

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
GY-L1027

PROJECT PROFILE (PP)

I. BASIC DATA

Project name:	Road Improvement and Rehabilitation Program		
Project number:	GY-L1027		
Project team:	Team Leader: Alejandro Taddia (INE/TSP); other members Rafael Acevedo-Daunas (INE/TSP); Christopher Persaud (TSP/CGY); Javier Jimenez (LEG/SGO) and Caterina Vecco (INE/TSP).		
Borrower:	Co-Operative Republic of Guyana (GOG)		
Executing agency:	Ministry of Public Works and Communications (MPW&C)		
Financing plan:	IDB (Blend):	US\$	18,600,000
	Local:	US\$	0
	Total:	US\$	18,600,000
Safeguards:	Policies triggered: B.01, B.03 and B.11		
	Classification: B		

II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1 **Background:** The road network of Guyana totals 3,995 km and serves a national fleet of about 52,000 vehicles. All national paved roads, consisting of six main roads, have only two lanes, except for a segment along the East Coast Demerara, which has four lanes. Guyana has 98 km of railroads entirely dedicated to ore transport, one international airport, and 46 additional airstrips with short runways. The country has a single general cargo seaport in Georgetown, and 4 specialized bulk loading facilities. Guyana relies upon its 6,000 km of navigable water-ways for carrying bauxite, sugar cane or other bulk commodities.
- 2.2 **Sector Knowledge.** Guyana is a low-income, thinly-populated country with a predominantly agricultural economy. The total population according to the 2002 census was 723,000. The vast majority of the population lives in the coastal strip. The rural interior is very sparsely populated, with transportation being predominately along waterways, and/or by air and road to the coast. Government responsibilities in the transportation sector are spread among various agencies, with the MPW&C taking on the main role. The MPW&C is basically responsible for transport policy and the provision and maintenance of almost all major transport infrastructures. The MPW&C's capacity to perform the function of executing agency has been consolidated over the years with the creation, in 2002, of the Work Services Group (WSG) that assumed responsibilities for the main roads and bridges, and main executive responsibilities for the road sector. This unit has evolved to become responsible for all road works being undertaken by the MPW&C. and is responsible for the planning and management of road investments and maintenance activities.

- 2.3 **The Problem.** Although the road network of Guyana is one of the sparsest in South America, due to the concentration of the population and the main road system along the coastal areas, most of the population has access to paved roads. Most of these roads are in fair conditions since over the last 15 years GOG has embarked on a progressive rehabilitation of the roadways and structures. The Bank supported this long-term program by means of five prior operations that focused on the rehabilitation of approximately 300 kilometers of the main road network. The road network in the interior consists mainly of roads readily accessible only during the dry season and limited to 4wd vehicles. Overall, the transport system is supported by an inadequate network, providing little internal and international connections, with highly congested roads in urban areas with poor quality, low level of service, lack of alternative roadways and costly services.
- 2.4 In addition, the rehabilitation of the main road in the Essequibo area was financed by other MDB's; all the rehabilitated roads, approximately 350 kilometers, representing less than 10% of the country's road network, have been included in a routine maintenance program (RMMS). Nevertheless, still more than 90% of the network has not been rehabilitated and is in regular to very poor conditions, resulting in long journey times, high transport costs, difficulties in access to school, basic services (such as health, public administration, etc.) and economic alternatives (such as markets, jobs, etc.), effectively limiting the mobility and accessibility of the population in important areas of the country. This situation threatens the long term developmental objectives of the GOG, which is based on a safe and reliable road network to facilitate investments and increase private sector productivity to accelerate economic growth.
- 2.5 **The Country's Strategy.** The country's strategy for the road subsector consists of i) rehabilitation, improvement and extension of the road network, financed by external resources, and ii) routine maintenance of the rehabilitated network financed by recurrent resources. This strategy aims to reduce transportation costs, improve market access and overall competitiveness, and increase coverage of maintenance activities of main roads, bridges and other infrastructure. GOG has been actively restoring infrastructure that in most cases has exceeded its life service, improving traveling conditions and road safety along public roads. Maintenance programs have been implemented uninterruptedly and include the involvement of the private sector by means of contracting out continuous routine maintenance activities, as well as the strengthening of MPW&C's capacity to administer and maintain the road network.
- 2.6 **The Bank's Strategies.** The Bank's strategy in Guyana, expressed in the Country Paper (GN-2503-1), seeks to support the Government vision for accelerating economic growth through economic diversification and targeted social development. This strategy promotes the improvement of the quality and coverage of the road network as a pillar of the strategic infrastructure investments therefore supporting the economic diversification objective. The main areas of focus of the *transport sector strategy* are: i) develop a balanced transport system; ii) develop criteria to prioritize projects rationally within a general strategy; iii) provide for the improvement and the regulation of the transport system; and iv) improve the

