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ANY REPLY OR SUBSEQUENT REFERENCE SHOULD
BE ADDRESSED TO THE CHIEF EXECUTIVE OFFICER
AND THE FOLLOWING REFERENCE NUMBER
QUOTED:-

Ref. No.:

South Eastern
Regional Office
15 Hagley Park Road
Kingston 10
Tel: 926-6499
929-7328, 968-1576
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Southern Regional Office
33 Caledonia Road
Mandeville, Manchester
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Fax: 962-5183

Western Regional Office
Flankers Main Road
Flankers, St. James
Tel: 940-7337
940-4466, 979-3166
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North Eastern
Regional Office
West Street
Port Antonio
Portland
Tel: 993-2531
Fax: 993-9665

035:820

2016 January 20

Mr. Christopher Persaud
Transport Senior Specialist
Inter-American Development Bank
6th Floor, Dyoll Building
40-46 Knutsford Boulevard
Kingston 5

Dear Mr. Persaud:

**Re: Loan 2026/OC-JA – Transport Infrastructure Rehabilitation Program
Project Completion & Final Program Evaluation Reports**

We have enclosed the caption reports in accordance with Chapter V; Special
Conditions of the Loan Agreement:

- Final Evaluation Report
- Project Completion Report

The information outlined in these report address the requirements set out in Section
5.01(g) and (h) Records, Inspection and Reports.

Yours truly,
NATIONAL WORKS AGENCY

E.G. Hunter
Chief Executive Officer

DL/ca

Enclosure

Copy: Mrs. Audrey Sewell, J.P. - Permanent Secretary, MTW&H
Mr. Howard Duval - Project Officer, Ministry of Finance
Mrs. Winsome Miller - Manager, Multilateral Financial Unit, PIOJ



Project Completion Report

PCR

| | |
|------------------------|--|
| Project Name: | Transportation Infrastructure Rehabilitation Program |
| Country: | Jamaica |
| Sector: | Transportation |
| Original Project Team: | Brian Mc Nish (TSP/CTT), Project Team Leader; Alejandro Taddia (INE/TSP); Diego Buchara (LEG/SGO); James Campbell (PDP/CTT), Silvano Tjong Ahin (CCB/CSU); Rosemarie Morgan (PDP/CJA); Glaister Cunningham (CCB/CJA); Giovanna Mahfouz and Giselle Apat (INE/TSP); German Silva Fajardo, Ione Müller and Hernan Pflucker (Consultants) |
| Project Number: | JA-L1016 |
| Loan Number: | 2026/OC-JA |
| QRR Date: | |
| Approval Date: | |

PCR Team:

TABLE OF CONTENTS

| | |
|--|-----------|
| I. BASIC INFORMATION..... | 4 |
| II. THE PROJECT..... | 5 |
| A. PROJECT CONTEXT..... | 5 |
| B. PROJECT DESCRIPTION..... | 7 |
| C. QUALITY -AT- ENTRY REVIEW | 9 |
| III. RESULTS | 9 |
| A. OUTCOMES | |
| B. EXTERNALITIES..... | 7 |
| C. OUTPUTS..... | 8 |
| D. PROJECT COSTS | 11 |
| IV. PROJECT IMPLEMENTATION..... | 11 |
| A. ANALYSIS OF CRITICAL FACTORS | 11 |
| V. SUSTAINABILITY | 12 |
| A. ANALYSIS OF CRITICAL FACTORS | 12 |
| VI. LESSONS LEARNED | 13 |
| VII. FURTHER OBSERVATIONS | |

ACRONYMS AND ABBREVIATIONS

| | |
|-------|---|
| CDB | Caribbean Development Bank |
| EA | Executing Agency |
| EC | European Commission |
| ESMP | Environmental and Social Management Plan |
| GOJ | Government of Jamaica |
| IDB | Inter-American Development Bank |
| MTW | Ministry of Transport and Work |
| NCHIP | Northern Coastal Highway Improvement Program |
| NEAP | National Emergency Assistance Program |
| NEPA | National Environment and Planning Agency |
| NRP | National Roads Policy |
| NRSIP | National Road Service Improvement Program |
| NTP | National Transport Policy |
| NWA | National Works Agency |
| NWC | National Water Commission |
| PEU | Project Executing Unit |
| PIOJ | Planning Institute of Jamaica |
| RMF | Road Maintenance Fund |
| RMMP | Road Maintenance Management System |
| RSU | Road Safety Unit |
| RTI | Road Traffic Injuries |
| TIRP | Transport Infrastructure Rehabilitation Program |
| WB | World Bank |

