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**DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D.C. 20523**

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**CAPITAL ASSISTANCE PAPER**

**Proposal and Recommendations  
For the Review of the  
Development Loan Committee**

GUYANA IMPROVEMENT OF GEORGETOWN CITY STREETS  
AND APPROACHES

AID-DLC/P-988

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DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D.C. 20523

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AID-DLC/P-988  
September 9, 1971

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT Guyana Improvement of Georgetown City Streets  
and Approaches

Attached for your review are the recommendations for authorization of a loan in an amount not to exceed eight million nine hundred thousand dollars (\$8,900,000) to the Government of Guyana to assist in financing the United States dollar costs of equipment, materials and technical services for the Borrower's city street and approach road improvement program ("Project")

This loan proposal is scheduled for consideration by the Development Loan Staff Committee at a meeting on Friday, September 17, 1971

Rachel R Agee  
Secretary  
Development Loan Committee

Attachments

Summary and Recommendations  
Project Analysis  
ANNEXES I-IV

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GUYANA

IMPROVEMENT OF GEORGETOWN CITY STREETS AND APPROACHES

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September 9, 1971

GUYANA  
IMPROVEMENT OF GEORGETOWN CITY STREETS AND APPROACHES

PART I SUMMARY AND RECOMMENDATIONS

1. BORROWER The Borrower will be the Government of Guyana (GOG) acting through the Ministry of Finance. The Ministry of Works, Hydraulics and Supply (MWHS) will execute the program.
  
2. LOAN. a) Amount. Not to exceed eight million, nine hundred thousand dollars (U.S. \$8.9 million).  
  
b) Terms . Repayable in 40 years, including a grace period of 10 years at an annual interest rate of two percent (2%) during the grace period and three percent (3%) thereafter.
  
3. TOTAL PROJECT COST The total cost of the project is distributed as follows

	<u>FX</u>	<u>LC</u> <sup>1/</sup>	<u>TC</u>
AID	\$8,900,000	- 0 -	\$8,900,000
GOG	- 0 -	\$3,000,000	3,000,000
	<hr/>	<hr/>	<hr/>
	\$8,900,000	\$3,000,000	\$11,900,000

<sup>1/</sup> Local currency is expressed in dollar equivalents. The exchange rate between the Guyana and U.S. dollar is approximately 2 to 1.

4. PROJECT DESCRIPTION: The proposed loan will assist the Government of Guyana by providing 75% of the cost for the construction and improvement of the Georgetown Approach Roads, and Georgetown city streets; providing consulting services to prepare final plans, specifications and contract documents; providing construction supervision, and providing procurement of off-shore materials and supplies necessary for the project.

The Georgetown Approach Roads consist of two major roads - the East Coast Road generally considered from Mahaica to Central Georgetown (22.1 miles) and the East Bank (Demerara) Road from Soesdyke (20.6 miles) to the central area of Georgetown. Both of these roads serve a densely populated area and traffic volumes progressively increase as the roads approach Georgetown reaching an ADT volume of 11,000 with a peak hour of 1972 vehicles on the East Coast and ADT volume 10,900 with a peak hour of 1485 vehicles on the East Bank. The existing narrow two lane roads, with their mixed traffic of bicycles, horse carts, pedestrians and motor cycles, have now reached saturation limits. Travel is slow and the accident rate is high.

The Georgetown Approach Roads will be improved by widening and straightening to provide a standard width shoulder and permit a safe sustained speed over the entire length. A four lane section, divided where unimproved land is available, will be provided for 7.2 miles from Georgetown on the Soesdyke Road and 8.6 miles on the Mahaica to Georgetown section.

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Within the area of Greater Georgetown, main east to west and north to south arterials will be improved and widened to distribute the traffic within the city and provide routes through it. Camp Street will be improved from the East Coast Road to the East Bank Road to a four lane facility. A portion of the route from Hadfield Street to Laing Avenue will use existing two way streets as one-way, two lane facilities. Other north-south arterials to be improved will include Vlissengen Road, additional two lanes to be constructed between the Coast Road and Lamaha Street, and Sheriff Street from the Coast Road to Ruimveldt.

East to west arterials are to be developed by widening and/or new construction and include Lamaha Street from High Street to Sheriff and its extension easterly to the University of Guyana,

South Street between Vlissengen Road and Sheriff, and Ruimveldt Avenue between East Coast Road and Sheriff Sheriff running north and south and Ruimveldt east and west will provide a bypass of the Central Georgetown Area.

5. PROJECT PURPOSE & JUSTIFICATION; It is essential that existing approach roads be improved and brought to the design level to permit adequate forward planning and to prevent the strangulation of traffic movements in Guyana's major city. Such strangulation would thwart progress and lead to a highly jumbled, disorganized sprawl of traffic and businesses in the limited central business districts. The Greater Georgetown area must be considered for the near future as incorporating an area from Mahaica on the east to Soesdyke on the south. A similar triangle of development is anticipated on the West Bank of the Demerara and the Berbice Region. AID and the IBRD are participating in the basic development directions through highway construction/rehabilitation programs along the West Coast and Bank Demerara and an AID loan is proposed for FY 1973 to rationalize the traffic system in the New Amsterdam area. Thus, through orderly development of approaches and the establishment of major directions for future egress and ingress to the cities, we are laying the framework to accommodate the future growth of Georgetown and New Amsterdam.

The economic and social impact of the project from a user benefit viewpoint is clearly demonstrated through the individual projects internal rates of return which span a range of from 20% to 26.5%. Improved transport will facilitate the flow of products and services, expand the area for development, e.g. housing, farming, industry, thus providing expanded employment opportunities, and permit the relocation of families to areas apart from the congested center.

Also of immediate concern is the public safety aspects of this project. The roads presently represent serious traffic hazards because of the lack of shoulders for the movement of pedestrian, bicycle and animal drawn vehicles. With a growing motor vehicle population there has been a rapid increase in traffic fatalities which, despite a considerable public education campaign, indicates no abatement. Prime Minister Burnham has on several occasions referred to the improvement of these approach roads as a life and death need.

6. OTHER SOURCES OF FINANCING. The Export-Import Bank, The World Bank (IRBD) and the Caribbean Development Bank indicated no interest in the proposed financing in their letters of, respectively, May 24, June 7, and May 18, 1971. Guyana is not a member of the IDB and does not have borrowing rights from that institution.
  
7. VIEWS OF COUNTRY TEAM The Country Team considers it urgent to improve the approaches to Georgetown in view of the economic, social and political impact which such a project would have. Also to be considered are the short-term employment effects of the construction program in view of the existing 20% unemployment rate. For these reasons the Country Team gives this project the highest priority.  
  
The Country Team judges, on the basis of personal conversations between the Ambassador and the Prime Minister and conversations between the Mission Director and the Prime Minister and with other Ministers of the Government, that this project ranks second within the list of major undertakings in which the Government is involved. (See STATE 522, May 22, 1970).  
  
As is clearly demonstrated by the benefit-cost ratios this project will have extremely positive effects on the nation's economy in terms of efficiency of transport and provide a high degree of user benefits.
  
8. STATUTORY CRITERIA. All statutory criteria have been or will be met. (See ANNEX III, Statutory Checklist for details).
  
9. ISSUES: None.
  
10. LOAN ADMINISTRATION The applicable Capital Project Guidelines will be adhered to in all implementing actions.
  
11. RECOMMENDATIONS. On the basis of the conclusions of the Capital Assistance Committee that the project is technically, economically and financially sound, it is recommended that a loan to the Government of Guyana for an amount not to exceed eight million nine hundred thousand dollars (\$8,900,000) be authorized subject to the following terms and conditions

A Interest and Terms of Repayment

Borrower shall repay the loan to AID in United States dollars within forty (40) years from the first disbursement under the loan, including a grace period of not to exceed ten (10) years. Borrower shall pay to AID in United States Dollars on the disbursed balance of the loan interest of two (2) per cent per annum during the grace period and three (3) per cent per annum thereafter.

B. Other Terms and Conditions

(1) To firmly ensure the Borrower will make available the financial resources, equipment, personnel and other resources as required, the Borrower will confirm in writing prior to award of contract for any and each construction contract as to the availability of these inputs.

(2) Borrower shall covenant to maintain the Project and to make adequate provisions in its budget annually for that purpose. Such amount shall be in addition to amounts Borrower provides in its budget annually for the maintenance and upkeep of other roads and trails in Guyana.

(3) Borrower shall covenant to provide all right-of-ways necessary for this permanent construction and temporary detours and shall certify that such right-of-ways or legal rights of possession have been obtained prior to the award of any contract for construction.

(4) Equipment, materials and services financed under the loan shall have their source and origin in and be procured from Code 941 countries

(5) United States dollars utilized under the loan to finance local currency costs shall be made available to Borrower or its designee through appropriate procedures.

(6) The loan shall be subject to such other terms and conditions as AID may deem advisable.

Capital Assistance Committee

Loan Officer J. Shea, USAID/G  
R. Bobel, LA/DR

Engineer . M. Brigham, USIAD/G

Economist : C. Bischoff, LA/DR

Lawyer : K. Knowles, LA/GC

Approved by . Robert C. Hamer, USIAD Director

PART II - PROJECT

SECTION I NATURE OF THE PROJECT

A DETAILED DESCRIPTION OF ACTIVITY

The separate project areas have been delineated within the Approach System as described below

Project No. 1

- a) Georgetown Bypass 4.5 miles
- b) City Street Improvements including University of Guyana Access Road 8 miles

Project No. 2

East Coast Road - Georgetown 22 miles

Project No. 3

East Bank Road - Georgetown 20 miles

The design period is 1990. The Georgetown Approaches section extends eastward from the central business district to Mahaica about 22 miles and southward about 20 miles to Soesdyke.

Project No 1 and the section of Project No 3 from Craig to Soesdyke (10½ miles) will be constructed by the Ministry of Works, Hydraulics and Supply (MwHS) utilizing subcontractors for all concrete and structure work and for hauling of all materials. The Ministry with its crews will do all materials placing (grading and compaction) and paving

A foreign Contractor will be used for the construction of Project No. 2 and the section project No 3 from Ruimveldt Avenue to Craig (8½ miles).

A map indicating the location of these projects is attached as Annex II, Exhibit I Typical road, bridge widening and composite timber bridge sections are attached as Exhibits 2, 3 and 4 respectively of Annex II

Georgetown Portion

Project No. 1 - Georgetown Bypass and City Street Improvements

Georgetown Bypass - Consideration was given to a new highway, diverging from the East Bank Demerara Road near Diamond, passing to the east of Greater Georgetown and joining the East Coast Highway at Felicity, thus providing an effective bypass of the Georgetown Area.

However, the volume of traffic desiring to bypass Georgetown is only about six per cent of the total Georgetown traffic. Furthermore, about half of this volume of traffic originates or terminates at the Bulk Sugar Terminal and the Ruimveldt Industrial Area on the East Bank Demerara, and travels only as far east as Plaisance on the East Coast Road. Considering the volume of traffic desiring to bypass Georgetown and the high cost of constructing an entirely new highway, it was decided that an adequate bypass could be provided by improving existing streets. Ruimveldt Avenue would be improved for about 8,700 feet east of the East Bank Demerara Road, and existing Sheriff Street would be improved from Princess Street north to East Coast Road. The gap of about 4,000 feet between Ruimveldt Avenue and Sheriff Street at Princess Street would be closed with a new road. Thus by improvement to two existing roads and a short extent of new road, a bypass adequate for the volume of traffic desiring to bypass Georgetown can be provided.

City Street Improvements Between the westerly terminus of Project No 2 in Central Georgetown and the beginning of Project No 3 south of Georgetown, at Houston, improvements to several city streets are proposed. Camp Street from the East Coast Road to just north of the Cummings Canal would be improved to four lanes, south of the Canal to North Street, it would be improved as a divided, four-lane highway. Camp Street, south of North Street to Hadfield would be a four-lane undivided street. South of Hadfield Street to Laing Avenue, Hunter and Russell Streets, and Sussex, Albert, Charles, Hadfield (between Camp and Smyth) and Smyth Streets, would be improved as one-way, two-lane streets, with channelization and signalling to provide improved north-south circulation through to the central business district. South of Laing Avenue, Hunter Street would be improved as a divided four-lane highway to the beginning of Project No 3 at Houston. Lamaha Street, between High Street and Sheriff Street, will be improved to a full two-

lane section and extended as a two-lane easterly in a straight line to the boundary of the University of Guyana where a new two-lane road will be constructed to join with the already existing road running from the East Coast Road to the University property. Vlissengen Road will be improved from a two-lane section to a four-lane divided section between the East Coast Road and Lamaha Street. Improvements to South Street will be made between Sheriff Street and Vlissengen. This will be a two-lane highway. Princess Street will also be improved between Sheriff Street and Vlissengen.

#### Project No. 2 - East Coast Road

Project No. 2 essentially comprises improvements to the existing East Coast Road from the existing bridge over the Mahaica River at Mahaica to Vlissengen Road in Central Georgetown. To simplify the description of the project, it is divided into four segments, as presented in the following paragraphs.

Mahaica to Grove The segment of the project from Mahaica to Grove, the most easterly segment, begins at the existing bridge over the Mahaica River, extends in a northerly direction over undeveloped lands to the East Coast railroad, parallels the railroad for about 4,000 feet, then curves to the northeast and joins the existing East Coast road near Mosquito Hall. From this point to Grove, the project is an improvement of the existing East Coast Road. The projected traffic demand for this segment indicates the need for a two-lane facility. The total length of this segment is about 3.8 miles.

Grove to Buxton The next segment of Project No. 2 involves an improvement of about 8.2 miles of the existing East Coast Road between Grove and Buxton. The improvement consists of the construction of shoulders, repaving to meet the design criteria, and some straightening of less than three miles of the existing alignment to eliminate right-angle turns. The traffic analysis indicates the requirement of a two-lane roadway.

Buxton to Good Hope The next segment of Project No. 2 is from Buxton to Good Hope, a distance of about 1.5 miles. Improvement to the existing East Coast Road as a two-lane highway is proposed. Because of the area which this segment traverses is densely populated, the provision of ten-foot wide shoulders is proposed.

Good Hope to Vlissengen Road: The plan proposed for this westerly segment of about 8.6 miles involves continuing the improvement of the East Coast Road as a divided, four-lane highway from Good Hope to Vlissengen Road, extending toward the central business district at Lamaha Street in Georgetown.

Project No. 3 - East Bank Demerara Road-Georgetown

Project No. 3 is essentially an improvement of the East Bank Demerara Road along the Demerara River from Ruimveldt Avenue at Houston south to Soesdyke. The total length of the project is about 20.6 miles. For purposes of description, the project is divided into three segments, as presented in the following sections.

Ruimveldt Avenue to Diamond Place. The segment from Ruimveldt Avenue, at the beginning of the project to Diamond Place, is about 5.4 miles in length. The projected traffic demand for this segment indicates the need for four traffic lanes so the proposed project is an improvement and widening of the existing East Bank Road, with 2 two-lane, 22-foot roadways, separated by a 16-foot wide median from Ruimveldt Avenue to Peter's Hall, 2 two-lane roadways separated by a 10-foot median from Peter's Hall to Diamond Place. Throughout this segment, the improvement of the existing highway includes elimination of right-angle turns and smoothing of sharp curves.

Diamond Place to Craig From the end of the four-lane section the existing road will be improved as a two-lane road to the northerly boundary of Golden Grove where a new two-lane realignment will commence located approximately 1,500 feet east and parallel to the existing road, rejoining the existing road at the southern boundary of Craig. This section is approximately 2.6 miles in length.

Craig to Soesdyke For the remainder of Project No. 3 from Craig to the southerly end at Soesdyke, the traffic projections indicated that only a two-lane facility is required for the design period. The proposed project involves the improvement of the existing two-lane roadway by the provision of six or eight-foot shoulders and repaving and elimination of right-angle turns and sharp curves. The terminus of this road will conform to the approaches to the Soesdyke-Mackenzie highway which was constructed under AID Loan 504-L-001.

B. BACKGROUND OF PROJECT

1. History of Project

The need for improvement of the Georgetown and New Amsterdam Approach Roads has been recognized by the Government of Guyana for over five years. With each passing year the pressure on the system has increased with commensurate public discontent being voiced

The Government of Guyana's first attempt to reach a solution to the growing problems of the system was to request a feasibility study in the Fall of 1967.

The required advertisement was carried in the Commerce Business Daily on January 5, 1968, and, as a result, the firm of De Leuw Cather International was selected on September 10, 1968. The selection did not materialize into a contract. The Government subsequently selected the firm of Parsons, Brinckerhoff, Quade and Douglas on February 6, 1969. USAID approved the selection and a contract was approved on November 6, 1969.

The required letters of credit were established and Parsons, Brinckerhoff, Quade and Douglas started work on the feasibility plan November 6, 1969, with a planned completion date of September 1970. For various reasons, the draft report was delayed. A draft copy of the report was completed and submitted to the Government April 6, 1971. The final report is anticipated in July 1971.

A formal application from the Government of Guyana was received on June 8, 1971, for a loan of U.S. \$ Ten (10) million. This application represented 75% of the estimated costs to construct all roads in the Parsons, Brinckerhoff, Quade and Douglas feasibility study, including those in the New Amsterdam Area, but excluding Canje Bridge. This application contemplated doing all work by Force Account. Subsequent discussions with AID/W, USAID/G and the Government of Guyana reduced the scope of work by eliminating all New Amsterdam streets and dividing the remaining work between a foreign Contractor and the MWHS. The GOG concurred in this action and on June 21, 1971, their request for \$8.55 million to cover the estimated costs based on the agreed discussion between force account and foreign contractor. A review of the estimates indicates a loan amount of \$8.9 million is deemed appropriate to cover the costs of construction as now planned.

## 2 Evaluation of Previous AID Assistance

In 1965 AID made a loan of \$5,500,000 (later increased to \$7,500,000) to construct a modern two-lane facility from Soesdyke to Linden (to merge Mackenzie), a mining town 50 miles up the Demerara River. The proposed improvement of the East Bank Road would connect with this road at Soesdyke providing a modern highway from Georgetown to Linden.

There are present plans underway to extend this road with a penetration type facility from Linden to the Bartica-Potaro trail crossing the Essequibo in the vicinity of Rockstone. After connecting this road with the Bartica-Potaro trail, traffic could travel to Mahdia along the existing road. The road from Mahdia to Lethem on the Brazil border is under construction by the Government forces (Military and civilian) and self-help volunteers.

The improvement of East Bank Road thus becomes a part of total planned road system extending Georgetown to the Brazilian border via Soesdyke, Linden, Rockstone, Mahdia, Annai and Lethem.

In 1967, AID made a loan for \$7,500,000 to reconstruct 47 miles of the highway on the East Coast from Crabwood Creek (near the Surinam border) to New Amsterdam. From New Amsterdam, the road follows the Coast to Georgetown. This part of the highway is of adequate structural section but is narrow and of poor alignment, reducing substantially the traffic capacity. The plan therefore provides for the widening of this road and realignment from Mahaica to Georgetown, a distance of 22.1 miles. Thus with the completion of this section an adequate highway will be provided between Crabwood Creek to Georgetown along the Atlantic Coast.

On completion of these improvements, a major segment of the population of Guyana, East of Demerara along the Coast will be served with modern transport facilities.

The Government of Guyana is preparing final plans and specifications and will be negotiating a loan from the IBRD in the amount of U.S.\$9,500,000 for improvements of several roads, West of the Demerara which generally include

- 1) Vreed-en-Hoop to Uitvlugt - 10½ miles
- 2) Canal Polder 1 and 2 along the West Bank of Demerara - 14 miles
- 3) Vreed-en-Hoop to Vriesland on the West Bank of Demerara - 9 miles
- 4) A Highway along the Essequibo Coast from Supenaam to Charity - 38 miles

It is proposed that on demonstration by the MWHs of its ability to implement sizeable road projects, e.g. the Georgetown City Streets and Bypass and the Craig-Soesdyke work under this loan, that a loan be made to finance a portion of the New Amsterdam Approaches, city streets and a new bridge over the Canje River. A study of this project is expected to be completed in the late summer of 1971.

A feasibility study is under consideration, to be financed under AID Loan 504-L-009, for a bridge crossing of the Demerara

With realization of the IBRD and the New Amsterdam Approach projects and ultimately a bridge crossing of the Demerara a vast and highly productive coastal area would be integrated into a single highway network.

As discussed, there have been two previous loans in this sector of activity. The GOG has complied fully with the Conditions Precedent and covenants contained in these two loan projects noted above.