performance of the main logistic chains which sustain the economic growth of the country. The principles of this strategy are: a) prioritize the solution of the principal problems of the existing system (localized congestion, need of maintenance of the road network, road safety, and urban transport) with an efficient use of the economic resources; b) relate the size of the projects with the size of the economy and the capacity of the executing agencies; c) consider accessibility and integration aspects; and d) take advantage of integration possibilities with neighbour countries.

- 2.7 The Bank's involvement in the development of road infrastructure has comprised long-term capital investments aimed at the rehabilitation of infrastructure that has fulfilled its service life expectancy, extension of the road network, support of regional and international integration projects and improvement of road safety conditions. This strategy, in concurrence with the country's sector strategy, aims to improve and expand the road network, while assuring its technical, financial, socio-environmental and economic sustainability.
- 2.8 **Strategy implementation.** The Bank, following this long-term strategy, has been financing major rehabilitation works along most of the main road network (approximately 300 km.) and has contributed to develop and improve sustainable routine maintenance mechanisms, covering most of the rehabilitated network (approximately 350 km.). Bank operations also include provisions for the future financing of maintenance of the road network, as well as either explicit road safety components or implicit activities for safety improvements.
- 2.9 **Solution.** The proposed Project will finance improvement, restoration and rehabilitation works on the national road network, continuing the objectives and goals of the prior loans in the sector. In aggregate, the prior operations and the proposed one, respond to GOG's objective of rehabilitating the main road network, supporting growth and competitiveness, through the restoration of accessibility, mobility, safety and reliability of the road network. This operation also builds upon the efforts undertaken by the existing loans supporting the institutionalization of improved, modernized and sustainable routine road maintenance.
- 2.10 In 2004 the Bank funded the preparation of studies of some critical road segments including the East and West Canje Roads. These studies will be reviewed and updated with financing from a technical cooperation in execution (GY-T1018) that support the preparation of this program. The economic analysis of these roads, performed using the HDM-4 model, estimated a net present value of US\$12.56 M for the East Canje Road and US\$0.60 M for the West Canje Road; the internal rates of return were 32.3% and 14.8% respectively. These roads constitute the representative sample of the program.
- 2.11 The expected components of Project are: **Component 1: Improvement and Rehabilitation of Roads (US\$16.7 million).** This component will finance the civil works on the East and West Canje Roads, and other roads to be selected from those prioritized by the GOG that are consistent with a set of eligibility criteria. These works include improvement and rehabilitation of roads, bridges and culverts, construction of shoulders in interurban segments, and sidewalks and other safety

related works in urban areas. The required studies, including technical, economic, and socio-environmental feasibilities, and technical designs of the road segments outside the representative sample, will be financed by means of two technical cooperations (GY-T1070 and GY-T1071) that support the execution of this project. **Component 2: Implementation Support (US\$1.5 million).** These activities are directly related to the implementation and supervision of the civil works as well as for the conduct of required technical, and environmental audits. **Component 3: Institutional Strengthening (US\$0.4 million).** Provide support to MPW&C in the engineering and environmental areas.