I. BASIC INFORMATION

Project No: JA-L1016

Borrower: Jamaica

Executing Agency (EA): Ministry of Transport and Works

Loan: 2026/OC-JA

Sector: Transportation

Lending Instrument: Investment / Global Multiple Works

Title: Transportation Infrastructure Rehabilitation Program

Date of Board Approval: 8 October 2008

Date of Loan Contract Effectiveness: 10 October 2008

Date of Eligibility for First Disbursement: 15 April 2009

Months in Execution

* from Approval: 85

* from Contract Effectiveness: 79

Disbursement Periods

Original Date of Final Disbursement: 10 October 2013

Current Date of Final Disbursement: 31 March 2016

Cumulative Extension (Months): 29

Special Extensions (Months): 0

Loan Amounts

* **Original Amount:** 50,000,000

* **Current Amount:** 50,000,000

* **Pari Passu (if applicable):** NA

Poverty Targeted Investment (PTI): No

Social Equity (SEQ): No

Environmental Classification: B

Disbursements

* **Amount to date:** 50,000,000 (%): 100.00

Total Project Cost (Original Estimate): 50,000,000

Redirectioning

Has this Project?

Received funds from another Project ☐ ☐

Sent funds to another Project ☐ ☐

N/A ☒ ☐

On Alert Status

Is project currently designated "on alert" by PAIS: No

If yes then why is the project on alert (DO, IP Ratings and/or relevant PAIS indicators): N/A

Comments on relevance of "on alert" status for this project:
N/A

* **Current amount (adjusted for redirection):**

| | | | | |
|----|---|--|---|---|
| DO | <input type="checkbox"/> Highly Probable (HP) | <input checked="" type="checkbox"/> Probable (P) | <input type="checkbox"/> Low Probability (LP) | <input type="checkbox"/> Improbable (I) |
| IP | <input type="checkbox"/> Highly Satisfactory (HS) | <input checked="" type="checkbox"/> Satisfactory (S) | <input type="checkbox"/> Unsatisfactory (US) | <input type="checkbox"/> Very Unsatisfactory (VU) |
| SU | <input type="checkbox"/> Highly Probable (HP) | <input checked="" type="checkbox"/> Probable (P) | <input type="checkbox"/> Low Probability (LP) | <input type="checkbox"/> Improbable (I) |

II. THE PROJECT

A. Project Context

- 2.1 Jamaica enjoys a widespread though aging road network, which according to the World Bank has the highest normalized road index of all countries (752). A high road index is indicative of a country where the network of roads is both dense and extensive. For a country with a total area of 11,000 sq km the total length of the road system including national and parish roads is approximately 15,700km. Highways and roads of national importance (the "national road network") account for 29% of the roads i.e. 5,006km which falls under the jurisdiction of the National Works Agency (NWA) and includes arterial roads 1,561km, secondary and tertiary roads 3,445 km. Except for about 360km classified as agricultural and forestry roads, the parishes administer the remaining 10,334km; of which 80% are paved.
- 2.2 However, due to a decade of annual year on year decline in the 1990s to the road maintenance budget allocations, by the turn of the millennium Jamaica's dense road network, had degenerated into a state of disrepair receiving a poor grading following a condition survey completed in 1999¹. In an attempt to break out off the road failure cycle, the Government of Jamaica (GOJ) coordinated with the European Commission (EC) and the Bank to support a plan to develop a national transportation framework which would guide redevelopment of the sector while it concomitantly embarked on vital medium-term road investments balanced amongst periodic road rehabilitation, routine maintenance and trunk roadexpansion through Public Private Partnerships (PPP).
- 2.3 Accordingly, the Bank since 2001, had been supporting this strategy through a triad of operations; (i) the US\$59.5M Northern Coastal Highway Improvement Program (NCHIP) Loan 972/OC-JA focused on road improvement and rehabilitation, (ii) the US\$18.5M National Road Service Improvement Program (NRSIP) Loan 1363/OC-JA focused on the preservation of the road network by supporting improvement and reengineering of the systems of road maintenance and (iii) the US\$10M National Emergency Assistance Program (NEAP) Loan 1959/OC-JA, focused on supporting emergency improvement and rehabilitation to the road network following hurricane and flood damage.
- 2.4 Additionally, under the 9th European Development Fund's (EDF), National Indicative Program (NIP) three key studies were developed which provide a comprehensive strategic framework for the development of the sector in general and for the redevelopment of the road network in particular. These were (1) The National Transport Policy (NTP) which provided a diagnostic of the sector analyzing, air, sea, rail and road transportation and also provides an elaboration of policy for the sectorwas approved by Cabinet in 2005. (2) The National Road Policy (NRP) was focused specifically on the amplification of policy for road transportation and was approved by the Ministry of Transport and Works (MTW). The third important study prepared was the Road Maintenance Master Plan (RMMP) which justified and identified options, and scenarios based on funding