The road financed under the first loan (Soesdyke-Linden) was officially opened in December 1968 and has been maintained and operated as a toll road by the Ministry of Works, Hydraulics and Supply. The maintenance problems have not been difficult because of adequate structural section of the travel ways, however, the road passes through a "White Sand Area" with several deep cuts and fills, which is subject to severe erosion during periods of intensive rainfalls. The Government has done a commendable job in maintaining these slopes and has made much progress in restoring the natural vegetation to the area. This has involved the placing of cover material, and the planting of grasses capable of surviving in this sandy soil. It is estimated that vegetation has been restored on about 50% of the exposed areas, and is predicted that within another two years re-growth will be fully established with the exception of a few of the higher cuts and fills.

Prior to construction of the Soesdyke-Linden highway there was very little economic activity between the two points. Today, two and a half years after the road's completion, there are several small scale logging operations in progress, several pig farms have been started, an agricultural research facility has been established, several shops are evident, land clearing efforts have been initiated by cooperatives and private persons, a large AID housing guaranty project has been started as have many week-end camps. Overall, a gradual development is progressing inwardly from opposite ends of the road.

The GOG is very pleased with the success of this highway. A full page photograph of the completed road was used as their outside cover of the 1970 telephone directory. The highway is well policed and maintained. A headquarters is located about half way where a small police and maintenance group assigned to the road is permanently housed. The accident rate has not been excessive, even though speeds are high.

In summary, it can be said that the objectives of the loan have been fully accomplished. The road has been highly successful in providing a social and economic link between the two populated centers. It is felt that the benefits will continue to accrue as the population and the level of social and economic demands increases.

The second loan, providing for the reconstruction of the highway between Crabwood Creek and New Amsterdam, is scheduled for completion in the Fall of 1971. Therefore, a complete assessment of its success cannot be fully made. However, the paved travel ways, except for 5 miles at the Crabwood Creek end, have been completed and used for almost a year. There is every indication that upon completion it will be an equally successful project. Several local newspaper articles have given high praise to the project. Letters received from residents indicate much satisfaction with the project.

The route passes through a highly productive area, the principal products of which are rice, sugar, coconuts, vegetables and lumbering. The highway will provide transport facilities for these products to central markets in Georgetown for local consumption or export. In addition, it provides local service to small communities along the route for social and economic activities.

The GOG has fulfilled all of its obligations under the terms of the loan and contracts with Consultants and Contractors. The GOG have paid promptly all local costs. They have supplied an adequate and capable local technical staff to work under the supervision of the Consultant in the layout of the work and supervision of construction. The prime Contractor (Emkay S.A.), subcontracts a large portion of the work to local contractors, which has assisted in the development of local contracting institutions. The completion of the job has been delayed a few months for various reasons and there will probably be some discussions as to the payment of liquidated damages. However, this does not reduce the effectiveness or value of the completed facility.

### 3. Reviews and Recommendations of Country Team

The IRR was approved by the Capital Assistance Executive Committee (CAEC) on April 15, 1971

USAID conducted a series of review sessions to consider each point raised in the IRR. These meetings also included, at times, members of the Ministry of Works, Hydraulics and Supply. Without exception a satisfactory resolution was reached.

The basic conclusions reached in the Mission Review was that the project was sufficiently mature to warrant intensive review. This review has now been completed and it is agreed the project is technically, economically and financially sound and that AID financing is warranted

### 4 Opinion of Other Institutions

The Export-Import Bank and the World Bank were queried by AID/W as to their interest in participating in this project. Their replies, contained in letters dated May 24, 1971 and June 7, 1971, respectively, stated these institutions were not interested in assisting in the financing of the project.

The GOG asked the Caribbean Development Bank for an expression of interest in this project. The response dated May 18, 1971, was also negative.

No other institutions have expressed interest in providing financial assistance.

### 5 Environmental Effects

Because the project involves improvement and realignment of existing roadways little impact on the environment is anticipated. The following factors were considered in judging the project's environmental impact

- 1) Construction for the most part will take place in existing rights-of-way
- 2) Where such is not the case, right of way will still not deviate too far from existing road
- 3) Therefore, the environmental impact is likely to be minimal as the existing road has been in existence for some time and whatever environmental effects which could be expected from a road in this area have already occurred.

C PROGRAM JUSTIFICATION

1. Place of Project in Country Program

The Georgetown Approaches project has been carried as a specific economic objective in the FY 1970 Program Memorandum and FY 71 and FY 72 Country Field Submissions. The relationship between the project and the U.S. objectives is spelled out in the referenced classified submissions. Essentially the rationale links economic growth to the direct and indirect attainment of overall policy objectives.

2. Impact on US Economy

It is believed that the majority of funds provided under this loan will be spent for services and products from the U S. Certainly as now planned the engineering will be accomplished by the firm which performed the feasibility study and the tentative division of the work is such that a large contractor will be required. Generally speaking, this effectively means a US contractor. Certain supplies, such as asphalt and cement will be procured from Code 941 countries. The amount so expended will approximate 10 percent of the loan.

3 Development of Democratic Institutions

Guyana's Government is increasing its emphasis on self help, stressing the need for cooperative effort to maintain existing infra-structure - such as clearing canals, road building and maintenance, etc., all activities in which the Prime Minister personally participated. Large scale construction projects are not amenable to self help techniques, however, on the "force account" work in Georgetown, there will be a heavy labor component providing meaningful employment within the areas of high unemployment. Considerable opportunities for training and upgrading of skills will exist in all phases of the work adding to the growing body of trained construction personnel. As USAID believes that Guyanese labor will play a major role in the country's political orientation, gainful employment is a necessary factor in the equation.

The effective total highway linkage from Linden (Mackenzie) to Crabwood Creek on the Surinam border should similarly produce in time a cohesiveness of society by facilitating economic and social interchange. Thus, while this project is not a direct contributor to democratic institutional development it has every indication of having a significant indirect bearing on the development of such institutions.

#### 4 Mission Director's Certificate

A copy of the Mission Director's Certificate attesting the satisfactory performance by the Borrower with respect to previous AID loans and the Borrower's capability of implementing the loan proposed herein, is contained in Annex I.

#### 5 Economic Analysis

##### a) Growth Trends

During the early part of the 1960's activity was affected by severe civil disturbances which led to a substantial drop in production between 1961 and 1963. Output recovered in 1964 and growth was resumed in 1965. Over the six years 1965-70 the GNP at current prices rose fairly steadily, at an average rate of 8.6 per cent per year, in comparison to increases of only 3.3 percent a year in 1961-64. Most sectors of the economy shared in the expansion, but the largest increases were in mining (bauxite and alumina), construction, and government services, while farming and manufacturing grew less rapidly than total output. On a year to year basis the rate of increase reached almost 10 per cent in 1967-68, but fell away to about 7 per cent in 1969 and to less than 7 per cent in 1970. Allowing for an estimated population increase of 2.5 per cent a year, net national income per capita rose by about 0.5 per cent a year in 1961-64 and by more than 5 per cent a year in 1965-70, in 1970 average income per capita was approximately G \$565.

The slowdown in 1970 was primarily due to a 15 per cent decline in the volume of sugar production, there was a poor spring crop and the more important autumn crop was interrupted by strike. In addition, production in the bauxite and alumina industry, which is the largest sector of the economy, was affected by bad weather, and output expanded at a somewhat slower pace than in the preceding year. These factors were partially offset by a sharp recovery in rice production which had declined in 1969.

Because of recent good weather conditions, agricultural production in general is expected to increase substantially in 1971. Rice may only marginally surpass the 1970 level of output, however, sugar production for the first half of the crop year was at a new record level and it is estimated that sugar production could rise by as much as 25 per cent, to a record volume of 390,000 tons. Bauxite and alumina production is being maintained and could also increase by as much as 10 per cent. The construction industry is expected to continue expanding at about the same pace as before. On the strength of these estimates, the economy as a whole may grow by about 5 per cent in real terms.

b) Central Government Finance.

The general government sector in Guyana consists of the Central Government, the local authorities, and the National Insurance Fund, together with a few trust funds and decentralized agencies, such as the Guyana Development Corporation and the Guyana Credit Corporation which are arms of the central administration. The public sector also includes a group of six state enterprises, including the Rice Development Corporation, the Guyana Marketing Corporation, the Guyana Electricity Corporation, the Guyana Telecommunications Corporation, and the Guyana Airways Corporation. The Transport and Harbours Department, although part of the Ministry of Public Works, is also included in this group, as its operating revenues and expenditures do not pass through the budget accounts. Recently the Government has acquired several other business concerns including a trading company, a newspaper and a bus company, but the transactions of these firms are not reported separately.

The principal source of information on the transactions of the Central Government is the annual budget document. Data for 1970 are based upon revised estimates prepared before the end of the calendar year, and thus may be subject to quite extensive revision. Debt amortization and sinking fund payments are treated as current expenditure in the budget document, but herein they are treated as a negative financing item.

The operations of the public sector are dominated by the Central Government, which collects 85 per cent to 90 per cent of current revenues and is directly responsible for a slightly higher proportion of current expenditure. Until recently it also generated almost all of the public sector saving, but following the establishment of the National Insurance Fund in 1970 the proportion was reduced to about two thirds. The Central Government also undertakes either directly or by means of loans and grants to the rest of the public sector more than 85 per cent of total public investment.

Of the other general government agencies, the local authorities are responsible for less than 5 percent of total current revenue and expenditure. As indicated above, however, the newly established National Insurance Fund assumed considerable importance in 1970, providing about 8.5 per cent of total current revenue and 38 per cent of the current surplus. The capital expenditure of these agencies appears to be very small, although information about investment by the local authorities is not available.

The state enterprises play a relatively important part in the economy. Since 1966 their gross trading receipts have fluctuated between G \$47 million and G \$57 million, and in 1970 they were equivalent to about 10 per cent of the gross national product. Two or three of the agencies receive regular subsidies from the Government, but as a group they have achieved small net current account surpluses in recent years. The investment expenditure of these agencies has been quite small, declining from G \$6 million in 1966 to less than G \$4 million in 1967-69. In 1970, however, several new programs were undertaken and outlays rose sharply to G \$16 million. Over the past five years the enterprises appear to have financed more than half of the capital outlays from their current surpluses while loans from the Government have amounted to about 13 per cent of the total. The rest of the financing has been obtained mainly from the banks and foreign suppliers.

Expressed as a ratio to GNP the current receipts of the general government sector, both tax and nontax, amounted to about 25.5 per cent of GNP from 1966 through 1969, but rose to 30.7 per cent in 1970 as a result of an increase in the tax revenue of the Central Government and the setting up of the National Insurance Fund. Current expenditure, meanwhile, rose from 23.3 per cent of GNP to 24.8 percent. The current surpluses of the general government rose from the equivalent of 3 per cent of GNP in 1966 to more than 3 per cent in 1967-69 and to almost 6 per cent in 1970. Including the current balances of the public enterprises, total public sector savings rose from 1.2 per cent in 1966 to over 6 per cent in 1970. Meanwhile, the public sector investment averaged less than 10 per cent of GNP from 1966 through 1969, rising to over 13 per cent in 1970. Taking this into account, the public sector has incurred over-all deficits ranging between 1.6 per cent of GNP in 1967 and 6.4 per cent in 1970, and averaging 4.5 per cent over the five-year period. In these years some 59 per cent of the over-all deficit was financed by net external borrowing, while net borrowing from the banking system was equivalent to about 44 per cent.

c) Central Government Operations

(1) Major Trends

From 1966 through 1969 the operations of the Central Government expanded at a pace more or less in line with the over-all growth of the economy (Annex II, Exhibit 5) In 1970, however, both revenue and expenditure increased very strongly, and faster than the economy as a whole. The budget for 1971, which has been described as a year of consolidation, provides for smaller increases in receipts and expenditures than last year, but the scale of operations is expected to remain about the same in relation to the GNP

Current revenue rose at an average rate of about 9 per cent a year in 1967-69, while the ratio of receipts to GNP remained very stable, around 23.5 per cent. In 1970, on the other hand, there were extensive changes in the tax system, and revenue increased by almost 21 per cent, and the ratio of budgetary receipts to GNP rose to 26.5 per cent. The growth of current expenditure was restrained in 1967, and while the rate of increase accelerated somewhat during the next two years, the ratio of current outlays to GNP was moderately reduced between 1966 and 1969. In 1970, however, current expenditure rose by more than 18 per cent, from 21.1 per cent of GNP to 23.4 per cent

As a result of these trends, current saving which had been less than G \$6 million in 1966 averaged about G \$11 million in 1967-69 and rose to almost G \$16 million in 1970, an increase from 1.5 per cent of GNP at the beginning of the period to slightly over 3 per cent at the end. Capital expenditure rose by about 10 per cent a year in 1967-69, but turned up strongly in 1970 when it showed an advance of G \$9.3 million, or more than one-fifth. Over the period as a whole the current surplus financed about 28 per cent of total capital expenditure. During the immediate post-independence period, the Government also received substantial development assistance in the form of grants from Canada and the United Kingdom, but these receipts tapered off rather rapidly from 1966 onward. Reliance on grant assistance, however, was more than offset by the increased use of external development loans, on a gross basis, drawings against these loans financed over 40 per cent of the Government's rising capital expenditure in 1968-70, against 24 per cent in 1966-67. Thus, even though the overall deficit increased substantially from 1966 through 1970, the residual deficit to be financed by internal borrowing or the use of official foreign exchange holdings increased only moderately from an average of G \$7.4 million in 1966-67 to about G \$12.6 million in 1970. Until 1970 domestic borrowing was largely from the banking system. In that year, however, the newly created National Insurance Fund took up more than G \$10 million of government securities, while the private insurance companies are estimated to have taken

up a further G \$2.5 million. Thus, total borrowing from the banking system, which had risen from G \$10 million in 1968 to G \$13 million in 1969, declined to G \$8 million in 1970.

Budget for 1971 The budget for 1971 provides for a much smaller increase in current operations than took place last year. Current receipts are expected to increase by only G \$12 million, or 9 per cent, while current expenditure is estimated to rise by G \$6 million (5 per cent), the smallest increase since 1967. If realized, these estimates would yield a current account surplus of G \$22 million, or G \$6 million more than last year. As indicated above, 1971 is regarded as a year of consolidation. No major new expenditure programs appear to be included in the budget, and the Government has expressed the intention of keeping current expenditure under tight control.

On capital account the budget again provides for expenditure of G \$75 million, slightly less than last year's appropriations but almost half as much again as actual outlays. As in the past, a number of projects are included in the budget for administrative reasons, and it is not expected that they will be fully carried out. Another substantial increase in investment expenditure is probable, but the authorities do not expect the total level to exceed G \$60 million. The shortfall is likely to affect principally the externally financed projects. Domestically financed investment expenditures are expected to be much closer to the estimated G \$27 million.

11) Revenue

For some years, the Government has been concerned with increasing efficiency in the various institutions involved in the field of public finance and, to this end, the Government in January 1970 established a committee to improve revenue collection. Although the committee's formal report has not yet been completed, some interim suggestions have been implemented (with regard to, for example, the collection of arrears) which are thought to have been partly responsible for the increase in revenue in 1970. The major part of the increase, however, was the result of a number of measures, involving increases in taxes on corporate profits and property and the imposition of new taxes on insurance companies. The Government has also embarked on comprehensive administrative programs to increase the efficiency of the departments of Inland Revenue and Customs and Excise. The program covering the former department will extend over a three-year period and involves technical assistance from the United States Internal Revenue Service.

111) Capital Expenditure

Following an increase of only 6 per cent in 1967, capital expenditure rose at an average annual rate of 15 per cent in 1968-70. Much of the capital outlays in Guyana in the past several years has been on the provision of infrastructure for community services such as roads, sea and river defenses, development of civil aviation, and other such projects. Such outlays accounted for between one half and three fifths of total capital expenditure in the 1966-70 period. Among the major capital projects completed during 1967-70 were the Atkinson-Mackenzie road, the University of Guyana, and the Timehri International Airport. Investment expenditure on behalf of social services has been relatively small and stable over the past five years. This has also been true for agriculture, except for the rice storage facilities, which became important in 1969 and 1970. Three major projects account for virtually all of the projected increase in capital outlays in 1971--sea and river defenses, rice storage facilities and water supply improvement.

1v) Government Debt

At the end of 1970, total debt of the Central Government amounted to G \$248 million, G \$120 million more or almost twice the size of the debt at the end of 1965. At the end of 1965, internal liabilities accounted for only 30 per cent of the total debt, but over the next five years they rose more rapidly than the external debt and by the end of 1970, represented two fifths of total indebtedness.

Of the internal debt outstanding at the end of 1970, about three fifths consisted of debentures (net of sinking fund balances), somewhat more than one fourth was in the form of Treasury Bills, and the remainder consisted of bank advances and a small amount of savings certificates. Since 1965, some G \$28 million, or 48 per cent of the over-all net increase in internal debt has taken the form of debentures, with the balance of the increase being accounted for largely by Treasury Bills. The largest holders of debentures at the end of 1970 were various government funds, including the National Insurance Fund. Smaller amounts of debentures, in order of importance were held by private industry, commercial banks, insurance companies, the Bank of Guyana, and miscellaneous holders. The distribution of the debt is expected to change considerably over the next few years, with increasing amounts being taken up by the National Insurance Fund and the insurance companies. The large increase in outstanding Treasury Bills since 1965 (accounting for more than 40 per cent of the over-all increase in outstanding debt) has accrued almost entirely to the banking system.

Total debt service of the government rose sharply between 1966 and 1968, but leveled off during the next two years as interest payments rose less rapidly and as a rise in internal debt repayments was more than offset by smaller repayments on external debt. Debt service amounted to 3½ per cent of GNP in 1970.

d) Balance of Payments and External Public Debt

1. Recent developments and prospects

Guyana has had deficits on the balance of payments in four out of the last five years. A heavy deficit in 1966 was largely offset by a surplus in the following year. Since then, there have been three successive deficits with a cumulative total of \$10.8 million. In 1970 the deficit amounted to \$2.3 million, which was substantially smaller than the deficits incurred in either of the two preceding years (Annex II, Exhibit 6).

A small surplus is projected for 1971. This is predicated on an improvement of about \$10 million in the balance on goods and services. Exports may be expected to rise by about \$12 million, or 9 per cent, on the basis of recovery in the sugar sector, increased rice exports stemming from the large autumn 1970 crop, and continued growth in bauxite and alumina exports, no substantial changes are expected with regard to minor exports. The increase in imports, meanwhile, is likely to be only moderate as a result of a fall in capital goods imports from their high level in 1970. The private capital inflow is expected to taper off, but official capital receipts, on the other hand, are expected to rise because of a larger foreign-financed component in total Central Government development spending.

2. International reserves

The foreign reserves, shown in Annex II, Exhibit 7, include the net foreign assets of the banking system and certain foreign balances held by or under the management of the Government. Most of the reserves--\$20 million on December 31, 1970-- are held by the monetary authorities, but about \$7 million was held on the same date by the various government funds. The most important of these are the sinking funds against the government internal debt, which at the end of 1970 held \$4.5 million in foreign assets. (Note: Balances held in funds against the external debt are not freely available for meeting international payments and consequently are not included in the net international reserves--they are instead treated as an offset to the

Government's outstanding external debt) The commercial banks sold most of their reserve assets to the Bank of Guyana in 1968, since when they have held net debtor positions, but the Post Office Savings Bank still holds some assets abroad. The total level of reserves at the end of the year was equivalent to two months' imports at the 1970 rate.

Over the past five years, Guyana's net reserve position has declined by \$18.2 million, reflecting a cumulative balance of payment deficit of \$13.1 million and a reduction in the U.S. dollar value of Guyana's sterling holdings as a result of the devaluation of sterling in November 1967. The cumulative decline in reserves over the three years through 1970 was \$10.8 million. Of the reserve decline, \$9 million was in the accounts of the commercial banks, \$1.1 million in those of the Government, and \$2.2 million in the foreign assets of the Post Office Savings Bank, the monetary authorities, meanwhile, increased their reserves by \$1.5 million.

### 3. Merchandise Trade

#### 1) Exports

Between 1960 and 1970, Guyana's exports rose from \$75 million to \$133 million, or at an average annual rate of 5.9 per cent. (See Annex II, Exhibit 8) The rate of growth was faster in the first half of the decade than in the second--7.6 per cent a year compared with 4.3 per cent. The production of sugar and rice for export in 1962-64 was seriously affected by the civil disturbances of those years, but this was largely offset by the very rapid initial expansion of output in the newly established alumina industry. Between 1966 and 1970 agricultural exports stagnated while bauxite and alumina exports rose \$24 million.

### 4. External Public Debt

At the end of 1970 the external public debt of Guyana amounted to \$77.5 million, equal to 31 per cent of GNP in that year. Included in the total is a small amount (\$1.5 million) representing debt of two public enterprises guaranteed by the Government. (See Annex II, Exhibit 9).

