum disruption to the local labor market. For one thing, the recurrent nature of maintenance works creates a sustained demand for labor across time. Secondly, the differential between the opportunity cost of local labor and the minimum wage will be attenuated when local, in-kind contributions to maintenance costs come in the form of free labor. Finally, the schedule for maintenance works will be adapted to take into consideration agricultural activities.

## LOGICAL FRAMEWORK

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p><b>GOALS</b></p> <p>Contribute to the GOH's rural development strategy:</p> <ol style="list-style-type: none"> <li>1. facilitate the integration of remote and isolated areas into the national community;</li> <li>2. improve access for the rural population to basic social services;</li> <li>3. support rural economic activity by facilitating the transportation of goods and the access to external and domestic markets.</li> <li>4. support development of tourism by facilitating access to sites of interest.</li> </ol>	<p>Global indicators that would measure Program contribution to developmental goals (such as the increase in agricultural production for goal #3) are likely to be influenced by a number of factors external to the Program.</p> <p>It is therefore proposed to monitor the Program's overall contribution through:</p> <ol style="list-style-type: none"> <li>1. the VOC savings generated for secondary roads [as computed by HDM-III within the economic feasibility study to be carried out for each secondary road project]; and</li> <li>2. the percentage of tertiary roads that are still maintained adequately five years after their rehabilitation; [a 70% "success rate" should be considered an overall success for the tertiary road component of the Program.]</li> </ol>	<ol style="list-style-type: none"> <li>1. Economic feasibility studies and annual maintenance report by CEU; external audits</li> <li>2. Annual maintenance report by CEU; external audits</li> </ol>	

<b>PURPOSE</b>	[Y = Program Initiation Year]		
The country's secondary and tertiary road infrastructure is improved in a sustainable way.	<p><b>A. Secondary roads</b></p> <p>A.1 Overall number of kilometers of secondary roads in good condition  Y+1: 180 + 40 (see note 1/)  Y+2: 180 + 94  Y+3: 180 + 148  Y+4: 180 + 200</p> <p>A.2 Yearly allocation of central resources to secondary road maintenance  Y+1: US\$ 900,000  Y+2: US\$1,700,000  Y+3: US\$2,000,000  Y+4: US\$2,500,000</p> <p><b>B. Tertiary roads</b></p> <p>B.1 Overall number of kilometers of tertiary roads in good condition  Y+1: 320 + 67 (see note 2/)  Y+2: 320 + 133  Y+3: 320 + 217  Y+4: 320 + 300</p> <p>B.2 Yearly allocation of central resources to tertiary road maintenance  Y+1: US\$ 800,000  Y+2: US\$1,700,000  Y+3: US\$2,000,000  Y+4: US\$2,500,000</p> <p>B.3 Yearly allocation of local resources to tertiary road maintenance  Y+1: US\$ 0  Y+2: US\$ 26,800  Y+3: US\$ 53,200  Y+4: US\$ 86,800  Y+5: US\$ 120,000</p>	<p>A.1 CEU reports and external audits</p> <p>A.2 Ministry of Finance</p> <p>B.1 CEU reports and external audits</p> <p>B.2 Ministry of Finance</p> <p>B.3 CEU reports and external audits</p>	<p>Complementary projects are implemented for:</p> <ul style="list-style-type: none"> <li>- Social services</li> <li>- Agriculture</li> <li>- Tourism.</li> </ul>

1/ The present number of kilometers of secondary roads in good condition is 180. The assumption made here is twofold: (i) the Program's rehabilitation targets (as spelt out in OUTPUTS B.1.1) are met; and (ii) the roads that are presently in good condition get maintained and do therefore not deteriorate.

2/ Similarly, the present number of kilometers of tertiary roads in good condition is 320 and the assumption made here is twofold: (i) the Program's rehabilitation targets (as spelt out in OUTPUTS B.3.1) are met; and (ii) the roads that are presently in good condition get maintained and do therefore not deteriorate.