¹ Road Inventory and Condition Survey, 1999

availability and served to guide road maintenance investment priorities required in Jamaica over five years to 2012.

- 2.5 The Bank's active programs had also been collectively contributing albeit slowly since the year 2002, to incrementally improving the condition of the road network, and in building significant, self-sustaining and important institutional and systemic reforms within the NWA to manage road maintenance in Jamaica. The NCHIP in particular has contributed to the improvement and rehabilitation of the Northern Coastal Ring Road in Jamaica. The NRSIP has introduced cost effective performance based road maintenance contracts which are being managed using an informatics Routine Maintenance Management System (RMMS) which provides data, information, analyses and justification for optimum road maintenance expenditure. NRSIP has also supported since July 2003 the operationalization of a Road Maintenance Fund (RMF).
- 2.6 Notwithstanding, these institutional achievements in the five years prior to loan approval climatic events together with budget constraints had conspired to erode road network gains, as Jamaica experienced heavy torrential rains and flooding starting in 2002, followed by more floods in the wake of hurricane Ivan in 2004, hurricane Dean in 2007 and Tropical Storm Gustav in 2008. The cumulative effect of storm water runoff allied with the lack of effective watercourse maintenance damaged significant parts of the national road network and related infrastructure maintained by the NWA; including following Tropical Storm Gustav the washing away of the important Hope River Bridge the most viable access point for the populations of East St Andrew, St Thomas and parts of Portland into the capital city of Kingston. The alternative route along the North Coast for these nationals into Kingston is at least twice as long.
- 2.7 Road survey data showed that in 2005, 317km or 12% of the network was classified as good, down from 721km or 28% of the network in 1999 which represents a 57% decrease in the quantity of roadway defined as "good" between 1999 and 2005. It was evident that the condition of the main road network had deteriorated appreciably since the 1999 survey. These features of the Jamaican road system clearly have repercussions and translate into high logistical cost and a compromised national standard of living. This situation was a threat to the long term developmental objective of the GoJ which is based on investments that foster private sector productivity improvements and which required a safe and reliable road network that facilitated the movement of goods and services.
- 2.8 The availability of sufficient resources for road maintenance has been another recurrent problem in Jamaica. With respect to the RMF the flow of funds traditionally has been insufficient and available amounts traditionally have not coincided with the seasonal demand for road works, creating a cyclical cash flow problem that does not permit the budgeted resources for maintenance to be used efficiently. The EU 9th EDF will provide the technical support to establish mechanism and incentives that assure sufficient funds are dedicated in a timely manner to road maintenance with donor coordination.
- 2.9 The Island's road infrastructure is a necessary input to facilitate greater private

sector efficiency and competitiveness in support of the Government of Jamaica's strategy of market liberalization based on an export-led growth model. Government's developmental efforts have been focused on creating an environment conducive to attracting and increasing investment, fostering private sector growth and increasing levels of productivity. The adoption of this long-term strategy was to achieve sustainable high growth through investment promotion, particularly, for dynamic and competitive export segments of the economy. Consistent with this strategy the Government has recognized that, in order to achieve these growth objectives, seminal efforts will have to be aimed at promoting greater private sector productivity and efficiency, by upgrading and maintaining the economic social and physical infrastructure.