Interest rates on most of the United States loans have been below 3 per cent, while all the Canadian loans have been interest-free. Moreover, these loans have in general involved extended grace periods and terms to final maturity in contrast to the United Kingdom loans which constituted virtually all of Guyana's external debt at the end of 1965. Thus, it appears that the maturity profile has improved in recent years.

Annex II, Exhibit 10, shows debt service payments in respect of the direct external indebtedness of the Central Government. The U.S. dollar value of the debt service burden has declined substantially since 1967, partly as a result of the effect of devaluation on the sterling debt. Thus, interest and amortization payments have declined from \$6.1 million in 1967 to \$5.2 million in 1970. The annual debt service is expected to drop off sharply to \$4 million in 1971 and then rise rather steadily again to \$5 million in 1975. Reflecting the favorable terms associated with government external borrowing in recent years, the debt service burden is rather light. In 1970 it amounted to only 2 per cent of GNP and 3.4 per cent of exports of goods and services. Interest payments alone in that year amounted to 4 per cent of the outstanding debt.

##### 5 Other Creditworthiness Considerations

Guyana has recently taken steps to nationalize the Demerara Bauxite Company, a subsidiary of the Aluminum Company of Canada. The successor Company will be the Guyana Bauxite Company (Guybau). This nationalization action has resulted in questioning of Guyana's creditworthiness. Nationalization will result in some slowdown of production, however, it is noted that the GOG has entered contracts for the sale of a portion of Guybau's output to Alcan and taken action to fill a high proportion of Guybau's technical positions with qualified expatriate personnel and successful local business and professional people. The quality of Guyana's bauxite, particularly the calcined variety, makes assured a continued demand. Therefore, sales appear assured. The GOG recognizes that price significantly influences sales levels. Accordingly, the GOG has conducted an intensive public relations campaign to impress on the general public, and the bauxite workers in particular, the need to maximize production, efficiency and hold costs in line. The theme bauxite is the true backbone of the economy, and if bauxite fails so does Guyana. To minimize the possibility of inept management, the Prime Minister has announced emphatically that Guybau will be an independent public corporation, devoid of political patronage and run on a profit making basis. Performance will be the criteria for continued employment by management.

We believe there will be a slowdown in production during at least Guybau's first year of operation. However, for the long pull, it appears the take over will prove successful. A major consideration leading to the conclusion, is that USAID believes it inevitable that Guyana will reach full accord on all differences with Venezuela and, presumably under World Bank leadership, Guyana will be permitted to utilize power from the Guri Dam in Venezuela. Use of this power will permit Guyana to enter into aluminum production and to permit the sale of high value added products either as ingot or worked products. USAID's view, then, is Guyana probably will have a period of considerable trial, but for the long term, and most likely by the end of the grace period of this loan, the nationalization of Demba will work to improve Guyana's creditworthiness.

On July 15, the Government formally acquired the assets of the Dememra Bauxite Company. It is reported that the Government and Alcan Aluminum Ltd. reached a negotiated settlement for compensation whereby the Government is to pay Alcan G\$ 107 million over a period of no more than 20 years with the interest set at six percent subject to withholding tax. As part of this settlement Alcan will purchase all of the calcined bauxite and a large portion of the metal grade and aluminum production with the balance to be marketed in Eastern Europe by Gerald Metals of London. The above marketing agreements are for the balance of 1971 only. Marketing arrangements for 1972 and beyond are not known at this time. It is the accepted practice in the bauxite industry for the buyer to provide the shipping. Therefore as long as customers are available shipping will present no problems.

The staffing of Guybau was virtually completed before July 15. The staff is considered adequate and its known weakness correctable. Guybau has secured a 12 month loan at a minimum interest rate of  $7\frac{1}{2}\%$  of approximately four million U.S. dollars from the Chase Manhattan. Guybau also has arranged for the Royal Bank of Canada to finance U.S. \$1.38 million in P.O.L. supplies each month. In general the current picture remains positive for successful operation of Guybau. For a more detailed and comprehensive view of the current situation see classified cable Georgetown 1059.

## 6 Conclusion

Guyana's central government finances are in order. Projected external debt servicing is low and the economic prospects indicate continued progress toward long term growth. On the basis of the reasonable assurance that progress will be maintained, there is every prospect of the GOG being able to make its required contribution to the project and to meet the debt obligations incurred by this loan.

SECTION II PROJECT ANALYSIS

A BORROWER

1 Principal and Participating Entities

The Borrower is the Government of Guyana. The Minister of Finance will sign the Loan Agreement on behalf of the Government. The Ministry of Works, Hydraulics and Supply will be the implementing Ministry and within that Ministry the project will be controlled by the Roads Division.

The Minister of the Ministry of Works, Hydraulics and Supply will be responsible for all matters pertaining to the signing of construction, technical assistance and related contracts, financed by the loan. The Chief and Deputy of the Roads Division are to be responsible for (1) all matters pertaining to the preparation of final plans and specifications, (2) assisting in the preparation of bid documents and carrying out bidding and award procedures, (3) supervising construction and certifying payments for contractors pursuant to the loan and (4) supervise and certify for the technical assistance services to be provided for construction, supervision and material procurement, and (5) planning and supervision of work to be performed by "force account"

The actual day-to-day administration of the contract will be under the Roads Division of the Ministry of Works, Hydraulics and Supply

The Roads Division will assign technical personnel from its staff to assist the Consultant in layout and engineering supervision of construction. This Division will be directly responsible for the construction to be done by force account. This will be done by awarding various sub-contracts for the construction of drainage structures and hauling of materials with the Ministry force doing grading and asphalt pavement work

Other entities which will be involved in the execution of the project are the Ministry of Finance and External Trade Bureau. The Ministry of Finance's role is, subsequent to signing of the Loan Agreement, to request the issuance of Letters of Commitment and to establish Letters of Credit utilizing both AID and GOG funds. The External Trade Bureau (ETB) role will affect the force account contractors

ETB is expected to become a state trading operation and we assume all offshore procurement such as cement required for force account work will be procured through the FTB. No problems are anticipated as a result of the involvement of these two governmental units

2. Organization and Management of Implementing Agency

The Roads Division of the Ministry of Works, Hydraulics and Supply is headed by a Chief Engineer, he reports to the Chief Officer of the Ministry of Works, Hydraulics and Supply, who in turn reports to the Minister in charge. The organization is very similar to comparable political subdivisions in the U S , having similar responsibilities. The Chief Works, Hydraulics and Supply Officer capably delegates his responsibilities, retaining such administrative control as to effectively manage his responsibility. The Chief Engineer of the Roads Division is supported by capable and experienced heads who control, operate and manage each of the various services required.

An organization chart of the Ministry of Works, Hydraulics and Supply and for the Roads Division, is shown in the Annex II, as Exhibits 25 and 26 respectively.

The Heads of the Sections, and the Chief of the Roads Division are all highly trained, experienced and technically qualified to perform their responsibilities. There is some shortage of technicians below the level of section chiefs because of the non-availability of this type of qualified personnel in Guyana. The University of Guyana has implemented a course of study whereby training is given to produce technical skills in various descriptions of engineers below the level of professional engineers.

The Supply function of the Government was recently added to Ministry of Works and Hydraulics. This gives that Division more latitude in controlling the supplies for all Divisions. This is especially helpful to the Mechanical Division in its control of spare parts for the repair and maintenance of the equipment and used by the Roads Division in the construction and maintenance sections.

The Mechanical Division is in the process of some reorganization with the advice and assistance of U.K specialists. The repair of equipment and maintenance of spare parts is still a problem, but has improved considerably during the past year.

The Government is aware of the problems and is actively searching and trying to bring about changes to improve, within their financial capabilities.

It is not considered necessary that any specific conditions be included as covenants to loan in the field of management or organizational structure. The past performance has indicated that the Government has the capability to manage and execute the project in a successful manner.

The feasibility study including preliminary plans and cost estimates has been completed by the Consulting firm of Parsons, Brinckerhoff, Quade and Douglas (PBQ&D). It is proposed that a consulting engineering firm will be retained to prepare final plans, specifications and contract documents for all sections of streets and highways to be constructed or reconstructed. This firm will be selected by the Government and will very likely be the same firm that completed the feasibility study. This plan will be done largely through the Consultant's U.S. personnel, supplemented by local hire personnel. The Roads Division will maintain administrative control, review and approve work performed and provide some logistic support to the Contractors.

Likewise, the consulting engineering firm (most likely (PBQ&D)), will be retained to supervise construction of all contract and force account work. The Consultant will provide the key personnel and the Ministry of Works, Hydraulics and Supply will provide technicians to support the Consultant's staff such as surveyors, field inspectors, materials testing and sampling personnel. The facilities of the Ministry of Works, Hydraulics and Supply, soils and materials testing laboratory and personnel will be made available for all materials testing.

The detailed organization has not been defined, but the pattern will be the same as in effect on the construction of the Corentyne Highway. The cost of providing consulting services will be from the loan funds.

3. Capability of the Ministry of Works, Hydraulics and Supply to handle Force Account

The Ministry will be required to construct over a three and a half (3½) year period, approximately U.S. \$3 1/3 million dollars worth of improvement. These improvements will consist of numerous short sections within and adjacent to Georgetown and the section from Craig to Soesdyke on the East Bank. This construction would represent an expenditure of approximately U.S. \$1 million per year.

The Ministry has demonstrated substantial capabilities in street construction using subcontractors for structures (bridges and drainage culverts) with the Ministry force doing the placing of materials and surfacing. The Ministry during the past five years has completed several substantial projects. The principal ones include

- 1) Resurfacing the highway from Georgetown to Soesdyke, approximately 20 miles
- 2) Resurfacing the highway from Georgetown to 6 miles beyond New Amsterdam, approximately 50 miles
- 3) Resurfacing the West Coast Road from Vreed-en-Hoop to Uitvlugt, 10 miles.
- 4) In process of reconstruction of the road from Uitvlugt to Parika, 10 miles. This road is for the most, a new realignment, and is scheduled for completion this year
- 5) Construction of approximately 40 miles of a new road (dry weather) from Mahdia to Anna. This road passes through a heavily wooded area and difficult terrain. In addition to Ministry crews, self-help groups have been organized to assist in clearing and other manual type of labor
- 6) There have also been many minor realignments and community type streets improved and constructed

To the extent that the Ministry will use local contractors, there appears to be several qualified contractors available for this type of work. The Guyana Rice Corporation is constructing concrete foundations for six rice storage centers (A.I D Loan 504-L-008) and using local contractors for this work. Bids received for two of the sites have received approximately ten qualified bidders. The cost was around G \$200,000. Both jobs (different contractors) are nearing completion and the work has been of good quality and was performed effectively with a minimum of problems and delays.

The hauling of materials is done on a rental basis and there are several small truck owners who participate plus a few larger operators with several trucks.

The Consulting Engineer will supervise the construction of all force account as well as foreign contract works.

The Ministry has given assurances that they can and want to do this work, and their past performance indicates a reasonable assurance that they have capabilities to perform to the extent required under this proposed loan.

## B ENGINEERING FEASIBILITY

### 1 Studies

The engineering firm of Parsons, Brinckerhoff, Quade and Douglas has completed a detailed feasibility study of the area under consideration which included preliminary plans, economic feasibility, cost estimates, traffic demands and a consideration of alternates. The plan was coordinated with the Municipality of Georgetown and provides for facilities to meet the highway needs to year 1990 with the recommended construction projects meeting the needs for the next five years.

The user-benefits to cost ratio have been computed for the separate units of construction. All roads proposed for construction have user-benefits greater than costs. The benefits to cost ratio are shown in Section C, Economic Analysis below, and varies from 1.75 for the University of Guyana access to 2.64 for the East Bank Road, using a discount rate of 12 per cent. The internal rate of return varies from 20 per cent to 26.5 per cent.

## 2. Cost Estimates

Cost estimates based on unit quantities have been prepared for each of the projects proposed. The cost estimates were prepared in accordance with M O 1223.1 dated August 1968, and checked and adjusted to conform with recent experience in Guyana. The cost estimates were prepared on the basis of a foreign Contractor and by Government Force Account. The Roads Division of the Ministry of Works, Hydraulics and Supply furnished the latter costs on the basis of their cost records for previous jobs.

The Government when doing a Force Account job, sub-contracts with local contractors for concrete and wooden bridges and structures and uses private truckers for the hauling of all materials. Local contractors are not equipped with graders and rollers for placing the material, nor do they have asphalt placing equipment. Commercial supplies of bitumen are not stocked in the country. Sources and availability of raw materials were investigated. Available in-country are mineral aggregates consisting of crushed stone of all gradations from quarries along the Essequibo River and white sand from natural deposits commencing in the vicinity of Soesdyke. All other required materials will be imported from the U.S. or a country of the 941 Code. This includes cement, bitumen, all classes of steel, iron products, equipment, spare parts, fuel and lubricants.

At present, the crushed stone production capabilities are limited due to large amounts required for the sea defence work and other improvement projects. The Construction Contractor, therefore, may be required to set up crushing facilities in-country. Most classes of labor, skilled and unskilled, are available on the local labor market. Several large projects performed by foreign Contractors have developed many of the skills required. The Corentyne Highway will be finished in a few months and skilled equipment operators and other classes of tradesmen will be released to other projects. No particular problem is anticipated in the procurement of materials and labor.

## 3. Engineering Plans for Execution of the Project

### a) Plan Preparation

After the Government of Guyana and the Government of the United States have entered into the required Loan Agreement, a Consulting Engineering firm, selected and qualified in accordance with the requirement of M O 1442.1, will be employed by the Government of

Guyana to prepare final plans, specifications and contract documents. It is reasonable to assume the U S consulting firm of Parsons, Brinckerhoff, Ouade and Douglas will be retained to do this part of the project, also, since they are familiar with the work having completed the Feasibility Study.

The firm selected will have the complete responsibility for this phase and will be required to furnish, either locally or from their home office staff, all the engineering skills required. It is not anticipated that any waivers will be required in this phase of the work.

The plans and technical specifications will be prepared for all projects, irrespective of whether it is to be constructed by Force Account and local contractors, or offshore contractors. The General Provisions of the specifications and contract documents will be varied to fit the method by which the work is to be done.

A schedule of the engineering design and construction work has been prepared and is included in Annex II, Exhibits 11 and 12. Since the project is divided into several sub-projects, the engineering schedule is shown separately for each of the sub-projects. In general, all plans, specifications and contract documents would be completed one year after the Consultant is authorized to commence work.

b) Construction •

The total project would be divided between foreign contractors and Government Force Account. Local subcontractors will do all concrete and timber structure work and all materials hauling, the rest will be done by Ministry personnel. The Government will do by Force Account, all streets within Georgetown and the section from Craig to Soesdyke on the East Bank Demerara.

The breakdown of Force Account and Foreign Contractors is as follows

Force Account

	<u>Miles</u>	<u>U.S. \$</u>
1. Georgetown Bypass - Sheriff to Ruimveldt	4.5	\$554,000
2. Georgetown Streets	6.5	1,087,350
3. University of Guyana Access Road	1.5	174,700
4. East Bank - Craig to Soesdyke	10.5	1,317,900
<u>TOTAL</u>	<u>23 0</u>	<u>\$3,133,950</u>

Foreign Contractor

1. East Coast Road - Mahaica to Vlissengen	21½	\$5,717,450
2. East Bank Road - Ruimveldt to Craig	8½	2,972,600
<u>TOTAL</u>	<u>29½</u>	<u>\$8,690,050</u>

TOTAL Contract and Force Account      52½ miles      \$11,824,000

The contract for work to be done by foreign Contractors U.S. or Code 941) will be awarded in accordance with the latest revision of M.O 1442.1 (A I D Capital Projects Guidelines - Borrower Procurement of Construction Services) The proposed projects will be advertised in the Commerce Business Daily, bidders will be prequalified, sealed bids on the basis of unit prices will be received from previously established qualified bidders, and the bid awarded to the lowest responsive and responsible bidder The successful bidder will be required to furnish all labor, equipment,

materials and supervision, in accordance with established AID regulations, to complete the work in accordance with the plans, specifications and contract documents

Payment to the foreign contractor will be made monthly on the basis of the number of units of work completed during the month. Seventy five per cent of the amount will be paid in U S Dollars against a Letter of Credit opened in a U S Bank. The remaining twenty five per cent would be paid by the Government of Guyana in local currency

Using Force Account and subcontracting procedure, the work will be divided between subcontractor work and strictly Force Account, using GOG personnel and materials

The procedure for subcontract work will be similar to that for foreign contractors. The Government of Guyana will advertise the project using plans and technical specifications prepared by Consultant, competitive sealed bids will be received, bids awarded to the lowest responsible and responsive bidder and the work will be under the supervision of the Consultant. Since payment from loan funds will be made only to the Government of Guyana after completion of the work by Force Account and subcontractors, the bonding provisions would be relaxed to conform to the existing GOG policies. An obviously low bid will be rejected upon the recommendation of the Consultant and approval of USAID/Guyana, as non-responsible. Payment to the sub-contractor will be made by the Government of Guyana in local currency for work completed in accordance with plans and specifications and approved by the Consultant. Seventy five per cent of the total payment made to the local contractor will be reimbursed to the Government of Guyana in local Dollars. The local contractor will be required to buy locally all his materials using goods produced in eligible countries. Local contracts will be relatively small and will utilize the service of several contractors who have limited capabilities and financial resources. However, it should assist the country in the development of private contracting institutions. It will also be giving consideration to GOG standing complaint that local contractors are not given the opportunity to participate in development contracts. The payment to GOG in same proportion as paid foreign contractors recognizes the foreign exchange required to cover equipment depreciation and the purchase from local sources of imported construction materials, fuel and oils and spare parts

For work performed by GOG using their personnel, equipment and materials, the following will apply

1) The Government on each specific project would prepare an estimate based on the plans and specifications. This estimate will be broken down by labor, materials, equipment rental, job supervision and an agreed percentage for administration and overhead costs. This estimate will be checked and approved by the Consultant and USAID/Guyana as to its reasonableness and accuracy

2) The GOG will be reimbursed from the loan funds in local dollars, 75% of invoiced cost expended by them up to a total maximum amount of 75% of the estimated cost plus 10% Reimbursement will be in the same manner as provided for local contractors, with one exception, upon the submission of documentation to support the actual GOG expenditures plus a percentage amount for administration and overhead and an hourly rate for equipment

c) Time Table

The Consultant has estimated that construction should be completed in thirty-two months after authorization to start the final engineering. This schedule does not make allowance for the rainy season, which will affect the construction by extending the time up to 33%, dependent on the actual time of year when the construction commences. It is estimated that a maximum additional allowance of twelve months should be made for delays due to rains. Final completion would then require forty-four months in final engineering and construction.

d) Maintenance

Maintenance operations on the road system in Guyana are performed by the Maintenance Section of the Roads Division of the Ministry of Works, Hydraulics and Supply. The Specialist Engineer, Maintenance, is responsible for this activity and reports to the Assistant Chief Engineer, Roads Division

The country is divided into ten maintenance districts (1) East Berbice, (2) West Berbice, (3) East Demerara, (4) Last Bank Demerara, (5) West Demerara, (6) Essequibo, (7) Interior, (8) Georgetown, (9) Rupununi, and (10) the North West District. The last two districts are administered by District Engineers and Superintendents. These administration supervisors are responsible to

the Specialist Engineer, Maintenance, only for the road maintenance portion of their activity.

In general, the maintenance groups consist of a pavement unit and an asphalt unit. They vary from one district to another, both in personnel and equipment, depending upon the needs. In addition, there are three mobile asphalt batching plants - two with a working capacity of fifty tons each per hour and the third with a thirty ton capacity. Annex II, Exhibit 13, shows the list of personnel and equipment during 1970 for the six major districts. The maintenance work in Georgetown is performed under the direction of the main office of the Roads Division.

Exhibit 14 of Annex II shows the annual expenditures for road maintenance during the past nine years. The figures represent available funds for maintenance rather than the amount that was actually needed, the actual allocation generally being less than the originally requested. The difference between requested and approved funds are listed for 1966 to 1970 in Annex II, Exhibit 15.

In past years, some funds allocated for road maintenance have been utilized for other general fund purposes in the districts, which has reduced road maintenance efficiency. A recent account and reporting procedure has been established within the Roads Division to ensure that all funds are spent on road maintenance. Annex II, Exhibit 15, indicates the present projected expenditures for road maintenance from 1970 through 1974.

The maintenance cost for the Georgetown Approaches and city streets is estimated at G \$6,000 per mile. This figure is based on an analysis of the 1969 maintenance expenditures.