III. TECHNICAL ISSUES

- 3.1 **Institutional Capacity.** The MPW&C and WSG are currently in charge of the implementation of two operations from the Bank. It is expected that the execution of civil works of the rehabilitation of the New Amsterdam – Moleson Creek Road will be completed by the fourth quarter of 2009, and therefore, WSG will have sufficient capacity to implement this proposed program, and keep with the activities on schedule. In addition, the institutional strengthening component, designed upon the recommendations of the institutional capacity assessment completed in 2006 and the risk assessment to be completed during the preparation of this program, will address critical areas to allow for a timely execution of the program.
- 3.2 **Studies:** Other studies to be conducted during project preparation include: 1. engineering review and update of the existing economic feasibility with current data traffic provided by MPW&C, review existing design and construction cost estimates with revised figures provided by MPW&C, and 2. develop the Environmental and Social Management Plan and the procedures that must be followed to ensure that any new project comply with all environmental, social, health and safety and information disclosure requirements set up by national laws and required by the Bank's policies.
- 3.3 **Monitoring and Evaluation:** A comprehensive monitoring and evaluation system will be designed into the program to continuously assess and refine the program's impact. The expected outcomes of the project would be: i) reduction in vehicle travel times on the road, ii) extension of the road network in good / fair conditions, and iii) more efficient and effective planning, programming and execution of transport projects by WSG. The key outputs of the project would include: a) kilometers of road improved and rehabilitated, b) number of structures improved, and c) projects implemented taking into consideration Bank's social and environmental safeguards.

III. SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 **Auditors:** The MPW&C 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. Given the importance of this task, the MPW&C must ensure that personnel with accounting and/or audit experience are retained.
- 4.2 **Environment.** The RIRP will have net positive environmental impacts and improve social and economic conditions for residents and businesses in the project area and

the country as a whole. The scope of the project involves small to medium size interventions in several roads within their existing Right of Way (ROW). No major environmental issues aside those from small scale rehabilitation projects are expected. No environmental protected or vulnerable areas exist or are planned along the project roads. In general, the anticipated environmental negative impacts of the rehabilitation works implementation and road operation 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.

- 4.3 The environmental strategy for the project proposes the preparation of Environmental and Social Analysis (ESA) for each of the selected projects which will include the updating of environmental and social baseline conditions, identify the environmental and social impacts, and definition and preparation of a specific Environmental and Social Management Plan (ESMP) for each individual project.¹
- 4.4 The East and West Canje Roads, which constitute the representative sample of the multiple works Program, are bordered by constructions and former irrigation canals, which limit the possibility of any widening. Given these conditions, special emphasis will be given to the social impacts and the possibility of improving the living and safety conditions of local communities. This value added approach will aim to enhance the social benefits of the program by analyzing the characteristics of the immediate neighboring areas, and include, wherever feasible, additional improvements to the drainage conditions of the roads with the purpose of reducing the likelihood of water-borne diseases, accidental deaths and other related problems. In order for any new project to be considered eligible for inclusion as part of the RIRP, strict screening will be done beforehand in order to ensure it is technically, environmentally and socially viable and will comply with local regulations and all of the Bank's policies. Further detail on the proposed strategy is presented in the environmental and social Annex to this document.

V. OTHER ISSUES

- 5.1 The technical studies of the representative sample of this project were completed in 2004, and are being currently revised.

VI. RESOURCES AND TIMETABLE

- 6.1 The expected date for submission of the operation to the Board is the fourth quarter of 2009. Annex V details the cost and timeline for preparation and approval of this operation. The required consulting studies will be financed through the TC GY-T1018 In addition, administrative funds will be required for the realization of missions and contracting consultancy studies.

¹ These studies will be financed by two Technical Cooperations under preparation in parallel with the loan operation: (GY-T1070 and GY-T1071)

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
(GY-L1027)

Confidential Annex

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
GY-L1027

Safeguard Screening Form

PROJECT DETAILS	IDB Sector	Transportation
	Type of Operation	Investment Loan
	Additional Operation Details	
	Country	Guyana
	Project Status	
	Investment Checklist	Infrastructure Road and Rail
	Team Leader	Taddia, Alejandro Pablo (ALEJANDROTA@iadb.org)
	Project Title	Road Improvement and Rehabilitation Program
	Project Number	GY-L1027
	Safeguard Specialist(s)	Canfield, Mary Eloise (ELOISEC@iadb.org)
	Assessment Date	2009-05-29
	Additional Comments	