- 2.10 The program of works in this operation was consistent with the Bank's strategy in the country at the time which set 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 was to serve as a complementary input to facilitating the business climate and towards private sector development. Road rehabilitation and maintenance activities were also aligned with the Bank's third strategic pillar of reducing Jamaica's vulnerability to natural disasters, through prevention and mitigation activities.

B. Project Description

- 2.11 The program included three components: (i) Civil works to support the rehabilitation and improvement of selected primary roads on the main road network, including the replacement of the Hope river bridge, river training works and construction of retaining walls, (ii) Project Implementation Support which centered on supporting staff for the project execution unit, and in providing ancillary (environmental and engineering) professional support; and (iii) Technical studies to provide support for technical assistance and studies to inform future supplementary interventions. Each component is elaborated in detail below.

i. Development Objective

- 2.12 The general objective of the program was to contribute to the restoration of Jamaica's transportation system allowing the reestablishment of adequate operating conditions through the rehabilitation of vital portions of the primary road network which have been damaged due to storms and to help stimulate economic activity and improve the quality of life of the Jamaican population. The specific objectives included: (i) rehabilitation of essential portions of the main road system and ensuring physical continuity of the primary network; (ii) minimize the impact of future flooding on the road system; (iii) help decrease travel cost for road system users which will in turn benefit access to social services and economic spaces; and (iv) strengthening the NWA in order to improve the capacity to strategically address key reform issues towards improved

road transport policy and regulation covering RMMS, RMF and future road improvement investments on the Southern Coastal Link.

ii. Components

The program was designed with the following components.

Component 1: Civil Works - Total Financing US\$45.2 million

2.13 Under this component roads and bridges under the purview of the NWA were to be selected for rehabilitation. The works to be eligible must:

- i Be part of the national main road network system comprising 5006km
- ii Have a budget allocation provided for the corresponding year
- iii For the replacement of the bridge and for complex rehabilitation works the projects should be economically feasible, i.e., the economic rate of return shall be at least 12%
- iv Be environmentally feasible thereby complying with the country's environmental legislation and Bank Policies²
- v Have standard designs prepared for simple works and final designs for complex works and final designs for the Hope River Bridge reconstruction and must have incorporated mitigation measures to prevent correct or compensate direct environmental impacts.
- vi Have clearance of the right of way before signing the contract for civil works.
- vii Must provide evidence that there is no need to resettle any citizen.

2.14 The scope of work in this component was expected to fall into three groups of works: (i) simple rehabilitative works comprising straightforward works consisting of deep patching, milling, sealing cracks, repairs to longitudinal drains, road markings and median restoration. It will include repair of surface distress, pavement strengthening where eroded and reduction of roughness, reconstruction of inadequate drainage facilities, and retaining walls which will only require simple standard designs and the implementation of the Environmental and Social Management Plan; (ii) complex rehabilitative works comprising bridges restoration, river training, embankment stabilization and sea defense works as well as improvement of geometrical and structural characteristics requiring detailed designs and more important engineering and environmental studies prior to construction; and (iii) the complete design and replacement of the Hope River Bridge.

Component 2: Project Implementation Support - Total Financing \$2.80 million

2.16 This component was to directly support the hiring of the project manager, the project accountant and an environmental expert to manage the day to day

² Environment and Safeguards Compliance Policy (OP-703); Involuntary Resettlement (OP-710); Natural Disaster (OP-704); Indigenous People (OP-765); Disclosure of Information (OP-102)

technical, socio-environmental, financial and administrative aspects of the project and the hiring of an engineering and supervisory consultant firm on a competitive basis to monitor and oversee the implementation of the proposed construction of the civil works. This component was to also provide resources for minor office equipment and the hiring of financial and environmental auditors and a monitoring and evaluation consultant to respectively conduct the audits and to track and monitor the results of the operation.