The improvement of roads included in the project will actually reduce the maintenance requirements by constructing the existing roads to a higher structural standard. Since all of the roads are main highways, there is no problem anticipated in the future maintenance of them. The Ministry of Works, Hydraulics and Supply has an organization and equipment capable to properly maintain the project. The roads to be improved are all existing routes on which the maintenance has been very adequate. The new highway from Mackenzie (now Linden) to Soesdyke has been adequately maintained.

e) Monitoring

There is presently assigned to the Mission staff, two direct hire U.S. Engineers. They have monitoring responsibilities on all engineering construction projects. There are presently three large projects under construction, namely, Rice Modernization Loan, Corentyne Highway and Water Supply. The Corentyne highway should be completed this year and relieve some of the present workload.

It is believed that the present staff will be able to carry out the USAID/Guyana monitoring responsibilities on this project.

f) Appraisal of Technical Soundness

The highway projects will be similar to other existing highways in Guyana, no new techniques or methods will be employed.

The highways will be constructed in coastal regions and riverain areas surrounding and adjacent to Georgetown. These are low lying areas below the level of high tide and protected by dikes along the river banks and Atlantic Coast. The soil is generally soft clay containing high moisture content near the surface and increasing in stiffness as a function of depth. The top few inches has been formed into a humus type of soil through vegetation growth and decay.

The roadway surface will be constructed on an embankment fill sufficiently above the existing surface of land to protect it from flooding and permit passage of surface drainage. Where embankment is required it can be obtained by excavation of adjoining areas, it will require considerable time to dry out in order to reach a moisture content which will permit an adequate compaction to support the wheel loads. This drying process can be accelerated by aeration, by discing and working the fill material. The decision as to whether to use imported (borrow) white sands as embankment or excavate adjacent soil will depend on the economics and will be decided during the preparation of final plans.

Standard types of equipment will be used, the foreign contractor will probably import his own equipment. The local contractors and highway department will use their existing equipment which for the most part is either of U.S. or U.K. manufacture.

Cement, reinforcing steel and bituminous products will be imported. The cement and bitumen will most likely be supplied from Trinidad source and the rebar from U.S. source. However, supply from the U.S. or any 941 Code country will be eligible.

Adequate supply of rock is available from the quarries along the Essequibo, but will have to be crushed, graded and barged to an unloading point near the project. The contractors should review the adequacy of the existing crushing and hauling capabilities before bidding. Conditions may require additional crushing equipment.

Some additional right-of-way will have to be acquired and a few improvements purchased or relocated to accommodate the proposed road sections. This will be done independently by the Ministry of Works, Hydraulics and Supply and will not be financed from loan funds. A major portion of the project will be constructed within existing road reserves. Some relocation of utility lines will also be required to clear the right-of-way for construction. The local contractors and the Government forces will secure their material either through the ETB (External Trade Bureau) or the local suppliers who import it. The ETB is controlling the imports of certain critical types of materials. Cement has recently been in short supply to local contractors and foreign contractors working on the sea defence. This is allegedly due to procurement problems in the source country and the newly adopted procedures of the LTB. This will undoubtedly be corrected shortly and should not be a problem in the project.

Other than those mentioned, there are no unusual technical problems foreseen.

g) Basis of Cost Estimates

There has been sufficient work of the same type done in the country which gives a good basis for comparison of costs. The Consultant also considered other recent foreign jobs where conditions were similar. He also investigated the cost of local labor and current prices for materials and equipment which would be required to complete the project. The estimates furnished are believed to be reasonable and of sufficient accuracy. The total costs include an overall figure of 5% for escalation of labor and material costs and 10% contingency reserve to cover unforeseen conditions that arise. Force Account co-estimates are based on records supplied to the Consultant by the Ministry of Works Hydraulics and Supply. These costs have not been independently verified, but the Ministry has vouched as to the reliability of the estimates.

h) Engineering Conclusion

It is concluded that the proposed plan is technically feasible, well planned, and can be executed in accordance with the plan set forth herein

C ECONOMIC EVALUATION

1. Comparison of Construction and Economic Evaluation Cost

There is a difference between the construction cost and the cost figures used for economic evaluation. This difference represents estimated transfer payments and the amount has been deducted from the construction estimates to arrive at the figures used for economic analysis figures. The precise differences are shown below

<u>Project</u>	<u>Est. Construc-</u> <u>tion Costs</u>	<u>Est Transfer</u> <u>Payments</u>	<u>Net Cost</u>
Georgetown Bypass	554,000	28,000	526,000
Georgetown Streets	1,087,350	52,350	1,035,000
East Coast Road	5,717,450	572,450	5,145,000
East Bank Road	4,290,500	425,500	3,865,000
Univ of Guyana Access	174,700	8,700	166,000
TOTAL	11,824,000	1,087,000	10,737,000

In the economic computations, the Georgetown Street costs are divided equally between the East Coast and East Bank Roads, i.e. \$1,035,000 divided by 2 = \$517,500 is added to each road.

2 Internal Rate of Return Analysis

The project is made up of four sub-projects, each of which has been subjected to Benefit-Cost analysis at opportunity costs of capital of 10 and 12 per cent. All four proved feasible by substantial margins, with internal rates of return ranging from 20 to 26.5 per cent, far exceeding the highest opportunity cost considered appropriate for a public works project of this type in Guyana.

Benefit calculations were limited to those anticipated from projected user savings alone, neglecting entirely any returns to the economy in the form of incremental productivity growing out of improvements to the road networks. This may have given a conservative bias to the benefit calculations.

The present value of benefits accruing to the economy over the assumed life of the project, 20 years from completion of construction, discounted back to the date of first disbursement (taken here to be in 1971), were compared to the present value of the anticipated stream of costs for construction and maintenance over the same period, similarly discounted, to give the following benefit-cost ratios and internal rates of return

<u>Sub-Project</u>	<u>B/C @</u>		<u>IRR</u>
	<u>10%</u>	<u>12%</u>	
1. Georgetown Bypass	2.19	1.83	20%
2. East Coast Road	3.11	2.60	26.5%
3. East Bank Demerara Road	3.16	2.64	26%
4. University of Guyana Access Road	2.05	1.75	21%

### 3. Induced Productivity Benefits

In the feasibility study of the improved highway Approaches to Georgetown, the economic benefits quantified are the benefits to the users of the highway approaches in the form of savings in time and operating costs. Such savings are a direct contribution or benefit to the national economy. These benefits are found to exceed substantially the cost to the national economy of making the improvements.

The approach roads to Georgetown serve the capital and largest city, whose economy is a substantial part of the total national economy. The proposed projects are improvements to the existing approach roads, with some minor alignment changes, and do not change significantly the transport corridors served in any instance. Therefore, the proposed investment in improved road transport facilities will not cause any essential changes in existing land use, production, or traffic patterns, and the principal benefits to the economy will be reflected by the estimated user savings.

Incremental productivity attributable to the highway improvements is difficult to quantify, and its allocation is more questionable on a conceptual basis. Such benefits would presumably result from greater mobility and ease of access, which might also have the effect of increasing property values, but such local effects may be only transfers within the national economy, somewhat similar to increased tax revenues. (This would not be the case, for example, if an in-depth technical and economic feasibility study of bridging the Demerara River were to be eventually undertaken. The potential effect on the economy of the West Bank region and its relation to Georgetown could be significant, and would then have to be evaluated in detail. In that case, cost savings alone would be incomplete as the measure of benefits because major changes in land use, production, and traffic patterns could be expected.)

#### 4. Economic Conclusions

The feasibility study of this project performed by a reputable U.S. transportation consulting firm under contract to the GOG has been examined in some detail. While the study leaves something to be desired with respect to comprehensiveness and various questions of detail, the assumptions and conclusions of the study appear to be, on the whole, conservative, and the methodology employed seems to be of the type currently accepted as applicable to transport project analysis of this type.

The report's favorable forecast of results well in excess of acceptable marginal returns to the application of capital in Guyana indicate that this investment should be undertaken.

See Annex II, Exhibits 16 through 24, for tabular presentation of data underlying Benefit-Cost calculations. Annex II, Exhibit 24a is a statement on the consultant's computations of the value of time savings used in projecting economic benefits.

#### D. FINANCIAL ANALYSIS

##### 1. Funding Requirements

The total cost of the project is the U.S. dollar equivalent of \$11,824,000 distributed as follows among the several sub-projects.

<u>Sub-Project</u>	<u>U.S. \$</u> <u>Amount</u>
Georgetown Bypass and Street Improvements	
Sheriff to East Bank Road	\$554,000
Georgetown Streets	1,087,350**
University of Guyana Access	174,000
	<hr/>
Sub-Total	\$ 1,816,050
East Coast Road (Vlissengen Road to Mahaica)	\$5,717,450
East Bank Demerara	4,290,500
	<hr/>
TOTAL	\$ 11,824,000
	<hr/>

The above total estimated costs include 15% for Engineering and Supervision, 10% for Contingencies and 5% for Escalation. Additionally, the total estimated cost includes all charges to the project even though such charges may represent transfers within the economy in the form of imports, etc. For purposes of economic evaluation, the estimated amount of these charges were subtracted from the final cost estimate.

## 2. Sources of Financing

The planned financing sources of the project and their respective time phased revenue are as set forth. The schedule represents the targets established by the GOG and their Consultant.

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\*\* For economic evaluation purposes, the Georgetown Streets have been allocated on the basis of a fifty-fifty cost apportionment between the East Coast and East Bank Roads.

<u>Source</u>	<u>Calendar Year</u>			<u>TOTAL</u>
	<u>1972</u>	<u>1973</u>	<u>1974</u>	
AID	742 5	3,553 5	4,572	8,868
GOG <u>1/</u>	247 5	1,184 5	1,524	2,956
TOTAL	990 0	4,738 0	6,096	11,824

This schedule appears optimistic as is noted in the engineering evaluation. A possible extension of twelve months due to rainy season work stoppages is possible. The AID loan of \$8.9 million represents approximately 75% of the total project cost, while the GOG contribution of \$3.0 million makes up the remaining 25%. These percentage breakdowns correspond closely to those of two previous road projects--the Mackenzie and Corentyne Roads-- for which A.I.D. financing was made available.

Because of the small size of the Guyanese economy and the small effective resource base, a greater share of direct and indirect foreign exchange costs are prevalent in construction contracts than are normal in most other countries of the hemisphere. Previous experience has shown that anywhere between 70% and 80% of road project construction costs are required for import financing. Thus, the amount proposed for A.I.D. financing will most likely be used entirely for the foreign exchange component of the project. There are several examples of the high indirect foreign exchange cost which influenced our views to adopt a cost sharing approach. One is that all equipment must be imported as well as spare parts and fuel, therefore, all costs associated with the use of equipment must, all practical purposes, be considered as foreign costs of the project. As a practical matter, the only truly local costs will be for labor, sand, fill and wood. However, our financial plan is based as much on what we consider a reasonable cost sharing formula over the four year project disbursement period as it is on attempting to cover the foreign exchange cost. We believe the 75%-25% formula is reasonable.

1/ In U.S. Dollar equivalents

The proposed level of expenditure in support of this project is considered reasonable and obtainable on the basis of previous GOG contributions. For 1971, the GOG's budgeted contribution to the Corentyne Road Project is U.S. \$2.2 million down from \$2.8 million in 1970. In 1969, the GOG expended \$946,000 in support of the Soesdyke-Mackenzie Road project. Thus the level of support to AID loan funded projects has been at a level considerably higher than will be required in any one year under the proposed project.

The project review process by the GOG, i.e., Technical Ministry, Ministry of Economic Development and finally Cabinet, assures all matters are thoroughly reviewed and approved in advance of the actual agreement. Additionally, the stated support of the Prime Minister and his personal application for the loan provides reasonable assurance of the Borrower meeting his commitments.

#### Local Cost Financing

As noted above, the direct and indirect foreign exchange costs constitute a minimum of 70-80 per cent of the cost of the project. Thus as noted, we have taken what we consider a reasoned guess that the foreign costs will approximate 75% of the total cost of the project. A I D. participation not to exceed a maximum amount of 8.9 million dollars or 75% of the overall cost.

#### Prospects of Loan Repayment

The GOG is not in default of any loans. Certain public corporations have been forced to re-negotiate terms with foreign lenders, the most recent about 1968, was the Telecommunications Authority, which was the recipient of a loan, prior to Independence, which the Authority could not service.

The balance of payment analysis and debt projections indicate the required resources will be available to serve Guyana's total indebtedness. A.I D. need not insist on rights to first payments. There is no requirement for consideration of a two step procedure.

### Financial Conclusion

The financial plan is considered adequate to meet the project schedule and the firmness of the inputs has been assured. We are also reasonably assured by analysis of repayment.

Continued close consultation among the Mission and Ministries of Finance, Works, Hydraulics and Supply and Consultant will assure proper budgetary support levels.

### SECTION III LOAN ADMINISTRATION

#### A Execution Plan

It is anticipated that the loan will be authorized during Aug of 1971. As the Government of Guyana and the Ministry of Works, Hydraulics and Supply are well acquainted with AID loan agreements and as detailed discussions have been held with the Guyanese concerning the financial, engineering and construction conditions of the loan, we believe the loan will be signed in approximately three months from the date of authorization. Selection of, and contract negotiation with, a Consultant for final design, and preparation of bid documents and supervision of construction will take an additional three months, so, in effect, work on the project will begin in January 1972.

Bar Charts for the entire project construction program are included as Annex II, Exhibits 11 and 12. It shows that construction activity can begin during CY 1972 only on the smaller sub-projects, while the entire year will be required for preparation of final design, including the bid package, for the Last Coast Road and the Last Bank Demerara Road sub-projects. As these sub-projects represent 68% of the total project cost, the result is that physical execution of the project will be fairly minor until construction activity begins on the two major sub-projects in early CY 1973. This accounts for the low disbursement level in CY 1972 and the much heavier peak reached in CY 1973 and 1974. All phases of the project should be completed by the end of the third quarter of CY 1975 but to allow for slippage and processing of final payments, our loan terminal disbursement date will be December 31, 1975.

Road construction will be carried out principally by private contract, but a small portion--the street improvements in Georgetown and the Craig-Soesdyke section, will be carried out by Force Account with local subcontractors. A private consulting firm will supervise

and certify payments for the construction of the project, including the force account work

The work planned for the foreign contractor will be bid under a single tender

B Disbursement Procedure

For payments, USAID will, in conjunction with the Ministry of Finance, establish Letters of Commitment and Credit Payment procedures will be spelled out in each contract in accord with the applicable Capital Projects Guidelines. A I D will provide payment of 75% (less 10 per cent retention) and the Government of Guyana will provide 25% (less 10 per cent retention) against each voucher for all foreign contractor payments

For local subcontractors employed by the Ministry in their Force Account work, A I D will provide reimbursement to the Government of Guyana, against documentation, on a fixed time schedule which will be established. The A I D progress payments effectively will be 67.5% of the value of the work with the balance of 7.5 per cent being paid at the time of final payment containing the retention monies

For Force Account work, no retention is contemplated

C Procurement Procedures

All procurement will be in accord with the applicable Capital Projects Guidelines

D Conditions and Covenants

1 To firmly ensure the Borrower will make available the financial resources, equipment, personnel and other resources as required, the Borrower will confirm in writing prior to award of contract, for any and each construction contract, as to the availability of these inputs

2. Borrower shall covenant to provide all right-of-ways necessary for the permanent construction and temporary detours and shall certify that such right-of-ways or legal rights of possession have been obtained prior to the award of any contract for construction

3. Equipment, materials and services financed under the loan shall have their source and origin in and be procured from Code 941 countries,

4. United States dollars utilized under the loan to finance local currency costs shall be made available to borrower or its designee through appropriate procedures

5. Borrower shall covenant to maintain the Project and to make adequate provision in its budget annually for that purpose. Such amount shall be in addition to amounts borrower provides in its budget annually for the maintenance and upkeep of other roads and trails in Guyana. Other than these conditions, it is recommended that only the usual terms and conditions and covenants should be incorporated in the Loan Agreement

6. The loan shall be subject to such other terms and conditions as AID may deem advisable

June 7, 1971

MISSION DIRECTOR'S CERTIFICATION

IMPROVEMENT OF GEORGETOWN CITY STREETS AND APPROACHES

I certify that the Government of Guyana has the capability required to effectively implement the proposed loan, maintain and utilize the referenced project, having taken into account the following factors

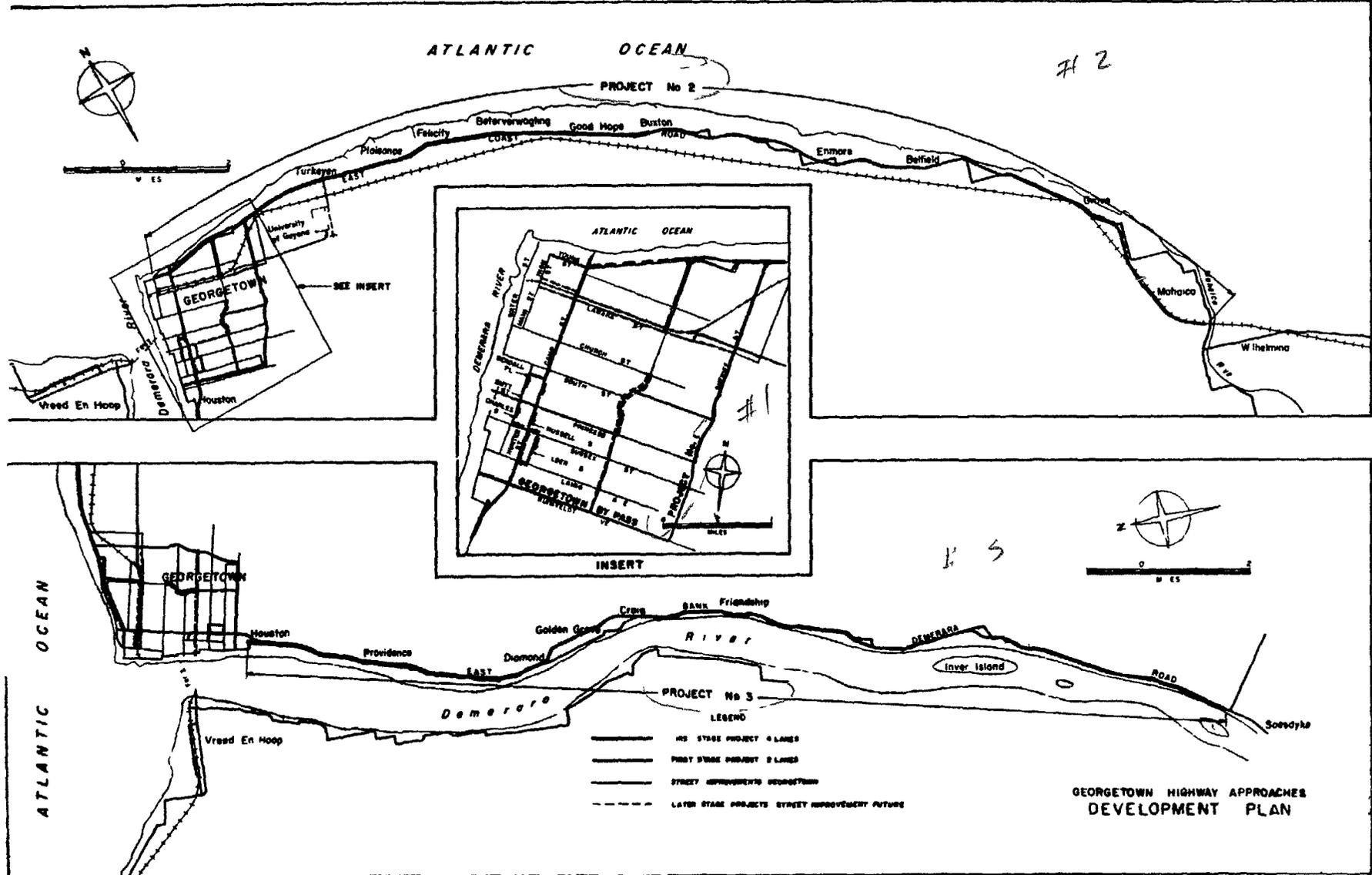
A. All projects previously financed by the U.S. Government either have been, or are being, effectively implemented, used and maintained.