	Project Category: B	Override Rating:	Override Justification:
			Comments:
PROJECT CLASSIFICATION SUMMARY	Conditions/ Recommendations	<p>Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements).</p> <p>The Project Team must send to ESR the PP or PCD (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports.</p> <p>These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary.</p>	

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
GY-L1027

SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	Identified Impacts/Risks	Potential Solutions
	Negative impacts leading to involuntary resettlement or economic displacement are minor to moderate in nature.	Develop Resettlement Plan (RP): The client should be required to develop a simple RP (that could be part of the ESMP) that demonstrates the following attributes: (a) successful engagement with affected parties via a process of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within client's organization) to monitor and manage resettlement activities as necessary over the course of the transaction; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.
	Generation of solid waste is moderate in volume and does not include hazardous materials.	Solid Waste Management: The client should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and recycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.

ASSESSOR DETAILS	Name of person who completed screening:	
	Title:	
	Date:	2009-05-29

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
GY-L1027

Safeguard Policy Filter Report

PROJECT DETAILS	IDB Sector	TRANSPORTATION
	Type of Operation	Investment Loan
	Additional Operation Details	
	Investment Checklist	Infrastructure Road and Rail
	Team Leader	Taddia, Alejandro Pablo (ALEJANDROTA@iadb.org)
	Project Title	Road Improvement and Rehabilitation Program
	Project Number	GY-L1027
	Safeguard Specialist(s)	Canfield, Mary Eloise (ELOISEC@iadb.org)
	Assessment Date	2009-05-29
	Additional Comments	

SAFEGUARD POLICY FILTER RESULTS	Type of Operation	Investment Loan	
	Safeguard Policy Items Identified (Yes)	Potential disruption to people's livelihoods living in the project's area of influence (not limited to involuntary displacement, also see Resettlement Policy .)	Resettlement and Indigenous People (B.01)
		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 ESR..	
	Additional Comments:		

ASSESSOR DETAILS	Name of person who completed screening:	
	Title:	
	Date:	2009-05-29

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
GY-L1027

Environmental and Social Considerations

- A.1 Throughout the years, the Bank has been a permanent partner of Guyana in the development of the road infrastructure of the country. The primary road network has been subject to continuous improvement and, with the Bank's help, Guyana has established an adequate system for maintenance allocating resources from the national budget on a yearly basis.
- A.2 The country is interested in expanding and improving the conditions along its roads and is allocating a substantial portion of the available FSO resources to the sector. The government has identified a series of priority projects to be intervened in the next few years. The first stage, to be financed by this operation (GY-L1027) includes the resurfacing and improvement of existing roads.
- A.3 The selection of projects to be financed by this operation follows the rules the Bank uses and requires the specific works to have social, environmental and economic viability. At this stage, only initial studies for the East and West Canje roads have been finalized. Studies to evaluate and compare other projects are to be carried by two Technical Cooperations that are being approved in parallel with this program¹. The Canje roads will therefore constitute the project sample required by a multiple works program.
- A.4 The roads to be included are mostly small existing roads that require paving and in some cases rehabilitation. The work required for these interventions is minor in scale given the limited availability of resources and will take place within the existing Right-of-Way (ROW). Typical activities will include the supplementing of road base materials, paving, ditch and drainage construction, and all necessary complementary activities related to construction camps set-up, operation and dismantling, extraction and transportation of construction materials, etc.
- A.5 The project will mainly generate positive long lasting impacts by improving the living conditions, sanitary, safety and accessibility conditions of the population along the road.
- A.6 The negative impacts expected from these activities include traffic congestion due to construction equipment, potential air and water pollution issues related to transportation and construction practices, noise generation in inhabited areas, potential contamination of soils in campsite facilities and workshops, pressure upon local communities by influx of workers, health and safety issues, the potential for accidents, etc. In any case all are 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

¹ GY-T1070 and GY-T1071, being prepared in parallel with the operation

can return to its preexisting condition after an impact occurs.