Component 3: Technical Studies - Total Financing \$2.0 million

- 2.18 This component provided resources to undertake engineering and environmental feasibility studies pertinent to the rehabilitation of future restoration or improvement of road sections. Amongst the possible studies Jamaican authorities have considered developing feasibility studies for the Southern Highway Corridor focusing on continuing the main road-network circumscribing the island in keeping with GOJ's strategic development plan for the south coast of the island.

C. Quality -At- Entry Review

- 2.19 Program assessment typically relies on project design information that specifies goals, targets, anticipated results and outcomes. For evaluation purposes available documentation appears not to include the established criteria for selecting specific Program activities and locations. Explicit technical criteria for choosing civil works for segments of the 5006 kilometer roadway network are not systematically stated. The application of other social criteria and specification of social targets and potential benefits also appear to be undocumented. The inclusion of such data would help to identify and capture all of the project's achievements and benefits.

III. RESULTS

A. Outcomes

| Indicator Description | Baseline Values | Activity | Unit of Measure | Project Total | % Complete |
|---|-----------------|-------------------------|-----------------|---------------|------------|
| Specific Outcomes | | | | | |
| Rehabilitate 5006km of main road network | | Complex Projects | % | 1% | 100% |
| Engineering and Supervisory Consultants Hired | | | # | 2 | 100% |
| Project Execution Unit Established | | | | 1 | 100% |
| Audit and Evaluation Completed Annually | | | # | 7 | 100% |
| Feasibility Study - South Coast | | South Coast Feasibility | % | 100% | 100% |

| | | | | | |
|---------------------------------------|-----------------|--|---------|---------------------|---|
| Master Drainage Plan (TORs) | | Master Drainage Plan | % | 100% | 100% |
| Specific Outcomes | | | | | |
| % Reduction Accidents from Bad Roads | None documented | Complex Projects | % | Not available | Not available |
| % Reduction in Vehicle Operating Cost | None documented | Complex Projects | % | Not available | Not available |
| Reduction in Journey Trips Time | None documented | Red Hills - Bog Walk Scott's Cove - Belmont Belmont - Ferris Dry River Bridge | Minutes | 15 15 15 5 | 15 minutes 15 minutes 15 minutes 5 minutes |
| % Projects Satisfactorily Completed | | Program of Works | % | 100% | 100% |
| | | | | | |

Note: In some instances the baseline data and end of Program information (outcomes) were not contained in routine Project reporting and documentation and apparently were not accurately determined (e.g., reduction in vehicle operating costs, reductions in accidents and travel time) by final value computations by NWA using its appropriate original methodology.

B. Externalities

- 3.1 Preliminary work with respect to procurement contracts for other projects proceeded to bring them to a state of readiness for implementation. Tropical Storm Nicole had influenced management to be constantly shifting priorities. This contributed to the delay in implementation as projects that were at an advanced stage of procurement had to be placed on hold to advance others that became a higher priority.
- 3.2 The limited fiscal space retarded the procurement process due to some hesitancy to proceed as the project was in and out of the budget as various stages of the procurement process.

C. Outputs

Civil Works

- 3.3 **Simple Rehabilitation Works.** Bank financing of US\$7 million was used to reimburse the Government of Jamaica for expenditures incurred by the executing agency before the date of approval of this operation (Loan 2026/OC-JA) and after August 28, 2008 the date on which Tropical Storm Gustav struck Jamaica causing an estimated US\$42 million of damage to road infrastructure including along the Northern Coastal Highway. The Bank recognized expenditures that were consistent with the project objectives, the terms and conditions of the loan

contract, as well as with Bank policies and procedures. The activities carried out under this sub component were as follows:

- i Removal of debris from roads;
- ii Clearing of road blockages and road slips caused by heavy rains;
- iii Clearing of block drains;
- iv Structural work related to drainage systems along the roadway;
- v Road repairs including deep patching, milling, sealing cracks, repairs to longitudinal drains, road markings and median restoration.

3.4 **Complex Rehabilitation Works.** These works comprised of bridges restoration, river training, embankment stabilization and sea defense works as well as improvement of geometrical and structural characteristics requiring detailed designs and more important engineering and environmental studies prior to construction. The completed works are as follows.