B. Through training efforts the Government is constantly improving utilization of their resources.

C. Government recognizes the value of maintenance of facilities and is budgeting funds for this purpose.



Robert C. Hamer, Director  
USAID/Georgetown, Guyana

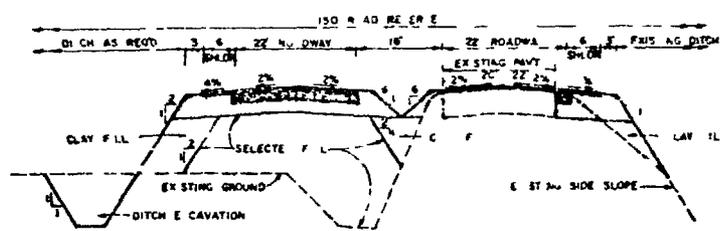


PARSONS BRINCKERHOFF QUADE & DOUGLAS INC

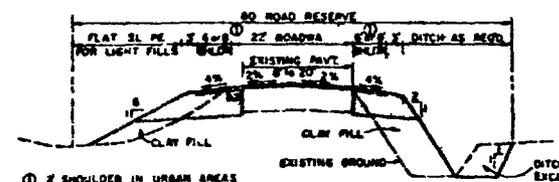
GEORGETOWN HIGHWAY APPROACHES DEVELOPMENT PLAN

UNCLASSIFIED  
AID-DLC/P-983  
ANNEX II, Exhibit 1

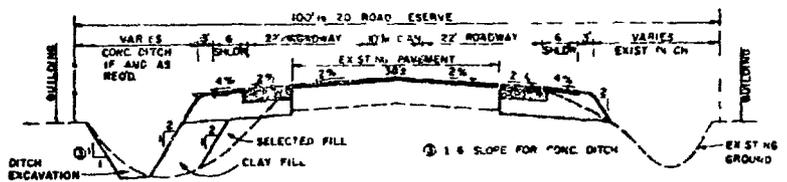
14



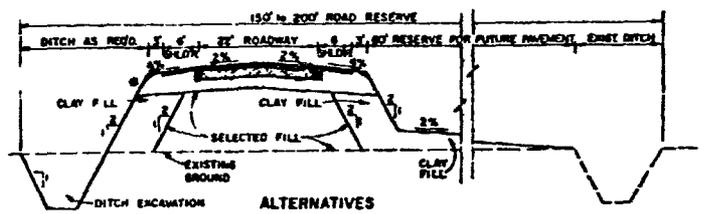
EAST BANK DEMERARA ROAD PETER HALL TO GOLDEN GROVE - STA 105+00 TO STA 310+00  
 EAST COAST ROAD CAMP STREET TO GOOD HOPE - STA 18 00 TO STA. 440+00



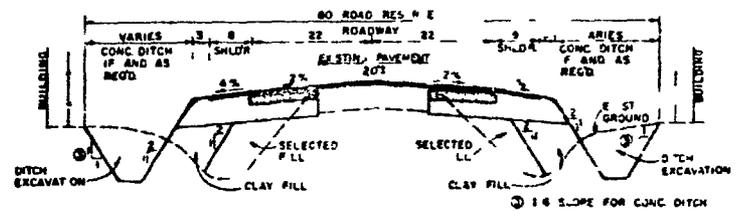
① 2' SHOULDER IN URBAN AREAS  
 EAST BANK DEMERARA ROAD GOOD SUCCESS TO SOESDYKE - STA 375 00 TO STA. 862+00  
 EAST COAST ROAD, HIGH STREET TO CAMP STREET - STA. 0+00 TO STA 18+00  
 EAST COAST ROAD, GOOD HOPE TO MAHAICA - STA. 440+00 TO STA. 1210+00



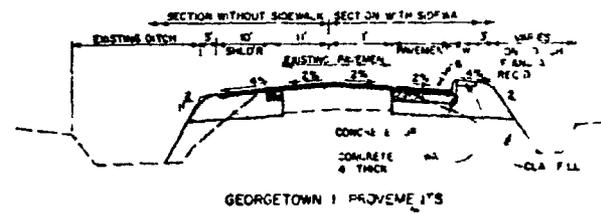
EAST BANK DEMERARA ROAD HOUSTON TO PETER HALL - STA 0+00 TO STA 105+00



ALTERNATIVES  
 EAST COAST ROAD SHERIFF STREET TO FELICITY - STA 0+00 TO STA 245+00  
 EAST BANK DEMERARA ROAD, RUIJVELDT TO GOLDEN GROVE - STA 0+00 TO STA 339+00



EAST BANK DEMERARA ROAD GOLDEN GROVE TO GOOD SUCCESS - STA 30 00 TO STA 375 00



GEORGETOWN 1 PROPOSED

- LEGEND
- 2" BITUMINOUS DOUBLE SURFACE TREATMENT
  - 2" ASPHALT CONCRETE
  - 2" ASPHALT CONCRETE
  - 6" CRUSHED STONE
  - 10" 4% SAND CLAY
  - NEW MASTERDAM AND USE LINE 3 APPLICATION AS SUBBASE

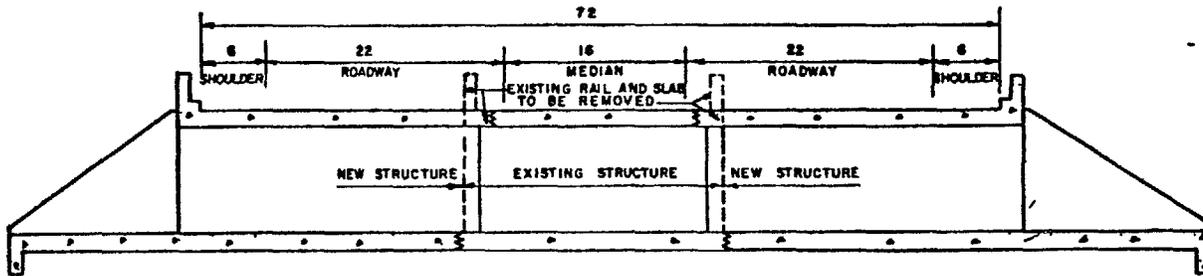
DEVELOPMENT PLANS FOR HIGHWAY APPROACHES TO  
 GEORGE TOWN AND WERRINBOROUGH  
 GUYANA  
 TYPICAL ROADWAY SECTIONS

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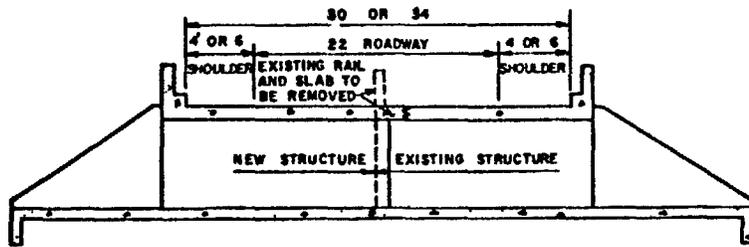
ANNEX II, Exhibit 2

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TYPICAL SECTION SHOWING EXISTING BRIDGES WIDENED TO 72'

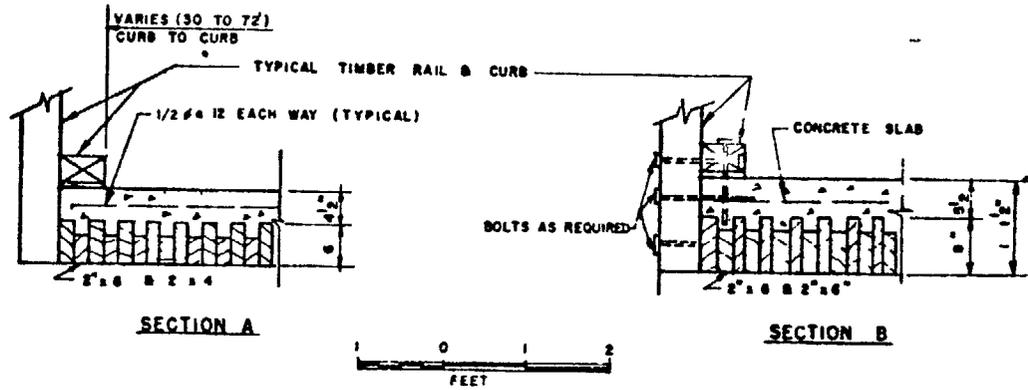
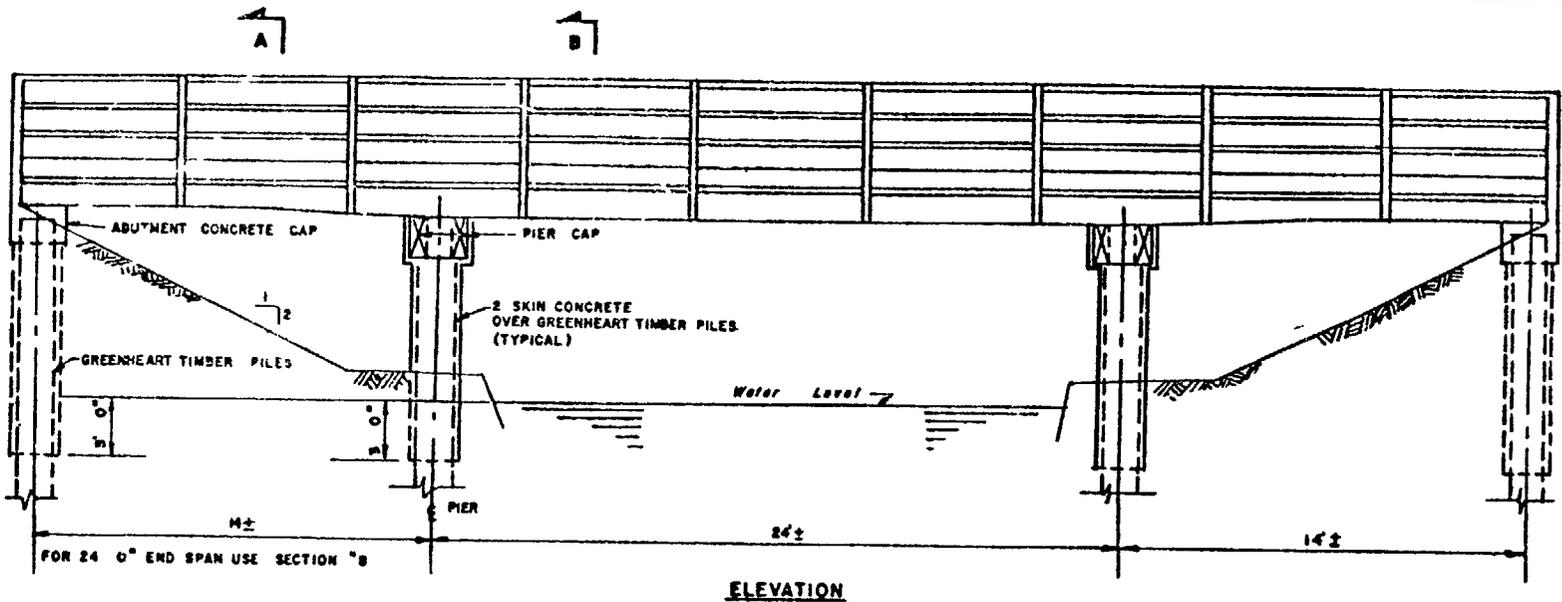


TYPICAL SECTION SHOWING EXISTING BRIDGES WIDENED TO 30' AND 34'



TYPICAL SECTIONS SHOWING WIDENING EXISTING BRIDGES

51



TYPICAL COMPOSITE TIMBER BRIDGE

PARSONS BRINCKERHOFF QUADE & DOUGLAS INC

BEST AVAILABLE COPY

ANNEX II, Exhibit b

22

ANNEX II, EXHIBIT 5

Summary of Central Government Operations

	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>Prov. 1970</u>	<u>Budget 1971</u>
<u>(In millions of Guyana dollars)</u>						
Current revenue	85.2	92.9	102.6	110.4	127.5	145.6
Current expenditure	-79.7	-81.6	-90.9	-99.5	-117.8	-123.8
<u>Current surplus</u>	<u>5.5</u>	<u>11.3</u>	<u>11.7</u>	<u>10.9</u>	<u>15.6</u>	<u>21.8</u>
Capital revenue	11.6	14.2	7.6	6.3	3.9	1.2
External grants	(10.7)	(8.0)	(5.8)	(4.1)	(2.6)	(0.1)
Other	(0.9)	(6.2)	(1.8)	(2.2)	(1.3)	(1.1)
Capital expenditure	-31.9	-33.8	-39.7	-42.2	-51.5	-75.2
<u>Over-all deficit</u>	<u>-14.8</u>	<u>- 8.3</u>	<u>-20.4</u>	<u>-25.0</u>	<u>-32.0</u>	<u>-52.2</u>
<u>Financing</u>	<u>14.8</u>	<u>8.3</u>	<u>20.4</u>	<u>25.0</u>	<u>32.0</u>	<u>52.2</u>
Net external borrowing	1.6	6.7	11.9	13.1	19.4	44.9
Utilization	(4.4)	(11.1)	(15.7)	(17.2)	(22.6)	(47.9)
Amortization	(-2.8)	(-4.4)	(-3.8)	(-4.1)	(-3.2)	(-3.0)
Change in government external assets (increase)	-0.5	2.9	-1.2	0.4	0.5 )	
Net domestic borrowing	13.7	-1.3	9.7	11.5	13.1 )	
Bank of Guyana	(11.5)	(-6.0)	(-3.0)	(14.4)	(4.5) )	
Rest of banking system	(2.8)	(0.3)	(13.3)	(-1.5)	(3.7) )	7.3
National Insurance Fund	(--)	(--)	(--)	(1.4)	(10.2) )	
Insurance companies	(0.9)	(0.6)	(0.4)	(-0.4)	(2.5) )	
Other	(-1.5)	(3.8)	(-1.0)	(-2.4)	(-7.8) )	

(As per cent of GNP)

Current revenue	23.6	23.4	23.5	23.4	26.5	26.8
Current expenditure	22.1	20.6	20.8	21.1	23.4	22.8
<u>Current surplus</u>	<u>1.5</u>	<u>2.8</u>	<u>2.7</u>	<u>2.3</u>	<u>3.1</u>	<u>4.0</u>
Capital expenditure	8.8	8.5	9.1	8.9	10.2	13.8
<u>Over-all deficit</u>	<u>4.1</u>	<u>2.1</u>	<u>4.7</u>	<u>5.3</u>	<u>6.4</u>	<u>9.6</u>

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ANNEX II, EXHIBIT 6

Summary Balance of Payments

(In millions of U.S. dollars)

	<u>1966</u>	<u>1967</u> <sup>1/</sup>	<u>1968</u>	<u>1969</u>	<u>1970</u>
<u>Goods, services, and private transfers</u>	<u>-29.6</u>	<u>-30.0</u>	<u>-14.8</u>	<u>-13.7</u>	<u>-21.7</u>
Merchandise	-5.7	-7.9	7.4	9.6	-1.9
Exports, f.o.b.	(112.2)	(123.0)	(117.4)	(127.7)	(133.0)
Imports, c.i.f.	(-117.9)	(-130.9)	(-110.0)	(-118.1)	(-134.9)
Travel	-2.2	-3.3	-2.7	-2.7	-2.4
Investment income	-19.1	-15.7	-15.1	-17.8	-17.4
Other services	-2.5	-3.3	-2.6	-1.9	-0.4
Private transfers	-0.1	-0.2	-1.8	-0.9	0.4
<u>Capital and official transfers</u>	<u>20.0</u>	<u>33.0</u>	<u>17.3</u>	<u>14.2</u>	<u>21.6</u>
Private capital	12.8	21.4	9.1	4.2	11.0
Direct investment	(15.7)	(20.8)	(8.0)	(8.7)	(...)
Other private capital	(-2.9)	(0.6)	(1.1)	(-4.5)	(...)
Public capital and transfers	7.2	11.6	8.2	10.0	10.6
Capital	(1.8)	(4.8)	(6.0)	(8.6)	(10.1)
Transfers	(5.4)	(6.8)	(2.2)	(1.4)	(0.5)
<u>Allocation of SDRs</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>2.5</u>
<u>Unidentified transactions</u>	<u>2.5</u>	<u>1.8</u>	<u>-6.3</u>	<u>-5.2</u>	<u>-4.7</u>
<u>Monetary movements (increase -)</u>	<u>7.1</u>	<u>-4.8</u>	<u>3.8</u>	<u>4.7</u>	<u>2.3</u>
Government	0.1	2.4	2.2	-0.5	-0.6
Monetary authorities	3.2	-3.9	-4.7	3.0	0.2
Commercial banks	3.6	-3.3	5.6	1.9	1.5
Post Office Savings Bank	0.2	--	0.7	0.3	1.2

Source: IMF

<sup>1/</sup> Excluding devaluation profits or losses on foreign assets and liabilities.

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ANNEX II, EXHIBIT 7

Net International Reserves  
(In millions of U.S. dollars)

	December 31					
	1965	1966	1967	1968	1969	1970
<u>Total</u>	<u>43.8</u>	<u>36.7</u>	<u>36.4</u>	<u>32.6</u>	<u>27.9</u>	<u>25.6</u>
<u>Government</u>	<u>11.9</u>	<u>11.8</u>	<u>8.3</u>	<u>6.1</u>	<u>6.6</u>	<u>7.2</u>
Joint Consolidated Fund	0.5	0.9	-0.8	-0.2	-0.4	-0.2
Investment surplus balances	0.3	0.2	0.2	0.2	0.2	0.2
Sugar industry funds	5.9	5.3	3.7	0.6	1.3	1.1
Sinking funds against internal debt	2.7	2.9	3.3	3.6	3.7	4.5
Other funds	2.5	2.5	1.8	1.9	1.8	1.6
<u>Banking system</u>	<u>31.9</u>	<u>24.9</u>	<u>28.1</u>	<u>26.5</u>	<u>21.3</u>	<u>18.4</u>
<u>Monetary authorities</u>	<u>20.1</u>	<u>16.9</u>	<u>18.8</u>	<u>23.5</u>	<u>20.5</u>	<u>20.3</u>
Deposits abroad )	(11.0)	(1.3)	(1.5)	(1.2)	(4.7)	(3.3)
Securities )	(13.1)	(15.6)	(20.8)	(14.2)	(14.7)	
Net IMF position	(--)	(1.2)	(1.2)	(1.2)	(1.2)	(1.8)
SDR holdings	(--)	(--)	(--)	(--)	(--)	(0.1)
Claims on BCCB	(9.0)	(1.2)	(0.4)	(0.3)	(0.3)	(0.3)
Other	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
<u>Commercial banks</u>	<u>7.2</u>	<u>3.6</u>	<u>5.6</u>	<u>--</u>	<u>-1.9</u>	<u>-3.4</u>
Assets	(8.5)	(5.1)	(7.2)	(1.8)	(2.1)	(1.5)
Liabilities	(-1.3)	(-1.6)	(-1.6)	(-1.8)	(-4.0)	(-4.9)
Post Office Savings Bank	4.6	4.4	3.7	3.0	2.7	1.5

Source. Bank of Guyana, and Accountant General Annual Reports.