- A.7 The project team proposes the following socio-environmental strategy to ensure the sustainability of the Project: a) carry out an environmental and social analysis ESA of each particular project, in accordance with Terms of reference to be approved by the Bank ensuring compliance with local regulations and Bank Policies; b) development of an environmental and social management plan (ESMP) including preventive and mitigating measures, monitoring, supervision and contingency programs, as well as General Environmental Specifications; c) the preparation of an Operations Manual for the loan to specify conditions for eligibility of any new proposed project; d) when necessary, development of a resettlement plan (RP) of the affected population, coordinated with the final engineering designs, as a prior condition to the Bank's no objection to the bidding documents for construction works and engineering supervisory services, as well as of construction and supervisory contracts; e) allocation of necessary financial resources of the loan to ensure there is adequate follow-up and control of all necessary activities; f) the hiring of an environmental and social specialist to work permanently as part of the Work Services Group (WSG) in charge of project execution; g) the retaining of a project supervision firm to support the WSG staff in monitoring construction activities; and h) a reporting system to ensure adequate compliance.

Specific Issues related to the East and West Canje Roads

- A.8 The Canje roads resulted from the urbanization process by people working in the government owned sugar industry. Along irrigation channels and access roads, houses were built and eventually a linear development of the area resulted. There are limitations as to the maximum width of the roads and these, in turn, limit the technical specifications, the road can achieve.
- A.9 The project team visited the area and had a chance of identifying a series of issues that could improve the benefits of the project to the community. The drainage system along the roads is supposed to be running water connected to the irrigation system of the neighboring sugar plantations. However in some cases individual owners have blocked the flow of water generating unhealthy conditions and potential breeding grounds for the transmission of water borne illnesses. It is not clear whether the entire system of drainages on both sides of the road, are really necessary. As part of the final revision of the designs for the Canje roads, under way, the project team has proposed the review of this topic and the evaluation of eventually closing some of the drains, allowing for a widening of the road.
- A.10 An important part of the local population has economic activities related to the sugar industry and a fair number of workers travel to work on their bicycles. The design review will also include the provision of bicycle pathways and walkways to allow for non motorized traffic.
- A.11 These two topics are of great importance and are the result of the value added the Bank expects to bring into its operations, and in this particular case will result in a substantial improvement of sanitary and road safety conditions.

Other Projects

- A.12 The government will be analyzing a series of additional projects to be financed by this operation. Given the limitations in funding, only a small project, similar in scope to either the East or West Canje is expected to be included. However, the Technical Cooperations will also provide funds for the design of an Operational Manual (OM) that will clearly specify the conditions any project must cover in order to be eligible for funding. The OM will not be limited to environmental but also define requirements for compliance with social issues including the resettlement, the gender and diversity and indigenous peoples policies and will also ensure technical and economic feasibility.
- A.13 The project team proposes a “B” classification for this operation given the characteristics of the projects identified by the government.

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
(GY-L 1027)

Index for Completed and Proposed Sector Work

Issues	Description	Expected Dates	References & hyper links to Technical files
Technical options and design	Funded by the Bank (GY 0056)	Completed in 2004. Currently under review (GY-T1018).	
Analysis of project cost and economic viability	Funded by the Bank (GY 0056)	Completed in 2004. Currently under review(GY-T1018).	
Data collection and analysis for reporting on results	Project Team. Orientation Mission and Analysis Mission	3 rd Q 2009	
Institutional analysis/personnel, procedures other aspects of implementation capacity	Institutional capacity assessment: Recommendations being implemented.	Completed in 2006	
Social and environmental safeguards	See Annexes II and III	-	

GUYANA
ROAD IMPROVEMENT AND REHABILITATION PROGRAM
GY-L 1027

Confidential Annex

TECHNICAL COOPERATION PROFILE
GUYANA
SUPPORT FOR THE ROAD REHABILITATION PROGRAM
(GY-T1070) (GY-T1071)

