

JAMAICA
TRANSPORTATION INFRASTRUCTURE REHABILITATION PROGRAM
JA-L1016

PROJECT PROFILE (PP)

I. BASIC DATA

Project name: Transportation Infrastructure Rehabilitation Program

Project number: JA-L1016

Project team: Team Leader: Brian Mc Nish (TSP/CTT); other members Alejandro Taddia (INE/TSP); Diego Buchara (LEG/SGO); Dennis Chong, (Consultant/CJA); and Caterina Vecco (INE/TSP).

Borrower: Government of Jamaica

Executing agency: Ministry of Works and Transport through its National Works Authority

Financing plan:

IDB: Ordinary Capital	US\$	20,000,000
TCs (see annex):	US\$	0
Local:	US\$	0
Total:	US\$	20,000,000

Safeguards: Policies triggered: B.03 and B.11

Classification: B

II. GENERAL JUSTIFICATION AND OBJECTIVES

A. JUSTIFICATION

- 2.1 **Background:** Jamaica's dense network of roads supports the primary mode of transport and mobility that facilitates access to social and economic life for the island's 2.7 million inhabitants. The road network however, has devolved into a state of disrepair due to a lack of adequate maintenance, which over the last 5 years has been exacerbated by hurricanes and attendant floods. Starting in 2002 there was heavy torrential rains and flooding, followed by floods in the wake of hurricane Ivan in 2004 and hurricane Dean most recently in 2007. The ensuing storm water runoff for these events allied with the lack of effective watercourse maintenance breached several river channels and the attendant flood waters, exacted its full force on the road transportation sector. The resultant accumulative damage to the road network was severe and pervasive.
- 2.2 **Sector Knowledge:** The importance of the land transportation sector in Jamaica is evident from the fact that it accounted for three quarters of the total national consumption of petroleum in 2004. With over 15,000 km of roads, Jamaica has one of the densest road networks in the world, which translates into a demand for resources for road maintenance in excess of the country's ability to adequately finance it. Recognizing this, the Government of Jamaica (GOJ) created the National Works Authority (NWA) in 2001 and the Road Maintenance Fund in 2002.

- 2.3 Additionally, with complementary support from the IDB through the National Road Service Improvement Program (NRSIP, LO 1363/OC-JA), amendments to the Road Traffic Act, which allows offloading of over-weight vehicles and the institution of appropriate fines, have been finalized and laid before Parliament. Preparation is also being made to implement the commercial vehicle safety and weight limit enforcement Program. These legislative acts, together with the recently developed trio of transportation policy documents, namely: (i) the National Transportation Policy, (ii) the Road Sector Policy and (iii) the Road Maintenance Management Program defines a framework which will comprehensively identify those roads, in the period 2006-2016, which are in need of urgent periodic maintenance, and which will significantly complement and contribute to the long-term protection of the investments envisioned for this operation.
- 2.4 **Problem:** Current estimates of the condition of the road network is that of the total 15,700 km of main and parochial roads in Jamaica, between 30% - 60% are currently in poor or very poor condition to the extent that the road network in part has been rendered unreliable. Some roads are closed which result in long journey times and high transport costs, effectively limiting the mobility of the nation. The attendant dislocation and social difficulties manifest in traffic congestion, difficulty for children to reach to school, difficulty accessing other basic social services such as health, public administration and other economic spaces such as markets and jobs. This situation threatens the long-term developmental objective of the GOJ's which is based on a safe and reliable road network to facilitate the movement of goods and services and create conditions which engender investments and facilitates private sector productivity.
- 2.5 **Government Strategy:** The proposed project to improve service of the road network is consistent with the government's strategy, since Jamaica has embarked upon a process of market liberalization with the adoption of an export-led growth model. Attempts are therefore being made to create an environment conducive to attracting and increasing investment, to foster private sector growth and increase levels of output. The long-term policy direction is the sustainability of high growth through investment promotion, particularly, for the dynamic and competitive export clusters. In order to achieve these growth objectives, efforts are sensibly being aimed at promoting greater private sector yields and efficiency; by upgrading and maintaining the social and physical infrastructure, in particular the island's road network. As a result, the GOJ, given the enormity of the challenge it faces in maintaining their road network, considering the network's sheer size and the fiscal constraints associated with the availability of funds for investment in transportation, has requested support from the IDB to help entrench road rehabilitation and maintenance reform initiatives and to continue the process of finding ways to restore a safe and reliable national road network.
- 2.6 **Solution:** The proposed Transport Infrastructure Rehabilitation Program (TIRP) in the amount of US\$20M will finance restoration and rehabilitation works on the road network. It will complement and build on the US\$10M emergency support provided by the Bank through JA-L1015 for immediate repairs to the road network following the damage caused by floods during the 2007 hurricane season. In aggregate these