ANNEX II , EXHIBIT 8

Exports by Selected Commodities

(Value in millions of U.S. dollars;  
unit value in U.S. dollars per long ton; volume  
in million long tons for bauxite and thousand  
long tons for other products)

	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
<u>Total exports: value</u>	<u>112.2</u>	<u>123.0</u>	<u>117.4</u>	<u>127.7</u>	<u>133.0</u>
<u>Agricultural exports. value</u>	<u>58.4</u>	<u>65.4</u>	<u>58.9</u>	<u>62.4</u>	<u>57.2</u>
Sugar					
Volume	267.0	311.6	294.0	33.0	286.1
Unit value	118.7	119.2	113.9	124.0	126.5
Value	31.7	37.2	33.5	41.3	36.2
Rice					
Volume	108.1	94.4	94.0	62.3	59.4
Unit value	134.4	146.2	139.4	157.3	151.5
Value	14.5	13.8	13.1	9.8	9.0
Other agricultural exports: value	12.2	14.4	12.3	11.3	12.0
Molasses	(1.6)	(2.7)	(2.1)	(1.8)	(1.6)
Rum	(2.0)	(3.3)	(2.1)	(1.4)	(1.6)
Timber	(2.1)	(1.6)	(1.4)	(1.2)	(1.8)
Shrimp	(3.8)	(3.5)	(3.7)	(3.8)	(4.3)
Other	(2.7)	(3.3)	(3.0)	(3.1)	(2.7)
<u>Mineral exports. value</u>	<u>53.3</u>	<u>55.7</u>	<u>55.4</u>	<u>62.3</u>	<u>72.3</u>
Calcined bauxite					
Volume	0.49	0.46	0.59	0.65	0.71
Unit value	30.6	32.4	31.5	32.5	34.4
Value	15.0	14.9	18.6	21.1	24.1
Dried bauxite					
Volume	1.53	1.82	1.78	2.10	2.30
Unit value	7.8	8.6	8.2	8.7	9.4
Value	12.0	15.6	14.6	18.3	21.7
Alumina					
Volume	297.0	292.0	267.0	295.0	345.0
Unit value	64.8	64.0	68.2	70.2	71.6
Value	19.3	18.7	18.2	20.7	24.7
Other mineral exports: value	7.0	6.5	4.0	2.2	1.8
Manganese	(3.2)	(2.9)	(1.6)	(--)	(--)
Diamonds	(3.0)	(3.6)	(2.4)	(2.0)	(1.6)
Other	(0.8)	(--)	(--)	(0.2)	(0.2)
<u>Other exports value</u>	<u>0.5</u>	<u>1.9</u>	<u>3.1</u>	<u>3.0</u>	<u>3.5</u>

ANNEX II, EXHIBIT 9

External Public Debt  
(In millions of U.S. dollars)

	Outstanding as of December 31						Undis- bursed Balances 12/31/70
	1965	1966	1967	1968	1969	1970	
<u>Total</u>	<u>56.6</u>	<u>58.0</u>	<u>54.4</u>	<u>58.8</u>	<u>67.5</u>	<u>77.5</u>	<u>45.4</u>
<u>Total Central Government</u>	<u>53.1</u>	<u>53.2</u>	<u>51.8</u>	<u>58.0</u>	<u>67.2</u>	<u>76.0</u>	<u>39.6</u>
Market loans	14.9	13.8	10.4	9.2	8.5	8.3	--
United Kingdom <sup>1/</sup>	(14.9)	(13.8)	(10.4)	(9.2)	(8.5)	(8.3)	(--)
Project loans	36.0	36.8	37.8	45.4	55.7	65.7	39.6
United Kingdom	(35.4)	(35.9)	(33.4)	(34.5)	(36.9)	(38.8)	(7.5)
United States	(--)	(0.3)	(3.3)	(8.8)	(16.0)	(19.8)	(20.3)
Canada	(--)	(0.1)	(0.8)	(2.0)	(2.6)	(5.7)	(0.2)
IBRD and IDA	(0.6)	(0.5)	(0.3)	(0.1)	(0.2)	(1.4)	(11.6)
Private loans	1.0	1.4	1.1	1.0	0.8	(--)	(--)
United Kingdom	(1.0)	(1.4)	(1.1)	(1.0)	(0.8)	(--)	(--)
Other U.K. Government loans	1.2	1.2	2.5	2.4	2.2	2.0	--
<u>Loans with government guarantee</u>	<u>3.5</u>	<u>4.8</u>	<u>2.6</u>	<u>0.8</u>	<u>0.3</u>	<u>1.5</u>	<u>5.8</u>

Source: IMF

<sup>1/</sup> Net of sinking fund balances.

The outstanding debt changed little between 1965 and 1968 but rose in both 1969 and 1970. The debt had actually declined in 1967, as net utilization of loans was more than offset by a reduction of about \$8.5 million in the U.S. dollar value of debt owed to the United Kingdom as a result of the devaluation of sterling in November 1967.

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Projected Service Payments on Government External Debt

1970-76<sup>1/</sup>

(million U.S. dollars)

	1970		1971		1972		1973		1974		1975		1976	
	Amorti- zation	Interest payments												
<u>Total</u>	<u>1.8</u>	<u>2.7</u>	<u>1.6</u>	<u>2.4</u>	<u>1.8</u>	<u>2.4</u>	<u>1.9</u>	<u>2.6</u>	<u>2.0</u>	<u>2.8</u>	<u>2.2</u>	<u>2.8</u>	<u>2.3</u>	<u>2.6</u>
Bonded debt to United Kingdom <sup>2/3/</sup>	0.3	0.7	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
U.K. Development loans	0.2	--	0.1	--	0.2	0.1	0.3	0.4	0.3	0.6	0.4	0.6	0.4	0.5
U.K. Exchequer loans	1.0	1.7	1.0	1.6	1.1	1.5	1.1	1.4	1.2	1.4	1.3	1.3	1.4	1.2
Commonwealth Development and Welfare	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Suppliers' credit	0	) 0.2	--	--	--	--	--	--	--	--	--	--	--	--
Commonwealth Development Corporation	0	)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IBRD and IDA	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--
U.S. AID	--	0.1	--	0.1	0.1	0.1	--	0.1	--	0.1	--	0.2	--	0.2
Canadian loans	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Sources: Bank of Guyana

<sup>1/</sup> Debt service payments are projected on the basis of the debt outstanding at the end of 1969

<sup>2/</sup> Amounts shown as amortization represent contribution to sinking funds

<sup>3/</sup> Includes Barclays, ODC



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1970 MAINTENANCE STAFF AND EQUIPMENT - ROADS DIVISION  
ANNEX II, EXHIBIT 13

<u>District</u>	<u>Staff</u>						<u>Equipment</u>				
	<u>Foreman</u>	<u>Labourers</u>	<u>Equipment Operators</u>	<u>Drivers</u>	<u>Miscellaneous</u>	<u>Steel Wheel Roller</u>	<u>Front End Loader</u>	<u>Tractor and Trailer</u>	<u>Dragline</u>	<u>Grader</u>	<u>1</u>
East Berbice	4	22	8	5	3	2	1	1	1	2	
West Berbice	2	22	5	5	1	1	-	1	-	1	
East Demerara	2	20	8	3	2	1	-	2	-	1	
East Bank Demerara	2	32	6	4	1	2	1	-	-	-	
West Demerara*	2	11	13	7	3	1	1	1	-	2	
Essequibo	4	30	8	6	-	-	1	3	-	1	

EQUIPMENT

<u>District</u>	<u>Bitumen Distributor</u>	<u>Water Tender</u>	<u>Patch Mixer</u>	<u>Bitumen Kettle</u>	<u>Land Rover</u>	<u>Tractor Loader</u>	<u>Pneumatic Tired Roller</u>	<u>Concrete Mixer</u>	<u>Service Unit</u>	<u>Bulldozer</u>
East Berbice	1	1	1	2	1	-	-	-	-	-
West Berbice	-	-	-	-	-	1	1	-	-	-
East Demerara	1	1	-	-	-	1	-	2	-	-
East Bank Demerara	1	-	-	-	1	1	-	2	-	-
West Demerara*	1	1	1	-	1	1	1	-	1	1
Essequibo	-	1	1	-	-	-	1	-	-	-

\* Part of this equipment is on a temporary assignment due to capital works and will be redeployed upon completion. Some staff reorganization will be required upon the completion of the capital works.

Note: Figures not available for other districts

ANNEX I, EXHIBIT 14  
EXPENDITURES - ROAD MAINTENANCE

Annual Expenditure in Guyana Dollars

District	1961	1962	1963	1964	1965	1966	1967	1968	1969
East Berbice	505,700	440,000	421,600	451,100	363,000	326,000	327,000	159,000	274,000
West Coast Berbice	499,100	521,700	542,200	125,300	185,000	115,000	72,000	98,000	130,000
East Coast Demerara				511,800	318,000	105,000	174,000	1,000	164,000
East Bank Demerara	39,800	71,800	34,700	56,700	88,200	50,000	52,000	87,000	104,000
West Demerara	255,300	254,500	246,400	300,100	233,000	131,000	168,000	98,000	125,000
Essequibo	284,400	271,300	238,800	269,400	210,000	185,000	325,000	132,000	168,000
North West	14,300	18,000	16,100	34,000	35,000	28,000	44,000	50,000	45,000
Interior	139,600	131,400	149,500	144,300	173,000	152,000	32,000	156,000	190,000
Georgetown	NA	NA	NA	NA	NA	41,000	227,000	109,000	100,000
Rupununi			N O T		A V A I L A B L E				
<b>TOTALS</b>	<b>1,738,200</b>	<b>1,708,700</b>	<b>1,649,300</b>	<b>1,892,700</b>	<b>1,605,200</b>	<b>1,133,000</b>	<b>1,421,000</b>	<b>890,000</b>	<b>1,300,000</b>

\* Combined with figures for West Coast Berbice

\* Estimated

In addition, the following districts were allocated for Capital Funds (USAID) for road works  
 East Berbice \$ 181,000, West Berbice \$ 90,000, East Coast Demerara \$ 000 and West  
 Demerara \$ 278,000

ANNEX II, EXHIBIT 15

PROJECTED EXPENDITURE - MAINTENANCE OF ROADS

1970 - 1974

Annual Expenditure in Guyana Dollars

District	1970	1971	1972	1973	1974
East Berbice	345,000	271,000	300,000	300,000	310,000
West Berbice	217,000	242,000	240,000	250,000	250,000
East Demerara	160,000	232,000	250,000	270,000	270,000
East Bank	142,000	200,000	200,000	200,000	180,000
West Demerara	140,000	200,000	180,000	200,000	180,000
Essequibo	88,000	256,000	260,000	260,000	270,000
North West	50,000	60,000	70,000	70,000	80,000
Interior	152,000	241,000	200,000	180,000	200,000
Georgetown	140,000	100,000	100,000	100,000	100,000
<b>TOTAL</b>	<b>1,434,000</b>	<b>1,802,000</b>	<b>1,800,000</b>	<b>1,830,000</b>	<b>1,840,000</b>

ANNUAL RECORD OF ALLOCATIONS FOR ROAD MAINTENANCE

<u>Year</u>	<u>Requested Allocation</u>	<u>Approved Allocation</u>
1966	-	1,260,000
1967	1,500,000	1,400,000
1968	1,750,000	1,500,000
1969	1,800,000	1,400,000
1970	2,032,000	1,450,000

ANNEX II, EXHIBIT 16

SUMMARY OF BENEFIT-COST RATIOS AND INTERNAL RATES OF RETURN

<u>Project</u>	Internal Rate of Return %	At 10%			At 12%		
		<u>Present</u> <u>Benefits</u>	<u>Worth</u> <u>Costs</u>	<u>B/C</u> <u>Ratio</u>	<u>Present</u> <u>Benefits</u>	<u>Worth</u> <u>Costs</u>	<u>B/C</u> <u>Ratio</u>
1 Georgetown Bypass	20	1,452,000	663,000	2.19	1,186,000	647,000	1.83
2. East Coast Road	26.5	25,081,000	8,607,000	3.11	20,493,000	7,870,000	2.60
3. Fast Bank Demerara Road	26	18,844,000	5,976,000	3.16	15,399,000	5,844,000	2.64
4 University of Guyana Access Road	21	747,000	365,000	2.05	596,400	341,000	1.75

## ANNEX II, EXHIBIT 17

## SUMMARY OF ANNUAL COSTS - PROJECT 1

## GEORGETOWN BYPASS

(In Thousands of 1970 Guyana Dollars)

Year	Construc- tion Cost	Maintenance		Pavement Overlay		Total		Cost Differential	Present Worth Discounted to 1971				
		W/out Improvements	With	Without Improvements	With	W/out Improvements	With		75%	10%	12%		
1970													
1	112	28				28	112.0	84 0	84	84			
2	420	28				28	420.0	392.0	356	350			
3	520	28		190		218	520.0	302 0	250	240			
4		28	15.6			28	15.6	-12.4	-9	-8			
1975		28	15.6			28	15.6	-12 4	-8	-7			
6		28	15.6			28	15.6	-12 4	-8	-7			
7		28	15.6			28	15.6	-12 4	-7	-6			
8		28	15.6			28	15.6	-12 4	-6	-6			
9		28	15 6			28	15.6	-12 4	-6	-5			
1980		28	15.6			28	15.6	-12 4	-5	-4			
1		28	15.6			28	15.6	-12 4	-5	-4			
2		28	15.6			28	15.6	-12 4	-4	-4			
3		28	15.6		260	28	275 6	247 6	79	64			
4		28	15.6	190		218	15.6	-202.4	-59	46			
1985		28	15.6			28	15.6	-12 4	-3	-3			
6		28	15.6			28	15.6	-12 4	-3	-2			
7		28	15.6			28	15.6	-12 4	-3	-2			
8		28	15 6			28	15.6	-12.4	-2	-2			
9		28	15.6			28	15.6	-12 4	-2	-2			
1990		28	15.6			28	15 6	-12.4	-2	-1			
1		28	15.6			28	15.6	-12 4	-2	-1			
2		28	15.6			28	15.6	-12 4	-2	-1			
1993		28	15.6		260	28	275.6	247 6	30	20			
									TOTAL	PRESENT	WORTH	663	647

ANNEX II, EXHIBIT 18

SUMMARY OF ANNUAL COSTS - PROJECT 2

EAST COAST ROAD

(In Thousands of 1970 Guvana Dollars)

Year	Construc- tion Costs	Maintenance		Pavement Overlay		Total		Cost Differential	Present Worth Discounted to 1971		
		W/out Improvements	With Improvements	Without Improvements	With Improvements	W/out Improvements	With Improvements		75%	10%	12%
1970											
1	225	180				180	975	745		745	745
2	4,500	180				180	4,500	4,320		3,927	3,857
3	5,900	180		1,500		1,680	5,900	4,220		3,488	3,364
4		180	127			180	127	-53		-40	-37
1975		180	127			180	127	-53		-36	-33
6		180	127			180	127	-53		-33	-30
7		180	127			180	127	-53		-30	-27
8		180	127			180	127	-53		-27	-24
9		180	127			180	127	-53		-25	-21
1980		180	127			180	127	-53		-23	-19
1		180	127			180	127	-53		-20	-17
2		180	127			180	127	-53		-19	-15
3		180	127	1,500	2,140	1,680	2,267	587		187	151
4		180	127			180	127	-53		-15	-12
1985		180	127			180	127	-53		-14	-11
6		180	127			180	127	-53		-13	-10
7		180	127			180	127	-53		-12	-9
8		180	127			180	127	-53		-11	-8
9		180	127			180	127	-53		-10	-7
1990		180	127			180	127	-53		-9	-6
1		180	127			180	127	-53		-8	-5
2		180	127			180	127	-53		-7	-5
1993		180	127	1,500	2,140	1,680	2,267	587		72	49
										8,067	7,870

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## ANNEX II, EXHIBIT 19

## SUMMARY OF ANNUAL COSTS - PROJECT 3

## EAST BANK DEMERARA ROAD

(In Thousands of 1970 Guyana Dollars)

Year	Constru- ction Cost	<u>Maintenance</u>		<u>Pavement Overlay</u>		<u>Total</u>		Cost Differential	Present Worth Discounted to 1971		
		W/out Improvements	With Improvements	Without Improvements	With	W/out Improvements	With		7.5%	10%	12%
1970											
1	700	161				161	700	539	539	539	
2	3,565	161				161	3,565	3,404	3,095	3,039	
3	4,500	161		1,327		1,488	4,500	3,012	2,489	2,401	
4		161	122			161	122	-39	-29	-27	
1975		161	122			161	122	-39	-27	-24	
6		161	122			161	122	-39	-24	-22	
7		161	122			161	122	-39	-22	-20	
8		161	122			161	122	-39	-20	-18	
9		161	122			161	122	-39	-18	-16	
1980		161	122			161	122	-39	-17	-14	
1		161	122			161	122	-39	-15	-13	
2		161	122			161	122	-39	-14	-11	
3		161	122	1,327	1,614	1,488	1,736	248	79	64	
4		161	122			161	122	-39	-11	-9	
1985		161	122			161	122	-39	-10	-8	
6		161	122			161	122	-39	-9	-7	
7		161	122			161	122	-39	-8	-6	
8		161	122			161	122	-39	-8	-6	
9		161	122			161	122	-39	-7	-5	
1990		161	122			161	122	-39	-6	-5	
1		161	122			161	122	-39	-6	-4	
2		161	122			161	122	-39	-5	-4	
1993		161	122	1,327	1,614	1,488	1,736	248	30	20	
<u>Total Present Worth</u>									5,976	5,844	

## ANNEX II, EXHIBIT 20

## SUMMARY OF ANNUAL COSTS

## UNIVERSITY OF GUYANA ACCESS ROAD

(In Thousands of 1970 Guyana Dollars)

Year	Construc- tion Cost	Maintenance	Pavement Overlay	Total	Present worth Discounted to 1971		
					7.5%	10%	12%
1970							
1	26			26		26	26
2	133			133		121	118
3	173			173		143	137
4		8		8		6	5
1975		8		8		5	5
6		8		8		5	3
7		8		8		5	4
8		8		8		4	4
9		8		8		4	3
1980		8		8		3	3
1		8		8		3	3
2		8		8		3	2
3		8	43	51		16	13
4		8		8		3	2
1985		8		8		2	2
6		8		8		2	1
7		8		8		2	1
8		8		8		2	1
9		8		8		1	1
1990		8		8		1	1
1		8		8		1	1
2		8		8		1	1
1993		8	43	51		6	4
				<u>Total</u>	<u>Present Worth</u>	<u>365</u>	<u>341</u>

ANNEX II, EXHIBIT 21

ANNUAL USER BENEFITS - PROJECT I

GEORGETOWN BYPASS

(In Thousands of 1970 Guyana Dollars)

Year	<u>Without Improvements</u>		<u>With Improvements</u>		<u>User Savings</u>			<u>Present Worth Discounted to 1971</u>	
	Operating	Time	Operating	Time	Operating	Time	Total	10%	12%
1974	186.5	203.3	131.1	134.3	55.4	69.0	124.4	93	88
1975	198.6	217.2	139.2	143.5	59.4	73.7	133.1	91	84
6	211.5	232.1	147.8	153.3	63.7	78.8	142.5	88	81
7	225.2	248.0	157.0	163.8	68.2	84.2	152.4	86	77
8	239.8	265.0	166.7	175.0	73.1	90.0	163.1	84	74
9	255.4	283.2	177.0	187.0	78.4	96.2	174.6	81	71
1980	272.0	302.6	188.0	199.8	84.0	102.8	186.8	79	67
1	289.7	323.3	199.7	213.5	90.0	109.8	199.8	77	64
2	308.5	345.4	212.1	228.1	96.4	117.3	213.7	75	61
3	328.6	361.1	225.3	243.7	103.3	125.4	228.7	73	59
4	350.0	394.4	239.3	260.4	110.7	134.0	244.7	71	56
1985	372.8	421.4	254.1	278.2	118.7	143.2	261.9	69	54
6	397.0	450.3	269.9	297.3	127.1	153.0	280.1	67	51
7	422.8	481.1	286.6	317.7	136.2	163.4	299.6	65	49
8	450.3	514.1	304.4	339.5	145.9	174.6	320.5	63	47
9	480.0	549.3	323.3	362.8	156.7	186.5	343.2	62	45
1990	511.2	586.9	343.3	387.7	167.7	199.2	366.9	60	43
1	544.4	627.1	364.6	414.3	179.8	212.8	392.6	58	41
2	579.2	670.0	387.2	442.7	192.6	227.3	419.9	57	39
1993	611.0	720.0	430.0	473.0	181.0	247.0	428.0	53	35
<u>Total Present Worth</u>								<u>1,452</u>	<u>1,186</u>

ANNEX II, EXHIBIT 22

ANNUAL USER BENEFITS - Project 2

EAST COAST ROAD

(In Thousands of 1970 Guyana Dollars)

Year	Without Improvements		With Improvements		User Savings			Present Worth Discounted to 1971	
	Operating	Time	Operating	Time	Operating	Time	Total	10%	12%
1974	4,738	4,559	3,890	3,198	848	1,361	2,209	1,660	1,572
1975	5,059	4,857	4,154	3,407	905	1,450	2,355	1,609	1,496
6	5,402	5,172	4,436	3,629	966	1,543	2,509	1,558	1,424
7	5,767	5,509	4,735	3,865	1,032	1,644	2,676	1,511	1,356
8	6,154	5,867	5,053	4,116	1,101	1,751	2,852	1,464	1,290
9	6,570	6,250	5,395	4,385	1,175	1,865	3,040	1,418	1,228
1980	7,015	6,654	5,760	4,668	1,255	1,986	3,241	1,375	1,169
1	7,307	7,086	6,000	4,972	1,307	2,114	3,421	1,319	1,101
2	7,997	7,547	6,566	5,295	1,431	2,252	3,683	1,291	1,059
3	8,534	8,037	7,007	5,638	1,527	2,399	3,926	1,251	1,008
4	9,114	8,561	7,484	6,006	1,630	2,555	4,185	1,212	959
1985	9,727	9,118	7,987	6,397	1,740	2,721	4,461	1,175	913
6	10,384	9,710	8,526	6,812	1,858	2,898	4,756	1,139	864
7	11,089	10,341	9,105	7,255	1,984	3,086	5,070	1,103	827
8	11,837	11,014	9,719	7,721	2,118	3,287	5,405	1,069	787
9	12,640	11,730	10,379	8,229	2,261	3,501	5,762	1,036	749
1990	13,494	12,603	11,080	8,839	2,414	3,764	6,178	1,010	717
1	14,407	13,524	11,829	9,464	2,578	4,060	6,638	987	688
2	15,381	14,499	12,629	10,136	2,752	4,363	7,115	962	659
1993	16,413	15,522	13,500	10,847	2,913	4,675	7,588	932	627
Total Present Worth								25,081	20,493