I. BASIC PROJECT DATA

Country	Guyana		
Project name	Support for the Road Rehabilitation Program		
Project Number	GY-T1070 and GY-T1071		
Team Leader and Members:	Alejandro Taddia, Team Leader (INE/TSP); Rafael Acevedo-Daunas, Caterina Vecco (INE/TSP); Javier Jimenez (LEG/SGO); Virginia Franzini (LEG/SGO) and Christopher Persaud (TSP/CGY).		
Date of request:	November 22, 2008		
Beneficiaries:	Government of Guyana (GGY)		
Executing agency:	Ministry of Public Works and Communications (MPWC)		
Financing plan:	Infra Fund (GY-T1071)	US\$	400,000
	NET FSO Contribution (GY-T1070)	US\$	600,000
	Total Contribution of the Bank:	US\$	1,000,000
	Local Counterpart:	US\$	100,000
	Total:	US\$	1,100,000
Technical and Basic Responsibility	Basic responsibility: CCB/CGY Technical responsibility: INE/TSP		
Tentative dates:	Plan of Operations	August, 2009	
	Approval	September, 2009	

II. BACKGROUND AND PROBLEM STATEMENT

- 2.1 Guyana is a low-income, thinly-populated country with a predominantly agricultural economy. The total population according to the 2002 census was 723,000. The vast majority of the population lives in the coastal strip. The rural interior is very sparsely populated, with communication being predominately along waterways, and/or by air and road to the coast. The country is divided into 10 Regional Administrative Region, governed by Regional Democratic Councils (RDCs). Regions 1, 7, 8, and 9 are classified as the interior regions - rural and remote, with small populations. Regions 2, 3, 4, 5, and 6 are the coastal regions, and Region 10 has one moderate sized town and a large rural area. Region 4 includes Georgetown, the capital, and represents the largest concentration of population.
- 2.2 Guyana has 98 km of railroads entirely dedicated to ore transport, one international airport, and 46 additional airstrips with short runways. The country has a single general cargo seaport in Georgetown, and 4 specialized bulk loading facilities. Guyana relies upon its 6,000 km of navigable water-ways used for carrying bauxite, sugar cane or other bulk commodities. The road network of Guyana totals 3,995 km and serves a national fleet of about 52,000 vehicles. All national paved roads, consisting of six main roads, have only two lanes, except for a segment along the East Coast Demerara, which has four lanes.

- 2.3 Although the road network is one of the sparsest in South America, most of the population has access to paved roads, mostly in fair conditions, due to the concentration of the population and the main road system in the coastal areas and since over the last 15 years GOG has embarked on a progressive rehabilitation of the roadways and structures along these roads. The road network in the interior consists mainly of roads readily accessible only during the dry season and limited to 4wd vehicles. Overall, the transport system is supported by an inadequate network, providing little internal and international connections, highly congested roads in urban areas with poor quality and costly transport services (ferries and buses). Air service and river transport to the interior is sporadic and limited by inadequate infrastructure.
- 2.4 Government responsibilities in the transportation sector are spread among various agencies, with the MPW&C taking on the main role. The MPW&C is basically responsible for transport policy and the provision and maintenance of almost all major transport infrastructures. The Ministries of Agriculture and Local Government assume the responsibility for providing and maintaining some local infrastructure while the Ministry of Home Affairs assumes some regulatory functions regarding safety and security of transport services.
- 2.5 The MPW&C's capacity to perform the function of executing agency has been consolidated over the years with the creation, in 2002, of the Work Services Group (WSG) that assumed responsibilities for the main roads and bridges, and main executive responsibilities for the road sector. This unit has evolved from being a PEU for IDB projects being undertaken by the MPW&C to become the unit which is responsible for all road works being undertaken by the MPW&C. This unit is also responsible for the planning and management of road investments and maintenance activities.
- 2.6 The Country's Strategy: The country's strategy for the road subsector consists of i) rehabilitation, improvement and extension of the road network, financed by external resources, and ii) routine maintenance of the rehabilitated network financed by recurrent resources. This strategy aims to reduce transportation costs, improve market access and overall competitiveness, and increase coverage of maintenance activities of main roads, bridges and other infrastructure. Guyana has been actively restoring infrastructure that in most cases has exceeded its life service, improving traveling conditions and road safety along public roads. Maintenance programs include the involvement of the private sector by means of contracting out continuous routine maintenance activities of existing infrastructure, as well as the strengthening of MPW&C's capacity to administer and maintain the road network.
- 2.7 The GOG seeks to enhance regional integration, accessibility and facilitate trade through the improvement of the transportation link (Georgetown and Lethem) between Guyana's north and south regions. The Bank has approved a TC to finance a prefeasibility study, and the feasibility studies including: i) Indigenous Peoples Plan, ii) Environmental and Social Impact Assessment, iii) Technical Analysis, and iv) Economic and Financial Feasibility. Complementing this approach, the GOG is also seeking to improve the accessibility of the population in Georgetown by means of the development of an alternative new Southern Approach, that would be linking the outskirts of Georgetown and the new urban developments in Diamond Grove, south of the capital city, and the simultaneous improvement of the main arterial network within the City as an integrated