- a) **Dry River Training Works:** By the end of December 2014, the NWA had completed the three (3) phases of the Yallahs River Training work as follows.
 - i Phase I – 600 meters of bunding/protection works satisfactorily completed in May 2010
 - ii Phase II – 450 meters of bunding/protection works completed in August 2012
 - iii Phase III – 70 meters of protective measures of Yallahs River Bridge piers completed in November 2013.
- (b) **Red Hills – Bog Walk:** The works on all three (3) phases were completed by August 2014.
 - i Red Hill Phase I (Red Hill – Santa Maria): The road works began in June 2012 and completed in August 2013 approximately 10% above the contract sum.
 - ii Red Hill Phase II (Bog Walk – Sligoville): Detailed due diligence and the protracted procurement process delayed the signing of the contract until July 17, 2013. The scheduled implementation for the 9.2 km roadway was completed on May 31, 2014 below the contract sum by \$10m.
 - iii Red Hill Phase III (Santa Maria – Sligoville): This 6.8 kilometer section of the detour route to Bog Walk gorge was completed on June 24, 2014 within budget and with the contracted timeline.
- (c) **Scotts Cove – Belmont:** This project required replacement of a defective water pipeline which was only completed in February 2014 (financed by the National Water Commission). Rehabilitation of 16.5 kilometers of roadway (repair the 10 kilometers and rehabilitate 6.5 kilometers) was completed in September 2015. Increased scope of works as a consequence

of the pipeline works resulted in overrun of the original project timeline and original budget.

- (d) **Roselle Revetment Works:** The works were designed and constructed to restore some areas that were affected mainly as a result of the flood rains of 2007. Under the previous Emergency Loan Program a total length of 1300 meters was restored out of a total damaged length of 2400 meters. Under the current program, a total of 700 meters were being constructed meaning 400 meters would remain unprotected on completion of this phase. This project was implemented through direct contracting by a Memorandum of Understanding between the Ministry of Transport and Works and the National Works Agency.

The project's three components include: 1) supply and delivery of river shingle; 2) supply and deliver of boulders; and 3) placement of river shingle and boulders. The revetment portion of the works was started in September 2012 and by April 2013 revetment works had been substantially complete. Subsequently, Hurricane Sandy damaged a further 120 meters of the unprotected portion of the shoreline. Despite the many challenges both in procurement and in implementation the 120 meters revetment works was completed in April 2014.

- (e) **Belmont to Ferris:** This 8.5km project was negotiated as a follow-on contract to the Belmont to Scotts Cove Project with Asphaltic Concrete Enterprise. This was done as compromise to offset any fluctuation claim contemplated by the contractor as a result of the delay caused by the pipeline works. The works commenced May 2012 and was completed November 2013.

- 3.5 **Hope/Dry River Bridge (Replacement).** During Tropical Storm Gustav in 2008 the river washed away the previous Dry River Bridge structure and flooded adjacent housing developments. The works financed by TIRP included the construction of a dual carriageway 650 meters either side of the four lane bridge. The bridge reestablishes a critical link to economic development areas to the east of Kingston. The contractor handed over the completed bridge to the Government on November 10, 2011.

Project Implementation Support

- 3.6 The PEU was responsible for coordinating the technical and environmental supervision and quality control of works performed under the program as well as services provided by contractors and consultants. The Program Manager and staff demonstrated competent and creative management of the project with close supervision of project activities.

Technical Studies

- 3.7 **Southern Highway Corridor Feasibility Study.** The Feasibility Study provides an overview of the reports prepared to document the process of identifying existing conditions, viable alternatives, selecting a preferred alignment alternative for each

segment, documenting design features of the selected alignments and evaluating the economic feasibility of the selected alignment. The Southern Coastal Highway is in some respects a misnomer since much of the highway is not exactly along the South Coast.

The Southern Coastal Highway Improvement Project is actually divided into two segments. Segment 1 begins just west from Port Antonio to Harbour View (near Kingston). The road wraps around the east end of the island and, except through the Duckenfield area, follows the southern coastline and passes through the parishes of Portland, St. Thomas and St. Andrew. Elevation differences are not very pronounced along Segment I. The project ends just east of the Harbour View roundabout where new road construction terminates. The total length of Segment I is roughly 110 km. Segment 2, geographically more complicated with more noticeable elevation relief passes through the parishes of Westmoreland, St. Elizabeth and Manchester.