two operations respond to Government's request for US\$30 million to facilitate emergency and urgent restorative work on the road network in support of Government's growth and competitiveness goals and to normalize economic development through restoring mobility, safety and reliability to the national road network. These operations also build upon the efforts undertaken under the existing IDB Loans 1363/OC-JA (National Road Service Improvement Program), and 972/OC-JA (Northern Coastal Highway Improvement Program), currently under execution, supporting the institutionalization of improved and modernized routine road maintenance systems, and addressing the issue of maintenance sustainability.

- 2.7 The expected three components of TIRP are: **Component 1 - Rehabilitation and Improvement of Primary and Parochial Roads (US\$ 17 million)**. Under this component the roads will be selected from those identified as priority civil works consistent with their coherence to work in tandem with LO 1363/OC-JA and the emergency operation (JA-L1015) to take up integrated investments needed in areas damaged by the floods so that these programs are cogent and have measurable impacts. These potential civil works projects fall in three groups (i) pavement and bridges restoration, (ii) river training, and (iii) embankment stabilization and sea defense works. **Component 2 - Implementation Support (US\$ 2.5 million)**. This is directly related to the implementation of the civil works and covers consulting services for design and supervision of the civil works in Component 1 as well as for the conduct of required technical, environmental and safety audits. **Component 3 - Institutional Strengthening (US\$ 0.5 million)**. Provide support to strategically address key issues, continuing the works started under NRSIP, towards improved road transport policy and regulation covering inter alia: weight control, and the road maintenance fund. However, given the current status of implementation of the NRSIP, a mission to analyze the obstacles to implementing the governance initiatives is required to determine the decisions and actions needed to make the attainment of the development objectives probable and inform the proposed intervention of this new operation.
- 2.8 **Bank's Strategy:** The proposed program is consistent with the Bank's Country Strategy that sets out three principal areas of focus: (i) private sector development, (ii) getting value for money, and (iii) reducing vulnerability to natural disasters. Impaired road infrastructure has a detrimental effect on the business environment, productivity and private sector development, as the ability to efficiently move goods and services, and leverage the country's resources towards economic growth is impeded. Addressing the state of the road network through a program of rehabilitation and preventive works will serve as a complementary input to enhancing the business climate and towards private sector development and will directly respond to the identified strategy of assisting with rehabilitation and reconstruction activities as required as well as align with the Bank's third strategic pillar by reducing Jamaica's vulnerability to natural disasters, through prevention and mitigation activities.
- 2.9 **Coordination with other MDB's.** The Bank is coordinating its assistance efforts with other agencies such as the Caribbean Development Bank (CDB) who has approved US\$20 million for road repairs, along with an approved US\$10 million

loan from the World Bank (WB) for road rehabilitation. The European Union (EU) has also approved € 10M targeting augmentation of budgetary assistance for road maintenance support, providing the necessary resources to protect and maintain the investments. The participation of the CDB, WB, EU and the IDB reflects GOJ coordinated strategy of MDBs participation in the road sector.