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ANNEX II, EXHIBIT 23

ANNUAL USER BENEFITS

PROJECT 3 - EAST BANK DEMERARA ROAD

(In Thousands of 1970 Guyana Dollars)

Year	Without Improvements		With Improvements		User Savings		TOTAL	Present worth Discounted to 1971	
	Operating	Time	Operating	Time	Operating	Time		10%	12%
1970									
1									
2									
3									
4	3,465	3,234	2,896	2,196	569	1,038	1,607	1,207	1,143
1975	3,708	3,461	3,099	2,350	609	1,111	1,720	1,175	1,093
6	3,967	3,703	3,316	2,514	651	1,189	1,840	1,143	1,044
7	4,245	3,962	3,548	2,690	697	1,272	1,969	1,111	998
8	4,541	4,238	3,795	2,878	746	1,360	2,106	1,081	953
9	4,858	4,534	4,060	3,079	798	1,455	2,253	1,051	910
1980	5,199	4,853	4,345	3,295	854	1,558	2,412	1,033	870
1	5,564	5,193	4,650	3,526	914	1,667	2,581	995	831
2	5,955	5,556	4,975	3,772	980	1,784	2,764	969	795
3	6,370	5,945	5,324	4,037	1,046	1,908	2,954	941	758
4	6,816	6,362	5,697	4,320	1,119	2,042	3,161	916	724
1985	7,292	6,806	6,095	4,621	1,197	2,185	3,382	891	692
6	7,802	7,283	6,521	4,945	1,281	2,338	3,619	866	658
7	8,349	7,793	6,978	5,291	1,371	2,502	3,873	844	632
8	8,933	8,338	7,466	5,662	1,467	2,676	4,143	820	603
9	9,560	8,923	7,990	6,058	1,570	2,865	4,435	798	577
1990	10,353	9,652	8,649	6,552	1,704	3,100	4,804	786	558
1	11,195	10,426	9,347	7,075	1,848	3,351	5,199	773	539
2	12,083	11,244	10,086	7,630	1,997	3,614	5,611	758	519
1993	13,088	12,121	10,867	8,210	2,161	3,911	6,072	746	502
<u>Total Present Worth</u>								18,844	15,399

ANNEX II, EXHIBIT 24  
ANNUAL USER BENEFITS - UNIVERSITY OF GUYANA ACCESS ROAD

Year	Average Daily Number of Vehicles					Daily User Savings					Present Worth Discounted to 1971		
	Private Cars	Hire Cars	Vans	Trucks	Buses	Private Cars	Hire Cars	Vans	Trucks	Buses	TOTAL	10%	12%
1970													
4	470	41	16	14	14	121.00	9.30	3.10	8.60	8.70	150.70	37,500	35,000
1975	520	44	17	15	15	134.00	10.10	3.20	9.20	9.40	165.90	37,600	34,300
6	570	48	18	16	16	146.80	11.00	3.40	9.90	10.00	181.10	37,200	33,400
7	620	52	20	19	17	159.50	11.90	3.80	10.50	10.60	196.30	36,700	32,400
8	680	56	22	18	18	175.00	12.90	4.20	11.10	11.20	214.40	36,500	31,600
9	750	60	24	20	19	193.00	13.80	4.60	12.30	11.80	235.50	36,400	31,000
1980	820	65	26	21	20	211.00	14.90	5.00	13.00	12.40	256.30	36,000	30,200
1	900	71	28	23	21	232.00	16.30	5.40	16.20	13.10	281.00	36,000	29,400
2	980	76	30	25	23	257.00	17.50	5.80	15.40	14.30	305.00	35,600	28,600
3	1080	83	32	27	25	278.00	19.10	6.10	16.70	15.60	335.50	35,400	28,000
4	1190	90	34	29	27	306.00	20.90	6.50	17.90	16.80	367.90	35,200	27,400
1985	1300	97	37	31	28	334.00	22.30	7.10	19.10	17.50	400.00	34,900	26,500
6	1420	105	40	33	30	365.00	24.10	7.60	20.40	18.70	435.80	34,500	25,600
7	1570	112	44	36	32	404.00	25.70	8.40	22.20	19.90	480.20	34,800	25,600
8	1710	122	48	39	35	440.00	28.00	9.20	24.10	21.80	523.10	34,400	24,800
9	1890	133	51	41	37	486.00	30.60	9.80	25.30	23.00	574.70	34,200	24,400
1990	2060	145	55	45	40	530.00	33.30	10.50	27.80	24.90	626.50	34,100	23,700
1	2280	155	59	48	43	586.00	35.60	11.30	29.60	26.80	689.30	34,100	23,400
2	2500	168	64	52	46	643.00	38.60	12.20	32.10	28.60	754.50	33,800	22,700
1993	2750	182	69	57	49	717.00	41.80	13.20	35.10	30.50	837.60	34,000	22,500
<b>Total Present Worth</b>											<b>746,800</b>	<b>596,400</b>	

Note Savings computed at the following unit rates (in 1970 Guyana Dollars)

- 0.2576 per private car
- 0.2296 per hire car
- 0.1914 per van
- 0.6174 per truck
- 0.6230 per bus

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Highway Approaches to Georgetown  
 -----, Guyana

CONTRACTOR'S STATEMENT ON THE VALUE OF TIME SAVINGS

Under date December 1970, our firm prepared a report on a feasibility study of the highway approaches to Georgetown ----- in Guyana. The user benefits were estimated for various highway projects and they were compared with the corresponding costs. Benefit-cost ratios and internal rates of return were computed. User benefits were divided into savings in vehicle operating costs and savings in time costs. It is the purpose of this statement to present a summary of the sections of the report dealing with the time costs, and to present a sensitivity analysis on the influence of certain time cost savings on the benefit-cost ratios.

In any feasibility study of a highway project, particular attention must be given to the trip purpose of the persons for which time cost benefits are computed. It is a generally accepted method to separate travel time spent for business or work purposes from travel time spent on leisure trips. There is little doubt that certain monetary values can be attached to business and work time. No universally accepted method exist, however, to assess the economic value of leisure time. Hence we have made the conservative assumption that the economic value of leisure time is zero.

Our economic analysis of the time cost savings starts with the computation of unit time costs in Guyana cents per hour, in Table A. They are divided into driver's time, assistant's wages, passenger's time, and the time related part of capital replacement, and of overhead and profit. It is generally accepted that drivers and assistants time for hire cars, trucks, and buses should be fully taken into account, because they are necessary to operate the vehicles. For the drivers of private cars, for motorcyclists, and for passengers in all vehicles, only the time should be entered into the economic analysis which is spent on business and work trips. During the study period in Guyana we conducted a full series of interviews as described in our report. It was established that on the average 45 percent\*of all passenger trips were business and work trips in passenger cars and hire cars, while for bus passengers the rate was 30 percent.

the consultant

\*It has been noted by/D.O.T./however, that no attempt has been made to determine separate data for business trips and journey-to-work trips because basic data were not collected in the field interviews. Hence, the results in calculating time costs would probably be somewhat different from those reported later in this statement

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To determine the time cost of each driver of a passenger car we estimated that its owner must make a salary of at least G\$ 2 60 per hour to be able to maintain a passenger car. For the benefit analysis we used an hourly rate of  $0.45 \times 2.60$ , or G\$ 1 17 per hour.

For motorcycle rider, we assumed an hourly wage of G\$ 1 00, and used the hourly rate of  $0.45 \times 1.00$ , or G\$ 0 45.

A salary of G\$ 0 50 per hour, close to the minimum wage for unskilled workers, was used for all passengers. Hence, a value of G\$ 0 225 per hour was used as average passenger time cost in passenger cars and hire cars, and G\$ 0 15 per hour in buses.

Passenger cars were found to carry on the average one passenger in addition to the driver, hire cars carry 2 9 passengers (they are not taxis but operate as minibuses on the highways), and buses 27 passengers. At the given hourly rates per passenger, the corresponding values of G\$ 0 23, G\$ 0 65, and G\$ 4 05 per vehicle hour are obtained which appear in Table A.

The described method of dealing with the time costs is adapted to the special conditions in Guyana by taking into account the prevailing wage levels, the high rate of unemployment, and the particular ratios between work and leisure trips. However, to have an idea of the influence the time costs of drivers of private cars, motorcyclists, and passengers in private cars, hire cars, and buses, may have on the benefit-cost ratios, the following limited sensitivity analysis was made by determining the benefit-cost ratio for the East Coast Road under the extreme assumption that none of the mentioned time costs are part of the analysis. Section 2a (CBD to Sheriff Street) was chosen as a basis because of its high percentage of private and hire cars.

In Table A-1, a reduction factor was determined for each type of vehicle, by conducting the time costs of the above categories and comparing the resulting reduced time costs with the ones appearing in Table A. Reductions vary from full elimination of time costs (for motorcycles) to no reduction (for trucks and buses).

In Table B-1, the reduction factors are applied to the time costs as they appear in the back-up sheets for Table B. By following through the analysis by the method described in the report, an over-all reduction factor of 0 5 for all time costs on Section 2a was found. It was then assumed that this reduction factor would apply to the entire Project 2. Hence all time costs of Table C were reduced by 0 5, as shown on Table C-1, with the result that for a discount rate of 10 percent, the benefit-cost ratio would be reduced from 3 11, as established in the report, to 2 16.

From the foregoing analysis it may be concluded that due to the conservative assumptions on salary levels and work to leisure ratios, as used in the report, the benefit-cost ratios as computed in the report are reasonable. However, even if certain specific time costs are left out of the analysis entirely - which seems to be an extreme assumption - the benefit-cost ratios would not be reduced to a point where the reduction influences the decision on the economic feasibility of the projects.

PARSONS, BRINCKERHOFF QUADE & DOUGLAS, INC



P Jolowicz

Table A  
UNIT TIME COSTS  
(in G\$ per hour)

<u>Cost Item</u>	<u>Private Cars</u>	<u>Hire Cars</u>	<u>Trucks</u>	<u>Buses</u>	<u>Motorcycle</u>
Driver Time	1 17	0 71	0 79	0 91	0 45
Assistant's Wages	-	-	0 57	0 57	-
Capital Replacement	0 86	0 38	0 74	0 62	-
Overhead and Profit	-	0 28	1 30	1 16	-
Passenger's Time	0 23	0 65	-	4 05	-
Total	<u>2 26</u>	<u>2 02</u> - 0 65 <u>Vans 1 37</u>	<u>3 40</u>	<u>7 31</u>	<u>0 45</u>

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REDUCTION AS PER TABLE A

	Private Car	Hire Car	Van	Truck	Bus	Motor- Cycle
Total unit time cost	2 26	2 02	1 37	3 40	7 31	0 45
Driver time	-1 17	-	-	-	-	-0 45
Assistant's time	-	-	-	-	-	-
Passenger's time	-0 23	-0 65	-	-	-4 05	-
	<u>0 86</u>	<u>1 37</u>	<u>1 37</u>	<u>3 40</u>	<u>3 26</u>	<u>0 00</u>
Reduction factor	0 38	0 68	1 00	1 00	0 45	0

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EARLY VEHICLE OPERATING AND TIME COSTS

1970 - 1993 WITH & WITHOUT IMPROVEMENTS

1970	#veh/y. (000)	WITHOUT IMPROVEMENTS			WITH IMPROVEMENTS				
		(uoc)	(utc)	(oc)	(te)	(uoc)	(utc)	(oc)	(te)
Private	1760	17 04	22 60	300	398	13 44	18 08	236	318
Hire	1780	15 04	20 20	268	360	11 88	16 16	211	288
Truck	210	47 54	34 00	100	71	39 36	27 22	83	57
Motorcycle	700	--	4.50	--	31		02 70		19
Bus	30	48 14	73 10	14	22	39 94	58 50	12	17
			<b>TOTAL</b>	<b>622</b>	<b>882</b>		<b>TOTAL</b>	<b>542</b>	<b>699</b>

1993	WITHOUT IMPROVEMENTS				WITH IMPROVEMENTS				
	(000)	(uoc)	(utc)	(oc)	(te)	(uoc)	(utc)	(oc)	(te)
Private	8450			1440	1909			1136	1528
Hire	5690			856	1150			676	919
Truck	990			471	336			390	269
Motorcycle	3310				148				89
Bus	80			84	132			72	102
			<b>TOTAL</b>	<b>2851</b>	<b>3675</b>			<b>2274</b>	<b>2907</b>

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TABLE B  
SUMMARY OF YEARLY VEHICLE OPERATING AND TIME COSTS  
BY PROJECT - 1970 AND 1993

Project Sector	Without Improvements				With Improvements			
	1970		1993		1970		1993	
	OC	TC	OC	TC	OC	TC	OC	TC
Georgetown Bypass	145	156	611	720	103	103	430	473
<u>East Coast Road</u>								
2a	682	882	2,851	3,675	542	699	2,274	2,907
2b	548	603	2,293	2,536	447	376	1,883	1,580
2c	397	367	2,263	2,126	338	243	1,925	1,408
2d	899	837	3,827	3,429	763	557	3,227	2,283
2e	644	484	2,396	1,765	518	349	1,925	1,265
2f	480	372	2,783	1,199	389	263	2,216	1,404
Totals	3,650	3,545	16,413	15,522	2,997	2,487	13,500	10,847
<u>East Bank Dominican Road</u>								
3a	383	598	1,862	2,858	289	365	1,404	1,734
3b	692	635	3,368	3,088	592	410	2,877	1,995
3c	655	589	3,173	2,839	562	387	2,710	1,867
3d	285	250	1,383	1,273	242	168	1,172	798
3e	145	89	881	545	122	80	749	496
3f	483	306	2,360	1,518	402	265	1,955	1,320
Totals	2,643	2,467	13,028	12,121	2,209	1,675	10,867	8,210
<u>East Bank</u>								
4a	58	96	314	469	43	48	230	244
4b	122	230	670	1,195	88	120	492	626
4c	40	86	145	284	29	44	103	142
Totals	220	412	1,129	1,948	160	212	825	1,012
<u>West Canje Road</u>	40	54	272	333	25	28	173	175
<u>East Canje Road</u>								
6a	54	81	201	302	39	44	148	158
6b	48	205	579	781	92	109	361	406
6c	38	49	87	116	25	26	55	61
6d	60	79	130	173	37	42	81	91
6e	75	89	169	218	43	47	99	114
Totals	375	503	1,166	1,590	236	268	744	830

BREAKDOWN OF YEARLY OPERATING AND TIME COST, Sumarized in TABLE B  
 REDUCTION, IF CERTAIN TIME COSTS ARE ELIMINATED  
 (in thousands of \$)

Section A  
Project 2

	Without Improvement			With Improvement		Without Impr		With Improvement	
	Original TC	Reduction Factor	Reduc'd TC	Orig TC	Reduc'd TC	Orig TC	Reduc'd TC	Orig TC	Reduc'd TC
Private Cars	398	0 38	151	318	121	1,909	725	1,528	580
Hire Cars	60	0 68	244	288	196	1,150	782	919	624
Trucks	71	1 00	71	57	57	336	336	269	269
Buses	22	0 45	10	17	8	132	59	102	46
Motorcycles	31	0	0	19	0	148	0	89	0
	<u>882</u>		<u>476</u>	<u>699</u>	<u>382</u>	<u>3,675</u>	<u>1,902</u>	<u>2,907</u>	<u>1,519</u>

Savings	1970		1993	
	Orig	Red	Orig	Red
W/O	882	476	3,675	1,902
With	699	382	2,907	1,519
Saving	<u>183</u>	<u>94</u>	<u>768</u>	<u>383</u>
Reduction		0.5		0.5

TABLE B-1

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TABLE C  
ANNUAL USER BENEFITS  
PROJECT 2 - EAST COAST ROAD  
(in thousands of 1970 Guyana dollars)

Year	without Improvements		With Improvements		User Saving			Present Worth, Discounted to 1971	
	Operating	Time	Operating	Time	Operating	Time	Total	10%	12%
1970	3,650	3,545	2,997	2,487	653	1,058	1,711	-	-
1	3,898	3,775	3,201	2,649	697	1,126	1,823	-	-
2	4,157	4,020	3,414	2,820	743	1,200	1,943	-	-
3	4,438	4,282	3,644	3,004	794	1,278	2,072	-	-
4	4,738	4,559	3,890	3,198	848	1,361	2,209	1,660	1,572
1975	5,059	4,857	4,154	3,407	905	1,450	2,355	1,609	1,496
6	5,402	5,172	4,436	3,629	966	1,543	2,509	1,558	1,424
7	5,767	5,509	4,735	3,865	1,032	1,644	2,676	1,511	1,356
8	6,154	5,867	5,953	4,116	1,101	1,751	2,852	1,464	1,290
9	6,570	6,250	5,395	4,385	1,175	1,865	3,040	1,418	1,228
1980	7,015	6,654	5,760	4,668	1,255	1,986	3,241	1,375	1,169
1	7,307	7,086	6,000	4,972	1,307	2,114	3,421	1,319	1,101
2	7,997	7,547	6,566	5,295	1,431	2,252	3,683	1,291	1,059
3	8,534	8,037	7,007	5,638	1,527	2,399	3,926	1,251	1,008
4	9,114	8,561	7,484	6,006	1,630	2,555	4,185	1,212	959
1985	9,727	9,118	7,987	6,397	1,740	2,721	4,461	1,175	913
6	10,384	9,710	8,526	6,812	1,858	2,898	4,756	1,139	864
7	11,089	10,341	9,105	7,255	1,984	3,086	5,070	1,103	827
8	11,837	11,014	9,719	7,727	2,118	3,211	5,405	1,069	787
9	12,640	11,730	10,379	8,229	2,261	3,501	5,762	1,036	749
1990	13,494	12,603	11,080	8,839	2,414	3,764	6,178	1,010	717
1	14,407	13,524	11,829	9,464	2,578	4,060	6,638	987	688
2	15,381	14,499	12,629	10,136	2,752	4,363	7,115	962	659
1993	16,413	15,522	13,500	10,847	2,913	4,675	7,588	932	627
Total present worth								25,081	22,193

BEST AVAILABLE

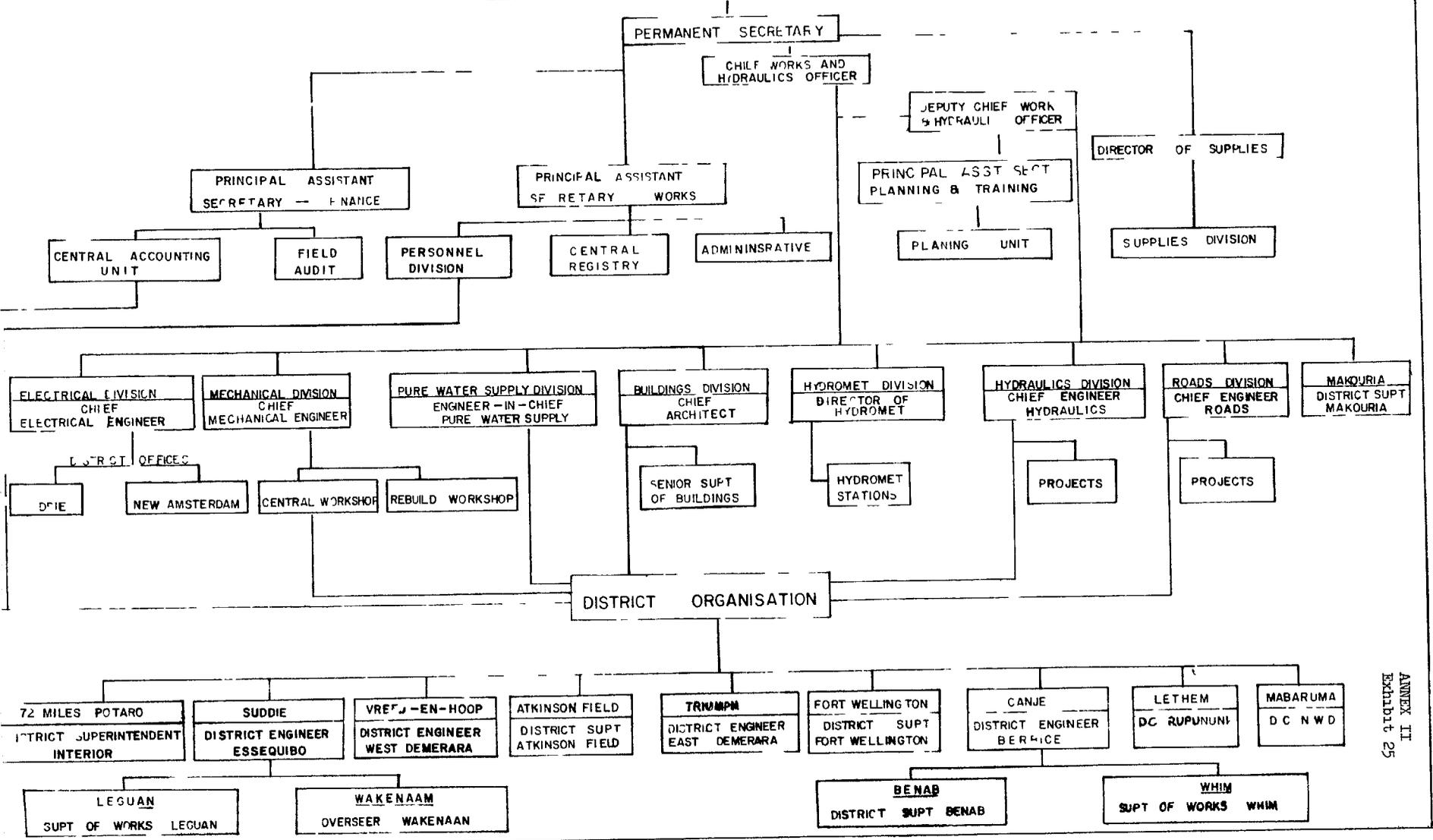
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TABLE C-1, Modified to Analyze the Sensitivity of the B/C Ratio for Time Costs of Passengers, Private Car Drivers and Motorcyclists