<p><b>OUTPUTS</b></p> <p><b><u>A. Institutional component</u></b></p> <p>A.1 Implementation of a plan to strengthen the CEU</p> <p>A.2 Implementation of a plan to strengthen the DPOs</p> <p>A.3 Implementation of an EU within the MTPTC</p> <p>A.4 Implementation of a plan to strengthen LCSs</p> <p>A.5 Implementation of a plan to strengthen local private companies and communities</p>	<p>A.1 CEU operational</p> <p>A.2 Number of DPOs operational Y+1: 3 Y+4: between 3 and 9</p> <p>A.3 EU operational</p> <p>A.4 Number of LCSs operational Y+1: 4 Y+2: 8 Y+3: 14 Y+4: 20</p> <p>A.5 Number of local companies and communities involved Y+1: 4 Y+2: 8 Y+3: 14 Y+4: 20</p>	<p>A.1 CEU reports</p> <p>A.2 CEU reports and external audits</p> <p>A.3 CEU reports</p> <p>A.4 CEU reports and external audits</p> <p>A.5 CEU reports and external audits</p>	<p>Complementary rehabilitation projects are implemented within the institutional framework established by the proposed Program and maintenance of these projects performed adequately.</p>
<p><b><u>B. Investment component</u></b></p> <p>B.1 Rehabilitation of secondary roads</p> <p>B.2 Maintenance of secondary roads</p>	<p>B.1.1 Number of kilometers of secondary roads rehabilitated Y+1: 40 Y+2: 94 Y+3: 148 Y+4: 200</p> <p>B.1.2 Cost per kilometer rehabilitated (average: US\$60,000)</p> <p>B.2.1 Number of kilometers of secondary roads maintained Y+1: 0 Y+2: 40 Y+3: 94 Y+4: 148 Y+5: 200</p> <p>B.2.2 Cost per kilometer maintained (annual, routine/average: US\$2,000)</p>	<p>B.1 Supervisor report, CEU reports and external audits</p> <p>B.2 CEU reports and external audits</p>	



<p>B.3 Rehabilitation of tertiary roads</p>	<p>B.3.1 Number of kilometers of tertiary roads rehabilitated Y+1: 67 Y+2: 133 Y+3: 217 Y+4: 300</p> <p>B.3.2 Cost per kilometer rehabilitated (average: US\$60,000/km)</p>	<p>B.3 Supervisor report, CEU reports and external audits</p>	
<p>B.4 Maintenance of tertiary roads</p>	<p>B.4.1 Number of triennial maintenance plans signed Y+1: 4 Y+2: 8 Y+3: 14 Y+4: 20</p> <p>B.4.2 Number of kilometers of tertiary roads maintained Y+1: 0 Y+2: 67 Y+3: 133 Y+4: 217 Y+5: 300</p> <p>B.4.3 Cost per kilometer maintained (average: US\$2,000/km)</p> <p>B.4.4 Yearly success rate of Triennial Maintenance Plans &gt; 70%</p>	<p>B.4 CEU reports and external audits</p>	

<b>ACTIVITIES</b>			
<u><b>Institutional component</b></u>			
A.1 Set up the CEU with personnel from the Ministry	A.1 (3) Ministry personnel nominated	A.1 Nomination published	Thanks to the NRRP, the National Road Maintenance Fund is operational.  Decentralization remains a priority of the GOH.
A.2 Contract technical, administrative and institutional assistance for the CEU	A.2 (3) International consultants hired	A.2 Contracts signed	
A.3 Set up the EU with one expert from the Ministry	A.3 (1) Ministry expert nominated	A.3 Nomination published	
A.4 Contract assistance for the EU	A.4 (1) International and (1) National consultants hired	A.4 Contracts signed	
A.5 Set up the DPOs with personnel from the Ministry	A.5 (2) Ministry personnel nominated for each DPO	A.5 Nominations published	
A.6 Contract technical, administrative and community development assistance for the DPOs	A.6 (3) National consultants hired for each DPO	A.6 Contracts signed	
A.7 Contract community development assistance for the LCSs	A.7 (1) NGO contracted for each LCS	A.7 Contract signed	
<u><b>Investment component</b></u>			
B.1 Contract feasibility studies for selecting secondary and tertiary roads	B.1 # of km of secondary and tertiary roads for which feasibility studies are contracted	B.1 Contracts signed	
B.2 Contract engineering studies for selected roads	B.2 # of km of secondary and tertiary roads for which engineering studies are contracted	B.2 Contracts signed	
B.3 Contract supervision for road works	B.3 # of km of roads for which supervision is contracted	B.3 Contracts signed	
B.4 Contract road works	B.4 # of km of roads for which rehabilitation works are contracted	B.4 Contracts signed	
B.5 Contract local private companies and communities for maintenance works	B.5 # of km of roads for which maintenance works are contracted per year	B.5 Contracts signed	