III. TECHNICAL ISSUES

- 3.1 **Institutional Capacity.** The NWA is currently in charge of the implementation of two operations from the Bank (LO-972/OC-JA and LO-1363/OC-JA0, and will commence implementation of an emergency operation recently approved (JA-L 1015). The simultaneous implementation of these operations and the complexity of the large number of individual projects, will affect NWA's capacity to implement projects properly and keep the programs on schedule. To address this situation the Institutional Strengthening component will be designed during the preparation of this operation based on the findings and recommendations of a specific assessment to review the institutional capacity and propose a strengthening program for the short and medium term.
- 3.2 **Studies:** Other studies to be conducted during project preparation (terms of reference annexed) will include the following 1. Engineering: to review existing standard designs, technical specifications, bidding documents, and technical capacity. 2. Environmental: to review the existing standard contractual clauses, environmental requirements, and to develop an Environmental and Social Management Plan, and 3. Institutional: to review the organization of the NWA, identify strengths and weaknesses, and propose a set of institutional strengthening actions and measures.
- 3.3 **Monitoring and Evaluation:** A comprehensive monitoring and evaluation system will be designed into the program to continually assess and refine the program's impact. The expected outcomes of the project would be: i) reduction in vehicle travel times on the roads to be improved, ii) proportion of the road network in good/fair conditions, and iii) more efficient and effective road management by NWA. The key outputs of the project would include: a) kilometers of road improved or rehabilitated, b) number of structures improved, and c) the conduct of specific capacity building activities in the NWA.

IV. SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 **Auditors:** The Executing Agency will be required to establish and maintain adequate accounting controls and records and they must submit to the Bank a consolidated financial report of the Program at the end of each fiscal year. This information will serve as the basis for the annual audit of the use of the Bank's funds. Given the importance of this task, the Executing Agency must ensure that staff with accounting and/or audit experience is retained.

- 4.2 **Environment.** The Project will have net positive environmental impacts and social effects for residents and businesses in the project area and the country as a whole. Negative impacts are those related to the rehabilitation works, which will be temporary and localized to those portions of the roadway under rehabilitation at a particular time. The proposed works are small to medium in magnitude, will take place within the existing right-of-way corridors distributed across consolidated rural, urban and semi-urban areas and are not anticipated to generate permanent, widespread or irreversible significant negative environmental or social impacts. In general, the anticipated negative impacts of the Project can be characterized as easily identifiable; minor to moderate in magnitude; temporary in duration; spatially restricted; easily preventable or controllable with widely available, technically simple and cost-effective mitigation techniques; and reversible in the sense that an affected area can return to its preexisting condition after an impact occurs. All projects in Jamaica need some type of environmental analysis following applicable NEPA guidelines. To ensure the inclusion of all appropriate mitigation measures, NWA must coordinate with NEPA prior to the execution of eligible work. NWA has ample experience in contracting works, and performing the environmental supervision and enforcement, in an effective and efficient manner in preventing and mitigating environmental impacts.
- 4.3 The project team proposes a "B" classification for this operation. The Socio-Environmental Management actions and measures to ensure the environmental and social sustainability of the Project are as follows: a) conduct of an environmental analyses of a sample of projects, to identify existing critical environmental liabilities and to include the costs of the corrective works as part of the cost of the Program; b) development of an environmental and social management plan (ESMP) including preventive and mitigating measures, monitoring, supervision and contingency programs, as well as General and Particular Environmental Specifications; and c) inclusion of the ESMP as part of the bidding documents for construction works and engineering supervisory services, as well as of construction and supervisory contracts.

V. OTHER ISSUES

- 5.1 Other issues which may impact on the scope, quality and timing of the preparation of the project relates to the selection of roads that will receive rehabilitation and the arrangements of the maintenance activities. To address these issues, the operation will develop a set of criteria for prioritizing roadwork based on road conditions, and analyze the relationship with other operations under execution.

VI. RESOURCES AND TIMETABLE

- 6.1 The tentative date for submission of the operation to the Board is the second quarter of 2008. The project team together with three specialized consultants will conduct an orientation mission during March 2008 to diagnose the engineering, environmental and institutional readiness of the operation following which a clear definition of the program will be developed.