Proceeding east from Negril then along the coast from Paradise to Black River, the road turns north and, near Baptist, arcs to the west again. Near Spur Tree the road angles north to Mandeville. The project ends at Williamsfield. The total length of Segment 2 is about 133 km.

- 3.8 Master Drainage Study. The NWA has developed a program to mitigate the effects of flooding. The project provides a badly needed plan and safety parameters for protection of communities on the island. For decision making the Government of Jamaica and the National Works Agency possesses the technical tools to determine potential impacts of additional storm water runoff, conveying storm water runoff via a pipe/drain network, salt water velocity, improvements necessary to alleviate flooding issues, catchment capacity of gully sections of roads, and necessary improvements.

D. Project Costs

| Category | Curr. Expr. | Current Approved Amount | Committed Amount | Disbursed Amount | % Disb. | Available Balance |
|---|-------------|-------------------------|------------------|------------------|----------|-------------------|
| 01.00.00-CIVIL WORKS | | 45,000,000.00 | 0.00 | 42,385,336.56 | 94.19% | 2,614,663.44 |
| 01.01.00-SIMPLE REHAB. WORKS | USD F | 7,000,000.00 | 0.00 | 7,000,000.00 | 100.00 % | 0.00 |
| 01.02.00-COMPLEX REHABILITATIVE WORKS | USD F | 24,200,000.00 | 0.00 | 24,086,497.86 | 99.53% | 113,502.14 |
| 01.03.00-REPLACEMENT OF HOPE RIVER | USD F | 13,800,000.00 | 0.00 | 11,298,838.70 | 81.88% | 2,501,161.30 |
| 02.00.00-PROJ. SUPP. - (MNGT/PRSNL/EQPT) | | 1,600,000.00 | 0.00 | 1,331,533.97 | 83.22% | 268,466.03 |
| 02.01.00-ENG & SUPERVISION CONSULTANT | USD F | 755,000.00 | 0.00 | 579,031.40 | 76.69% | 175,968.60 |
| 02.02.00-PROJ. EXECUTION UNIT | | 700,000.00 | 0.00 | 677,338.63 | 96.76% | 22,661.37 |
| 02.02.01-CONSULTANTS | USD F | 300,000.00 | 0.00 | 300,000.00 | 100.00 % | 0.00 |
| 02.02.02-OFFICE EQUIPMENT & SUPP. | USD F | 400,000.00 | 0.00 | 377,338.63 | 94.33% | 22,661.37 |
| 02.03.00-AUDIT & EVALUATION | USD F | 145,000.00 | 0.00 | 75,163.94 | 51.84% | 69,836.06 |
| 03.00.00-TECHNICAL STUDIES | | 3,400,000.00 | 0.00 | 3,390,117.69 | 99.71% | 9,882.31 |
| 03.01.00-FEASIBILITY STUDY S.HIGHWAY CORR | USD F | 2,700,000.00 | 0.00 | 2,698,022.07 | 99.93% | 1,977.93 |
| 03.02.00-MASTER DRAINAGE PLAN | USD F | 700,000.00 | 0.00 | 692,095.62 | 98.87% | 7,904.38 |
| 87.00.00-CAPITALIZATION CHARGES | | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 |
| 87.01.00-F. I. V. | | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 |
| 87.01.01-F. I. V. | USD F | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 |
| 88.00.00-PENDIENTE | USD F | 0.00 | 0.00 | 0.00 | 0.00% | 0.00 |
| 89.00.00-Revolving Fund | | 0.00 | 0.00 | 2,893,011.78 | 0.00% | -2,893,011.78 |
| Summary | | 55,000,000.00 | 0.00 | 55,000,000.00 | | 0.00 |

IV. PROJECT IMPLEMENTATION

A. Analysis of Critical Factors

- 4.1 The government ensures that the higher expenditure in the short term, and any associated future expenditure—including any recurrent spending on operations and maintenance required by an infrastructure investment—can be financed from current and future revenues. If debt-financed, the expenditure is assessed by reference to its effects on the underlying growth rate and the country's revenue-generating capacity. The government needs to be sure, in particular, that increased outlays in one worthwhile area will not ultimately crowd out productive spending elsewhere.