## PROCUREMENT SCHEDULE

- 1 Procurement of works, goods and services with Bank funds will be carried out in accordance with Bank guidelines. Secondary and tertiary road projects will be grouped so as to encourage the participation of international firms in the related design, supervision and rehabilitation works.
- 2 The following table presents a tentative schedule for the procurement of works, goods and services with resources of the Program.

ICB: International Competitive Bidding

NCB: National Competitive Bidding

Type of contract	Estimated amount	Procurement procedures	Estimated timing for initiation of bidding process	Observations
TECHNICAL ASSISTANCE				
Technical and administrative assistance to CEU	1,050,000	ICB	Last quarter 97	It may be decided to group this two contracts and launch only one tendering process
Technical and administrative assistance to DPOs	1,584,000	ICB	Last quarter 97	
Engineering and feasibility studies for projects other than first year projects	Total 1,950,000	NCB	Between beginning of 98 (for first batch) and end of 99 (for last batch)	It is not expected that the amount of each individual pre-investment study package be over US\$200,000 (hence the NCB).
Community development services for each tertiary road project	Average contract price US\$35,000	call for bids at national level	During the first three years of Program execution	NGOs with existing presence in the field are expected to be recruited for these services
Supervision services for RN3	720,000	ICB	Last quarter 97	
Supervision services for first year projects	360,000	ICB	Last quarter 97	See paragraph 1 above
Supervision services for other projects	Total 1,440,000	ICB	Between mid 98 (for first batch) and mid 2000 (for last batch)	See paragraph 1 above

WORKS				
Rehabilitation RN3	12,000,000	ICB	First semester 98	This contract will be partly financed with resources from OPEC. IDB procurement procedures will apply to the entire contract.
First-year projects	Total 6,000,000	ICB	Last quarter 97	See paragraph 1 above
Subsequent projects	Total 24,000,000	ICB	Between end of 98 (for first batch) and end of 2000 (for last batch)	See paragraph 1 above
Maintenance works	Total 500,000	NCB	Between mid 98 and mid 2000	These contracts will be very small in size. Local (regional) companies or communities are expected to be the most interested in those.
INDIVIDUAL CONSULTANTS				
	Duration	International or local recruitment	Time of recruitment	Observations
Institutional expert for CEU	36 months	International	Last semester 1997	
International technical assistance to EU	3 times 2 months	International	Last semester 1997	
Local technical assistance to EU	36 months	Local	Last semester 1997	
Community development expert for each DPO	Between 1 and 3 years	Local	From beginning of 1998 top end of 1999	

PROPOSED RESOLUTION

HAITI. LOAN /SF-HA TO THE REPUBLIQUE D'HAITI  
(Secondary and Tertiary Roads Rehabilitation and Maintenance Program)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf the Bank, to enter into such contract or contracts as may be necessary with the République d'Haïti, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a Secondary and Tertiary Roads Rehabilitation and Maintenance Program. Such financing will be for the amount of up to US\$50,000,000 or its equivalent in other currencies, except that of Haiti, which are part of the resources of the Fund for Special Operations, and will be subject to the "Special Contractual Conditions" and the "Terms and Financial Conditions" of the Executive Summary of the Loan Proposal.