SAFEGUARD POLICY FILTER REPORT

This Report provides guidance for project teams on safeguard policy triggers and should be attached as an annex to the Project Concept Document (or equivalent) together with the Safeguard Screening Form, and sent to CESI.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

PROJECT DETAILS	IDB Sector	Transportation and Communication
	Type of Operation	Investment Loan
	Additional Operation Details	
	Country	Jamaica
	Project Status	New Operation
	Investment Checklist	Infrastructure Road and Rail
	Team Leader	Brian Mc Nish
	Project Title	Transport Infrastructure Rehabilitation
	Project Number	JA-L1016
	Safeguard Specialist(s)	<i>To be completed by assessor</i>
	Assessment Date	2008-02-07
	Assessment Number	2008-02071843-2
	Additional Comments	

SAFEGUARD POLICY FILTER RESULTS	Type of Operation	Investment Loan	
	Safeguard Policy Items Identified (Yes)	The operation includes large infrastructure works (e.g. large number of workers, use of heavy machinery, or physical modification of the landscape).	(B.03)
		Potential to cause air, soil or water contamination (also see B.10).	(B.11)
	Potential Safeguard Policy Items (?)	No potential issues identified	
	Recommended Action	Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PCD (or equivalent) and Safeguard Screening Form to CESI Secretariat.	
	Additional Comments	<i>Policy Directives can be accessed from the Resources tab on the Toolkit home page.</i>	

ASSESSOR DETAILS	Name of person who completed screening:	
	Title	
	Date	2008-02-07

SAFEGUARD SCREENING FORM

This Report provides a summary of the project classification process and is consistent with Safeguard Screening Form requirements. The printed Report should be attached as an annex to the Project Concept Document (or equivalent) (together with the Safeguard Policy Filter Report) and sent to CESI.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

PROJECT DETAILS	IDB Sector	Transportation and Communication
	Type of Operation	Investment Loan
	Additional Operation Details	
	Country	Jamaica
	Project Status	New Operation
	Investment Checklist	Generic Checklist
	Team Leader	Brian Mc Nish
	Project Title	Transport Infrastructure Rehabilitation
	Project Number	JA-L1016
	Safeguard Specialist(s)	<i>To be completed by assessor</i>
	Assessment Date	2008-02-07
	Assessment Number	2008-02072911-2
Additional Comments		

PROJECT CLASSIFICATION SUMMARY	Project Category: B	Override Rating:	Override Justification:
	Conditions/Recommendations	<ul style="list-style-type: none"> Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements). The Project Team must send the PCD (or equivalent) containing an Environmental and Social Strategy (ESS – the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3; paragraph 9) and the SSF to the CESI. 	
<i>Policy Directives can be accessed from the Resources tab on the Toolkit home page.</i>			

SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	Identified Impacts/Risks	Potential Solutions
	Generation of untreated solid waste but this is <u>minor</u> in volume and does not contain hazardous materials.	<ul style="list-style-type: none"> Solid Waste Management: The client should monitor and report on waste reduction, management and disposal.

ASSESSOR DETAILS	Name of person who completed screening:	Date:
	Comments:	

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Environmental and Social Strategy

The Project will have net positive environmental impacts and social effects for residents and businesses in the project area and the country as a whole. Activities proposed will have very positive impacts on improving the MOTW and the NWA's technical capability to manage civil works projects and their attendant environmental impact, leading to more efficient monitoring and quality control of construction activities during execution of the Project. Training and technical assistance to staff of the NWA will also lead to improvements in the execution of future projects and maintenance programs in areas of design, construction, environmental mitigation and monitoring. Negative impacts are those related to the construction phase, which will be temporary and localized to those portions of the roadway under rehabilitation at any particular time.