With respect to the TIRP Program, limited fiscal space created, in effect, an annual cap on the amount of IDB funds that could be drawn for project implementation. Given the number and extent of variation the project team's annual projections for resources at time diverged from the amount actually available for project investments. In addition, limited fiscal space hampered the procurement process due to some hesitancy to proceed as some project activities were in and out of the budget at various stages of the procurement process.

- 4.2 In recent years the Government of Jamaica has streamlined procurement thereby reducing processing time from 6 to 4 months. Processing rules have changed over time and for this Program the NWA was required to make further adjustments toward compatibility with the IDB's own procurement standards and practices.

The National Contracts Commission (NCC) performs an important and needed function involving as it does the private sector in the decision making process of Government. However, in rare instances, the NCC's protracted process resulted in extended project implementation timelines and cost overruns due to increased final bid amounts.

- 4.3 The various Ministries have their own plans, priorities and corresponding budgets. Inter-ministerial transfers of financial resources are not the norm. Often the sources and conditions of financing (by separate international funding organizations) do not permit the application of funds for non-authorized projects unrelated to original contract commitments and stipulations. As a result, the National Water Commission was unable to disburse, in a timely fashion, sufficient funds to the National Works Agency to ensure completion of pipeline replacement works (and subsequent rehabilitation) so that road works could be completed on time.
- 4.4 The PEU was responsible for coordinating the technical and environmental supervision and quality control of works performed under the program as well as services provided by contractors and consultants. The program manager and staff demonstrated competent and creative management of the project with close supervision of project activities. The Project Executing Unit ensured that all project documentation was prepared and archived in a dedicated space easy to retrieve for any supervision or audit visits taking place either by the Ministry or the Inter-American Development Bank.

V. SUSTAINABILITY

A. Analysis of Critical Factors

- 5.1 The geographic location as a country makes it vulnerable to floods, hurricanes and earthquakes. With the best forecast available and mitigation measures put in place the country is always affected by hurricanes and floods. Roadways become flooded and inundated because recent floods have been more intensive. Mobility is affected when infrastructure and shorelines are damaged as a result of hurricanes. Aging bridge might not be able to withstand earthquakes of excessive magnitudes. The country is always at risk to natural disasters that can affect project implementation schedules.

VI. LESSONS LEARNED

The lessons learnt from the project are as follows.

- 6.1 Authorities should consider allotting sufficient annual resources to protecting this indispensable investment from natural and man-made threats to its structural integrity.
- 6.2 With respect to mining, it is recommended that Authorities consider allocating sufficient resources to vigorously enforce licensing agreements and, if necessary, prosecute violations.

- 6.3 In order to capture additional benefits resulting from civil works, it is recommended that in preparation of future projects additional indicators be included to measure economic and social benefits as well.
- 6.4 It is recommended that for future projects such a preliminary studies (due diligence) component be included and commensurate funding dedicated in order to avoid delays by predicting and adopting necessary corrective measures within the project's stipulated implementation timelines.
- 6.5 For future projects it is recommended that the mid-term review be considered a valuable and indispensable tool and included as a key component for enhancing project success.

VII. FURTHER OBSERVATIONS

- 7.1 Available data could not determine the effectiveness with respect to reduction of accidents from bad roads.
- 7.2 the National Water Commission, given the number and extent of variations, could not anticipate in a timely fashion the funds necessary for the National Works Agency to ensure completion of pipeline replacement works (and subsequent rehabilitation) so that road works could be completed on time.
- 7.3 In rare instances, the NCC's protracted process resulted in extended project implementation timelines and cost overruns due to increased final bid amounts.
- 7.4 The government needs to be sure, in particular, that increased outlays in one worthwhile area will not ultimately crowd out productive spending elsewhere.
- 7.5 No engineering and supervision consultant firm needed to be hired, nor a separate environmental expert procured. The IDB also authorized dispensing with an independent mid-term review.
- 7.6 The program manager and staff demonstrated competent and creative management of the project with close supervision of project activities.