project of urban mobility improvement.

- 2.8 The Bank's Country and Sector Strategies: The Bank's strategy in Guyana, expressed in the Country Paper (GN-2503-1), seeks to support the Government vision for accelerating economic growth through economic diversification and targeted social development. This strategy promotes the improvement of the quality and coverage of the road network as a pillar of the strategic infrastructure investments therefore supporting the economic diversification objective. The main areas of focus of the *transport sector strategy* are: i) develop a balanced transport system; ii) develop criteria to prioritize projects rationally within a general strategy; iii) provide for the improvement and the regulation of the transport system; and iv) improve the performance of the main logistic chains which sustain the economic growth of the country. The principles of this strategy are: a) prioritize the solution of the principal problems of the existing system (localized congestion, need of maintenance of the road network, road safety, and urban transport) with an efficient use of the economic resources; b) relate the size of the projects with the size of the economy of the country and the capacity of the executing agencies; c) consider accessibility and integration aspects; and d) take advantage of integration possibilities with the neighbour countries.
- 2.9 The Bank's involvement in the development of road infrastructure has comprised long-term capital investments aimed at the rehabilitation of infrastructure that has fulfilled its service life expectancy, extension of the road network, support of regional and international integration projects and improvement of road safety conditions. This strategy, in concurrence with the country's sector strategy, aims to improve and expand the road network, while assuring its technical, financial, socio-environmental and economic sustainability. The Bank, following this long-term strategy, has been financing major rehabilitation works along most of the main road network and has contributed to develop and improve sustainable routine maintenance mechanisms, covering most of the rehabilitated network. Bank operations also include provisions for the future financing of maintenance of the road network, as well as either explicit road safety components or implicit activities for safety improvements. This TC will support the improvement and maintenance of critical road infrastructure, creating a more attractive environment for private sector investments as a means to support economic and social development for the country.

III. PROGRAM OBJECTIVE AND DESCRIPTION

- 3.1 The TC objective is to support the improvement of the Road Improvement and Rehabilitation Program (GY-L1027) (RIRP). Such improvement will enhance regional integration and accessibility, improve operational and safety standards, and facilitate trade. The RIRP is currently being designed as a multiple works operation with a representative sample of works consisting of the East and West Canje roads, analyzed with Bank's financing in 2004, as well as a set of eligibility criteria for additional roads not yet identified. The existing studies on the East and West Canje roads are being reviewed and updated with resources from a Technical Cooperation currently under execution, Transport Sector Investment Strategy (GY-T1018). This proposed TC will finance the preparation of Technical and Economic Feasibility studies (traffic studies, geotechnical studies and topographical surveys, etc.), Environmental and Social studies, and preparation of designs and bidding documents for the rehabilitation of the other roads

to be financed by the RIRP; in principle, three road segments have been identified: a) the rehabilitation of the existing bridges and selected segments along the Railway Embankment, b) repair of localized failures (about 5 km in total) along the Soesdyke – Linden Highway, and c) rehabilitation of the Canal No 1 and Canal No 2 Roads. The studies will: i) identify alternatives to improve the present condition of the roads, ii) determine the alternatives' economic and technical viability; iii) prepare environmental and social analyses; and iv) develop designs and additional documents needed for tendering the works. These studies components will be executed sequentially; terms of reference are being prepared by WSG and will be reviewed by the Bank.