Positive Environmental and Social Impacts

The proposed road rehabilitation activities will not involve any significant changes to the traveled portion of the roads as the right-of-way will not be extended. The Project is not expected to result in increased traffic volumes, will not involve expropriation and/or direct impacts to properties along the route, nor are there any moderate or significant negative environmental impacts expected. Overall, the Project will result in the following positive effects:

- increased safety for pedestrians with the provision of warning signs, protected sidewalks and paved shoulders, street lighting, pedestrian crosswalks and reduced speed zones, especially in built-up areas and in proximity to schools, hospitals and markets;
- increased safety for the traveling public in private and public vehicles and truck transport with the provision of chevrons and warning signs in areas with obstructed line-of-site and dangerous curves, controlled speed zones and reflectors embedded in the pavement at dangerous curves;
- reduced travel time and economic costs arising from lost work hours due to delays;
- more efficient movement of produce to market, and improved access to shop and markets;
- improved transport services to hospitals and schools, and improved response time for fire and police services;
- a reduction in the number and severity of vehicle-to-vehicle and vehicle-to-pedestrian accidents, with concomitant reductions in injuries and fatalities, health and police services costs, and reduced costs associated vehicle damage (from potholes and accidents);
- improved storm water management with a reduction in the impacts of local and sub-regional flooding to residential, agricultural and business properties;

- reduction in the per-mile costs of vehicle operation (fuel, lubricants, wear-and-tear); and
- reductions in emissions and local air pollution as traffic will move more smoothly with a decrease in stop-and-go traffic and congestion.

Negative Environmental and Social Impacts

The anticipated negative impacts of the Project are related to the construction activities, and can be characterized as easily identifiable; minor to moderate in magnitude; temporary in duration; spatially restricted; easily preventable or controllable with widely available, technically simple and cost-effective mitigation techniques; and reversible in the sense that an affected area can return to a preexisting condition after an impact occurs. The environmental and social impacts that can be expected include:

- disruption of pedestrian movements and traffic flow at the site of construction resulting in travel delays and increased risk of accidents;
- dust and noise to nearby residents, shops, schools, hospitals and churches;
- risk of on-the-job accidents and sickness for workers;
- removal of secondary vegetation during the execution of earth movement operations;
- soil erosion and landscape degradation with possible sedimentation of nearby water bodies, resulting from earth movement (excavation, exploitation of quarries and borrow pits, cuts, etc.);
- soil and water contamination and landscape degradation due to wastes and effluents (garbage, used waters, oil, grease, fuel, paint, etc.) coming from work areas, equipment yards and asphalt plants;
- landscape degradation and contamination of water bodies due to inadequate disposal of removed waste pavement (asphaltic, base and subgrade materials); and
- accidental rupture of utilities pipes and lines (electricity, telephone, water and sewer), and temporary interruption of services during the excavation and removal of pavement.

These impacts will be largely mitigated through effective application of environmental management specifications to be developed as part of the environmental and social management plan (ESMP), including preventive and mitigating measures, monitoring, supervision and contingency programs, as well as General and Particular Environmental Specifications. The ESMP will be included as part of the bidding documents for construction works and engineering supervisory services, as well as of construction and supervisory contracts.

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INDEX FOR COMPLETED AND PROPOSED SECTOR WORK

Issues	Description	Expected Dates	References & hyper links to Technical files
Technical options and design	1. Engineering standard designs and Technical Specifications 2. Environmental and Social Management Plan	4/30/08	
Analysis of project cost and economic viability	Economic evaluation of the projects included in the representative sample	4/30/08	
Financial management/fiduciary issues and control environment	Fiduciary and financial control assessments: The consultant will propose the necessary activities and plans for the strengthening of NWA.	4/30/08	
Data collection and analysis for reporting on results	Project Team. Orientation Mission and Analysis Mission	3/10/08 4/30/08	
Institutional analysis/personnel, procedures other aspects of implementation capacity	Institutional capacity assessment: Proposal of a short and medium term program for institutional strengthening.	4/30/08	
Stakeholders and political environment	-	-	
Social and environmental safeguards	See Annexes I, II and III	-	
Other key issues, such as donors, gender, sustainability, country/sector issues	-	-	