	Original Time Savings	x0 5 Reduced TS's	Operating Savings	Total Savings	1971 Present Worth @ 10%
1974	1,361	680	848	1,528	1,150
5	1,450	725	905	1,630	1,110
6	1,543	771	966	1,737	1,080
7	1,644	822	1,032	1,854	1,040
8	1,751	875	1,101	1,976	1,010
9	1,865	932	1,175	2,107	980
1980	1,986	993	1,255	2,248	950
1	2,114	1,057	1,307	2,391	910
2	2,252	1,126	1,431	2,557	890
3	2,399	1,200	1,527	2,727	870
4	2,555	1,277	1,630	2,907	840
1985	2,721	1,360	1,740	3,100	820
6	2,898	1,449	1,858	3,307	790
7	3,086	1,543	1,984	3,527	770
8	3,287	1,643	2,118	3,761	740
9	3,501	1,750	2,261	4,011	720
1990	3,764	1,882	2,414	4,296	700
1	4,060	2,030	2,578	4,608	690
	4,363	2,181	2,752	4,933	670
3	4,675	2,337	2,913	5,250	650
					<u>17,380</u>

Benefit/Cost Ratio  $17,380/8,067 = \underline{2.16}$  Original 3 11

**MINISTRY OF WORKS, HYDRAULICS AND SUPPLY - ORGANIZATIONAL CHART**  
**MINISTER AND PARLIAMENTARY SECRETARY**



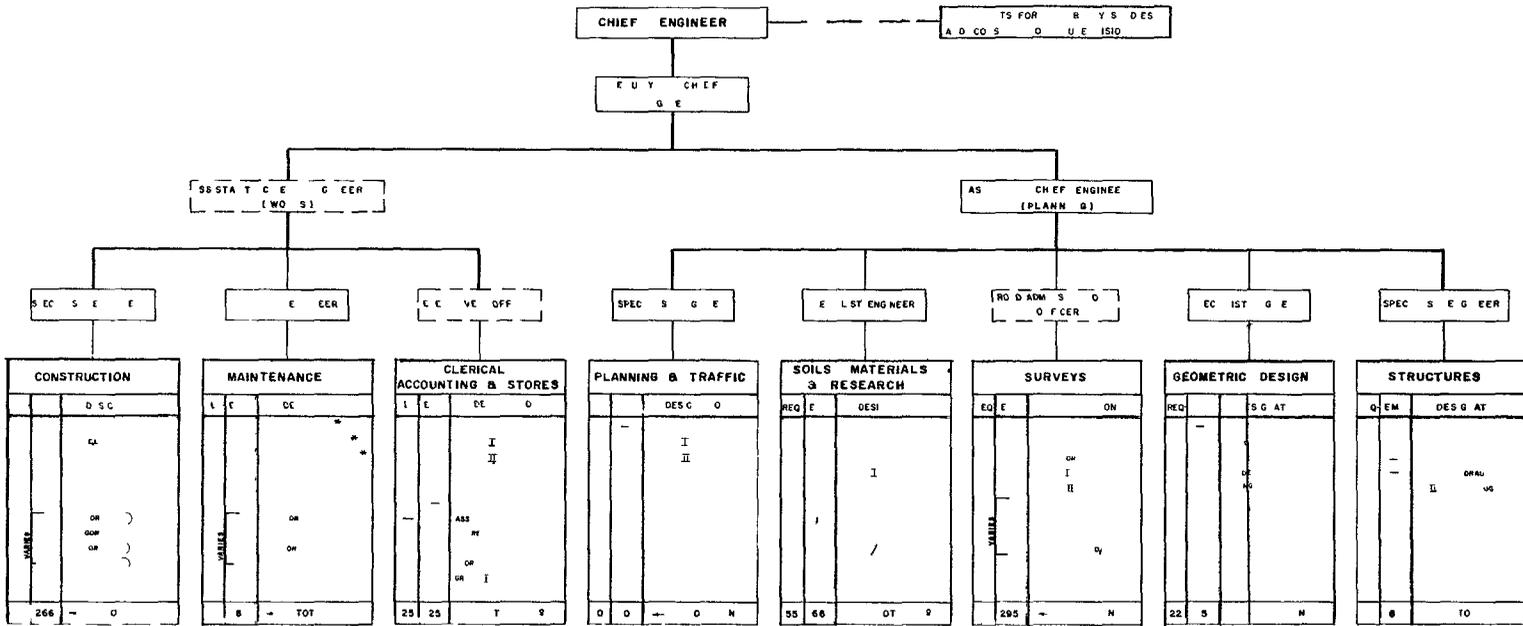
ANNEX II  
 Exhibit 25

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MINISTRY OF WORKS HYDRAULICS AND SUPPLY

ROADS DIVISION

ORGANIZATION CHART-1969



CAT	DESIGNATION IN CATEGORY
(A)	C E STORES ATTENDANT MESSENGER S O E IER
(B)	— OF — WORKS FOREMAN C E W CHMA
(C)	LEADING PORTER ABOURE
(D)	OPERATOR DRIVER MECHANIC SERVICEMAN GREASER CARPENTER
(A <sub>1</sub> )	C E STORES ATTENDANT ST C MP ATTENDANT M MAIL RUNNER
(B <sub>1</sub> )	FOREMAN ECU OFFICER
(C <sub>1</sub> )	U E D UGHER LNESMAN C E
(D <sub>1</sub> )	OPERATOR TRAFFIC OFFICER D VER C A FMAN UME T XEMAN R M N

NOTE —

\* — AS OT E ES ONSIBILITIES ADD ON  
O ROAD MA TE A CE

ANNEX II  
EXHIBIT 26

BEST AVAILABLE

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CHECKLIST OF STATUTORY CRITERIA

(Alliance for Progress)

In the right-hand margin, for each item, write answer or, as appropriate, a summary of required discussion. As necessary, reference the section(s) of the Capital Assistance Paper, or other clearly identified and available document, in which the matter is further discussed. This form may be made a part of the Capital Assistance Paper.

The following abbreviations are used

FAA - Foreign Assistance Act of 1961, as amended.

App. - Foreign Assistance and Related Agencies Appropriations Act, 1971.

MMA - Merchant Marine Act of 1936, as amended.

COUNTRY PERFORMANCE

Progress Towards Country Goals

1. FAA § 208, §.251(b).

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

Guyana is currently making a major effort to modernize its food industry. The 12.9 million A.I.D. loan-funded Rice Modernization Project, which is primarily a food storage and distribution program for Guyana's principal grain product, is an example of the efforts the country is making

Additionally the GOG is making a concerted effort to develop its Livestock Industry and to develop suitable crops for the Intermediate Savannah Areas.

The GOG has a program of industrial incentives and on mining concessions, designed to attract private investment, however, the stated economic policy is for Guyanese to control their own natural resources, with significant government involvement in the major projects, much in line with developments elsewhere in South America. Essentially, this policy has resulted in curtailment of foreign direct investment in mining and such natural resource enterprises.

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(3) *Increasing the public's role in the developmental process.*

The GOG makes diligent efforts to keep the public informed on the development program. Self-help projects directly involving the public are a key element in that program.

(4) (a) *Allocating available budgetary resources to development.*

Guyana allocates two-thirds of its national budget to developmental activity.

(b) *Diverting such resources for unnecessary military expenditure (See also Item No. 16 and intervention in affairs of other free and independent nations.) (See also Item No. 14.)*

Guyana's defence budget is minimal and Guyana does not intervene in other countries affairs.

(5) *Willing to contribute funds to the project or program.*

Guyana is willing to contribute 25 percent of the cost of the project.

(6) *Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.*

Guyana has requested, and is currently benefitting from, US/IRS technical assistance in improving tax collection procedures. The country recognizes freedom of expression and of the press and the role of individual freedom, initiative and private enterprise. The GOG has respected the rule of law.

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(7) *Adhering to the principles of the Act of Bogota and Charter of Punta del Este.*

Although the act of Bogota and the Charter of Punta del Este are not applicable to Guyana, the country is following policies which are in accord with the Act and Charter.

(8) *Attempting to repatriate capital invested in other countries by its own citizens.*

Yes, the GOG is attempting to mobilize the assets of individuals and firms for investment in Guyana.

(9) *Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.*

Yes, Guyana is showing a responsiveness to the legitimate concern of her people and is taking strenuous self-help measures including the mobilization of resources and emphasizing self-help programs.

B. *Are above factors taken into account in the furnishing of the subject assistance?*

Yes.

Treatment of U.S. Citizens

2. FAA § 620(c). *If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?*

No such situation is known to exist.

3. FAA § 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

No. This determination was made by the American Embassy.

4. FAA § 620(o); Fishermen's Protective Act. § 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters,

Not Applicable.

a. has any deduction required by Fishermen's Protective Act been made?

Not Applicable

b. has complete denial of assistance been considered by A.I.D. Administrator?

No denial of assistance has been considered.

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Relations with U S. Government and  
Other Nations

5. FAA § 620(d). If assistance is for any productive enterprise which will compete in the United States with United States enterprise, is there an agreement by the recipient country to prevent export to the United States of more than 20% of the enterprise's annual production during the life of the loan? **Not Applicable.**
6. FAA § 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property? **Guyana provides adequate protection for U.S. property.**
7. FAA § 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, in convertibility or confiscation, has the A.I.D. administration within the past year considered denying assistance to such government for this reason? **Guaranty Agreement is in effect.**
8. FAA § 620(q) Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country? **Guyana is not in default on any A.I.D. Loan.**

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9. FAA § 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?
- Not Applicable.
10. FAA § 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget?
- Guyana is not delinquent in its U.N. obligations.
11. FAA § 620(a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba?
- Guyana furnishes no assistance to Cuba and does not trade with Cuba.
12. FAA § 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?
- Guyana is not controlled by the International Communist Movement.

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13. FAA § 620(f). Is recipient country a Communist country? No.
14. FAA § 620(l). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression? No.
15. FAA § 620(n). Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam? No.

Military Expenditures

16. FAA § 620(s). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)

According to GOG Budget figures about 2% of total budgetary expenditures are allocated for military expenditure in CY 1971, or about U.S. \$2.6 million. Over half of the expenditure (U.S.\$1.4) is for personnel. No sophisticated weaponry is scheduled for procurement while approximately one quarter of the remaining expense is considered as representing foreign exchange costs.

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CONDITIONS OF THE LOANGeneral Soundness

17. FAA § 201(d). Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.
18. FAA § 251(b)(2), § 251(e). Information and conclusion on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?
19. FAA § 251(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.
20. FAA § 611(a)(1). Prior to signing of loan will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the United States of the assistance?

The proposed terms are considered legal and reasonable by both Guyana and the United States.

The project is economically and technically sound. An application for the loan has been made to the USAID. Procedures have been established for implementing the loan which will ensure funds are used in an economical and technically sound manner.

The terms of the loan are such as to permit Guyana to repay, and repayment prospects are favorable.

Yes, the engineering and financial plans have been developed and a reasonably firm cost estimate made.

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21. FAA § 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purposes of loan?

Not Applicable.

22. FAA § 611(e). If loan is for Capital Assistance, and all U.S. assistance to project now exceeds \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

Yes.

23. FAA § 251(b). Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.

Other free world financial sources are not interested in financing this project.

Loan's Relationship to Achievement of Country and Regional Goals

24. FAA § 207, § 251(a) Extent to which assistance reflects appropriate emphasis on (a) encouraging development of democratic, economic, political, and social institutions, (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country, (d) programs designed to meet the country's health needs, or

A I D assistance will result in the strengthening of democratic, economic, political and social institutions in Guyana, further A.I.D.'s assistance program is assisting the GOG's self-help projects in increasing food supply and this project will assist greatly in movement of agricultural produce. The project will result in improving the availability of trained manpower in the construction and equipment operator fields. This project cannot be considered as designed to meet health needs.

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- (c) other important areas of economic, political, and social development, including industry, free labor unions, cooperatives, and Voluntary Agencies; transportation and communication, planning and public administration; urban development, and modernization of existing laws.
- The project does assist the economic, political and social development and will greatly enhance transportation facility and urban development.
5. FAA § 209. Is project susceptible of execution as part of regional project? If so why is project not so executed?
- The project is not susceptible of execution as part of a regional project.
26. FAA § 251(b)(3). Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives.
- The activity is consistent with and related to other development activities and will contribute to long-range, realizable objectives.
27. FAA § 251(b)(7). Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth.
- The activity will contribute to self-sustaining growth by improving transportation facilities in the most economically active areas of the country.
28. FAA § 281(a). Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private, and local governmental institutions.
- The loan will assist the Government of Guyana in the development of its ability to serve its people. The project will help to improve mobile communication of a large number of Guyanese.

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29. FAA § 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country, utilizes the country's intellectual resources to encourage institutional development, and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.
- In the summary section, a petition by residents, to the Prime Minister was granted, which reflects well how this activity recognizes the needs of the people. The project does not provide for or support civic education or training in skills required for effective participation in Government or processes essential to self-government.
30. FAA § 601(a). Information and conclusions whether loan will encourage efforts of the country to (a) increase the flow of international trade, (b) foster private initiative and competition, (c) encourage development and use of cooperatives, credit unions, and savings and loan associations, (d) discourage monopolistic practices, (e) improve technical efficiency of industry, agriculture, and commerce, and (f) strengthen free labor unions.
- The loan will help reduce costs of transport within Guyana, provide incentives to private enterprise, a smoother flow of commerce and assist the promotion of construction cooperatives.
31. FAA § 619. If assistance is for newly independent country, is it furnished through multilateral organizations or plans to the maximum extent appropriate?
- Other lenders have expressed no interest in the project.
32. FAA § 251(h). Information and conclusion on whether the activity is consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress in its annual review of national development activities.
- Guyana is not a member of C.I.A.P.

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33. FAA § 251(g). Information and conclusion on use of loan to assist in promoting the cooperative movement in Latin America.

The loan will have no visible effect on the cooperative movement in Latin America.

34. FAA § 209; § 251(b)(8). Information and conclusion whether assistance will encourage regional development programs, and contribute to the economic and political integration of Latin America.

The activity will not measurably contribute to the economic and political integration of Latin America.

Loan's Effect on U.S. and A.I.D. Program

35. FAA § 251(b)(4), § 102. Information and conclusion on possible effects of loan on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving the U.S. balance of payments position.

The loan will have no foreseen adverse effect on the U.S. Economy.

36. FAA § 601(b). Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

Portions of the loan will be used for procurement of U.S. goods and services. It is anticipated that a private engineering firm and private construction firm will perform services in Guyana.

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37. FAA § 601(d). *If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?*

A U.S. engineering firm will be used and presumably the bulk of the construction will be performed by a U.S. Contractor.

38. FAA § 602 *Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and services financed by the loan.*

U.S. small business will have an opportunity to participate equitably in furnishing goods and services to the project.

39. FAA § 620(h). *Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?*

This project will not promote or assist foreign aid projects or activities of the Communist-bloc countries. No such programs exist in Guyana.

40. FAA § 621. *If Technical Assistance is financed by the loan, information and conclusion whether such assistance will be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.*

Technical assistance will be contracted with a private U.S. firm.

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1. FAA § 252(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.

It is anticipated that all loan funds will be used for procurement of goods and services from private enterprise.

Loan's Compliance with Specific Requirements

42. FAA § 201(d). Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter?

Yes.

43. FAA § 608(a). Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.

To the extent feasible, U.S. Government excess personal property will be utilized.

44. FAA § 604(a). Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President?

Yes, Code 941 procurement is authorized.

45. FAA § 604(b). What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price?

All commodity procurements will be effected under competitive bid conditions.

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46. FAA § 604(d). *If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan?* **Will be complied with.**
47. FAA § 604(e). *If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?* **Not applicable.**
48. FAA § 611(b), App § 101. *If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?* **Not applicable.**
49. FAA § 611(c). *If contracts for construction are to be financed, what provision will be made that they be let on a competitive basis to maximum extent practicable?* **Implementation Letters will spell out the necessity for compliance through citation of the pertinent A.I.D. Guideline.**
50. FAA § 620(g). *What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?* **Eligible items for procurement financing will be stated in Annex I of the Loan Agreement.**

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The GOG has agreed to meet 25 percent of the cost of the project which is our best estimate of the actual local cost to be incurred.

1. FAA § 612(b), § 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services.

No.

2. App § 104. Will any loan funds be used to pay pensions, etc., for military personnel?

Yes, such approval will be required.

53. App § 106. If loan is for capital project, is there provision for A I.D. approval of all contractors and contract terms?

No.

54. App § 108. Will any loan funds be used to pay U.N. assessments?

This will be complied with.

55. App § 109. Compliance with regulations on employment of U.S. and local personnel for funds obligated after April 30, 1964 (A I D Regulation 7).

No, this is not contemplated.

56. FAA § 636(z). Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States, or any guaranty of such a transaction?

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57. App. § 401. Will any loan funds be used for publicity or propaganda purposes with the United States not authorized by the Congress?

No.

58. FAA § 620(k). If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed \$100 million?

No.

59. FAA § 612(d). Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?

Not Applicable

60. MMA § 901 b. Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed with funds made available under this loan shall be transported on privately owned U.S -flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

Will be complied with.



UNITED STATES COORDINATOR  
ALLIANCE FOR PROGRESS

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D C 20523

UNCLASSIFIED  
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DRAFT  
LOAN AUTHORIZATION

Provided from Alliance for Progress Funds  
GUYANA. Improvement of Georgetown Streets and Approaches

Pursuant to the authority vested in the Deputy U.S. Coordinator, Alliance for Progress, by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the establishment of a loan pursuant to Part I, Chapter 2, Title VI. Alliance for Progress, of said Act to the Government of Guyana (GOG) ("Borrower") of not to exceed eight million nine hundred thousand United States dollar (\$8,900,000) to assist in financing the United States dollar costs of equipment, materials and technical services for the Borrower's city street and approach road improvement program ("Project") The loan shall be subject to the following terms and conditions

1. Interest and Terms of Repayment

Borrower shall repay the loan to AID in United States dollars within forty (40) years from the first disbursement under the loan, including a grace period of not to exceed ten (10) years Borrower shall pay to AID in United States Dollars on the disbursed balance of the loan interest of two (2) per cent per annum during the grace period and three (3) per cent per annum thereafter

2. Other Terms and Conditions

(a) To firmly ensure the Borrower will make available the financial resources, equipment, personnel and other resources as required, the Borrower will confirm in writing prior to award of contract for any and each construction contract as to the availability of these inputs.

(b) Borrower shall covenant to maintain the Project and to make adequate provisions in its budget annually for that purpose Such amount shall be in addition to amounts Borrower provides in its budget annually for the maintenance and upkeep of other roads and trails in Guyana.

(c) Borrower shall covenant to provide all right-of-ways necessary for this permanent construction and temporary detours and shall certify that such right-of-ways or legal rights of possession have been obtained prior to the award of any contract for construction

(d) Equipment, materials and services financed under the loan shall have their source and origin in and be procured from Code 941 countries

(e) United States dollars utilized under the loan to finance local currency costs shall be made available to Borrower or its designee through appropriate procedures

(f) The loan shall be subject to such other terms and conditions as AID may deem advisable

\_\_\_\_\_  
Deputy U.S Coordinator

\_\_\_\_\_  
DATE