IV. COST AND FINANCING

- 4.1 The cost of the TC is estimated at US\$1,100,000. The Fund for Preparation of Infrastructure Projects -Infra Fund- will provide US\$400,000, The Net Fund for Special Operations will contribute with US\$600,000, and GGY will contribute US\$100,000. This project is considered eligible for non-reimbursable financing by the Infra Fund, since the loan operation is included in the Bank's pipeline with Guyana (GY-L1027); it has a strong commitment by the government, and is fully consistent with the strategies of Guyana and the Bank. The expected execution of this TC is 12 months and 18 months for disbursement.

Component	GY-T1070	GY-T1071	IDB Total (US\$)	GGY (in kind)	Total (US\$)
Technical and Economic Feasibility, Environmental and Social Analyses	150,000	150,000	300,000	30,000	330,000
Direct cost	75,000	75,000	150,000		
Indirect cost, trips, travel, etc.	75,000	75,000	150,000		
Preparation of Designs	420,000	220,000	640,000	70,000	710,000
Direct cost	210,000	110,000	320,000		
Indirect cost, trips, travel, etc.	210,000	110,000	320,000		
Contingencies	15,000	15,000	30,000	-	30,000
Supervision	15,000	15,000	30,000	-	30,000
TOTAL	600,000	400,000	1,000,000	100,000	1,100,000

V. EXECUTING AGENCY AND EXECUTION STRUCTURE

- 5.1 The nature of these activities is well within the realm of MPW&C responsibilities and therefore the MPW&C will be the executing agency for the studies of this TC. MPW&C will provide local transportation, logistical support and facilities such as office space and communication, facilitate access to information, and provide counterpart staff. The Country Office in Guyana will have the basic responsibilities and the Project Team will have the technical responsibility. The MPW&C will be the executing agency for this TC and will also be responsible for preparing TORs and selecting consulting firms / individuals.

VI. MAJOR ISSUES

- 6.1 There are no foreseeable issues or impacts to the preparation of the Plan of Operation or the execution of this technical cooperation.

VII. ACTION PLAN

- 7.1 Upon approval of this profile, the Plan of Operation will be prepared, and could be submitted for approval during the third quarter of 2009.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

- 8.1 This TC will not have a direct environmental and social impact. The emphasis of this TC will be on supporting the GGY on developing technical and economic feasibility studies for the rehabilitation of roads and bridges. Given the nature of the projects to be included in the RIRP, no major environmental issues aside from those from small scale rehabilitation projects are expected. In order to address the different environmental impacts related to the works themselves, this TC will finance an Environmental and Social Analysis (ESA) for each of the selected projects which will include the updating of environmental and social baseline conditions, identify the environmental and social impacts, and define the scope of the different components of a specific ESMP for each individual project, to ensure the mitigation of negative impacts and to cover all the requirements of local environmental regulations and the Bank's policies. Special emphasis will be given to the social impacts and the possibility of improving the conditions of local communities. This value added approach will aim to enhance the social benefits of the program by analyzing the characteristics of the immediate neighboring areas, and include, wherever feasible, additional improvements to the drainage conditions of the roads with the purpose of reducing the likelihood of water-borne diseases and other related problems. The TC will also cover any costs related to the preparation of resettlement plans should there be a need, ensuring compliance with the Bank's resettlement policy (OP-710). In order for any new project to be considered for financing as part of the RIRP, strict screening will be done beforehand in order to ensure it is technically environmentally and socially viable. In this respect, the TC will also fund the preparation of an operational plan which will include specific guidelines and requirements for it to be included and financed by the Program.
- 8.2 According to the Bank Environmental and Safeguard Compliance Policy (OP-703), and considering the objectives, the environmental and social impacts and risks of the TC, this operation is a Category "C".